

Investigation of Aggression and Anger Levels of Female Amateur Footballers by Position

Kadın Amatör Futbolcuların Mevkilerine Göre Saldırganlık ve Öfke Düzeylerinin İncelenmesi

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Abstract

In this study, it was aimed to determine the levels of aggression and anger of female amateur football players according to their positions. Correlational research design, one of the quantitative research methods, was used in the study. The research sample comprises 192 female football players who continue their amateur-level football life in the Eastern Anatolia Region. The data were collected with a questionnaire form created in two parts: demographic characteristics (positions) in the first part and the aggression and anger scale in sports in the second part. Parametric tests were used to analyze the data. As a result of the research, it was determined that goalkeepers and forwards had significantly higher scores than defenders and midfielders in the aggression sub-dimension, and midfielders had substantially higher scores than defenders. In the anger sub-dimension, it was found that defenders, midfielders, and forwards had significantly higher averages than goalkeepers. In terms of total score, defenders had considerably higher averages than midfielders. As a result of the correlation analysis conducted to determine the relationship between aggression and anger levels, there is a positive and moderately significant relationship between aggression and anger levels of the participants.

Keywords: Football, Aggression, Anger, Female footballer, Positions in football.

Öz

Bu çalışmada, kadın amatör futbolcuların mevkilerine göre saldırganlık ve öfke düzeylerinin belirlenmesi amaçlanmıştır. Araştırmada nicel araştırma yöntemlerinden korelasyonel araştırma deseni kullanılmıştır. Araştırma örneklemini Doğu Anadolu Bölgesinde amatör düzeyde futbol hayatlarına devam eden 192 kadın futbolcu oluşturmaktadır. Veriler iki bölüm şeklinde oluşturulan anket formu ile toplanmıştır, birinci bölümünde demografik özellikler (mevkiler), ikinci bölümünde sporda saldırganlık ve öfke ölçeği kullanılmıştır. Verilerin analizinde parametrik testlerden yararlanılmıştır. Araştırma sonucunda; saldırganlık alt boyutunda kaleci ve forvet oyuncularının, defans ve orta saha oyuncularına göre; orta saha oyuncularının ise defans oyuncularına göre anlamlı düzeyde daha yüksek puanlara sahip oldukları belirlenmiştir. Öfke alt boyutunda ise defans, orta saha ve forvet oyuncularının, kaleci oyuncularına göre; toplam puanda ise defans oyuncularının, orta saha oyuncularına göre anlamlı düzeyde daha yüksek ortalamalara sahip oldukları bulunmuştur. Saldırganlık ve öfke düzeyleri arasındaki ilişkiyi tespit etmek için yapılan korelasyon analizi sonucunda; katılımcıların saldırganlık ile öfke düzeyleri arasında pozitif yönlü orta düzeyde anlamlı ilişki görülmektedir.

Anahtar Kelimeler: Futbol, Saldırganlık, Öfke, Kadın futbolcu, Futbolda mevkiler.

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INTRODUCTION

Football is one of the most popular sports worldwide (Giulianotti, 1999). At both amateur and professional levels, it is followed with great interest across the globe. Football, which attracts athletes and spectators, has become a huge industry in today's world. Football is a sports branch that is played by teams consisting of 11 people and two opposing teams within the framework of rules specific to football (Aracı, 2005). Football can also be defined as follows: "Football is a team game played on a rectangular field between two groups of eleven players. In addition to physical characteristics, it also provides psychological self-confidence (Aracı, 2005; Reilly & Gilbourne, 2003). Socially, it is a natural means of communication". Football is a team sport where each player has a position. These are the defenders, also known as defenders, and the strikers, also known as attackers. Midfielders are the players who take part in defense and attack. There are players with different positions and personality traits within the football team (Başer, 1985). The area where the footballers are located according to the areas they take part in the playing field is called position. A team varies according to the system and field in which the team plays. Belbin (1993) defined the roles of those in the team as follows: solving problems, being in mutual communication, and being in support determine their responsibilities and roles in the team. Thus, the positions in the football branch are expressed as follows: Goalkeeper: In today's football, goalkeepers have to be more involved in the play inside and in front of the penalty area. They should be coordinated with the defenders and have the ability to eliminate mistakes in defense (Bizans, 1996). Characteristics such as problem-solving, attention, self-confidence, and leadership are listed among some of the characteristics that goalkeepers should have (Başer, 1994). In addition, goalkeepers are expected to demonstrate high-level decision-making and communication skills under pressure (Reilly & Williams, 2003). Defense: Within the defense line, the fullbacks and the stopper in the middle are the ones who meet the opponent and start the game building. Defenders should be brave (Harvey, 1999). They should not lose the ball and should not make movements that involve great risk while setting up the game (Norton et al., 1999). Furthermore, defenders' physical endurance and ability to engage in one-on-one duels are highlighted as key performance features (Di Salvo et al., 2007). Midfield: Players in the midfield, where the game is played the most and where the ball is won and lost the most, consist of athletes with high combat power, high level of game intelligence, high level of passing percentage and can directly affect the tempo of the game (Apaydin, 2000). With an emotionally strong identity, midfielders have a structure that never stops fighting with ambition and stubbornness (Başer, 1994). Midfielders also cover the largest distance during a match and play a central role in



transition phases (Bloomfield et al., 2007; Dellal et al., 2011). Forwards: The players closest to the goal are the players who work at the extreme end of the position. They work to use the ball opportunities coming from the midfield and wings to score a goal for the rival goal. Being able to open the game in the off-ball area and producing good results in unexpected moments are among the important characteristics of strikers (Dooley & Titz, 2011). Additionally, high-level shooting accuracy, spatial awareness, and anticipation are vital attributes of forwards (Gabbett & Mulvey, 2008). They should have a cool, ambitious, eager, and self-confident appearance that can show their current potential on the field (Baser, 1994). Female joined the world of football later than men and they continue their activities in the field of football (Hargreaves, 2002; Scraton et al., 2005). Although football is considered a male-dominated sport, studies on female players do not show any problem for female to play football. Therefore, a growing number of female have been participating in football activities worldwide recently (Günay & Yüce, 2008). Investigating the psychological characteristics of female football players is critically important for understanding individual performance and overall team dynamics. Psychological variables such as stress, anger, and motivation directly impact athletes' on-field behaviors and general wellbeing. In their study, Erdoğan and Karataş (2019) examined the relationship between psychological symptom levels and the tendency toward aggression among female athletes, revealing that those involved in contact sports exhibited significantly higher levels of aggression and anger compared to those in non-contact disciplines. This suggests that athletes participating in high-contact sports like female's football are more susceptible to psychological pressure. Similarly, Özdemir and Abakay (2017) emphasized that uncontrolled expressions of anger and higher levels of aggression are more frequently observed in female athletes. The inability to regulate anger has been identified as a significant factor that can disrupt the consistency of athletic performance (Kalkavan et al., 2022). Other studies have also highlighted that factors such as educational background, parental socio-cultural structure, and age may influence how anger is expressed (Yıldız, 2008). In a study conducted by İmamoğlu Kaya, Çiçek, and İmamoğlu (2020), it was found that female football players in the first league displayed higher levels of trait anger and outward expressions of anger compared to those in the second league while also demonstrating lower anger control abilities. The same study reported that second-league athletes had significantly higher intrinsic and extrinsic motivation levels. Furthermore, athletes with less sports experience exhibited lower levels of motivation and better anger control. These findings collectively underscore the heightened psychological pressures experienced by female football



players, particularly those in elite leagues, and point to the necessity of an in-depth examination of psychological factors in this context.

It is an important issue to examine female football players according to their positions since players have different tasks in football played in a wide area (Sezgin et al., 2011). As a result, it is necessary to reveal what is experienced in football fields from the perspective of female football players, their emotions, relationships, and the reasons behind the positioning of female in this field. The aim of this study is to examine "aggression and anger levels of female amateur football players according to their positions".

This study aims to reveal the relationship between the levels of aggression and anger according to the positions of female amateur football players in the Eastern Anatolia Region and to help determine the concepts needed in future studies on aggression and anger. This study will be useful in eliminating this deficiency in the literature. Within the scope of this study, the questions determined for the research are as follows. Female amateur football players;

- 1. Do aggression and anger levels differ according to "goalkeeper" position?
- 2. Do aggression and anger levels differ according to "defense" position?
- 3. Do aggression and anger levels differ according to "midfield" position?
- 4. Do aggression and anger levels differ according to "striker" position?
- 5. What is the degree and direction of the relationship between aggression and anger?

METHOD

Research Model

This study used the "correlational research method" as a quantitative research method. The correlational research method is used to determine the relationship between two or more two variables (Fraenkel et al., 2006).

Purpose of the Study

This study aims to reveal the relationship between aggression and anger levels according to the positions of female football players who continue their football life at the amateur level in the Eastern Anatolia Region.

Research Group

The research group comprised 192 female football players playing amateur-level football in the Eastern Anatolia Region. The study included 192 female football players, comprising 30 goalkeepers, 62 defenders, 58 midfielders, and 42 strikers."



Data Collection

In 2022-2023, 192 female football players playing amateur-level football in the Eastern Anatolia Region were asked to fill out the questionnaire. The researcher obtained scale application permission; the scales were applied voluntarily, and those who did not want to participate were not included in the study. The most preferred data collection method for sociological studies is the questionnaire survey. It helps to produce information about large groups' opinions, characteristics, attitudes, and behaviors. Due to these features of the questionnaire study, it is seen as a suitable data collection tool to obtain the data in our study (Gökçe, 2018; Gürbüz & Şahin, 2016). A questionnaire form prepared in two parts was used to obtain the data for the study. In the first part, "demographic information form" was used to obtain information about "demographic characteristics," and in the second part, the Competitive Aggressiveness and Anger Scale (CAAS), developed by Maxwell and Moores (2007), was used, and its validity and reliability were examined by Gürbüz et al. (2019). The statements in the scale were formed as a 5-point Likert scale between "Strongly Disagree (1) and Strongly Agree (5)". The items numbered "7-12" constitute the anger sub-dimension, and the items numbered "1-6" constitute the aggression sub-dimension. The factor loading values for the scale items are between ".50 and .84". The Cronbach's Alpha internal consistency coefficient of the scale was found to be .83 for the total scale. In our study, the "Cronbach's alpha internal consistency coefficient of the CAAS" was .844.

Data Analysis

After digitizing the collected data, they were analyzed using the "SPSS package program". As a result of the analysis to determine the distribution direction of the data, it was seen that the data showed a normal distribution, and therefore, parametric tests were used. One-Way ANOVA Test was used only for the variable consisting of the demographic variable of position. "Pearson Correlation Analysis" was used to determine the relationship between Aggression and Anger. The analyses are within the 95% confidence interval.

Ethical Approval And Institutional Permission

In this article, journal writing guidelines, publishing principles, and research and publication ethics were adhered to throughout the research process. Responsibility for any violations regarding the article belongs to the author. By publication ethics, ethics committee approval was received by the "Erzurum Technical University Scientific Research and Publication Ethics Committee" with meeting number 4 and decision number 16 in its session dated 30.03.2023.



FINDINGS

Table 1. Information on demographic characteristics

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Position	n	%
Goalkeeper	30	15.6
Defense	62	32.3
Midfielder	58	30.2
Forward	42	21.9
Total	192	100

When we look at the distribution of the participants according to the position variable, 30 individuals (15.6%) are goalkeepers Defense of 62 individuals (32.3%) The distribution shows 58 individuals (30.2%) are midfielders and 42 individuals (21.9%) are forwards.

Table 2. Normality distribution for scales

Scale	n	Min.	Max.	Mean	SD	Skewness	Kurtosis
Aggression	192	1.83	4.33	3.01	.709	.073	-1.070
Anger	192	1.00	3.50	2.04	.611	.323	129
Total	192	1.58	3.83	2.52	.546	.591	077

As shown in Table 2, the values for aggression (Skewness = .073, Kurtosis = -1.070), anger (Skewness = .323, Kurtosis = -.129), and the total sub-dimension (Skewness = .591, Kurtosis = -.077) are within acceptable ranges for normal distribution. It is stated that data between - 1.5 and + 1.5 show a normal distribution (Tabachnick & Fidel, 2015). Since our study is among the normality distribution criteria, "parametric tests" were used.

Table 3. Comparison of participants' aggression and anger levels according to their positions

Sub- Dimensions	Position	n	Mean	SD	F	P(sig.)	Post hoc (LSD)
Aggression	Goalkeeper ¹	30	3.30	.273	11.078	<.001*	
	Defense ²	62	2.95	.846			2,3<1,4
	Midfielder ³	58	2.67	.481			2<3
	Forward ⁴	42	3.36	.743			
Anger	Goalkeeper ¹	30	1.63	.657	6.876	<.001*	1 -2 2 4
	Defense ²	62	2.15	.573			
	Midfielder ³	58	2.00	.637			1<2,3,4
	Forward ⁴	42	2.21	.455			
Total	Goalkeeper ¹	30	2.46	.396	6.031	<.001*	
	Defense ²	62	2.55	.604			3<2
	Midfielder ³	58	2.33	.488			1,2,3<4
	Forward ⁴	42	2.78	.532			

^{*}p <.05

As seen in Table 3, the comparative analysis of the participants' aggression and anger levels according to the position variable is presented. There is a significant difference in the aggression (p<.001), anger (p<.001), and total (p<.001) subscales. As a result of multiple comparisons, in the aggression sub-dimension, the participants playing goalkeeper and forward positions exhibited higher levels than the participants playing defender and midfielder. In the anger sub-dimension, participants in the defense, midfield, and forward positions exhibited significantly higher scores compared to goalkeepers. In the total sub-dimension, defenders had higher averages than midfielders. Additionally, forwards demonstrated statistically significantly higher averages than goalkeepers, defenders, and midfielders.



Table 4. Correlation table for determining the relationship between participants' aggression and anger levels

-		1	2
1- Aggression	r	1	.367**
	p	-	.000
	n	192	192
2- Anger	r	.367** .000	1
	p	.000	-
	n	192	192

When Table 4 is examined, as a result of the analysis made to determine the relationship between aggression and anger levels. There is a moderately significant relationship between the participants' aggression and anger levels.

DISCUSSION AND CONCLUSION

Research findings show the relationship between sports aggression and anger levels of female football players playing amateur football in the Eastern Anatolia Region. The aggression and anger levels of the participants in the study were examined according to the position variable, and then the relationship between the aggression and anger levels was tried to be revealed.

In comparing the participants' aggression and anger levels according to their position variable, the aggression sub-dimension shows that the participants playing in the goalkeeper and forward positions have higher averages than the participants playing in the defense and midfield positions. Any mistake made by players playing in other positions can be compensated by another player, but any mistake made by the goalkeeper is seen as highly likely to directly affect the result (Marancı & Müniroğlu, 2001). Therefore, it can be thought that players in the goalkeeper position will have higher levels of aggression and anxiety compared to other positions. The importance of the goalkeeper's role in keeping the goal closed increases their personal responsibility and is thought to be a result of the increased burden of responsibility expected from them in order to keep the score in case their team misses a goal. An example of why midfield players have lower averages is that in the study conducted by Soylu et al. (2016) on elite football players, younger midfield players stated that their emotional intelligence scores were higher in the "emotional regulation/management" dimension compared to other positions. It is thought that midfielders with high scores in terms of emotional intelligence can tolerate situations such as aggression and anger more quickly. Strikers have higher statistical averages due to their aggressive nature to achieve their goals, their attitude of constantly wanting to fight to show their talents on the field, and their striving for their team to win (Celik, 2017). Strikers must be ambitious and do not shy away from double combat (Gündüz, 2014). It is seen that those who play in the midfield position have higher averages than the participants who play in the defense position. In a study conducted



by Afyon and Metin (2015) on football players in the Muğla Super amateur league, it was seen that those playing in the midfield position had higher averages than the participants playing in the defense position. This result is parallel to our study.

Midfielders have to perform their duties in a very large area during the match. Duties and responsibilities such as carrying the ball from the defense to the attack zone, ensuring the connection between the defense and the offensive line, ensuring that the team scores a goal, and helping the defensive line when the ball is in their own half (Cengiz, 2018) are thought to cause the midfield players' aggression levels to increase. In the anger sub-dimension, it is seen that the participants who play in the defense, midfield, and forward positions have higher averages than the participants who play in the goalkeeper position. The anger levels of the players playing in the defense and midfield positions may increase if the team tries to show a high level of performance to keep the team from conceding a goal and to win the ball for their team. The striker's desire to score goals and the goal expectation that develops over time can be shown to be the reason why the striker's anger levels are high.

In the total sub-dimension, it is seen that those who play in the defense position have higher averages than the participants who play in the midfield position. It is seen that those who play in the forward position have statistically significantly higher averages than the participants who play in the goalkeeper, defense, and midfield positions. In a study conducted by Kırkbir (2020) on football players, it was observed that there was no significant difference in the dimensions of aggression and anger levels. It is thought that players playing in the defense and forward positions have higher duties and responsibilities than players in other positions. A team whose defense is not good will likely concede a goal (Erdem, 2002). For this reason, it is thought that the high level of anger of defensive players in defending also increases their level of aggression. The player in the striker position must score goals in order for his team to win and to achieve personal satisfaction. It is thought that this duty and responsibility expected from the striker increases the anger levels and, in parallel, the aggression levels. As a result of the correlation analysis, a moderately significant relationship is observed between the participants' aggression and anger levels. In a study conducted by Kırkbir (2020) on football players, it was observed that football players had a moderate level of aggression and that increasing their anger levels increased their aggression levels. There are studies in the literature that reach similar results (Kesen et al., 2007; Gündoğdu, 2010; Karataş, 2008). In addition to these analyses, emotional behaviors also affect emotions such as stress, anxiety, location, and direction mobility (Hergüner et al., 2018). Every



event experienced by athletes during training and matches can affect their personalities, and this can affect their roles during the game (Cox & Yoo, 1995). Looking at the results of the study, it can be seen that the aggression levels of the participants whose anger level increased also increased in parallel. For this reason, it is thought that professional groups in sports, such as coaches, educators, and psychological counselors, especially families, should provide the necessary training to athletes on what to do when they encounter situations of anger and aggression, and how to turn this unexpected and involuntary situation into a positive behavior and reflect it on performance. This is a situation that can only occur thanks to self-improved parents, coaches, and educators.

Suggestions

It is thought that negative attitudes and behaviors can be transformed into positive attitudes and behaviors by selecting educators and coaches suitable for meritocracy in the field of sports. Studies can be conducted to reveal the aggression and anger levels of female football players in other regions. Factors that cause significant differences in the statistics section can be investigated. The number of sample groups can be increased, and different demographic variables can be added.

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Ethics Text

In this article, journal writing rules, publishing principles, research and publication ethics rules, and journal ethics rules were followed during the research process. Responsibility for any violations regarding the article belongs to the author. By publication ethics, ethics committee approval was received by the "Erzurum Technical University Scientific Research and Publication Ethics Committee" with meeting number 4 and decision number 16 in its session dated 30.03.2023.

Conflict of Interest

There is no personal or financial conflict of interest between the authors in this study. This study is supported within the scope of "2209-A University Students Research Projects Support Program".

Author Contribution Rate

In this study, the contribution rate of the first author is 60%, while the contribution rate of the second author is 40%.



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