

# The analysis of football players' percentages of shot on target and levels of self-confidence in different leagues

Oktay Çoban<sup>1</sup>, Erol Baykan<sup>2</sup>, Oğuz Gürkan<sup>3</sup> and Mehmet Yıldırım<sup>4\*</sup>

Faculty of Sport Sciences, Yozgat Bozok University, Turkey.

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## ABSTRACT

The present study aims to analyze football players' percentages of shot on target and level of self-confidence in different leagues. The sample of the study consisted of 70 football players who regularly play in Tier 1, Tier 2 and Regional Amateur League in Yozgat province of Turkey. Football players' demographic data were obtained using a "personal information form". Participants' shooting abilities were measured using shooting ability test, which is one of the sub-parameters of Mor-Christian football ability test. Participants' levels of self-confidence, on the other hand, were measured using a self-confidence scale developed by Akın (2007). The obtained data were statistically analyzed using SPSS 18 package program. Normality test, frequency analysis, percentage analysis, arithmetic means, t test, ANOVA analyses and post-hoc tests were used for data analysis. The present study found statistically significant differences among football players' total shot on target scores in terms of league level, monthly income, individual shooting training and individual fitness training ( $p < 0.05$ ). However, no statistically significant differences were observed among football players' total shots on target and self-confidence scale scores in terms of age, duration as a registered football player, being a registered athlete in another sports branch, playing position, preferred foot, history of serious injury and preferred football coach type ( $p > 0.05$ ).

**Keywords:** Football player, shot on target, self-confidence.

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\*Corresponding author. E-mail: mehmet2682@hotmail.com.

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## INTRODUCTION

According to FIFA's records, football is the most popular and watched sports branch around the world, which is played nearly by 265 million people (4% of the world population) and monitored by nearly 5 million authorities, including referees (Haugen and Seiler, 2015). Because football as a sports requires its players to become dynamic, challenging and make quick decisions on the pitch, football players' mental and psychological states and stamina are as important as their physical condition and stamina. It requires players to choose the best option among various strategic and spontaneous behaviors such as passing, shooting and coaches' tactical advice and thus make practical decisions during a game. In this respect, similar to individual sports, many internal and external factors in football lead to observable differences between a certain football team and other teams (Kıvanç,

2001). If athletes aim to create a peculiar profile, they need to maintain a different attitude from others and develop awareness about their current potentials and future limits, which directly results from their self-confidence in their skills as an athlete. Otherwise, they may lose their self-confidence when forced to display a behavior or develop a style beyond their self-evaluation (Kulaksızoğlu, 1999; Çetinkaya, 2015). Bandura defines self-confidence as "an individual's perception of him/herself as a valuable human being" (Bandura, 1997). According to Pervin and John (2001), self-confidence is a general personality trait and is not a temporary attitude peculiar to individual conditions. Hambly too defines self-confidence as an individual's faith in his/her own abilities and as a form of courage (Hambly, 2003). Self-confidence is a subjective phenomenon which comes into

being as a result of an individual's self-evaluation and content with him/herself. It is not a static condition; it may be negative or positive (high-low self-confidence). It may change depending on personal conditions, status and experiences. Thus, a high or low self-confidence may affect an individual's behaviors and feelings in different ways (Soner, 1995). Individuals with a low level of self-confidence usually try to keep themselves in the background. They usually think that they are worthless as human beings and do not attempt to take risks. They do not succeed in living an autonomous lifestyle and often depend on another person for their needs (Başoğlu, 2007). On the other hand, individuals with a high level of self-confidence who try to experience new things despite visible risks and develop strong interpersonal relationships lead a balanced life and accept others as who they are (Altıntaş, 2015). Because an individual's level of self-confidence may influence his/her life positively or negatively, it is important to factors contributing to an individual's level of self-confidence. Numerous factors affect an individual's level of self-confidence. The leading factor is the parents' attitudes towards their child. The second most important factors are the society and social circle in which an individual lives. Individual disappointments, oppressive parents, mental traumas, lack of guidance and academic success may also affect an individual's self-confidence negatively (Sarı, 2016). In the light of these, the present study aims to analyze football players' percentages of shot on target and levels of self-confidence in different leagues.

## **MATERIALS AND METHODS**

This section presents the study group, data collection tools and data analysis of the present study.

### **Study group**

The study group consisted of 20 football players who play for Sorgunspor, a regional amateur league (RAL) football team, and 50 football players in Tier 1 and Tier 2 amateur leagues in Yozgat province of Turkey during the football season 2019-2020.

### **Data collection tools**

This section presents the data collection tools used in the present study.

### **Personal information form**

The personal information form in the present study, which aimed to collect data about participants, consisted of 11

questions.

### **Shot on target test (Mor Christian shooting ability test)**

In the present study, participants' shooting abilities were measured using shooting ability test, which is one of the sub-parameters of Mor-Christian test. In this test, 4 circles with a diameter of 1.20 m were positioned. Shooting line was marked 14.5 m away from the goal. Shooting was performed towards an intended target by hitting a dead ball behind the shooting line. The participants were free to use their preferred foot, and the ball was positioned on any point behind the shooting line. A total of 16 shots were taken by the participants, i.e. 4 shots for each circle target.

Shots on target were scored 10 points, while missed shots were given 4 points. For instance, a shot towards an upper-right circle target was scored 10 if successful, while the shots hitting the lower circle target was scored 4 points. In addition, while shots reaching the target were counted as successful, those rolling towards the circle target or bouncing on the pitch ground was counted as unsuccessful. The final score was recorded as the sum of 16 shooting attempts (Strand and Wilson, 1993; Eri, 2018).

### **Self-confidence scale**

The self-confidence scale used in the present study was developed by Akin (2007). Using a 5-point Likert type scale, the scale contains 33 items, which yield a total highest and lowest score of 165 and 33 respectively. None of the scale items are negative. A higher scale score points to a higher level of individual self-confidence. A self-confidence score lower than 2.5 means a low level of self-confidence, a score between 2.5 and 3.5 is a moderate level of self-confidence, and, finally, a score higher than 3.5 means a high level of self-confidence. The self-confidence scale has two sub-dimensions, namely intrinsic and extrinsic motivation. The intrinsic motivation consists of Item 1, 3, 4, 5, 7, 9, 10, 12, 15, 17, 19, 21, 23, 25, 27, 30 and 32, which are closely related to individual's inner level of self-confidence and evaluate personal traits such as self-esteem, clear individual goals, positive thinking ability and awareness about strong and weak points. On the other hand, the extrinsic motivation consists of Item 2, 6, 8, 11, 13, 14, 16, 18, 20, 22, 24, 26, 28, 29, 31 and 33, which are related to individual's confidence in their social lives and evaluate personal traits such as easy communication with other people, self-expression, controlling emotions and taking risks. The internal consistence coefficient of the self-confidence scale was calculated as 0.83, while it was calculated as 0.83 and 0.85 for intrinsic and extrinsic sub-

dimensions respectively. Test-retest reliability coefficient of the self-confidence scale was calculated as 0.94, while it was calculated as 0.97 and 0.87 for intrinsic and extrinsic sub-dimensions respectively.

The total reliability coefficient of the self-confidence scale was calculated as 0.92 in the present study.

## Data analysis

The data obtained from the present study was analyzed using SPSS 18.0 package program. Prior to the statistical data analysis, the obtained data must be prepared for statistical analysis. Kurtosis and skewness coefficients are critical at this point (Şimşek, 2007: 74). Skewness coefficient is 0 in normal distribution. A negative skewness coefficient points to a skewed distribution to the right, while a positive skewness coefficient points to a skewed distribution to the left (http 1). The fact that skewness and kurtosis coefficients are between (+-2 and +-7) indicates a normal data distribution (West et al., 1995; Şencan, 2005: 376; Şimşek, 2007: 74). However, Kline (2005) argues that a skewness coefficient of  $\pm 3$  and a kurtosis coefficient of  $\pm 10$  can be considered as an indication of normal data distribution. Skewness and kurtosis coefficients were calculated as -0.558/0.112 and -0.031/-0.150, respectively in the present study. It can be thus stated that the obtained data were normally distributed. Parametric tests were used in the statistical analysis. Frequency analysis was used to describe participants' demographic features. In addition, T test and ANOVA analysis were used to find significant differences between participants' percentages of shot on target and levels of self-confidence. The level of statistical significance in the tests was taken as 0.05.

## RESULTS

The data regarding football players' demographic features are given in Table 1.

Table 1 indicates that 41 (58.6%) football players are aged between 18 and 23, 24 (34.3%) of them are aged between 24 and 29, and 5 (7.1%) of them are aged 30 and over. 4 (5.7%) football players have played as a registered player for 1 to 3 year(s), 12 (17.1%) of them have played for 4 to 6 years, 17 (24.3%) of them have played for 7 to 9 years, and 37 (52.9%) of them have played for more than 10 years. 37 (52.9%) and 13 (18.6%) football players play in Tier 1 and 2 amateur leagues respectively, while 20 (28.6%) football players play in the Regional Amateur League (RAL). 17 (24.3%) football players stated that they had been engaged in another sports branch as a registered athlete, whereas 53 (75.7%) of them were not engaged in any other sports branch. As for participants' monthly income, 20 (28.6%) football players earn 500 TL or less, 22 (31.4%) of them

earn 501 to 1000 TL, 19 (27.1%) of them earn 1001 to 2000 TL, 4 of them (5.7%) earn 2001 to 3000 TL, and 5 (7.1%) earn 3001 TL or more in a month. 10 (14.3%) football players participating in the present study are goalkeepers, 13 (18.6%) of them are full-backs, 12 (17.1%) of them are center-backs, 13 (18.6%) of them are midfielders, 18 (25.7%) of them are wingers, and 4 (5.7%) of them are forwards. While 40 (57.1%) football players prefer the right foot, 9 (12.9%) of them prefer the left foot. 21 (30.0%) football players can use their both feet. 27 (38.6%) players stated that they did individual shooting training apart from team trainings, whereas 43(61.4%) players stated that they did not do such trainings. Additionally, 29 (41.4%) football players stated that they did individual fitness trainings, while 41 (58.6%) of them stated that they did not do such trainings. 21 (30.0%) football players stated that they experienced a serious injury in the past, while 49 (70.0%) of them have not experienced such an injury. Finally, 43 (61.4%) football players stated that they were influenced by authoritative football coaches during a training or match, whereas 27 (38.6%) of them were influenced by a more democratic football coach.

Mean total shots on target and self-confidence scale scores are given in Table 2.

It can be seen in Table 2 that mean total shots on target and self-confidence scale scores were calculated as 48.54 and 137.38, respectively. In this respect, it can be stated that football players' percentages of shot on target were low, and their levels of self-confidence were high.

T test findings are given in Table 3. In Table 3, no statistically significant differences were found between participants' total shots on target and self-confidence scale scores in terms of being a registered athlete in another sports branch ( $p > .05$ ). However, it was observed that participants who had been engaged in another sports branch in the past had a higher level of self-confidence ( $\bar{x} = 142.64$ ). There was a statistically significant difference among participants' total shots on target scores in terms of doing individual shooting trainings apart from team trainings ( $p < .05$ ). It was also found that participants who did individual shooting trainings had a higher percentage of shots on target compared to those who did not ( $\bar{x} = 56.96$ ). No statistically differences were found among participants' total self-confidence scale scores ( $p > .05$ ). However, it was also observed that participants who did individual shooting trainings had a higher level of self-confidence ( $\bar{x} = 140.59$ ). There were no statistically significant differences among participants' total shots on target scores in terms of doing individual fitness trainings apart from team trainings ( $p < .05$ ). It was observed that participants who did individual fitness trainings had a higher percentage of shots on target compared to those who did not ( $\bar{x} = 57.44$ ). No statistically differences were found among participants' total self-confidence scale

**Table 1.** Football players' demographic features.

		<b>N</b>	<b>%</b>
Age	18-23	41	58.6
	24-29	24	34.3
	30 and over	5	7.1
Duration as a registered football player	1-3 year(s)	4	5.7
	4-6 years	12	17.1
	7-9 years	17	24.3
	10 years and more	37	52.9
League level	Tier 1	37	52.9
	Tier 2	13	18.6
	Regional Amateur (RAL)	20	28.6
Being a registered athlete in another sports branch	Yes	17	24.3
	No	53	75.7
Monthly income	500 TL and less	20	28.6
	501-1000 TL	22	31.4
	1001-2000 TL	19	27.1
	2001-3000 TL	4	5.7
	3001 TL and more	5	7.1
Playing position	Goalkeeper	10	14.3
	Full-back	13	18.6
	Center-back	12	17.1
	Midfielder	13	18.6
	Winger	18	25.7
	Forward	4	5.7
Preferred foot	Right	40	57.1
	Sol	9	12.9
	Both	21	30.0
Individual shooting training	Yes	27	38.6
	No	43	61.4
Individual fitness training	Yes	29	41.4
	No	41	58.6
History of severe injury	Yes	21	30.0
	No	49	70.0
Preferred coach type	Authoritative	43	61.4
	Democratic	27	38.6

**Table 2.** Findings related to mean total shots on target and self-confidence scale scores.

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b><math>\bar{x}</math></b>	<b>df</b>
Shots on target	70	0.00	104.00	48.54	21.57
Self-confidence	70	92.00	165.00	137.38	15.90

**Table 3.** T test findings.

		<b>N</b>	<b><math>\bar{x}</math></b>	<b>df</b>	<b>t</b>	<b>p</b>
<b>Athlete in another sports</b>						
Shots on target	Yes	17	46.82	17.50	-.375	.709
	No	53	49.09	22.85		
Self-confidence	Yes	17	142.64	14.51	1.585	.118
	No	53	135.69	16.08		
<b>Individual shooting training</b>						
Shots on target	Yes	27	56.96	17.27	2.703	<b>.009*</b>
	No	43	43.25	22.49		
Self-confidence	Yes	27	140.59	14.56	1.345	.183
	No	43	135.37	16.53		
<b>Individual fitness training</b>						
Shots on target	Yes	29	57.44	16.11	3.077	<b>.003*</b>
	No	41	42.24	22.87		
Self-confidence	Yes	29	139.31	15.88	.850	.398
	No	41	136.02	15.96		
<b>Severe injury</b>						
Shots on target	Yes	21	49.90	22.27	.343	.732
	No	49	47.95	21.48		
Self-confidence	Yes	21	132.09	15.92	-1.854	.068
	No	49	139.65	15.50		
<b>Coach type</b>						
Shots on target	Authoritative	43	47.48	20.62	-.513	.609
	Democratic	27	50.22	23.31		
Self-confidence	Authoritative	43	135.69	16.85	-1.123	.265
	Democratic	27	140.07	14.15		

scores ( $p > .05$ ). However, it was also observed that participants who did individual fitness trainings had a higher level of self-confidence ( $\bar{x} = 139.31$ ). No statistically significant differences were observed between participants' total shots on target and self-confidence scale scores in terms of their history of serious injuries such as ligaments, tendons or meniscus ( $p > .05$ ). However, the findings indicated that football players who did not experience a severe injury in the past had a higher percentage of shots on target and self-confidence. No statistically significant differences were found between participants' total shots on target and self-confidence scale scores in terms of their preferred coach type during a training or match ( $p > .05$ ). However, it was found that participants who preferred a more democratic football coach had a higher percentage of shots on target

and level of self-confidence.

Table 4 presents the findings of ANOVA analysis. It can be seen in Table 4 that there were no statistically significant differences between participants' total shots on target and self-confidence scale scores in terms of age ( $p > .05$ ). However, participants' percentage of shots on target and level of self-confidence were found to be directly proportional to their ages. No statistically significant differences were found between participants' total shots on target and self-confidence scale scores in terms of being a registered football player ( $p > .05$ ). There were no statistically significant differences among participants' total shots on target scores in terms of league level ( $p < .05$ ). It was observed that football players who play in Regional Amateur League (RAL) had a higher percentage of shots on target compared to those

Table 4. ANOVA analysis findings.

		N	$\bar{x}$	df	F	p	Difference
<b>Age</b>							
Shots on target	18-23 years	41	46.97	16.33	1.748	.098	-
	24-29 years	24	47.68	26.40			
	30 and over	5	63.60	21.51			
Self-confidence	18-23 years	41	135.32	18.47	.377	.942	-
	24-29 years	24	138.91	13.45			
	30 and over	5	143.20	11.90			
<b>Being a registered football player</b>							
Shots on target	1-3 year(s)	4	42.00	12.75	1.791	.157	-
	4-6 years	12	37.50	19.57			
	7-9 years	17	55.05	16.23			
	10 years and more	37	49.83	24.02			
Self-confidence	1-3 year(s)	4	120.00	27.14	1.971	.127	-
	4-6 years	12	138.91	13.83			
	7-9 years	17	135.88	14.50			
	10 years and more	37	139.45	15.21			
<b>League level</b>							
Shots on target	Tier 1	37	48.27	19.16	3.831	.027*	BAL>2.Amt
	Tier 2	13	36.46	21.69			
	RAL	20	56.90	22.89			
Self-confidence	Tier 1	37	138.13	16.30	.308	.736	-
	Tier 2	13	134.23	18.57			
	RAL	20	138.05	13.73			
<b>Monthly income</b>							
Shots on target	500 TL and less	20	38.70	22.73	2.760	.035	3001 TL and more > 500 TL and less
	501-1000 TL	22	50.09	18.62			
	1001-2000 TL	19	50.63	19.73			
	2001-3000 TL	4	51.00	8.08			
	3001 TL and more	5	71.20	28.09			
Self-confidence	500 TL and less	20	135.15	17.98	.668	.617	-
	501-1000 TL	22	137.59	15.11			
	1001-2000 TL	19	135.84	16.32			
	2001-3000 TL	4	144.25	16.58			
	3001 TL and more	5	145.80	7.04			
<b>Playing position</b>							
Shots on target	Goalkeeper	10	52.80	17.54	.901	.486	-
	Full-back	13	39.07	23.77			
	Center-back	12	46.66	24.11			
	Midfielder	13	53.84	26.18			
	Winger	18	48.33	18.30			
	Forward	4	58.00	6.92			
Self-confidence	Goalkeeper	10	139.40	21.63	.342	.886	-

Table 4. Continues.

	Full-back	13	135.23	15.00			
	Center-back	12	133.66	17.66			
	Midfielder	13	139.53	13.38			
	Winger	18	139.50	15.78			
	Forward	4	137.38	9.41			
<b>Preferred foot</b>							
	Right	40	44.70	21.05			
Shots on target	Left	9	51.77	23.82	1.554	.219	-
	Both	21	54.47	21.06			
	Right	40	136.75	14.91			
Self-confidence	Left	9	134.11	15.86	.499	.609	-
	Both	21	140.00	18.03			

playing in Tier 2. However, no statistically significant differences were found among football players' total self-confidence scale scores ( $p > .05$ ). There was a statistically significant difference among participants' total shots on target scores in terms of their monthly income from football ( $p < .05$ ). It was observed that players who earn a monthly income 3001 or more TL had a higher percentage of shots on target compared to those who earn 500 TL or less. However, no statistically significant differences were found among football players' total self-confidence scale scores ( $p > .05$ ). No statistically significant differences were found between participants' total shots on target and self-confidence scale scores in terms of their playing positions ( $p > .05$ ). However, it was found that midfielders and forwards had a higher percentage of shots on target compared to other football players. There were no statistically significant differences between participants' total shots on target and self-confidence scale scores in terms of their preferred foot ( $p > .05$ ). However, it was also observed that participants who could use their both feet or preferred left foot had a higher percentage of shots on target compared to those who preferred their right foot. In addition, it was also demonstrated that football players who could use their both feet had a higher level of self-confidence compared to those who preferred their right and left foot.

## DISCUSSION AND CONCLUSION

70 football players who play in different leagues in Turkey have participated in the present study, which aimed to determine football players' percentages of shots on target and self-confidence. Data analysis did not indicate any statistically significant differences among participants' total shots on target and self-confidence scale scores in terms of being a registered athlete in another sports branch in the past. However, it was found that

participants who were also engaged in another sports branch had a higher level of self-confidence. Sun's (2015) study on the effects of sports on high schools students' level of self-confidence reported that high school students who were registered athletes in a sports branch had a higher level of self-confidence compared to those who did not do any sports. In a similar vein, Aksoy (2019) indicated in a study on football referees' levels of self-confidence that there was a statistically significant difference in favor of football referees who played as registered football players in the past compared to those who did not. Pepe et al. (1999) analyzed the relationship between the impact of football referees' past as referees and football players on their decision consistency and 63.5% of the referees participating in the study stated that their past as football players made a positive impact on their decisions as referees. In the present study, no statistically significant differences were found among participants' total shots on target and self-confidence scale scores in terms of being a registered athlete in another sports branch in the past. However, it was also discovered that football players who were also engaged in another sports branch had a higher level of self-confidence. It may be stated that being engaged in another sports branch as an amateur or professional improve an athlete's motoric abilities more compared to their teammates and they thus display more self-confident behaviors during trainings and matches, which may have contributed to their percentages of shots on target positively. No statistically significant differences were found between participants' total shots on target and self-confidence scale scores in terms of age. However, it emerged that participants' percentages of shots on target and levels of self-confidence were directly proportional to their age. Toktaş (2017) analyzed the relationship among high school students' levels of anxiety, self-confidence and motivation in school sports and did not find any statistically significant differences

among their intrinsic and extrinsic self-confidence scores in terms of age. Başoğlu (2007) too found no statistically significant differences between age and self-confidence. In a similar vein, Gökkaya and Biçer (2017) stated that there were no statistically significant differences among elite athletes' self-confidence scale scores. However, Aksu (2016) reported that there was a statistically significant difference between football referees' age and level of self-confidence. Aksoy (2019), similarly, analyzed football referees' communicative skills and levels of self-confidence and reported that there was a statistically significant difference between their levels of self-confidence and ages. Bilgin's (2011) analysis of levels of self-confidence in adolescents' found 17-year-old teenagers' level of self-confidence significantly higher compared to those adolescents under 16. Finally, Şahin (2016) reported that physically handicapped athletes aged between 15 and 19 had a lower level of self-confidence compared to athletes who were older. Although the present study did not find any statistically significant differences in terms of age, it was observed that percentages of shots on target and levels of self-confidence were directly proportional to age. Self-confidence can be considered as a major factor that enables an athlete to succeed in a sports branch. Therefore, a link can be established between a football players' high level of self-confidence and percentages of shots on target. No statistically significant differences were observed between participants' total shots on target and self-confidence scale scores in terms of participants' preferred foot. However, it was observed that football players who used their both feet and left foot had a higher shots on target scores compared to those who used the right foot. In addition, football players who used both feet had a higher level of confidence compared to those who preferred either the right or the left foot. Acur (2019) reported that the effect of fatigue on football players' percentages of shots on target did not significantly differ in terms of preferred foot. In other words, a football player's percentage of shots on target is equally affected by any level of fatigue. Similarly, Aytekin (2019) indicated that football players' total self-confidence scale scores did not display statistically significant differences in terms of their preferred foot. The same study also reported that the group who regularly played football preferred their right or left foot or both feet more compared to the group who did not regularly play football and that amateur football players aged between 14 and 17 usually preferred their right foot, which can be considered as an innate ability. However, in addition to preferring the right foot, some football players may also try to improve their other foot. It can thus be argued that this is achieved thanks to a hard training schedule and a personal exercising style. There were no statistically significant differences between participants' total shots on target and self-confidence scale scores in terms of their durations as registered football players. Contrary to the

findings of the present study, Aytekin (2019) found statistically significant differences between total self-confidence scale scores in terms of participants' durations as registered football players. The difference stems from the fact that participants who played football as registered players for 1 to 2 year(s) had a higher total self-confidence scale score compared to those who played 3 to 4 years. Işık (2018) dealt with the relationship between registered amateur and professional athletes' sportive self-confidence and athlete identity changed the duration as a registered football player into sports year as a variable. The study reported statistically significant differences among participants' levels of sportive self-confidence. No statistically significant differences were found between participants' total shots on target and self-confidence scale scores in terms of their playing positions. However, it was found that midfielders' and forwards' shots on target scores were higher compared to other football players. On the other hand, Aytekin (2019) stated that football players' total self-confidence scale scores did not significantly differ in terms of playing positions. Similarly, Acur (2019) reported no differences in the effects of fatigue in football players on percentages of shots on target and playing positions, demonstrating that football players' percentages of shots on target were affected by their level of fatigue, regardless of their playing positions. The present study clearly indicated that midfielders' and forwards' shots on target scores were higher compared to other football players. This finding may result from the fact that football players' respective playing positions require them to possess a higher level of shooting ability and thus cause them to focus on shooting trainings more compared to their teammates in order to improve their shooting abilities. A statistically significant difference was found among total shots on target scores in terms of participants' monthly income from football. According to this, football players who earn 3001 TL or more from football on a monthly basis had a higher shots on target score compared to those who earn 500 TL or less. However, no statistically significant differences were found among their self-scale confidence scores. Gökkaya and Biçer (2017) reported no statistically significant differences among elite athletes' sportive self-confidence scale scores in terms of monthly income. On the other hand, Aksu (2016) found a statistically significant difference between football referees' levels of self-confidence and monthly incomes. The findings of the present study indicated that football players' percentages of shots on target were directly proportional to their monthly income from football. Therefore, football players who earn 3001 TL or more from football on a monthly basis are likely to experience less financial concerns and stress compared to those with a lower level of income, which in return help them focus on their sports branch more and thus increase their shooting performance. The present study found a statistically significant difference among participants' total



shots on target scores in terms of their individual shooting trainings apart from team trainings. It was discovered that football players who did individual shooting trainings had a higher percentage of shots on target compared to those who did not do such trainings. However, no statistically significant differences were found among participants' total self-confidence scale scores, while football players who did individual shooting trainings had a higher level of self-confidence. Özdal et al. (2013) focused on the effects of video supported mental training program on shooting ability and reported that the group who participating in a mental training along with a physical training session had a higher percentage of shots on target. Johnson et al. (2004) carried out a self-talk study on female football players and reported an increasing shooting performance. Shambrook and Bull (1996), similarly, stated that basketball players' free throw performance significantly increased following their participation in an imagination session. These findings overlap with the findings of the present study. However, some studies in the literature indicated that the findings of the present study did not significantly affect players' shots on target performance. For instance, Urfa and Asci (2018) reported that a 10-week psychological skill training program did not contribute to any improvements in young football players' shooting ability. Similarly, Perkos et al. (2002) did not report any significant differences in basketball players' shooting performance following a self-talk session. No statistically significant differences were found between participants' total shots on target and self-confidence scale scores in terms of past severe injury such as ligaments, tendons or meniscus. However, it was observed that participants who did not experience a serious injury had higher percentages of shots on target and levels of self-confidence. According to Aytekin (2019), football players' total intrinsic and extrinsic self-confidence scores did not display significant differences in terms of the diagnosis of a disease in them. It is important for an athlete to undergo a physical and psychological treatment following a serious injury to display a better performance compared to the pre-injury period (Tracey, 2003). Duruöz et al. (2010) analyzed sports injuries in physical education and sports students and reported that 34.2% of the injured students faced problems in their later sports career, and one of the main reasons was their fear of injury recurrence by 37.1%. In addition to a shortage of time and impatience for recovery, another important issue in sports rehabilitation is the possibility of mental and psychological problems in the athlete (Kalyon, 2000). No statistically significant differences were observed among participants' total shots on target scores in terms of their individual fitness trainings apart from team trainings. It was found that participants who did individual fitness trainings had a higher percentage of shots on target compared to those who did not. However, no statistically significant differences were observed between their total self-

confidence scale scores, while those who did individual fitness trainings had a higher level of self-confidence. Akpınar and Yağan (2019) focused on the levels of self-confidence among individuals who regularly went to a fitness center and observed that individuals who spent more time in a fitness center had a higher level of self-confidence and that individuals who went to a fitness center every day had a higher level of self-confidence compared to other participants. The present study demonstrated that football players who did individual fitness trainings had higher percentages of shots on target compared to those who did not do such trainings. It can be assumed that football players who possess a good physical condition will feel themselves mentally comfortable, which is likely to increase their shooting performance. There were no statistically significant differences between participants' total shots on target and self-confidence scale scores in terms of their preferred coach type during a training or match. However, it was observed that football players who preferred a more democratic football coach had higher percentages of shots on target and higher levels of self-confidence. A match is the most sensitive and critical period of time for an athlete and a coach. It is the time when athletes and coaches will enjoy seeing the results of their hard training sessions. In this respect, coaches need to help their athletes display their highest physiological and mental abilities and performances during a match (Biber, 2008). No statistically significant differences were found among participants' total shots on target scores in terms of league level. It was observed in the present study that football players who played in Regional Amateur League had higher percentages of shots on target compared to those who played in Tier 2. However, no statistically significant differences were observed among self-confidence scale total scores. Kartalet al. (2016) reported statistically significant differences among football players in regional amateur league, super amateur league, Tier 1 and 2 amateur leagues in terms of flexibility, balance and vital capacity performances. Aksoy (2019) too reported a statistically significant difference between football referees' divisions and levels of self-confidence. It was reported in this study that football referees in Division A and super league had higher levels of self-confidence compared to referees in Division B, C, regional league and provincial leagues, that referees in Division B had higher levels of self-confidence compared to referees in Division C, regional league and provincial leagues, and, finally, that referees in Division C had higher levels of self-confidence compared to referees in provincial leagues.

In conclusion, the present study, which focused on the analysis of football players' percentages of shots on target and levels of self-confidence in different league levels, found statistically significant differences among participants' total shots on target scores in terms of league level, monthly income, individual shooting training

and individual fitness training. However, no statistically significant differences were revealed between football players' total shots on target and self-scale scores in terms of age, duration as a registered football player, being a registered athlete in another sports branch, playing position, preferred foot, history of serious injury and preferred coach type. The findings of the present study suggest that athletes with high levels of self-confidence can maintain a more determined attitude during a match or training and thus increase their performance, which contributes to their percentages of shots on target. It is recommended that the methods and variables used in the present study to be applied to different leagues and regions to support the findings of the present study.

## REFERENCES

- Acur, C. (2019).** Futbolcularda yorgunluğun şut isabet yüzdesine etkisi (Master's thesis, İstanbul Gelişim Üniversitesi Sağlık Bilimleri Enstitüsü).
- Akın, A. (2007).** Öz güven ölçeğinin geliştirilmesi ve psikometrik özellikleri. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 7(2): 167-176.
- Akpınar, S., and Yağan, K. (2019).** Scrutiny on self-confidence levels of the individuals attending fitness center. *The Journal*, 12(67).
- Aksoy, U. (2019).** Farklı klasmanlarda görev yapan futbol hakemlerinin iletişim becerileri ve öz güven düzeylerinin çeşitli değişkenlere göre incelenmesi (aydın ili örneği) (master's thesis, adnan menderes üniversitesi sağlık bilimleri enstitüsü).
- Aksu A. (2016).** Investigation of decision making styles and self-confidence levels of football referees in different classifications. 13(2), 107-118.
- Altıntaş, E. (2015).** Kuramdan uygulamaya öz güven. Nobel Akademik Yayıncılık: Ankara.
- Aytekin, Ü. (2019)** amatör liglerde oynayan 14-17 yaş futbolcuların öz güven düzeylerinin incelenmesi (Hatay ili örneği) yüksek lisans tezi. Fırat Üniversitesi Bilimler Enstitüsü.
- Bandura, A. (1997).** Self-Efficacy, The Exercise of Control, W.H. Freeman and Company, New York, Usa.
- Başıoğlu, S. T. (2007).** Sınav Kaygısı İle Öz güven Arasındaki Erinlik Döneminde İncelenmesi, Yüksek Lisans Tezi, İstanbul: Maltepe Üniversitesi Sosyal Bilimler Enstitüsü.
- Başıoğlu, T. S. (2007).** Sınav kaygısı ile öz güven arasındaki ilişkinin erinlik döneminde incelenmesi. Yayımlanmamış yüksek lisans tezi. Maltepe Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.
- Biber, E. (2008).** Türk Futbol Antrenörlerinin Tükenmişlik Düzeylerinin Değerlendirilmesi. Yüksek Lisans Tezi, Dumlupınar Üniversitesi, Sosyal Bilimler Enstitüsü, Beden Eğitimi ve Spor Anabilim Dalı, Kütahya
- Bilgin O. (2011).** Ergenlerde Öz güven Düzeyinin Bazı Değişkenler Açısından İncelenmesi, Yüksek Lisans Tezi, T.C. Sakarya Üniversitesi Eğitim Bilimleri Enstitüsü Eğitim Bilimleri Anabilim Dalı, Sakarya, 2011.
- Çetinkaya, T. (2015).** Takım sporlarında sporcu kimliği ve sürekli sportif kendine güven ilişkisi. doktora tezi, gazi üniversitesi sağlık bilimleri enstitüsü, Ankara.
- Duruöz, T., Turan, Y., Eray, M., and Cerrahoğlu, L. (2010).** Beden eğitimi ve spor yüksekokulu öğrencilerinde görülen spor yaralanmalarının değerlendirilmesi ve rehabilitasyonunun önemi. *Beden Eğitimi Ve Spor Bilimleri Dergisi*, 6(2).
- Eri, E. (2018).** Futbol Oynayan Altyapı Sporcularında Algılanan Ebeveyn Tutumları İle Başarı Motivasyonu Arasındaki İlişkinin İncelenmesi. Yüksek Lisans Tezi, İstanbul Ticaret Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.
- Gökkaya, D, and Biçer, T. (2017).** Psikolojik beceri kıstası olarak öz güvenin, elit sporcuların performansına katkısı; boks milli takımı örneği. *Marmara Üniversitesi Spor Bilimleri Dergisi*, 2(1): 16-28.
- Hambly, K. (2003).** Öz güven. (Çev. B. Bıçakçı), (5. Bsm), Alfa Yayınları: İstanbul.
- Haugen, T., Seiler, S. (2015).** Physical and physiological testing of soccer players. Why, what and how should we measure? *Sports Science*, 19: 10-26.
- İşık, U. (2018).** Amatör ve profesyonel sporcu lisanlarına sahip futbolcuların sportif kendine güven düzeyleri ile sporcu kimlikleri arasındaki ilişki. *Spor Eğitim Dergisi*, 3(2).
- Johnson, J. J., Hrycaiko, D. W., Johnson, G. V., and Halas, J. M. (2004).** Self-talk and female youth soccer performance. *The Sport Psychologist*, 18(1): 44-59.
- Kalyon, T. A. (2000).** Spor yaralanmaları. Kalyon TA, ed; Spor Hekimliği, Sporcu Sağlığı ve Spor Sakatlıkları. GATA Basımevi 183-186.
- Kartal, A., Kartal, R., and İrez, G. B. (2016).** Futbolcuların oynadıkları mevkilere göre bazı motorik özelliklerinin karşılaştırılması. *CBÜ Beden Eğitimi ve Spor Bilimleri Dergisi*, 11(1): 55-62
- Kıvanç, Ü. (2001).** Kesin ofsayt: Televizyon futbolu ve futbol medyası. İstanbul.
- Kline, R. B. (2005).** Principles and Practice of Structural Equation Modeling: Methodology In The Social Sciences. New York, NY: Guilford Press.
- Kulaksızoğlu, A. (1999).** Ergen-aile çatışmaları ile annenin tutumları arasındaki ilişki ve ergenin problemleri, doktora tezi. İstanbul üniversitesi edebiyat fakültesi, İstanbul.
- Özdal M, Akcan F, Abakay U, and Dağlıoğlu Ö. (2013).** Video destekli zihinsel antrenman programının futbolda şut becerisi üzerine etkisi. *Spor ve Performans Araştırmaları Dergisi*, 4(2): 40-46.
- Pepe, H., Filiz, K., Pepe, K., and Can, S. (1999).** Futbol Hakemlerinin Hakemlik Geçmişleri ve Sporculuk Geçmişlerinin Tutarlı Karar Vermedeki Etkisinin İncelenmesi, Atatürk Üniversitesi BESYO, Beden Eğitimi ve Spor Bilimleri Dergisi, 1: 26-33.
- Perkos, S., Theodorakis, Y., and Chroni, S. (2002).** Enhancing performance and skill acquisition in novice basketball players with instructional self-talk. *The Sport Psychologist*, 16(4): 368-383.
- Pervin, L. A., and John, O. P. (2001).** Personality, Theory and Research. USA: John Wiley & Sons, Inc.
- Şahin, E. (2016).** Sporcu ve Sporcu Olmayan Bedensel Engelli Bireylerin Öz güven ve Sosyal İstenirlik Durumlarının Karşılaştırılması, Yüksek Lisans Tezi, Düzce Üniversitesi Sağlık Bilimleri Enstitüsü Beden Eğitimi ve Spor Anabilim Dalı, Düzce.
- Sarı, E. (2016).** Çocuklarda öz güven gelişimi. Net Medya Yayıncılık: Antalya.
- Şencan, H. (2005).** Sosyal ve Davranışsal Ölçümlerde Güvenilirlik ve Geçerlik. Ankara: Seçkin Yayınları.
- Shambrook, C. J., and Bull, S. J. (1996).** The use of a single-case research design to investigate the efficacy of imagery training. *Journal of Applied Sport Psychology*, 8(1): 27- 43.
- Şimşek, O. F. (2007).** Yapısal Eşitlik Modellemesine Giriş, Temel İlkeler ve Lisrel Uygulamaları. Ankara: Ekinoks Yayınları.
- Soner, O. (1995).** Aile Uyumu, Öğrenci Öz Güveni Ve Akademik Başarı Arasındaki İlişkiler. Doktora Tezi. Marmara Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Strand, B.N., and Wilson, R. (1993).** Assessing sport skills. Human Kinetics Publishers, USA Utah State.
- Sun, E. (2015).** Sporun Lise Öğrencilerinin Öz güven Düzeylerine Etkisi. Yüksek Lisans Tezi, T.C. Kahramanmaraş Sütçü İmam Üniversitesi Sağlık Bilimleri Enstitüsü Beden Eğitimi ve Spor Anabilim Dalı, Kahramanmaraş.
- Toktaş, S. (2017).** Okul Spor Müsabakalarına Katılan Lise Öğrencilerinin Kaygı, Öz güven ve Güdülenmeleri Arasındaki İlişkilerin İncelenmesi, Doktora Tezi, T.C. Karadeniz Teknik Üniversitesi Eğitim Bilimleri Enstitüsü Beden Eğitimi ve Spor Anabilim Dalı, Trabzon,
- Tracey, J. (2003).** The emotional response to injury and rehabilitation process. *Journal of Applied Sport Psychology*, 15: 279-293.
- Urfa, O., and Asci, H. (2018).** On haftalık psikolojik beceri antrenman programının genç futbolcuların kaygı, öz güven, güdülenme, dikkat ve şut isabet oranı üzerine etkisi. *Hacettepe Journal of Sport Science*, 29(3): 131-146.
- West, S. G., Finch, J. F., and Curran, P. J. (1995).** Structural Equation

Models with Non-normal Variables and Remedies. Akt: Hoyle, R.H. (Ed.) (1995). Structural Equation Modeling: Concepts, Issues and Applications. Sage: London.

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