



## Football Fans' Views on the Passolig E-Ticket System and the Decrease in Stadium Attendance: The Case of the Turkish Football Super League

### Authors' contribution:

- A) conception and design of the study
- B) acquisition of data
- C) analysis and interpretation of data
- D) manuscript preparation
- E) obtaining funding

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### Abstract

The aim of this research is to investigate the reasons behind the decline in stadium attendance in the Turkish Football Super League since the implementation of the Passolig e-ticket system as well as football fans' views on this system. The research sample consisted of football fans living in the province of Sakarya. The total number of participants was 500. A questionnaire comprising three parts was used for data collection. The first part of the questionnaire included questions aimed at identifying personal details of the participants; the second part included questions intended to identify their viewpoints on Passolig; the third part asked about their opinions concerning the reasons behind the decline in stadium attendance. The questionnaire contained 38 questions in total, 37 of which were prepared in the form of a five-point Likert scale with an additional open-ended question to identify participants' opinions of Passolig. Quantitative data obtained through the study were evaluated using the IBM SPSS 25.0 software package, and qualitative analysis methods were employed for coding the questions about participants' opinions. The study concluded that based on the opinions of the participants, Passolig has not been able to fulfill its intended functions of increasing stadium attendance, minimizing violence, and preventing ticket touting. The participants view Passolig as a means of generating unearned income and understand its implementation as one of the main reasons for the decline in stadium attendance. Besides the implementation of Passolig, high ticket prices, the weak financial situation of fans, and media broadcasts that provoke violence were among the foremost reported reasons for the decline in stadium attendance.

**Key words:** Football, fan, Turkish Football Super League, e-ticket, Passolig

### Introduction

Football is a sport dating back to very old times. It is possible to find information in several sources that there were games under various names in several societies in the past that looked like football. However, modern football first occurred in 18<sup>th</sup>-century Britain. At first, the sport was played with an amateur spirit by ordinary people. However, it has since been affected by the industrialization process and the development and improvement of societies. According to Huizinga (2015), a more serious game concept of football arose in the late 19<sup>th</sup> century, when the rules were clarified and enriched.

Along with the industrialization of football, old football grounds have been left behind and larger stadiums have been constructed to give more people the opportunity to watch games. As football became industrialized and developed over time, it also became a line of business (Aksar, 2005). Football now draws crowds and vast audiences all over the world.

Football games create an environment in which either desirable or undesirable incidents occur. This happens particularly because of the loss of individuality within crowded groups and various influences. A fan who considers themselves successful because of the success the team they support achieves, who regards any adverse situation a reproach to their team, and who loves the team unconditionally does not exhibit the same behavior patterns in the event of failure. The behaviors of fans following a defeat can include unpleasant cheering, nasty words, and even offenses towards players and directors. These behaviors can be observed across Turkey (Dever, 2010). Moreover, violence in stadiums takes place in Turkey and in various parts of the world.

Fights and stampedes have occurred from time to time in tribunes where crowded groups of fans are all together. Some of these incidents have led to disasters resulting in the deaths of many people. The number of such incidents in stadiums has risen over time, and governments in various countries have had to take several legal measures as a result. Some of the more notable measures have included efforts to ban football, the imposition of severe penalties on those who display disorderly behavior, and the use of several cards to more easily track people who get into the tribunes.

In Italy, football is often associated with a violent and risky environment because of hooliganism. The Tessera del Tifoso loyalty card, which came into force in Italy in 2008, is a card containing the identity and criminal records of fans and is mandatory for season ticket holders and away-game spectators. This card, which was intended to increase stadium participation, did not fulfill its purpose (Di Domizio & Caruso, 2014). In addition, the Football Fan Identity System is an example similar to Passolig. While Margaret Thatcher initially could not implement this system due to objections concerning personal rights violations, it was later put into practice following the Heysel disaster (Irak, 2013).

The number of incidents in the tribunes increased from the 2000s onwards in Turkey (Gunar & Cerrahoglu, 2018). It was largely accepted by the public that existing laws were not sufficient to prevent these incidents. As a result, the need for new measures was mentioned. Following these developments, Law No. 6222 on Prevention of Violence and Disorder in Sports was published in the Official Gazette on 14 April 2011 and entered into force (Official Gazette, 2017). With this law, severe penalties were set forth for those involved in violent acts. In addition, individuals who wish to watch football matches in the tribune are obliged to have an electronic card issued for them. Upon the introduction of this obligation, the Turkish Football Federation (TFF) signed a contract with a private bank by virtue of tender made for the design, supply, and integration of an e-ticket system in the stadiums of football clubs in the Super League, the top football league across the country, and in the First League, the league in the level immediately below the Super League.

The private bank termed the e-ticket card and system “Passolig.” This system, which is mandatorily applied in the Super League, the top football league in Turkey, and in the First League, the league in the level immediately below the Super League, allows every football spectator to get tickets for football games provided that they register with the Passolig system, get a card with their Turkish Republic identity number and photograph affixed to it, and pay the annual fee for the card. Those who do not have this card are not allowed into football matches. Spectators who want to watch football matches in stadiums are required to purchase tickets electronically through this system and link the tickets to the Passolig card.

The implementation of Passolig in the Turkish Football Super League starting in 2014 has caused a number of changes in the habits of fans regarding matches. It has led to situations where those who do not have Passolig cards cannot go to matches. In addition, the fact that paper tickets have been replaced by electronic cards has affected the consumer behaviors of many fans. It has been shown to be among the main reasons for the decline in stadium attendance, leading to discussions about whether this system, which was designed for safety reasons, adversely affects football spectators.

During the seasons following the implementation of Passolig, a noticeable decline in the number of people going to tribunes to watch football matches was observed compared to seasons before Passolig entered into effect. Despite the fact that the level of decline has been lower in recent years because, for example, fans cannot stay away from their teams and do not want to miss any matches, there is still a group of people among the fans who watch matches in the tribune but are against Passolig. Moreover, it is a matter of debate as to whether the aims of the system have been realized through the individualization of penalties, revoking of penalties for banning stadiums or blocks, imposition of deterrent penalties, and prevention of black-market ticket touting.

At this point, it would be meaningful to include statistics on stadium attendance numbers. For example, the league average stadium attendance in the 2013–2014 season was 12,131 people. Stadium attendance decreased by an average of 34.1% in the 2014–2015 season compared to the previous season and amounted to 7,989 people. Although stadium attendance increased by 5.5% in the 2015–2016 season compared to the previous season, it was still behind the pre-Passolig seasons. In the 2016–2017 season, stadium attendance increased by 22% compared to the previous season and amounted to 10,313 people. However, it was still behind the pre-Passolig seasons (European Football Statistics, 2021).

The fact that fans are regarded as customers in Turkish leagues has become much clearer after TFF put Passolig into effect. Although a significant decline has occurred in stadium attendance at the matches following the implementation of Passolig, the football federation continues to take a firm stand on retaining the system (Talismiler, 2015). This study is of importance for all of these reasons; it investigates why stadium attendance in the Turkish Football Super League is low compared to the periods before the implementation of Passolig and reveals football fans' opinions of Passolig.

## Methods

### Population and sample

The population of the study comprised of fans of the teams in the Super League and First League where Passolig system in 2016–2017 football season is applied. It is not possible to make a precise determination of the number of fans supporting the 36 teams in these leagues. The sample of the study consisted of 500 people who live Sakarya province and reported being fans of a Super League club or who did not support any teams but had knowledge of football and Passolig. The convenience sampling model was used.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was determined as 0.851. This value was found to be adequate, and the respective group was found to be suitable for analysis (Büyüköztürk, 2018).

### Data collection tool

A questionnaire consisting of 38 questions in three parts was used as a data collection tool. The questionnaire included questions about the personal information of the participants in the first part, their opinions on Passolig in the second part, and their opinions on the decline in stadium attendance in the third part.

The first part of the data collection tool included seven questions aimed at identifying general information about the participants. In the second part of the data collection tool, there were five questions aimed at determining participants' opinions of Passolig using a five-point Likert scale. The aims of Passolig that had been shared with the public were used when selecting these questions with the intention of revealing participants' opinions on whether these targets were achieved. This part also contained an open-ended question aimed at revealing participants' opinions of the Passolig system. There were 25 questions in the third part of the data collection tool designed by Ozgen (2015). These questions used a five-point Likert scale to determine the opinions of the participants on the reasons for the decline in stadium attendance in the Super League. Some of these questions were used by the researchers upon an update.

### Obtaining and analyzing data

Data were collected during the 2016–2017 football season. The questionnaire designed as the measurement tool was presented in a way that made it possible to record the opinions of football spectators both through feedback by hand and via the internet. The questionnaire was announced on the social media accounts of fan groups active in Sakarya province in order to reach their members and the social media accounts of groups interested in football. An IP restriction was applied to prevent individuals from completing the questionnaire multiple times. 382 participants were reached via the internet. A total of 500 participants were reached.

The obtained quantitative data were computerized and analyzed using the IBM SPSS Statistics 25.0 software package. Data obtained through quantitative and qualitative analysis were presented in tables and interpreted.

### Validity and reliability

The questionnaire was first conducted with 150 people for reliability analysis. Cronbach's alpha for the questionnaire was found to be 0.83. Alpar (2010) states that the reliability of a scale or test with a Cronbach's alpha of 0.80-1.00 is high. According to this information, the questionnaire has a high level of reliability.

**Table 1.** Personal information of the participants

Personal Information	Sub-Groups	Frequency (f)	Percentage (%)
Gender	Female	74	14.8
	Male	426	85.2
Occupation	Football player	10	2.0
	Student	279	55.8
	Academician	16	3.2
	Other	195	39.0
Age	18–24	266	53.2
	25–31	145	29.0
	32–38	62	12.4
	39 and older	27	5.4
Educational Status	Secondary Education	35	7.0
	Associate Degree	33	6.6
	Undergraduate	359	71.8
	Graduate	73	14.6
Frequency of Watching Matches at the Stadium (During One Season)	0	131	26.2
	1–3	134	26.8
	4–8	77	15.4
	9–12	33	6.6
	13 and more	125	25.0
Subscription to Broadcasting Company	Yes	162	32.4
	No	338	67.6
Supported Team	Besiktas	189	37.8
	Fenerbahce	77	15.4
	Galatasaray	123	24.6
	Trabzonspor	55	11.0
	Other	56	11.2

## Results

Table 2 shows that the opinions of the participants about Passolig are generally negative. A total of 82.8% of the participants stated that Passolig did not increase stadium attendance in the tribunes, while 58.6% stated that Passolig did not minimize impositions of penalties related to tribunes.

**Table 2.** Numerical and percentage distribution of participants' answers to the questions on their viewpoints about Passolig

Questions	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree		Mean:	SD:
	f	%	f	%	f	%	f	%	f	%		
1 Passolig minimizes the acts of violence that occur in the stadium tribunes.	269	53.8	88	17.6	71	14.2	44	8.8	28	5.6	1.95	1.240
2 Passolig minimizes the imposition of penalties related to tribunes (banning stadium, block, etc.).	293	58.6	98	19.6	52	10.4	35	7.0	22	4.4	1.79	1.151
3 Passolig prevents fans who are prone to violence from entering stadiums.	243	48.6	99	19.8	81	16.2	46	9.2	31	6.2	2.05	1.1255
4 Passolig increases stadium attendance in the tribunes.	414	82.8	42	8.4	23	4.6	9	1.8	12	2.4	1.33	.842
5 Passolig has made purchasing a ticket for a match easier.	212	42.4	63	12.6	86	17.2	62	12.4	77	15.6	2.46	1.508

**Table 3.** Numerical and percentage distribution of participants' answers to the questions on the reasons for the decline in stadium attendance

Questions	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree		Mean:	SD:
	f	%	f	%	f	%	f	%	f	%		
1 The acts of violence in the tribunes.	178	35.6	114	22.8	111	22.2	56	11.2	41	8.2	2.34	1.286
2 Poor football quality.	64	12.8	44	8.8	131	26.2	123	24.6	138	27.6	3.45	1.322
3 Passolig system.	37	7.4	39	7.8	71	14.2	105	21.0	248	49.6	3.98	1.272
4 Inconsistency of match schedules.	108	21.6	119	23.8	148	29.6	72	14.4	53	10.6	2.69	1.255
5 Convenience of following matches using communication instruments.	109	21.8	97	19.4	149	29.8	97	19.4	48	9.6	2.76	1.260
6 Poor conditions at the stadiums.	121	24.2	118	23.6	127	25.4	94	18.8	40	8.0	2.63	1.256
7 The fact that the team is often given the penalty of playing without spectators.	161	32.2	135	27.0	106	21.2	53	10.6	45	9.0	2.37	1.278
8 High ticket prices.	25	5.0	38	7.6	83	16.6	134	26.8	240	44.0	3.97	1.167
9 A negative response to the policies of TFF.	44	8.8	64	12.8	110	22.0	117	23.4	165	33.0	3.59	1.300

10	A negative response of the fans to their teams.	89	17.8	108	21.6	149	29.8	81	16.2	73	14.6	Mean: 2.88 SD: 1.290
11	Nasty cheering in the tribunes.	215	43.0	123	24.6	88	17.6	39	7.8	35	7.0	Mean: 2.11 SD: 1.240
12	The fact that gymnasiums are more attractive.	271	54.2	124	24.8	67	13.4	21	4.2	17	3.4	Mean: 1.78 SD: 1.050
13	Clubs cannot create a sense of belonging among their fans.	142	28.4	100	20.0	124	24.8	75	15.0	59	11.8	Mean: 2.62 SD: 1.347
14	Football is becoming increasingly boring.	174	34.8	89	17.8	106	21.2	69	13.8	62	12.4	Mean: 2.51 SD: 1.403
15	Weak financial situation of the fans.	47	9.4	63	12.6	91	18.2	148	29.6	151	30.2	Mean: 3.59 SD: 1.291
16	Lack of football players to excite the fans.	124	24.8	101	20.2	126	25.2	77	15.4	72	14.4	Mean: 2.74 SD: 1.365
17	Inadequacy of promotional activities for the league.	161	32.2	109	21.8	109	21.8	66	13.2	55	11.0	Mean: 2.49 SD: 1.350
18	Entry into force of laws on violence in football.	160	32.0	118	23.6	97	19.4	59	11.8	66	13.2	Mean: 2.51 SD: 1.386
19	Failure to make Passolig widespread.	261	52.2	66	13.2	71	14.2	51	10.2	51	10.2	Mean: 2.13 SD: 1.406
20	Lack of a well-established football culture.	151	30.2	84	16.8	100	20.0	88	17.6	77	15.4	Mean: 2.71 SD: 1.445
21	Tense atmosphere created by the coaches and players on the pitch.	177	35.4	129	25.8	100	20.0	58	11.6	36	7.2	Mean: 2.29 SD: 1.258
22	The perception that referees administer matches in a biased manner.	75	15.0	72	14.4	119	23.8	98	19.6	136	27.2	Mean: 3.30 SD: 1.394
23	Lack of management in football clubs.	46	9.2	48	9.6	131	26.2	132	26.4	143	28.6	Mean: 3.56 SD: 1.251
24	Media broadcasts that provoke violence among fans.	75	15.0	80	16.0	127	25.4	85	17.0	133	26.6	Mean: 3.24 SD: 1.393
25	Lack of policies aimed at making football widespread.	84	16.8	77	15.4	110	22.0	108	21.6	121	24.2	Mean: 3.21 SD: 1.404

When the table is examined, it can be seen that the participants agreed to a large extent with the statement that Passolig is a major reason for the decline in stadium attendance in the tribunes. Most of the participants did not agree with the statement that the reason for the decline in stadium attendance in the tribunes is the failure to make Passolig widespread.

Furthermore, most of the participants agreed that in addition to Passolig, high ticket prices, the weak financial situation of fans, and poor-quality football were reasons behind the decline in stadium attendance.

An examination of participants' opinions of Passolig shows that the majority believe Passolig is unnecessary and should be abolished, while the least preferred statement was that Passolig is insecure. The opinions of the participants about Passolig can be seen in Table 4.

**Table 4.** Numerical distributions of participants' opinions of Passolig

	Keyword	f
1	Unnecessary, should be abolished	297
2	A means of getting unearned income	119
3	The reason for the decline in stadium attendance	104
4	Cannot achieve its goals, non-functional	93
5	Inadequate, should be improved	65
6	Good and necessary	62
7	Malicious	58
8	Tagging	34
9	Practical	33
10	Means of touting	25
11	Insecure	20

## Discussion

Participants' answers to the questions offer an answer as to whether Passolig has been able to fulfill its aims.

According to the information on the official Passolig website, "Passolig card ensures that fans can go to stadiums with their beloved ones securely and watch any games they want in peace and away from any unfavorable situations" (Passolig, 2017). However, 53.8% of the football fans who participated in the study stated that they strongly disagreed with the statement in the data collection tool that "Passolig minimizes acts of violence in the tribunes," and only 17.6% disagreed with the same statement. In other words, football fans who participated in the research are of the opinion that the statement "it will minimize acts of violence," which is one of the benefits expected to be provided by Passolig, is not true and thus Passolig has not achieved its goal. Likewise, Mizrahi (2016), Baykara (2017), and Addesa and Delice (2019) concluded in their studies that the "Passolig application did not minimize acts of violence."

One of the main purposes of the Passolig card is to recognize an individual as they enter the stadium and impose penal sanctions by detecting spectators via their seat numbers (Güney, 2015). The football fans who participated in the study stated that they disagreed with the statement "Passolig minimizes impositions of penalties regarding tribunes (banning stadium, block, etc.)," with 58.6% reporting that they strongly disagreed with the statement and 19.6% reporting that they disagreed with the statement. It is possible to say based on these data that football fans who participated in the research did not agree with this statement. Penalties imposed by TFF for banning tribunes or blocks and playing without spectators support the opinions of the football fans who participated in the study. This hinders fans who are not involved in any actions that require penal sanctions but whose seats are located in the blocked part of the stadium from entering the next match. This can cause the unjust suffering of fans, particularly those who possess a combined card. The fact that TFF blocked the cards of those seated in some parts of the tribunes due to unpleasant and nasty cheering during the match between Sivasspor and Adana Demirspor on 24 December 2016 and that a fan of Sivasspor who was deaf and dumb since birth was penalized because of unpleasant and nasty cheering (Fotomaç, 2017) supports the opinions of the football fans who took part in the study. The fact that the same fan was penalized once again for the same reason (unpleasant and nasty cheering) during the league match between Yeni Malatyaspor and Sivasspor on 7 December 2019 (T24, 2019) and that the penalty was revoked when news of the incident spread on social media proves that no steps for improvement were taken. Hatipoğlu Aydın and Aydın (2019) state that it is a rudimentary solution to ban fans from watching matches despite the presence of security cameras and staff assigned to prevent violence and disorder.

When the answers to the open-ended question aimed at identifying participants' opinions of Passolig are examined, it is possible to state that participants mostly had negative opinions about Passolig. The idea that Passolig should be abolished was expressed by the participants 297 times. Similarly, the opinion that Passolig did not achieve its goals and was non-functional was expressed by the participants 93 times. The correspondence between

participants' answers to the questions included in the second part of the questionnaire and their opinions about Passolig strengthens the results.

Another situation that causes suffering for football fans is touting, which refers to the sale of sold-out tickets under the table for very high prices. The prevention of touting is another benefit promised through the implementation of Passolig. However, touting, which was previously done under the table, was made apparent upon the initiation of Passolig under the name of "ticket transfer" through social media and several websites. It is possible to transfer tickets without question via the Passolig system to another person who holds a Passolig card. This process is described under "Frequently Asked Questions" on the website (Passolig, 2017). Football fans who participated in the study stated 25 times that this application is a means of touting.

The fact that Passolig has a clear effect on the decline in stadium attendance in the tribunes is accepted by the vast majority of Turkish society. Regarding the questions on the decline in stadium attendance in the tribunes, most of the participants agreed with the answer "Passolig application" that is included in the data collection tool. A total of 49.6% of the participants stated that they strongly agreed with this statement, while 21% reported that they agreed with the statement. The arithmetic average of answers to this statement was found to be  $\bar{x} = 3.98$ . With regard to the reasons for the decline in stadium attendance, 52.2% of the football fans participating in the study stated that they strongly disagreed with the statement "Failure to make Passolig widespread." The arithmetic average for this statement was found to be  $\bar{x} = 2.13$ . According to these data, it is possible to assert that football fans who participated in the study consider Passolig to be the main reason for the decline in stadium attendance in the tribunes. When the current number of Passolig cards given on the official website for Passolig is examined, it can be seen that the number of Passolig card holders is quite considerable. Since 14 April 2014, the Passolig card has been used instead of paper tickets. Fans who do not have a Passolig card are not allowed to watch Super League and First League matches at the stadiums. Payment of a certain fee is required to have a card and renew it every year. The fact that 5,554,670 people have a Passolig card (Passolig, 2020) leads to the perception that Passolig is a system established for the purpose of making a profit. Apart from its financial dimension, the system is criticized by those who are against it because it requires every person 7 years old and older who wants to watch a match at a stadium to share personal details with a private bank. Examination of the participants' opinions about Passolig shows the correspondence of these issues to the issues mentioned above. The participants stated 297 times that this system should be abrogated, 119 times that this system is a means of unearned income, and 58 times that it is malicious.

Difficult living conditions in Turkey may be considered as another reason for the decline in stadium attendance in the tribunes. A total of 44% of football fans who participated in the study stated that they strongly agreed that high ticket prices were one of the reasons for the decline in stadium attendance, and 26.8% stated that they agreed with this statement. The arithmetic average of answers to this statement was found to be  $\bar{x} = 3.97$ . A total of 30.2% of the participants strongly agreed and 29.6% agreed that the weak financial situation of fans was one of the reasons for the decline in stadium attendance, which also confirms that ticket prices are high. The arithmetic average for this statement is  $\bar{x} = 3.59$ . In light of these data, it is possible to state that the football fans who participated in the study see high ticket prices and the weak financial situation of fans as reasons for the decline in stadium attendance.

According to the *Sabah* newspaper of 18 November 2014, the weekly average income of a person in Turkey is 284 euros based on IMF data. This amount can be used to buy tickets for 19 Super League matches with an average ticket price of 14.7 euros. This number corresponds to 20 tickets in Spain, 22 tickets in Italy, and 27.3 tickets in Germany (Karakullukçu, 2014).

According to the newspaper called *Fanatik* on 17 January 2018, based on data from the *Daily Mirror* that includes information about average ticket prices in Europe, the highest average ticket price was that of Arsenal (England) with 390 TL. Average ticket prices for other teams were as follows: Real Madrid (Spain), 294.5 TL; Bayern Munich (Germany), 289 TL; Galatasaray (Turkey), 256 TL; Juventus (Italy), 177.5 TL; Basel (Switzerland), 163 TL; Fenerbahçe (Turkey), 159.5 TL; and Besiktas (Turkey), 157.5 TL. The average price is much higher for the matches of major clubs, especially for matches between two major clubs. The purchasing power of the citizens of the abovementioned countries should not be ignored in this context as it makes these prices more meaningful. The situation is still similar today. For example, the average ticket price for Barcelona that attracted the highest number of spectators was 90 euros in the 2018-2019 season, while the average ticket price for the four major clubs in Turkey for the past four seasons was 148.5 TL (Aktifbank, 2019). The effect of ticket prices on stadium participation is obvious (Di Domizio & Caruso, 2014).

The intensity of competition in football is important in terms of stadium attendance (Scelles et al., 2013). A total of 27.6% of the football fans who participated in the study strongly agreed with the statement that poor football quality contributed to the decline in stadium attendance, while 24.6% agreed. The arithmetic average of the answers to this

statement was  $\bar{x} = 3.45$ . A total of 33% of the participants strongly agreed that a negative response to policies of the TFF contributed to the decline in stadium attendance, and 23.4% agreed with this statement. The arithmetic average of the answers to this statement was  $\bar{x} = 3.59$ . Finally, 28.6% of the football fans who participated in the study strongly agreed that a lack of management in football clubs was one of the reasons for the decline in stadium attendance, while 26.4% said they agreed with this statement. The arithmetic average of the answers to this statement was  $\bar{x} = 3.56$ . Based on these data, the football fans who participated in the study consider poor quality football, policies of the TFF, and the lack of management in football clubs reasons for the decline in stadium attendance.

## Conclusion

The aim of this study was to investigate the reasons for the decline in stadium attendance in the Turkish Football Super League and reveal the opinions of football fans about Passolig. The results were based on data obtained from only the fans of teams in the Turkish Football Super League. According to the opinions of the study participants, it was concluded that Passolig did not increase the number of spectators in the tribunes as intended, nor did it minimize penalty impositions regarding tribunes (banning blocks, tribunes, etc.), reduce acts of violence in the tribunes, or end black-market ticket touting. In fact, it made black-market ticket touting easier. Moreover, the general opinion of the participants was in favor of the abrogation of Passolig. It is understood that Passolig is the main reason for the decline in the number of spectators in the tribunes. High ticket prices and the weak financial situation of fans are considered other primary reasons for the decline in stadium attendance.

In light of these conclusions, Passolig, which is regarded as the main reason fans' attendance at stadiums has declined, should either be abolished or its image should be improved by implementing amendments concerning annual fees and the privacy of personal information. The negative perception of the system can only be improved in this way. Considering the financial situation of the fans, regulations should be implemented regarding ticket prices and combined card prices to make them more reasonable.

### Ethics approval and informed consent

This research was approved by the Ethics Committee of Sakarya University in Turkey (ref. no. 62/26.10.2016). Informed consent to participate was obtained for the study contents, purposes, and protocols; data confidentiality and anonymity procedures and participants' freedom to discontinue the study were explained. This research was produced from the master's thesis of Gökhan Çakmak, which was accepted by Sakarya University Social Sciences Institute in 2018.

### Competing interests

There are no conflicts of interest associated with this manuscript, financial or otherwise.

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