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Investigation of Injury Anxiety in Amateur Football Players

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Abstract

The aim of this study is to examine the injury anxiety of football players in terms of demographic variables. In line with this purpose, A team of football players (n = 190) of football clubs (93 teams) in Istanbul province and operating in the Istanbul Super Amateur League in the 2019-2020 season participated in the study. In order to measure the injury anxiety of football players, "Sports Injury Anxiety Scale" was developed by Rex and Metzler (2016) and adapted into Turkish by Caz, Kayhan, and Bardakçı (2019), and a personal information form created by the researcher were applied. Kolmogorov-Smirnov and Shapiro Wilk's tests were used to test the conformity of variables to normal distribution. Team footballers (n = 190) of football clubs (93 teams) located in Istanbul province and operating in the Istanbul Super Amateur League during the 2019-2020 season participated in our study. As a result, 119 of 190 football players had previous sports injuries and 69 of them had surgical intervention. A significant difference was found in the total score of sports injury anxiety and the letting down important others sub-dimension according to the injury status of football players. According to the results of sports injury anxiety, it was observed that the anxiety level of losing social support was high in the 21-25 age group where the participants were intense. It is observed that the anxiety levels of the injured football players are higher in the sports injury anxiety and disappointment sub-dimension compared to the non-injured players.

Anahtar Sözcükler: football, soccer, sports injury anxiety, sports anxiety, sports injury.

Introduction

Sports injuries become a serious problem with the spread of sports exercises in social life and the increase in the number of participations. Sports injuries are a very important life event, and they are quite common and undesirable (Williams & Andersen, 2007). Among the sports branches, football is a branch of sports that is played with great interest all over the world and where sports injuries are common (Uğur et al., 1999).

All health problems related to sports participation, which are used in the classification of the disabled by the World Health Organization (WHO) and based on the concept of impairment, are expressed as sports injuries (WHO, 2001). In other words, sports injuries are etiologically defined as the deviation of the structure caused by energy transfer or loss of body functions during sports participation (Timpka et al., 2014). Sports injuries include situations that occur when the endurance limits are exceeded as a result of the whole or a part of the body encountering more than normal force (Erol & Karahan, 2006).

Anxiety is a kind of feeling of fear, uneasiness felt by individuals in the face of events that individuals do not know the cause of but regard as dangerous and threatening (Özgül, 2003). Anxiety usually occurs when one or more of the excitements such as the feeling of failure, sadness, distress, fear, and tension come together. The symptoms of anxiety in behavior are in the form of changing from excessive excitement and activity to lethargy. Fear, irritability, excessive anger, disgust, fatigue, muscle aches, and mental complaints are the most common symptoms of anxiety (Akandere, 1997). On the other hand, anxiety in the sports environment indicates the negative psychological reaction to stress resulting from task performance performed under pressure (Cheng et al., 2009).

An athlete can be fully recovered physically, but their mental state says they are not ready to return, leading to negative assessments of their physical abilities (Maddison & Prapavessis, 2005). The new life that emerges due to the recovery of athletes after the treatments can cause the joy of recovering from sports injuries on the one hand, and the possibility of re-injury, on the other hand, the emergence of dual thoughts such as the possibility of re-injury (Mankad et al., 2009). Given the concern about physical recovery after injury, one of the biggest hurdles athletes have is the fear of re-injury. However, some athletes experience high levels of anxiety while others experience low levels of anxiety. Some researchers have stated that athletes with high anxiety levels experience more injuries (Ivarsson & Johnson, 2010).

An athlete who has sports injury anxiety; may be affected by the injury history, the severity of the previous injury, the amount of time passed after returning to sports, and various other injury-related factors (Smith & Smoll, 1990). Aydoğan (2014) stated in his study that the anxiety levels of athletes increased after injury and after treatment, and Özder (2010) stated in his study that athletes were most worried about losing their athletic abilities when they were injured.

In sports that involve physical contact, the majority of which are team sports, there may be anxiety about falling back in sportive competition due to being away from the team as well as injury (Kaçoğlu et al., 2018). Therefore, the study aims to examine the injury anxiety of football players in terms of demographic variables. The information obtained from this study reveals the results about the injury anxiety levels of football players according to sociodemographic variables.



Material and methods

The aim of this study is to examine the injury anxiety of football players in terms of demographic variables. In this direction, the causal comparison method, one of the quantitative research designs, was used. Data were collected using the questionnaire technique. In order to measure the injury concerns of football players, the "Sports Injury Anxiety Scale" developed by Rex and Metzler (2016) and adapted into Turkish by Caz, Kayhan, and Bardakçı (2019), and the personal information form created by the researcher were used. With this method; sports injury anxiety levels of amateur football players; it was analyzed comparatively in terms of age, training experience, position, injury experience variables.

The universe of the research; The A-team players of the football clubs (93 teams) located in the city of Istanbul and taking part in the Istanbul Super Amateur League in the 2019-2020 season. The sample of the study, on the other hand, consists of 190 football players determined by a simple random method. After the participants were informed about the study, participation in the study was conducted voluntarily. When the responses to the scales were examined, a total of 190 questionnaires were evaluated because there were no incomplete or incorrect questionnaires.

In line with the purpose of the study, the survey technique was used as a data collection method. Personal information form and sports injury anxiety scale were applied to the participants. After the participants were informed about the study, participation in the study was carried out voluntarily.

Sports Injury Anxiety Scale

As a data collection tool, the "Sports Injury Anxiety Scale" developed by Rex and Metzler (2016) and adapted into Turkish by Caz, Kayhan, and Bardakçı (2019), and the personal information form created by the researcher were used. This scale consists of six subdimensions and 19 items. These dimensions are 'loss of athleticism", 'being perceived as weak", "experiencing pain", "letting down important others", 'loss of social support", "reinjury" is. There is no negative (reverse) item on the scale scored in the five-point Likert type (1: strongly disagree - 2: disagree - 3: undecided - 4: agree - 5: strongly agree).

The Cronbach α internal consistency coefficient for the Sports Injury Anxiety Scale is 0.870. According to this value, it is seen that the scale has high internal consistency and thus high reliability. Same way; The Cronbach's α coefficient was 0.876 for 'letting down important others factor, 0.812 for loss of social support factor, 0.780 for experiencing pain factor, 0.724 for loss of athleticism factor, 0.645 for being perceived as a weak factor, and 0.608 for reinjury. As a result of the analysis, the model fit index values were χ^2 / df = 1.909, (<3.0); GFI = 0.928 (> 0.90); IFI = 0.942 (> 0.90); CFI = 0.941 (<0.95) and RMSEA = 0.049 (<0.05).

Results

Tablo 1. Socio-Demographic Characteristics of the Participants

	Variables	Frequency	Percent
	16-20	55	28,9
A	21-25	81	42,6
Age	26-30	34	17,9
	31 and over	20	10,5
Training Experience	1-5 years	15	7,9

	6-10 years	93	48,9
	11-15 years	55	28,9
	16-20 years	23	12,1
	21-25 years	4	2,1
	Goalkeeper	21	11,1
Position	Defense	66	34,7
Position	Midfield	77	40,5
	Attack	26	13,7
Indiana Status	Yes	119	62,6
Injury Status	No	71	37,4
	Total	190	100,0

According to the demographic characteristics of the participants, when Table 1 is examined, 28.9% of the volunteers are in the 16-20 age range, 42.6% in the 21-25 age range, 17.9% in the 26-30 age range, 10% 5 of them are 31 years old and over. According to their training experiences, 7.9% had training experiences of 1-5 years, 48.9% had training experiences of 6-10 years, 28.9% had training experiences of 11-15 years, 12.1% had training experiences of 16-20 years and 2.1% had a training experience of 21-25 years. According to the position, 11.1% are goalkeepers, 34.7% are defense, 40.5% are midfield and 13.7% are attacking players. While 62.6% of the participants had experienced an injury, 37.4% had not.

Tablo 2. Descriptive analysis of participants' responses to the sports injury anxiety scale

Sub-dimensions	N	Min	Max	Mean±Ss
Loss of Athleticism	190	1,00	5,00	2,18±1,01
Being Perceived as Weak	190	1,00	5,00	2,10±1,15
Experiencing Pain	190	1,00	5,00	3,13±1,03
Letting Down Important Others	190	1,00	5,00	2,66±1,13
Loss of Social Support	190	1,00	5,00	2,21±1,11
Re-injury	190	1,00	5,00	3,07±1,04
Total	190	1,00	4,26	2,58±1,04

When Table 2 is examined, the average of the multidimensional Sports Injury Anxiety sub-dimension of the participants is $2,18 \pm 1,01$, the average of the being perceived as weak sub-dimension is $2,10 \pm 1,15$, the average of the experiencing pain sub-dimension is $3,13 \pm 1,03$, the average of the letting down important others sub-dimension was $2,66 \pm 1,13$, the average of the loss of social support mean $2,21 \pm 1,11$, the average of the re-injury sub-dimension mean was $3,07 \pm 1,04$ it has been determined.

Tablo 3. Evaluation of sports injury anxiety levels according to the age of the participants

	Age	N	Rank Avg.	sd	X^2	p	diff.
	16-20 ¹	55	96,35		1,346	,718	
Loss of Athleticism	21-25 ²	81	90,78				
Loss of Athleticism	$26-30^3$	34	102,21				-
	31 and over ⁴	20	100,88				
	16-20 ¹	55	98,36	3			
Being Perceived as Weak	21-25 ²	81	90,35		1 255	.716	
being refereived as weak	$26-30^3$	34	101,29	1,355	1,333	,/10	-
	31 and over ⁴	20	98,63				
Experiencing Pain	16-20 ¹	55	99,25		5,974	,113	-



	21-25 ²	81	87,01			
•	26-30 ³	34	95,75			
	31 and over ⁴	20	119,15			
	16-20 ¹	55	84,52			
Latter Dame Income And Others	$21-25^2$	81	95,22	4 (01	107	
Letting Down Important Others	$26-30^3$	0^3 34 106,59		4,681	197	-
	31 and over ⁴	20	107,98			
	16-20 ¹	55	81,14		105	
Loss of Social Support	21-25 ²	81	100,34	6 1 1 6		
	$26-30^3$	34	98,49	6,146		-
	31 and over ⁴	20	110,32			
	16-20 ¹	55	92,61			
D	$21-25^2$	81	88,57	5,709	107	
Re-injury	$26-30^3$	34	114,74	3,709	127	-
	31 and over ⁴	20	98,83			
Total -	16-20 ¹	55	87,98			•
	21-25 ²	81	89,83	6,679	083	
Total	$26-30^3$	34	109,65	0,079	003	-
	31 and over ⁴	20	115,07			

When the sports injury anxiety scale is examined according to the age variable of the participants in Table 3, there is no statistically significant difference between the mean scores of the sub-dimensions of loss of athleticism, being perceived as weak, experiencing pain, letting down important others, loss of social support, re-injury (p> 0.05). However, it was found that the total value of the sports injury anxiety scale was close to the difference (0.083). When the mean ranks are examined, it is seen that the sports injury anxiety increases as the age of the participants' increases.

Tablo 4. Evaluation of sports injury anxiety levels according to the training experience of the participants

	Training Experience	N	Rank Avg.	sd	X^2	p	diff.
	1-5 years	15	77,50				
	6-10 years	93	92,18	_			
Loss of Athleticism	11-15 years	55	97,79	_	5,448	,244	-
-	16-20 years	23	108,46	_			
	21-25 years	4	134,13	_			
	1-5 years	15	74,13	_		,188	
	6-10 years	93	97,04	_			
Being Perceived as Weak	11-15 years	55	94,48	_	6,154		-
- -	16-20 years	23	111,63	_			
	21-25 years	4	61,00	_			
	1-5 years	15	111,07		2,532	,639	
-	6-10 years	93	94,06	- 4			
Experiencing Pain	11-15 years	55	89,66	_			-
-	16-20 years	23	104,15	_			
-	21-25 years	4	101,00	_			
	1-5 years	15	99,33	_			
I -44' D I4	6-10 years	93	89,05				
Letting Down Important	11-15 years	55	97,45	_	3,932	,415	-
Others -	16-20 years	23	113,20	_			
	21-25 years	4	102,63				
Logg of Cocial Cumpant	1-5 years	15	70,63	_	0.422	051	
Loss of Social Support	6-10 years	93	88,31	_	9,422	,051	-

	11-15 years	55	108,12			
	16-20 years	23	109,46			
	21-25 years	4	102,25			
	1-5 years	15	75,67			
	6-10 years	93	95,01			
Re-injury	11-15 years	55	97,12	5,090	,278	-
	16-20 years	23	111,54			
	21-25 years	4	66,75			
	1-5 years	15	78,40			
	6-10 years	93	90,49			
Total	11-15 years	55	97,39	7,778	,100	-
	16-20 years	23	122,35			
	21-25 years	4	95,75			

In Table 4, when the sports injury anxiety scale is examined according to the training experience variable of the participants, there is no statistically significant difference between the mean scores of sub-dimensions of loss of athleticism, being perceived as weak, experiencing pain, letting down important others, loss of social support, re-injury (p>0,05). On the other hand, in the loss of social support sub-dimension, there is a relationship close to a significant difference (0.051). As the training experience increases, the loss of social support increases, except for those who are 21-25 years old.

Tablo 5. Evaluation of sports injury anxiety levels according to player positions of the participants

	Position	N	Rank Avg.	sd	X^2	p	diff
	Goalkeeper	21	106,45				-
Loss of Athleticism	Defense	66	97,35		1,487	,685	
Loss of Atmeticism	Midfield	77	90,91		1,407	,003	
	Attack	26	95,56				
	Goalkeeper	21	111,10	_			
Being Perceived as Weak	Defense	66	94,55	_	3,147	,370	
being refereived as weak	Midfield	77	89,64	_	3,147	,370	-
	Attack	26	102,65	_			
	Goalkeeper	21	115,83	_		,080,	
Experiencing Pain	Defense	66	83,54		6,767		-
Experiencing Pain	Midfield	77	97,45				
	Attack	26	103,67				
	Goalkeeper	21	120,40			,058	
I attin a Danna Iman antont Others	Defense	66	84,49	- 3	7,908		
Letting Down Important Others	Midfield	77	94,84	_ 3	7,908		-
	Attack	26	105,27	_			
	Goalkeeper	21	94,38		-	902	
Loss of Social Support	Defense	66	95,46		,614		
Loss of Social Support	Midfield	77	93,35		,014	,893	-
	Attack	26	102,87				
	Goalkeeper	21	106,81				
Re-injury	Defense	66	87,51		2,583	.461	
Ke-mjury	Midfield	77	97,95		2,363	,401	_
	Attack	26	99,40	_			
	Goalkeeper	21	113,48	_			
Total	Defense	66	86,58	_	5 410	,144	-
10tai	Midfield	77	93,98	_	5,412		
	Attack	26	108,12	_			



In Table 5, when the sports injury anxiety levels of the participants are evaluated according to the positions of the participants, there no statistically significant difference was found (P <0.05). On the other hand, a correlation close to a significant difference is observed in the letting down important others (0.058) and experiencing pain (0,080) sub-dimensions. In both sub-dimensions, it was determined that the anxiety level average of goalkeepers and attackers was higher than defense and midfield players.

Tablo 6. Evaluating the sports injury anxiety levels according to the injury status of the participants

	Injury Status	N	Rank Avg.	Rank Sum	U	p
Loss of Athleticism	Yes	119	96,18	11446,00	4143,00	,822
Loss of Athleticism	No	71	94,35	6699,00	4143,00	,822
Daing Danasiyad on Wool	Yes	119	98,68	11742,50	2946 50	202
Being Perceived as Weak	No	71	90,18	6402,50	3846,50	,293
E-manianaina Dain	Yes	119	97,99	11660,50	- 3928,50	,416
Experiencing Pain	No	71	91,33	6484,50		,410
Latting Down Important Others	Yes	119	101,74	12107,50	- 3481,50	041*
Letting Down Important Others	No	71	85,04	6037,50		,041*
I are of Coolel Comment	Yes	119	96,97	11539,00	4050.00	(20
Loss of Social Support	No	71	93,04	6606,00	4050,00	,628
Do injum	Yes	119	101,41	12068,00	2521.00	054
Re-injury	No	71	85,59	6077,00	- 3521,00	,054
Total	Yes	119	101,97	12134,50	2454.50	026*
Total	No	71	84,65	6010,50	- 3454,50	,036*

In Table 6, when the sports injury anxiety scale was examined according to the injury status variable of the participants, it was found that there was a significant difference in the sports injury anxiety total scores and the letting down important others sub-dimension (p <0.05). It is seen that those with injuries have higher levels of sports injury anxiety and letting down important others compared to those who do not. In addition, in the re-injury (0.054) sub-dimension, there is a relationship close to a significant difference. In this sub-dimension, it was determined that those who had injury had higher scores than those who did not. There was no statistically significant difference in the sub-dimensions of loss of athleticism, being perceived as weak, experiencing pain, loss of social support, and re-injury (p>0.05).

Discussion and Conclusion

Athletes who suffer from sports injuries have psychological conditions that cause anxiety such as re-injury, failure to perform the desired performance, and loss of social support. In this study, the sub-dimensions of sports injury anxiety were examined in line with the variables we identified.

When the sports injury anxiety sub-dimension scores were compared by age, no statistically significant difference was found between the sub-dimensions average scores. However, the total value of the sports injury anxiety scale was found to be close to the difference. When the mean of ranks is examined, it is seen that injury anxiety increases as the age of the participants' increases. Çetindemir & Cihan (2019) could not find a significant relationship when they examined the age variable of athletes in terms of injury anxiety. Although the

relationship between age and injury anxiety was examined in another study dealing with this issue, no risk factor was found (Egermann et al., 2003). According to Karabulut and Sevde (2019), the level of state anxiety decreases as the biological age increases. Another study shows that as the age increases, the anxiety of letting down important others increases (Yalçınkaya et al., 2020).

Although there is no significant difference between the training experience sports injury anxiety sub-dimensions, there is a relationship close to the significant difference in the loss of social support sub-dimension. loss of social support increases as the training experience increases (except those for 21-25 years). We can say that the reason for the low anxiety level in those with 21-25 years of training experience is that the athletes are at the end of their sports life and do not have anxiety for the future. Some studies found that the training experience of athletes in different branches does not affect their anxiety levels (Bingöl vd., 2012; Atasoy et al., 2018). In contrast to this study, Budak et al. (2020) found that, in terms of the duration of the training experience of athletes, those who did sports for 9 years had higher anxiety of re-injury than those who did sports for 3-4 and 5-6 years. Besides, Kayhan et al. (2019), according to the training experience variable of the participants, it was determined that the average of being perceived as weak sub-dimensions of those who do sports for 4 to 6 years is higher than those who do sports for 10 years or more.

When the sub-dimensions of sports injury anxiety were examined according to the positions of the football players, close to a significant differences relationship was observed in the letting down important others and experiencing pain sub-dimensions. In both sub-dimensions, it was determined that the anxiety level average of goalkeepers and attackers was higher than defense and midfield players. Çetindemir & Cihan (2019) stated that there was no significant difference between the scores obtained by the athletes according to the position variable they played when they examined the scores they got from the injury anxiety scale. In this sense, Yıldız (2009), on the other hand, could not detect a significant difference in the statistical evaluation of the groups formed according to the positions played by the players and the status of injury.

It is observed that the players who experienced injuries had higher levels of sports injury anxiety and anxiety of letting down important others than those who did not. In addition, in the re-injury (0.054) sub-dimension, there is a close relationship with a significant difference. In this sub-dimension, it was determined that those who had injuries had higher scores than those who did not. In their studies supporting our study, Tanyeri (2019) and Aksoy (2019) stated that athletes who had previous sports injuries experienced re-injury anxiety. Unver et al., (2020) stated that athletes who did not experience sports injuries have high being perceived as weak and loss of athleticism, while those who have sports injuries have high experienced pain. Also, another study states that athletes who suffered injuries before the 1992 Winter Olympics continue to be concerned about whether they will be able to regain their former performance despite being well-trained (Petitpas & Danish, 1995).

As a result, when we examine the findings, it is seen that the anxiety of injury increases as the age of the athletes' increases, while the increase in the loss of social support as the training experience increases (except those for 21-25 years) draws attention. We can say that the reason for the low anxiety level in those with 21-25 years of training experience is that the athletes are at the end of their sports lives and do not have anxiety for the future. According to the results obtained according to the positions, it was determined that the letting down



important others and experiencing the pain of the goalkeeper and attackers was higher than that of the defense and midfield players. One of the striking results is that football players with injuries have higher levels of sports injury anxiety, letting down important others, and reinjury anxiety compared to those who do not.

All these results show that injuries and psychological factors negatively affect the performance of athletes. Therefore, sports clubs should get support from sports psychologists to increase the performance of athletes.

REFERENCES

Akandere M., 1997. Effect of sports in elimination of anxiety observed in the university youth, Unpublished doctoral thesis, Marmara University, Health Sciences Institute, İstanbul.

Aksoy D., 2019. Examining the state and trait anxiety levels after treatment in sports injuries, Journal of Physical Education and Sport Sciences, 21(2), 89-96.

Atasoy M., Karabulut E. O., & Var L., 2018. The research on the negative evaluation anxiety of taekwondo players by different variables, Turkish Journal of Sport and Exercise, 20(3), 158-162.

Aydoğan Z., 2014. Psychological changes in athletes during injury and after treatment, Master's thesis, Ankara University, Health Sciences Institute, Ankara.

Bingöl H., Çoban B., Bingöl Ş., & Gündoğdu C., 2012. Determine the anxiety level of national team taekwondo athletes before matches who studied at universities, Selçuk University Journal of Physical Education and Sport Science, 14 (1),121–125.

Budak H., Sanioğlu A., Keretli Ö., Durak A., & Barış Ö. Z., 2020. The effects of sports injury on anxiety, Kilis 7 Aralık University Journal of Physical Education and Sport Sciences, 4(1), 38-47.

Caz Ç., Kayhan R. F., & Bardakçı S., 2019. Adaptation of the sports injury anxiety scale to Turkish: validity and reliability study, Turkish Journal of Sports Medicine, 54(1), 52-63.

Cheng WK., Hardy L., & Markland D., 2009. Toward a three-dimensional conceptualization of performance anxiety: Rationale and initial measurement development, Psychology of Sport and Exercise, 10(2), 271-278.

Çetindemir A., & Cihan H., 2019. Examination of young footballers injury anxieties according to their team status (Amateur-Professional) and Positions, Journal of Sports Education, 3(2), 52-57.

Egermann M., Brocai D., Lill C. A. & Schmitt H., 2003. Analysis of injuries in long-distance triathletes, international journal of sports medicine, 24(04), 271-276.

Erol B., & Karahan M., 2006. Sports injuries in children, Türkiye Klinikleri J Pediatr Sci, 2(4), 89-97.

Ivarsson A., & Johnson U., 2010. Psychological factors as predictors of injuries among senior soccer players. A prospective study, Journal of Sports Science and Medicine, 9(2), 347.

Kaçoğlu C., Atalay E., & Turhan B., 2018. Assessing the kinesiophobia and depression status at return to sport following sport-related injuries in contact and non-contact sports, Turkish Journal of Sports Medicine, 53(2), 067-075.

Karabulut E. O., & Sevde, M. V., 2019. Competition performance of state and trait anxiety of taekwondo players and its relationship with injury status, The Journal of Turkish Sport Sciences, 2(1), 47-54.



Kayhan R. F., Yapıcı A., & Üstun Ü. D., 2019. Investigation of the injury anxiety of female athletes according to various variables, Sportif Bakış: Spor ve Eğitim Bilimleri Dergisi, 6(1), 276-287.

Maddison R., & Prapavessis H. A., 2005. Psychological approach to the prediction and prevention of athletic injury, Journal Sports Exerc Psychol, 27(3), 289-310.

Mankad A., Gordon S., & Wallman K., 2009. Perceptions of emotional climate among injured athletes, Journal of Clinical Sport Psychology, 3(1), 1-14.

Özder R., 2010. Examination of injury and the association between injury and injury anxiety among male pentathletes participated in world military pentathlon championship, Master's thesis, Gazi University, Health Sciences Institute, Ankara.

Özgül F., 2003. State and trait anxiety of the students in Cumhuriyet University School of Physical Training and Sports, Master's thesis, Cumhuriyet University, Health Sciences Institute, Sivas.

Petitpas A., & Danish S. J., In S. M., Murphy (Ed.), 1995, Caring for Injured Athletes, Sport Psychology Interventions (s. 253-306). Champain III: Human Kinetics.

Rex C. C., & Metzler J. N., 2016. Development of the sports injury anxiety scale. Measurement in Physical Education and Exercise Science, 20(3), 146-158.

Smith R.E., & Smoll F.L., 1990. Sports performance anxiety: handbook of social and evaluation anxiety, New York, 417-454.

Tanyeri L., 2019. Investigation of injury anxiety in different branches athletes, OPUS International Journal of Society Researches, 13(19), 577-591.

Timpka T., Jacobsson J., Bickenbach J., Finch C. F., Ekberg J., & Nordenfelt L., 2014. What is A Sports Injury?, Sports Medicine, 44(4), 423-428.

Uğur M., Can S., & Şenel K., 1999. The effect of the muscle power and the hand preference on injuries in various sport branches. Journal of Physical Education and Sport Sciences, 1(1), 1-4.

Ünver Ş., Şimşek E., İslamoğlu İ., & Arslan H. 2020. Investigation of injury anxiety levels of athletes in university teams, Journal of Physical Education and Sport Sciences, 14(3), 400-410.

Williams J. M., Andersen M. B., 2007. Psychosocial antecedents of sports injury and interventions for risk reduction, In G. Tennebaum and R.C. Eklund (Eds.), Handbook of sport psychology (3rd ed., pp. 279-403), Hoboken, NJ: Wiley.

World Health Organization, 2001. International classification of functioning, Disability and Health (ICF), 28-66, Geneva: World Health Organization.

Yalçınkaya A., Demirci M., ve Kızılyar N. G., 2020. Investigation of anxiety levels in sports injuries of physical education and sports school students, Bozok International Journal of Sport Science, 1(1), 43-51.

Yıldız M, 2009. Investigating/making a study about frequency of getting injured and causes at the sportsmen at the amateur sporting clubs in Afyonkarahisar, Master's thesis, Afyon Kocatepe University, Health Sciences Institute, Afyonkarahisar.