



# Education Quarterly Reviews

---

**Gönen, Mevlüt. (2021), Investigation of Injury Anxiety Level of Archers According to Various Parameters: Students of Faculty of Sport Sciences and Club Athletes. In: *Education Quarterly Reviews*, Vol.4, No.4, 506-513.**

ISSN 2621-5799

DOI: 10.31014/aior.1993.04.04.411

The online version of this article can be found at:  
<https://www.asianinstituteofresearch.org/>

---

Published by:  
The Asian Institute of Research

The *Education Quarterly Reviews* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Education Quarterly Reviews* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of education, linguistics, literature, educational theory, research, and methodologies, curriculum, elementary and secondary education, higher education, foreign language education, teaching and learning, teacher education, education of special groups, and other fields of study related to education. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Education Quarterly Reviews* aims to facilitate scholarly work on recent theoretical and practical aspects of education.



ASIAN INSTITUTE OF RESEARCH  
Connecting Scholars Worldwide



# Investigation of Injury Anxiety Level of Archers According to Various Parameters: Students of Faculty of Sport Sciences and Club Athletes

Mevlüt Gönen<sup>1</sup>

<sup>1</sup> Faculty Of Sport Sciences, The University of Bayburt, Bayburt, Turkey

Correspondence: Mevlüt GÖNEN, Faculty Of Sport Sciences, The University of Bayburt, Bayburt, Turkey.

E-mail: mevlutgonen@bayburt.edu.tr

## Abstract

This study aims to analyze injury anxiety in archers according to several parameters. The research universe consists of archers who conduct sports in archery clubs modern category and Sports sciences Faculty students in the Turkey.. On the other hand, the research sample comprises 346 archers, 194 men and 152 women, who willingly participate in archery at sports clubs in various cities in Turkey. In the study, the personal information form generated by the researcher and the "Sports Injury Anxiety Scale" established by Rex and Metzler (2016) and modified into Turkish by Caz, Kayhan and Bardakçı (2019) were utilized as data collection methods. Statistical analysis of the data was done with SPSS 25 program, t-test and One Way Anova tests. According to the results of the research, it was established that among the archers who participated in the research, the archers who had a lot of sports experience, had a sports injury before, and did not have any other sportsmen in their family, had a high mean score of sports injury anxiety.

**Keywords:** Archery Education, Sports Injuries, Anxiety, Student, Learning

## 1. Introduction

### 1.1 Introduce the Problem

Archery is a sport that aims to score high points by shooting arrows at the target with high accuracy in a limited time using bow, arrow, target, and various protective and auxiliary materials (Kabak & Karanfilci, 2018, Leroyer, Hoecke & Halal 1993). The beginning of archery dates back to ancient civilizations, where bows and arrows were used for hunting wild animals and as a weapon in wars, and over time it became one of the modern sports and had been taking part in the Olympic Games programs since 1972. Archery is a sport that athletes of all age groups can do, and it has become one of the sports branches that attract attention in the world day by day (Mondal & Mridha, 2021). Depending on the pedestrians and the game rules (Lee, 2009), archery consists of two main categories: Traditional Archery and Modern Archery. Both categories have their own sections.

Modern archery is divided into two main categories as compound bow and recurve bow, based on the type of bow used in itself. In both categories, competitions are held in national and international organizations. Besides, only the recurve bow category can compete in the olympic games.

Sports injuries are the common name given to all kinds of damage 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 during sports activities. These injuries can occur for a variety of reasons such as impacts, falls, and severe contractions (Kılıç, Yücel, Gümüşdağ, Kartal, & Korkmaz, 2014) and according to the recovery time of the injury, they are called as mild, moderate, and serious injuries (Bavli & Kozanoğlu, 2008).

In sports environments where competition and winning are at the forefront, athletes may experience various physical injuries as a result of sometimes having to push the limits to reach high performances. The cause of these injuries is sometimes the physical conditions in the sports environment and the materials used.

The type and area of injury in sports vary according to the age of the athlete, gender, and other factors. In general, whichever limb the athletes use the most, injuries are more common in that region (Çakır, Kısa, 2021). Since archers use the upper part of the body more frequently, injuries occur mostly in the shoulder, neck, and back regions as muscle pain and strain. (Kocaman, Atay, Alp & Suna 2018). In archery, sports injuries due to many reasons such as incorrect application of some techniques, overloads may occur, as well as injuries that may occur as a result of accidents that may occur if the necessary safety precautions are neglected. For whatever the reason might be, sports injuries are an undesirable situation that causes injury anxiety in athletes.

There are many components, including psychological components, that cause injury anxiety in the sports environment. An increase in injury anxiety in the athlete can be caused by the combination of one or more of them. (Aksoy, 2019, Rex & Metzler, 2016, Ivarsson & Johnson, 2010, Petrie, 1993). Although high injury anxiety in archers can negatively affect performance, at more advanced levels, it can cause the athlete to cool off from the sport or even quit the sport.

This study, which examines the level of injury anxiety in archers and the parameters affecting it, is important as it is thought to assist coaches and sports psychologists in dealing with injury anxiety in athletes. Besides, although there have been various studies on archery in the literature, there are no studies conducted on injury anxiety in archers. It is thought that this study is important in terms of filling this gap in the

## **2. Method**

### *2.1. Population-Sample*

The population of the study consists of athletes who do sports in archery clubs operating in the modern category in Turkey. The sample, as for that, consists of a total of 346 archers, 194 men and 152 women, who practice archery in sports clubs in various provinces, in the questionnaire created in the digital environment.

### *2.2 Data Collection Tools*

In the study, the personal information form was created by the researcher, and the "Sports Injury Anxiety Scale" was developed by Rex and Metzler (2016) and adapted into Turkish by Caz, Kayhan, and Bardakçı (2019) were used as data collection tools. This scale consists of six sub-dimensions and 19 items. There is no negative (reversely coded) item in the 5-point Likert-type (1: strongly disagree-2: disagree- 3: neither agree nor disagree- 4: agree- 5: strongly agree) scale.

### *2.2 Data Analysis:*

The data obtained within the scope of the study were analyzed using the SPSS 25 Package Program. Primarily, the Kolmogorov-Smirnov normality test was performed to determine whether the obtained data were normally distributed or not, to determine what kind of analysis to be made. In consequence of the test, it was determined

that the data were between -1.5 and +1.5 and provided the assumption of normal distribution (Tabachnick & Fidell, 2013). Thus, parametric tests were used in the analysis of the data.

### 3. Results

In this part of the study, data obtained from participants using the "Sports injury anxiety scale" was analyzed statistically in terms of different variables.

Table 1: Frequency and Percentage Distributions of the Descriptive Attributes of the Study Group

Variables		<i>f</i>	%
Gender	Male	194	56,0
	Female	152	43,9
Type Bow	Recurve Bow	257	74,3
	Compound Bow	89	25,7
Is there any other person in your family who does active sports?	Yes	122	35,3
	No	224	64,7
Sports experience	Less than 1 year	168	48,6
	1-3 Years	95	27,5
	3-7 Years	83	24,0
Did you experience sports injury before? What is the recovery time?	No	135	39,0
	1-7 Days	127	36,7
	8-21 Days	59	17,1
	21 Days and Over	25	7,2
	<i>Total</i>	346	%100

When Table 1 is examined, it is seen that of the athletes participating in the study, 194 are male, and 152 are female. According to the type of bow used, 257 athletes in the recurve bow category and 89 athletes in the compound bow category participated in the study. The number of archers engaged in active sports in their family is 122, and the number of archers in their family who do not play any active sports other than themselves is 224. In terms of sportsmanship experience, the number of individuals doing archery for less than 1 year is 168, the number of individuals doing archery for 1-3 years is 95, and the number of individuals doing archery for 3-7 years is 83. The number of athletes who have not experienced sports injuries before is 135, the number of athletes who experienced sports injuries and recovered between 1-7 days is 127, the number of athletes recovering between 8-21 days is 59, the number of athletes recovering in 21 days or more is 25. The results of the t-test analysis of the Sports Injury Anxiety Levels of the participants by gender are given in Table 2.

Table 2: T-Test Results of Sports Injury Anxiety Scale Scores by Gender

	Gender	N	X	ss	t-test		
					t	<i>sd</i>	<i>p</i>
The Anxiety of Loosing Ability	Male	194	3,319	1,082	2,766	344	.006*
	Female	152	2,980	1,193			
Poor Perception Anxiety	Male	194	3,340	1,109	-1,487	344	.138
	Female	152	3,519	1,121			
The Anxiety of Suffering	Male	194	3,273	1,161	1,379	344	.169
	Female	152	3,092	1,273			
Disappointing Anxiety	Male	194	3,376	1,071	-,542	344	.588
	Female	152	3,440	1,131			
The Anxiety of Loss Social Support	Male	194	3,355	1,183	-,712	344	.477
	Female	152	3,447	1,194			

The Anxiety of being Injured Again	Male	194	3,469	1,105	-,332	344	.740
	Female	152	3,509	1,171			

\* $p < 0.05$

It is seen that there is a statistically significant difference only in the sub-dimension of Losing Ability according to gender variable of sub-dimension scores of Sports Injury Anxiety Scale (SIAS) in Table 2 ( $t[2.776]=.006$ ;  $p < 0.05$ ). This difference is in terms of male athletes ( $X=3,319$ ).

Table 3: T-Test results according to the bow type used by the participants' sports injury anxiety levels

	Type Bow	N	X	ss	t testi		
					t	sd	p
The Anxiety of Loosing Ability	Recurve	257	3,120	1,144	2,766	344	.168
	Compound	89	3,314	1,134			
Poor Perception Anxiety	Recurve	257	3,393	1,151	-1,487	344	.461
	Compound	89	3,494	1,012			
The Anxiety of Suffering	Recurve	257	3,210	1,247	1,379	344	.668
	Compound	89	3,146	1,113			
Disappointing Anxiety	Recurve	257	3,478	1,079	-,542	344	.033*
	Compound	89	3,191	1,126			
The Anxiety of Loss Social Support	Recurve	257	3,455	1,182	-,712	344	.115
	Compound	89	3,224	1,194			
The Anxiety of being Injured Again	Recurve	257	3,529	1,126	-,332	344	.240
	Compound	89	3,365	1,150			

There is a statistically significant difference between the archers' SIAS sub-dimension scores, only in the Disappointment sub-dimension according to the type of publication used according to Table 3 ( $t[-.542]=.033$ ;  $p < 0.05$ ). This difference is in terms of archers using recurve bows ( $X=3,478$ ).

Table 4: T-Test results of the participants' sports injury anxiety levels according to the status of other active athletes in the family

Variable of active athlete and another individual in the family		N	X	ss	t-test		
					t	sd	p
The Anxiety of Loosing Ability	Yes	122	3,187	1,123	-,374	344	.709
	No	224	3,139	1,156			
Poor Perception Anxiety	Yes	122	3,468	1,101	-1,122	344	.263
	No	224	3,327	1,124			
The Anxiety of Suffering	Yes	122	3,236	1,267	-,892	344	.373
	No	224	3,114	1,183			
Disappointing Anxiety	Yes	122	3,495	1,076	-2,099	344	.037*
	No	224	3,237	1,100			
The Anxiety of Loss Social Support	Yes	122	3,549	1,241	-3,296	344	.001*
	No	224	3,114	1,131			
The Anxiety of being Injured Again	Yes	122	3,549	1,141	-1,383	344	.168
	No	224	3,373	1,126			

When Table 4 is examined, there is a statistically significant difference in the Disappointed ( $t[-2.099]=.037$ ;  $p < 0.05$ ) and Losing Social Support sub-dimension ( $t[-3.296]=.001$ ;  $p < 0.05$ ) scores of the archers in the SIAS sub-dimension scores, according to the variable of active athlete and another individual in the family. This difference is in the direction of individuals in the Disappointment sub-dimension ( $X=3,495$ ) and Losing Social Support sub-dimension ( $X=3,549$ ) who do not engage in active sports other than themselves in their family.

Table 5: ANOVA Test results of the participants' sports injury anxiety levels according to their athletic years

	Categories	N	X	Ss	Source of Variance	KT	sd	KO	F	p	Meaning
The Anxiety of Loosing Ability	Less than 1 year	168	3,070	1,121	<b>Between Grups</b>	6,332	2	3,166	2,442	,088	
	1-3 Years	95	3,380	1,160	<b>In-Group</b>	444,60	343	1,296			
	3-7 Years	83	3,100	1,147	<b>Total</b>	450,93	345				
	Total		3,170	1,143							
Poor Perception Anxiety	Less than 1 year	168	3,286	1,079	<b>Between Grups</b>	6,988	2	3,494	2,832	,060	
	1-3 Years	95	3,621	1,093	<b>In-Group</b>	423,246	343	1,234			
	3-7 Years	83	3,458	1,192	<b>Total</b>	430,234	345				
	Total	346	3,419	1,117							
The Anxiety of Suffering	Less than 1 year	168	2,887	1,129	<b>Between Grups</b>	33,507	2	16,754	12,110	.000*	B-A
	1-3 Years	95	3,600	1,215	<b>In-Group</b>	474,519	343	1,383			
	3-7 Years	83	3,349	1,224	<b>Total</b>	508,026	345				
	Total	346	3,194	1,213							
Disappointing Anxiety	Less than 1 year	168	3,179	1,057	<b>Between Grups</b>	16,725	2	8,362	7,196	,001*	B-A
	1-3 Years	95	3,632	1,001	<b>In-Group</b>	398,628	343	1,162			
	3-7 Years	83	3,602	1,199	<b>Total</b>	415,353	345				
	Total	346	3,405	1,097							
The Anxiety of Loss Social Support	Less than 1 year	168	3,065	1,050	<b>Between Grups</b>	37,022	2	18,511	14,118	,000*	B-A
	1-3 Years	95	3,789	1,090	<b>In-Group</b>	449,732	343	1,311			
	3-7 Years	83	3,614	1,368	<b>Total</b>	486,754	345				
	Toplam	346	3,396	1,187							
The Anxiety of being Injured Again	Less than 1 year	168	3,145	1,065	<b>Between Grups</b>	38,167	2	19,083	16,161	,000*	B-A; C-A
	1-3 Years	95	3,836	,918	<b>In-Group</b>	405,025	343	1,181			
	3-7 Years	83	3,777	1,288	<b>Total</b>	443,191	345				
	Total	346	3,487	1,133							

\*p&lt;0,05

A= Less than 1 year, B= 1-3 Years, C= 3-7 Years.

In Table 5, the SIAS of the participants according to their athletic years, Anxiety of Suffering (F=12.110; <P 0.05), Anxiety of Disappointment (F=7.196; <P 0.05), Anxiety of Losing Social Support (F=14.118) ; <P 0.05), Re-Injury Anxiety (F=16.161; <P 0.05), there is a statistically significant difference in the mean scores.

As a result of the Post-Hoc analysis Tukey Test, which was conducted to determine between which groups this difference occurred, the sub-dimensions of Suffering (X=3,600), Disappointment (X=3.632), Losing Social Support (X=3.789) were 1-3. It has been determined that the level of injury anxiety of the archers with a sportsmanship experience between 1 and 5 years is higher than those of the archers with less than 1 year of sports experience. In the Re-Injury sub-dimension, it was determined that the archers who had 1-3 years (X=3.836) and 4-7 years (X=3.777) sports experience had higher injury anxiety score averages than archers who had less than 1-year (X=3.145) sports experience. has been done.

Table 6: Anova-test results of participants' sports injury anxiety level scores according to previous sports injury and recovery time.

	Categories	N	X	Ss	Source of Variance	KT	sd	KO	F	p	Meaning
The Anxiety of Loosing Ability	No	135	3,044	1,151	<b>Between Grups</b>		3	4,849	3,800	,011	A-D; D-A,B
	1-7 Days	127	3,078	1,185	<b>In-Group</b>		342	1,276			
	8-21 Days	59	3,423	1,053	<b>Total</b>		345				
	21 Days or Over	25	3,720	,842							
	Total	346	3,170	1,143							
Poor Perception Anxiety	No	135	3,303	1,024	<b>Between Grups</b>		3	1,369	1,099	,350	
	1-7 Days	127	3,433	1,288	<b>In-Group</b>		342	1,246			
	8-21 Days	59	3,593	,967	<b>Total</b>		345				
	21 Days or Over	25	3,560	,960							
	Total	346	3,419	1,116							
The Anxiety of Suffering	No	135	2,837	1,173	<b>Between Grups</b>		3	9,686	6,916	,000	B-A; C-A; D-A
	1-7 Days	127	3,401	1,248	<b>In-Group</b>		342	1,400			
	8-21 Days	59	3,389	1,114	<b>Total</b>		345				
	21 Days or Over	25	3,600	1,040							
	Total	346	3,193	1,213							
Disappointing Anxiety	No	135	3,259	1,112	<b>Between Grups</b>		3	2,504	2,100	,100	
	1-7 Days	127	3,527	1,132	<b>In-Group</b>		342	1,193			
	8-21 Days	59	3,339	,975	<b>Total</b>		345				
	21 Days or Over	25	3,720	1,021							
	Total	346	3,404	1,097							
The Anxiety of Loss Social Support	No	135	3,288	1,158	<b>Between Grups</b>		3	2,255	1,607	,188	
	1-7 Days	127	3,551	1,245	<b>In-Group</b>		342	1,403			
	8-21 Days	59	3,237	1,072	<b>Total</b>		345				
	21 Days or Over	25	3,560	1,260							
	Total	346	3,396	1,187							
The Anxiety of being Injured Again	No	135	3,451	1,173	<b>Between Grups</b>	6,988	3	2,851	2,243	,083	
	1-7 Days	127	3,661	1,195	<b>In-Group</b>	423,246	342	1,271			
	8-21 Days	59	3,211	,831	<b>Total</b>	430,234	345				
	21 Days or Over	25	3,440	1,121							
	Total	346	3,487	1,133							

\*P&lt;0.05

A= No, B=1-7 Days, C= 8-21 Days, D= 21 Days or more

In Table 6, a statistically significant difference was found in the Anxiety of Losing Ability ( $F=3,800$ ;  $<P 0.05$ ) and Anxiety of Suffering ( $F=6.916$ ;  $<P 0.05$ ) sub-dimensions of the SIAS according to the previous sports injury and the recovery time of the archers. In consequence of the Post-Hoc Analysis Tukey Test, which was conducted to determine between which groups this difference was, it was determined that the Anxiety of Losing Ability sub-dimension average score ( $X=3,720$ ) of the archers who recovered in 21 days or more was higher than the archers who did not experience any sports injuries ( $X=3,044$ ). Again in the same sub-dimension, it was determined that the mean score ( $X=720$ ) of the archers who recovered in 21 days or more was higher than the archers with no previous sports injuries ( $X=3.044$ ) and archers healed in 1-7 days ( $X=3.078$ ).

In the Anxiety of Suffering sub-dimension, it was determined that the archers healed in 1-7 days ( $X= 3,401$ ), archers healed in 8-21 days ( $X= 3.389$ ), and archers healed in 21 days or more ( $X=3.600$ ) sports injury anxiety scores were higher than the archers who did not have a sports injury before ( $X= 2.837$ ).

#### 4. Discussion

In this study, in which the level of injury anxiety in archers was evaluated according to different variables, it was determined that male archers' anxiety levels were higher only in the "Losing of Ability" sub-dimension, among the archers' sports injury anxiety scale sub-dimension mean scores according to gender.

According to the type of bow used, it was determined that the anxiety levels of the Olympic recurve archers were higher than the compound archers only in the Disappointing Anxiety sub-dimension, from the SIAS sub-dimension scores.

It has been determined that the sports injury anxiety level mean scores of archers who do not have any other active sports in their family are higher than archers who do other sports in their family in the "Disappointing Anxiety and Anxiety of Loss Social Support sub-dimensions." This situation can be explained as the fact that archers in their family who played sports other than themselves have the opportunity to receive support from other members of their families who do sports in case of any sports injury, and therefore their anxiety about Disappointing Anxiety and Anxiety of Loss Social Support is less.

Archers with 1-3 years of sports experience have higher sports injury anxiety score averages than archers with less than 1 year in Anxiety of Suffering, Disappointing Anxiety, Anxiety of Loss Social Support sub-dimensions. In the Anxiety of being Injured Again sub-dimension, it was seen that the sports injury anxiety levels of the archers with 1-3-year and 4-7 years of sports experience were higher than the archers with less than 1 year. As the experience of the athletes increases, their expectations and needs for winning also increase. In this regard, every competition is important for athletes. The thought that their careers may be damaged due to the matches they could not attend due to sports injuries may cause more anxiety in more experienced athletes. This can be explained by the increase in sports injury concerns of archers as their sports experience increases.

It was determined that the anxiety levels of the archers who had not experienced a sports injury before in the Anxiety of Losing Ability and Anxiety of Suffering sub-dimensions of the SIAS were lower than those of the athletes who had experienced a sports injury and recovered at different times. Sports injuries are classified as minor injuries lasting 1-7 days, moderate injuries lasting 8-21 days, and serious injuries lasting more than 21 days (Kocaman, Atay, Alp & Suna 2018). It can be said that since the archers who healed in 1-7 days experienced minor injuries, their anxiety levels were lower than those of the athletes who had moderate and long-term injuries. In this regard, archers who have not experienced sports injuries before have lower anxiety levels, which can be explained in this direction. In a study conducted supporting the findings by Heil (1993), it was stated that injury experiences, physical pain in athletes, questioning of ability lead to anxiety.

It is thought that taking all necessary safety measures to prevent situations that can cause serious injuries in archery training, and competition areas will be effective in preventing sports injuries and related sports injury anxiety.



According to the study findings, the archers participating in the study generally have high sports injury anxiety levels. Nevertheless, archers who have a lot of sports experience, who have had sports injuries before, and who do not have any other sportsmen in their family have been found to have higher sports injury anxiety levels.

Sports environments with intense physical activity are risky areas for sports injuries. This risk is even higher in archery which is a shooting sport. Sports environments, where the risk of injury is high, bring injury anxiety in athletes. It is thought that measures to be taken to eliminate risk factors that may cause injury in sports environments will be effective in reducing injury anxiety in archers. However, it is thought that measures such as archers being careful to take their protective measures, not neglecting warm-up and cool-down techniques before training and matches will prevent the risk of injury and therefore, injury anxiety.

## References

- Aksoy, D. (2019). Spor yaralanmalarında tedavi sonrası durumluk ve sürekli kaygı düzeylerinin incelenmesi. *Beden Eğitimi ve Spor Bilimleri Dergisi*, 21(2), 89-96.
- Bavli, Ö., & Kozanoğlu, E. J. F. Ü. S. B. T. D. (2008). Adolesan basketbolcularda mevkilere göre yaralanma türleri ve nedenleri. 22(2), 77-80.
- Çakır, Z., & Cihad, K. (2021). Farklı Kategoride Yarışan Taekwondocuların Spor Yaralanmalarına Karşı, Kaygı Durumlarının İncelenmesi. *The Online Journal of Recreation and Sports*, 10(3), 18-30.
- Heil, J. (1993). A psychologist's view of the personal challenge of injury. *Psychology of sport injury*, 33-46.
- Ivarsson, A., & Johnson, U. (2010). Psychological factors as predictors of injuries among senior soccer players. A prospective study. *Journal of sports science & medicine*, 9(2), 347.
- Kabak, B., & Karanfilci, M. (2018). Okçuların Antrenman ve Müsabakada Geçirdikleri Spor Yaralanmalarının İncelenmesi. *Kilis 7 Aralık Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi*, 2(1), 17-27.
- Kılıç, B., Yücel, A. S., Gümüüşdağ, H., Kartal, A., & Korkmaz, M. (2014). Spor yaralanmaları üst ekstremitte yaralanmaları kapsamında omuz yaralanmaları ve tedavi yöntemleri.
- Kocaman, G., Atay, E., Alp, M., & Suna, G. (2018). Okçularda Spor Yaralanmaları Bölgelerinin ve Türlerinin Değerlendirilmesi. *Spor Hekimliği Dergisi*, 53(1), 001-008.
- Lee, K. H. (2009). Evaluation of attention and relaxation levels of archers in shooting process using brain wave signal analysis algorithms. *Science of Emotion and Sensibility*, 12(3), 341-350.
- Leroyer, P., Van Hoecke, J., & Helal, J. N. (1993). Biomechanical study of the final push-pull in archery. *Journal of Sports Sciences*, 11(1), 63-69.
- Mondal, T., & Mridha, S. (2021). A study on Indian archery: An upsurge with reference to different awards.
- Petrie, T. A. (1993). Coping skills, competitive trait anxiety, and playing states: Moderating effects an the life stress-injury relationship. *Journal of sport and exercise psychology*, 15(3), 261-274.
- Rex, C. C., & Metzler, J. N. (2016). Development of the sport injury anxiety scale. *Measurement in Physical Education and Exercise Science*, 20(3), 146-158