



A study on sports injuries and anxiety

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Abstract

The aim of study was to investigate the effects of sports injuries on the age, sex, and total number of injuries sustained by athletes in a year due to sports injuries. A total of 333 volunteer athletes, including 148 women and 185 men, aged 18 to 34 years were included in the study. For statistical analysis, an independent T test was used when binary groups were compared, a ANOVA test when more than two groups were compared, and a Tukey test of post hoc tests to determine which groups differed from the others. When comparing the Sports injuries anxiety scale (SIAS) by age and gender, differences in the subdimensions of suffering anxiety were found to be statistically significant ($p<0.05$). When comparing by total number of injuries in a year, differences in the subdimensions of fear of loss of ability, fear of poor perception, fear of pain, fear of loss of social support, and fear of re-injury were found to be statistically significant ($p<0.05$). No statistically significant differences were found for the other sub-dimensions ($p>0.05$). Consequently, anxiety after sports injuries is a multifactorial phenomenon influenced by many reasons.

Keywords: Athletes, anxiety, injury, sports

Spor sakatlıkları ve kaygı üzerine bir çalışma

Özet

Çalışmada, spor sakatlıkları sonrası sporcuların kaygı durumlarının yaş, cinsiyet ve 1 yılda geçirilen toplam sakatlık sayısı üzerine olan etkilerini incelemek amacıyla yapılmıştır. Çalışmaya, 18-34 yaş üzeri 148'i kadın, 185'i erkek olmak üzere toplam 333 sporcu dâhil edilmiştir. İstatistiksel değerlendirmede, ikili gruplar karşılaştırılırken independent T-testi, ikiden fazla gruplar karşılaştırılırken ise ANOVA testi, hangi grupların diğerlerinden farklı olduğunu belirlemek için de Post-Hoc testlerinden Tukey testi kullanılmıştır. SYKÖ yaş ve cinsiyet değişkenine göre yapılan karşılaştırmada, acı çekme kaygısı alt boyutlarında farklılıklar istatistiksel olarak anlamlı bulunmuştur ($p<0,05$). SYKÖ'nin 1 yılda geçirilen toplam sakatlık sayısına göre yapılan karşılaştırmada yeteneğini kaybetme kaygısı, zayıf algılanma kaygısı, acı çekme kaygısı, sosyal desteği kaybetme kaygısı ile yeniden yaralanma kaygısı alt boyutlarında farklılıklar istatistiksel olarak anlamlı bulunmuştur ($p<0,05$). Diğer alt boyutlarda ise istatistiksel olarak anlamlı farklılıklar bulunmamıştır ($p>0,05$). Sonuç olarak, spor yaralanmaları sonrası yaşanan kaygı durumu, birçok nedenden etkilenen multifaktöriyel bir olgudur.

Anahtar Kelimeler: Kaygı, sakatlık, spor, sporcu

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Genişletilmiş Türkçe Özet makalenin sonunda yer almaktadır.

INTRODUCTION

Sport, with its increasing popularity, has attracted the attention of people from all sectors of society and has become a socio-cultural activity whose participation has avalanched over time. Over time, sport has gained a global dimension. The increasing participation in sports activities has led to the fact that these entertaining activities also include a number of negativities. One of these negatives, and even the most important, is the concept of injuries. Due to the development of sports, intense sports activities have caused various injuries (Can et al., 2003; Yılmaz et al., 2018; Uzun et al., 2022). Any treatable or permanent injury that occurs during sports activities and prevents athletes from participating in training or competitions is defined as a sports injury (Karayol & Eroğlu, 2020). When sports injuries are studied in terms of processes, they are divided into two groups: acute and chronic. Acute injuries occur as a result of excessive stress on tissue boundaries (sprain, strain, contusion, fracture, etc.). Chronic injuries are usually due to overuse (Altunhan & Ökmen, 2021). In the development of sports injuries, we distinguish between internal factors and external factors (Koz & Ersöz, 2004). As internal factors, we can explain muscle strength, endurance, range of motion, core stability, balance, and proprioception of the athlete (Argut & Çelik, 2018). As external factors, we can mention environmental conditions, ground, weather, sport area, altitude and materials used (Koku, 2013).

In addition to the positive effects of sport on physical health, there are also many benefits related to the mental aspects (Karakaya et al., 2006). In this regard, there are many psychological factors that affect the athlete's performance in sports activities. The most important of these factors is anxiety mood (Aksoy, 2019). Anxiety in the general sense is the individual's reaction to environmental and mental events, and in the narrower sense, it is a state of fear and tension accompanied by physiological changes (sweating, rapid heartbeat, yellowing, etc.) that are truly felt even if they are not conscious (Kaya & Varol, 2004).

Anxiety, which is an important emotional state for the athlete's efficient performance, plays a key role in ensuring that the athlete makes the right decisions and uses his or her skills correctly during athletic performance (Civan et al., 2010). For this reason, maintaining anxiety at an optimal level is extremely important for athletic success. Excessive levels of anxiety impede mental concentration processes such as decision making and adaptation to activities, while appropriate levels of anxiety positively influence success in sports. To this end, Aydoğan et al. (2022), studied the treatment of severe sports injuries and found that the psychological effects of sports injuries lead to the conclusion that not only medical treatment

is sufficient, but also psychological treatment is important for the health of the athlete. Fear of injury, which has a psychosocial impact on athletes, has a critical importance in both the recovery process of athletes after injury and their successful return to sport (Güler, 2022). Anxiety, which has a serious impact on sports injuries, can have a negative effect on many sub-dimensions of anxiety (fear of losing skills, fear of poor perception, fear of suffering, fear of disappointment, fear of losing social support, fear of re-injury, etc.) even on athletes who try to act in a controlled manner in the face of injury (Namlı & Buzdağlı, 2020). In order to achieve optimal anxiety levels in the face of sports injuries, it is very important for athletes to avoid injury anxiety (Yalçınkaya et al., 2020). Regardless of the sport, it is very important to avoid injuries that occur in sports and to treat the injuries properly for athletic success in sports. In this regard, it is very important to identify athletes' fears of injury and to take and reduce measures against their fears according to the results of a successful sports life. In the light of these data, our study was conducted to investigate the anxiety status of athletes after the injuries they were exposed to.

METHOD

Group of research

A total of 333 athletes, 148 women and 185 men, from different sports, who trained regularly and were older than 18 years, were randomly selected and voluntarily participated in the study. Athletes' participation in the study was ensured and athletes were made to fill in an Informed Voluntary Participation Form (IVPF), which was completed by the test physician. The study was approved by the Ethics Committee of Adıyaman University of Humanities (21/11/2022-345). When the demographic characteristics of the participants were examined in Table 1, a total of 333 individuals participated in the study. 67% (223) of the participants were between 18 and 25 years old, 5.1% (17) were between 26 and 33 years old, and 27.9% (93) were 34 years old or older. 44.4% (148) of participants were female and 55.6% (185) were male. In response to the question "total number of injuries in a year," 34.8% (116) of participants reported that they had no injuries, 28.2% (94) had 1 injury, 22.2% (74) had 2 injuries, 9.6% (32) had 3 injuries, and 5.1% (17) had 4 or more injuries.

Scale of the study

In this study, we used the Sports Injury Anxiety Scale (SIAS) developed by Rex and Metzler and translated into Turkish by Caz et al. (2019), The scale had six factors (fear of loss of skills, fear of poor perception, fear of suffering, fear of disappointment, fear of loss of

social support, and fear of re-injury). The exploratory factors identified and the validity analysis of the scale were examined by confirmatory factor analysis. As a result of the analysis, the model fit index values were as follows: $\chi^2/df= 1.909$, (0.90); IFI=0.942 (> 0.90); CFI =0.941(< 0.95) and RMSEA=0.049 (<0.05). At the same time, the standard regression coefficients expressing the factor commitments of the substances were found to be quite high and significant. Based on this result, it can be concluded that the six-factor measurement structure explained by the exploratory factor analysis is also confirmed by the data obtained from an independent sample and thus has the validity of the structure. In measuring the internal consistency level of the scale, the Cronbach α -coefficient was also considered. The internal consistency coefficient of the Sports Injury Anxiety Scale Cronbach α for the (SIAS) was calculated to be 0.87. According to this result, we can say that the scale has high internal consistency and reliability. The Cronbach α coefficient was calculated as 0.87 for the Disappointment Anxiety factor, 0.81 for the Fear of Loss of Social Support factor, 0.78 for the Pain Anxiety factor, and 0.72 for the Fear of Loss of Ability factor. Cronbach's α -coefficients of 0.64 and 0.60 were calculated for the other subfactors of the fear of poor perception by the team and fear of re-injury scales, respectively. According to these results, it can be said that these factors are reliable. The stability coefficients of the subfactors of the scale were found to be 0.834 for the fear of loss of ability factor (ALA), 0.855 for the fear of poor perception factor (APP), 0.890 for the fear of suffering factor (AS), 0.901 for the fear of disappointment factor (AD), 0.903 for the fear of loss of social support factor (ALSS), and finally 0.942 for the fear of re-Injuryfactor (ARI). All these results of the validity and reliability analysis of the Sports Injury Anxiety Scale (SIAS) show that the scale is a valid and reliable measurement tool that can also be used to measure the injury anxiety of Turkish athletes. Moreover, there are no negative substances on the scale.

Collection of data

During the study, all necessary information was explained to the athletes and the content of the study was explained to them in detail. Each participant was presented with a 3-question personal information form (age, sex, and total number of injuries in a year), and 19 questions of the Sports Injury Anxiety Scale (SIAS) (which has 5 Likert scores) were completed. Participants were given a reasonable amount of time to answer each question. Data were then collected by the researcher.

Analysis of data

In this study, we used a descriptive screening method performed on large groups. In the study, we used the values of skewness and kurtosis as the statistical method. The values of the obtained data were interpreted to determine the normal distribution of the data. The data were analyzed in SPSS package program version 21.0. Normality distributions of the data were created. Once it was determined that the data were normally distributed, for independent groups, the T-test was used to compare the two groups. For comparisons of more than two groups, the F-test ANOVA was used. The Tukey test was used in one of the post hoc tests to determine which group was different from the others. The statistical significance level was accepted as $p < 0.05$.

FINDINGS

Participant results by age, gender, and total number of injuries in a year are presented in the form of averages (Table 1), standard deviations, and totals (Tables 2, 3, and 4) in the following tables.

Table 1. Demographic information of participants

Characteristic	Quality	N	%
Age	18-25	223	67
	26-33	17	5.1
	>34	93	27.9
Gender	Women	148	44.4
	Men	185	55.6
Number of injuries in one year	Zero	116	34.8
	1 time	94	28.2
	2 times	74	22.2
	3 times	32	9.6
	4 times or more	17	5.1
Total		333	100

67% of the study participants were between 18-25 years old, 5.1% were between 26-33 years old, and 27.9% were between > 34 years old; 44.4% of the participants were female and 55.6% were male. 34.8% of participants have never been injured, 28.2% have been injured once, 22.2% have been injured twice, 9.6% have been injured three times, and 5.1% have been injured four or more times in one year.

Table 2. Anova test results of the sias according to the age variable of the participants

Variable	ALA	APP	AS	AD	ALSS	ARI	SIAST
Age	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)
18-25 ⁽¹⁾	2.20±0.83	2.00±1.01	3.32±0.83	2.36±0.95	1.95±1.00	3.05±0.95	2.38±0.67
26-33 ⁽²⁾	2.56±0.78	1.76±0.65	3.74±0.67	2.66±0.80	2.33±1.04	3.22±0.79	2.63±0.49
>34 ⁽³⁾	2.14±0.82	1.59±0.66	3.35±0.85	2.43±1.01	1.99±0.93	3.12±0.92	2.32±0.55
f	1.89	6.84	2.05	0.87	1.17	1.33	1.68
p	0.15	0.001^{(1-3)*}	0.13	0.41	0.31	0.26	0.18

SIAS, Sports Injury Anxiety Scale; ALA [Anxiety of Losing Ability], APP [Anxiety of Poor Perception], AS [Anxiety of Suffering], AD [Anxiety of Disappointment], ALSS [Anxiety of Losing Social Support], ARI [Anxiety of Re-Injury], SIAST [Sports Injury Anxiety Scale Total]. p<0,05

*=p<0,05

When Table 2 is examined using the results of the Anova test of the Fear of Sports Injury Scale and the age variables of the participants, it can be seen that there were statistically significant differences in the Fear of Poor Perception sub-dimension in favor of the participants aged 18-25 years (\bar{X} =2.00) (p <0.05).

*=p<0,05

Table 3. T Test results of the sias according to the gender variable of the participants

Variable	ALA	APP	AS	AD	ALSS	ARI	SIAST
Gender	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)
women	2.17±0.74	1.93±0.94	3.58±0.79	2.38±0.98	1.94±0.92	2.55±0.60	2.43±0.59
men	2.23±0.89	1.83±0.91	3.16±0.82	2.40±0.96	2.01±1.03	2.42±0.66	2.34±0.66
t	-0.60	1.02	4.63	-0.21	-0.67	1.79	1.17
p	0.54	0.30	0.001*	0.83	0.50	0.07	0.23

SIAS, Sports Injury Anxiety Scale; ALA [Anxiety of Losing Ability], APP [Anxiety of Poor Perception], AS [Anxiety of Suffering], AD [Anxiety of Disappointment], ALSS [Anxiety of Losing Social Support], ARI [Anxiety of Re-Injury], SIAST [Sports Injury Anxiety Scale Total]. p<0,05

When Table 3 was examined, statistically significant differences were found in favour of female participants (\bar{X} =3.58) in the suffering anxiety subdimension according to the results of the T-test of the sports injury anxiety scale and the gender variable of the participants.

Table 4. Anova test results of the sias according to the variable of the total number of injuries spent in one year

Variable	ALA	APP	AS	AD	ALSS	ARI	SIAST
NIOY	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)	Mean ± (SD)
Any ⁽¹⁾	1.97±0.74	1.62±0.71	0.91±0.91	2.29±0.99	1.69±0.76	2.24±0.60	2.15±0.58
1 ⁽²⁾	2.25±0.85	2.03±1.00	0.79±0.79	2.41±0.92	2.05±1.01	2.55±0.61	2.45±0.61
2 ⁽³⁾	2.46±0.85	2.12±0.99	0.60±0.60	2.60±0.94	2.27±0.95	2.73±0.55	2.63±0.57
3 ⁽⁴⁾	2.19±0.80	1.82±1.05	0.71±0.71	2.23±1.08	2.03±1.23	2.49±0.72	2.37±0.72
4 > ⁽⁵⁾	2.45±0.84	1.86±0.91	0.98±0.98	2.37±0.83	2.19±1.38	2.64±0.69	2.53±0.67
f	4.69	4.34	6.37	1.40	4.60	8.35	7.98
p	0.001 ^{(1-3)*}	0.02 ^{(1-2-3)*}	0.001 ^{(1-2-3-5)*}	0.23	0.001 ^{(1-3)*}	0.001 ^{(1-2-3)*}	0.001 ^{(1-2-3)*}

NIOY, Number of Injury in One Year; SIAS, Sports Injury Anxiety Scale; ALA [Anxiety of Losing Ability], APP [Anxiety of Poor Perception], AS [Anxiety of Suffering], AD [Anxiety of Disappointment], ALSS [Anxiety of Losing Social Support], ARI [Anxiety of Re-Injury], SIAST [Sports Injury Anxiety Scale Total]. p<0,05

Examining Table 4, the results of the Anova test of the fear of sports injury scale by the variable of total number of injuries in a year, it is found that there were statistically significant differences in the sub-dimensions of fear of losing skills, fear of poor perception, fear of suffering, fear of losing social support, and fear of re-injury (p<0.05). According to the results of the double comparison test of the Sports Injury Fear Scale, there was a statistically significant difference between those who had no to 2 injuries in the sub-dimension of fear of losing their skills, between those who had no, 1 and 2 injuries in the sub-dimension of fear of poor perception. Similarly, there were statistically significant differences between those who had no injuries and 1, 2, 4, and more injuries in the subdimension of fear of pain, between those who had no injuries and 2 injuries in the subdimension of fear of losing social support, between those who had no injuries and 1 and 2 injuries in the subdimension of fear of re-injury, and between those who had no injuries and 1 and 2 injuries in the total score of the subdimension of the fear of sports injuries scale (p<0.05). When fear of disappointment was double compared, there was no significant difference (p>0.05).

DISCUSSION

In this study, a comparative test was performed according to the age variable of the anxiety level of athletes after a sports injury. According to the results of this comparison, the scores of the fear of poor perception subdimension in participants aged 18-25 years showed statistically significant differences from the scores of individuals aged 34 years and older. We can assume that this is a periodic situation that occurs during adolescence in the context of the individual's developmental stages and occupational concerns about the future. To this end, Lök et al. (2008), conducted a study in which they examined the anxiety levels of candidates who will enter the School of Physical Education and Sports with a special talent test. A total of 253 athletes participated, including 98 individuals under the age of 19, 139 individuals aged 20-24, and 16 individuals aged 25 and older. At the end of the study, they concluded that anxiety scores were statistically higher in individuals under age 19 compared to other age groups. In another study involving 119 adolescent athletes, according to Karacabey et al. (2017), they examined the anxiety and self-confidence of adolescent athletes. At the end of the study, they concluded that the cognitive anxiety scores of 16- and 17-year-old athletes were higher than those of 14- and 15-year-old athletes. These results are consistent with data from our current study, in which higher anxiety scores are a phenomenon that occurs during adolescence.

When the anxiety level of athletes after a sports injury was examined in the gender subdimension, our study showed that female participants had a higher fear of pain and re-injury. This may indicate that the anxiety level of female athletes is higher than that of male athletes. In this context, according to Kahya and Küçükkibiş (2022), a total of 985 athletes, 252 females and 733 males, participated in the study on anxiety level and optimal performance mood in sports. At the end of the study, they concluded that female athletes have higher levels of anxiety than male athletes. The result of this study is consistent with our current study. However, in another study, Çakır and Kısa (2021), examined the anxiety of taekwondo players who competed against sports injuries in different categories. A total of 617 athletes participated, including 326 men and 291 women. At the end of this study, when evaluated by gender, they concluded that the anxiety scores of male athletes were statistically significantly higher than those of female athletes in the sub-dimension of pain anxiety and fear of re-injury. According to Arıkan and Çimen (2020), a total of 321 athletes, including 209 men and 112 women, from different sports participated in the study of sports injuries of university candidates. At the end of this study, they concluded that the anxiety level of male

athletes was statistically significantly higher than that of female athletes in the sub-dimensions of suffering anxiety, disappointment anxiety, and anxiety of loss of social support in relation to the gender variable. At the end of the study, they found no statistically significant differences in the subdimension of pain anxiety and the subdimension of fear of re-injury among female athletes in the subdimensions of the Sports Injuries Anxiety Scale. These results are not consistent with our current study. As a result of the double comparison test of the Sports Injuries Anxiety Scale, according to the total number of injuries per year, it shows that female participants are concerned about losing their social support in their environment because they are injured at least 1 and 2 times per year. This shows us that because of the loss of social support, these athletes have the perception that they are perceived as weak in their social environment. These data from our study suggest that the social support provided to athletes is an important variable for the athlete. In Bozkurt's (2017), study, which examined social support in sports injuries, 48 subjects participated. At the end of the study, it was concluded that social support can be an important variable for the athlete. In relation to athletes' loss of social support after injury, their concerns about their social appearance and status in society may also have played a role. The study conducted by Tekeli (2017), which compared the social appearance anxiety and academic self-efficacy of physical education and sport teacher candidates with other teacher candidates, involved 384 students. At the end of the study, a negative relationship was found between trainee teachers' concern about social appearance and their social status. These findings are consistent with our current study. In another study conducted by Türker et al. (2018), they examined social appearance anxiety and self-esteem in people who participate in sports. A total of 600 people participated, including 412 women and 188 men. At the end of the study, they found no statistically significant differences as a result of comparing athletes' social appearance anxiety with the variables of year of playing sports, age, gender, and someone else playing sports in the family.

As a result of the double comparison test of the fear of sports injuries scale as a function of the total number of injuries in a year, it was found that participants who were exposed to injuries 2 and 4 times or more increased their fear of suffering after injuries. This may indicate that in parallel with the increase in the number of injuries of the participants, their fear of pain also increased. To this end, Ünver et al. (2020), conducted a study examining injury anxiety among athletes on university teams. A total of 791 athletes, 321 women and 470 men, participated in this study. At the end of the study, when comparing scores on the Sports Injury Anxiety Scale as a function of experience with previous sports injuries, they

concluded that previous injuries caused statistically significant differences in the pain anxiety sub-dimension in favour of the yes response. This result is consistent with the data from our current study. The study conducted as a result of the double comparison test of sports injury fear scale according to the total number of injuries suffered in a year can show that the fear of losing performance is high in athletes who have suffered at least 2 injuries in a year. And those with at least 1-2 injuries also have high levels of fear of re-injury. This could have been caused by the total time of activities in which the participants participated in their sports. Sports injuries cause material and moral losses to athletes. As athletes gain experience in sports, the number of injuries may decrease. This may cause athletes to be more cautious and anxious because they fear losing their skills. According to Budak et al. (2020), they conducted a study to examine the effects of sports injuries on anxiety, with a total of 150 male athletes participating in the study. At the end of the study, they concluded that fear of re-injury was higher in athletes who had been playing sports for 9 years or longer than in athletes who had been playing sports for 3 to 4 or 5 to 6 years. These results of our study could lead us to believe that athletes have become more and more competent over the years. We can say that increasing sports experience allows athletes to be more careful and to control their fear of injury. To this end, the study conducted by the Yıldız (2022), Faculty of Sports Sciences examined candidates' concerns about sports injuries and their ability to deal with sports-related problems. A total of 889 athletes, including 281 women and 608 men, participated. At the end of the study, it was concluded that individuals who participate in sports at the professional level are better able to cope with sports-related problems and have lower levels of anxiety compared to individuals who participate in sports at other levels.

This study, it can be concluded that the fear of perceived weakness also decreases as athletes age and, as a result, athletes are more relaxed. This may be a result that evolves depending on the progression of sports experience. The result of our study could be considered as a conclusion that the anxiety level in the suffering anxiety subdimension could increase due to the increasing number of injuries of athletes. The conclusion that the anxiety level in the suffering anxiety subdimension may increase due to the increase in the number of injuries of athletes can be considered in our study. We can conclude from our study that female participants are more sensitive to the loss of their athletic abilities and that the social environment of athletes in relation to the injuries they suffer could be an important factor in this situation. The injuries that athletes suffer in the course of their athletic performance are a

multifactorial phenomenon. In this regard, the evaluation of sports injuries based on a single dimension is not the right expression to determine the problem.

Anxiety, which is a crucial dimension of sports injuries, is a significant phenomenon to address. For this reason, the study of the psychological factors that influence the risk of injury is of great importance in the protection against injuries.

GENİŞLETİLMİŞ ÖZET

GİRİŞ

Son yüzyılda spor, kitleleri peşinden sürükleyen ekonomik, sosyokültürel bir endüstri olarak sürekli büyümesini devam ettiren bir olgudur (Gül ve ark., 2019). Artan popülaritesi ile toplumun her kesiminden insanların ilgisini çekmeyi başaran spor, zamanla katılımın çığ gibi arttığı sosyo-kültürel etkinlikler hâline dönüşmüştür. Sportif faaliyetlere katılımın artması, bu eğlenceli etkinliklerin bir takım olumsuzluklar barındırmasına neden olmuştur. Bu olumsuzluklardan birisi hatta en önemlisi sakatlık kavramıdır. Sporun gelişime bağlı olarak yoğun geçen sportif faaliyetler, beraberinde çeşitli sakatlanmalara sebep olmaktadır (Can ve ark., 2003; Yılmaz ve ark., 2018). Sportif faaliyetler sırasında meydana gelen ve sporcuların antrenman/müsabakalara katılımlarını engelleyen tedavi edilebilen ya da kalıcı her türlü hasar, spor sakatlıkları olarak tanımlanmaktadır (Karayol & Eroğlu, 2020). Sporun bedensel sağlığa olumlu etkilerinin yanı sıra ruhsal açıdan da bir çok yararı bulunmaktadır (Karakaya ve ark., 2006). Bu bakımdan sportif faaliyetlerde sporcunun performansı üzerinde etkili olan birçok psikolojik faktör bulunmaktadır. Bu faktörlerden en önemlilerinden biri ise kaygıdır (Aksoy, 2019). Sporcunun verimli bir performans sergilemesinde önemli bir duygu durumu olan kaygı, sporcunun sportif performans esnasında doğru karar almasında ve becerilerini doğru bir şekilde uygulamasında anahtar bir role sahiptir (Civan ve ark., 2010).

YÖNTEM

Çalışmaya 2022 yılı içerisinde aktif olarak spor yapan 18 yaş üstü sporcular katılmıştır. Çalışmada, Rex ve Metzler (2016), tarafından geliştirilen Caz ve arkadaşları (2019), tarafından Türkçeye uyarlanan Spor Yaralanması Kaygı Ölçeği (SYKÖ) kullanılmıştır. Araştırma uygulanmadan sporculara çalışmanın içeriği ayrıntılı bir şekilde anlatılarak gerekli bilgiler verilmiştir. Her bir katılımcıya kendilerine yönetilen 3 soruluk kişisel bilgi formu (yaş, cinsiyet ve 1 yılda geçirilen toplam sakatlık sayısı) ile 19 soru 5 likertli Spor Yaralanması Kaygı Ölçeği (SYKÖ) anket soruları yöneltmiştir.

BULGULAR

Çalışmada, katılımcıların yaş değişkenine göre spor yaralanması kaygı ölçeğinin zayıf algılanma kaygısı alt boyutunda 18-25 yaş arası katılımcılar lehine ($\bar{X}=2,00$) istatistiksel olarak anlamlı düzeyde farklılıklar bulunmuştur ($p<0,05$). Diğer alt boyutlarda ise istatistiksel olarak anlamlı

düzeyde farklılıklara rastlanmamıştır ($p>0,05$). Katılımcıların cinsiyet değişkenine göre spor yaralanması kaygı ölçeğinin T-testi sonuçlarına göre acı çekme kaygısı alt boyutunda kadın katılımcılar lehine ($\bar{X}=3,58$) istatistiksel olarak anlamlı düzeyde farklılıklar bulunmuştur ($p<0,05$). Diğer alt boyutlarda ise anlamlı düzeyde farklılıklara rastlanmamıştır ($p>0,05$). Katılımcıların 1 yılda geçirilen toplam sakatlık sayısı değişkenine göre spor yaralanması kaygı ölçeğinin Anova Testi sonuçlarına göre yeteneğini kaybetme kaygısı zayıf algılanma kaygısı, acı çekme kaygısı, sosyal desteği kaybetme kaygısı ile yeniden yaralanma kaygısı alt boyutlarında anlamlı düzeyde farklılıklar bulunmuştur ($p<0,05$).

TARTIŞMA VE SONUÇ

Yapılan bu çalışmada, sporcuların spor yaralanması sonrası kaygı düzeyinin yaş değişkenine göre 18-25 yaş arası katılımcıların zayıf algılanma kaygısı alt boyutunda 34 yaş ve üzerinde yer alan bireylere göre puanları anlamlı düzeyde farklılıklar göstermiştir. Bu durum kaygının, bireylerin içerisinde buldukları gelişimsel dönemler ile geleceğe yönelik mesleki endişeleri kapsamında daha çok ergenlik dönemine yakın yaşlarda karşılaşılan bir durum olduğunu sonucunu bizlere düşündürülebilir. Bu amaçla Lök ve arkadaşları (2008), beden eğitimi ve spor yüksek okuluna özel yetenek sınavıyla girecek adaylarda kaygı durumlarını inceledikleri çalışmaya, 19 yaş altı 98 birey, 20-24 yaş arası 139 birey ile 25 ve daha yüksek yaş grubundan 16 birey olmak üzere toplam da 253 sporcu katılmıştır. Çalışma sonunda, 19 yaş ve altı bireylerin durumluluk kaygı puanlarının diğer yaş gruplarına kıyasla daha yüksek olduğu sonucunu ulaşımlardır. Çalışmada, sporcuların spor yaralanması sonrası kaygı düzeyi cinsiyet alt boyutunda, kadın katılımcıların daha yüksek acı çekme ile yeniden yaralanma kaygısı içerisinde oldukları görülmüştür. Bu durum, kadın sporcuların kaygı düzeylerinin, erkek bireylerden daha yüksek olmasından kaynaklanabildiği sonucunu bizlere düşündürülebilir. Bu bağlamda, Kahya ve Küçükibiş (2022), sporda kaygı düzeyi ile optimal performans duygu durumu üzerine yaptıkları çalışmada, kadın sporcuların erkek sporculara oranla daha yüksek kaygı düzeyine sahip oldukları sonucuna ulaşımlardır. Spor yaralanması kaygı ölçeğinin 1 yılda geçirilen toplam sakatlık sayısına göre yapılan ikili karşılaştırma test sonucunda, katılımcıların 1 yılda en az 1 ve 2 kez sakatlık geçirmelerinin onların yaşadıkları çevrede sosyal desteklerini kaybedebileceklerine ve bunun bir sonucu olarak da bu bireylerin ait oldukları sosyal çevre içerisinde zayıf algılanma düşünceleri ortaya çıkarabileceği sonucunu bizlere göstermektedir. Çalışmadan elde edilen bu veriler, sporculara sağlanan sosyal desteğin sporcu açısından önemli olabileceği sonucu bizlere düşündürülebilir. Bu amaçla Bozkurt (2017), spor yaralanmalarında sosyal desteği incelediği çalışmaya, 48 birey katılmıştır. Çalışma sonunda, sosyal desteğin sporcu açısından önemli bir değişken olabileceği sonucuna ulaşmıştır. Sporcuların sportif performanslarını sergilerken karşılaştıkları sakatlıklar, çok faktörlü bir olgudur. Bu bakımdan spor sakatlıklarını tek boyuttan değerlendirmek sorunun tespitinde doğru bir ifade olmayacaktır. Spor sakatlıklarının önemli bir boyutu olan kaygı, üzerinde durulması gereken önemli bir olgudur. Bu bakımdan sakatlık riskini

etkileyen psikolojik faktörlerin incelenmesi, sakatlıklardan korunma bakımından büyük önem arz etmektedir.

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KATKI ORANI CONTRIBUTION RATE	AÇIKLAMA EXPLANATION	KATKIDA BULUNANLAR CONTRIBUTORS
Fikir ve Kavramsal Örgü <i>Idea or Notion</i>	Araştırma hipotezini veya fikrini oluşturmak <i>Form the research hypothesis or idea</i>	Sedat KAHYA Yeliz AY YILDIZ
Tasarım <i>Design</i>	Yöntem ve araştırma desenini tasarlamak <i>To design the method and research design.</i>	Sedat KAHYA Yeliz AY YILDIZ
Literatür Tarama <i>Literature Review</i>	Çalışma için gerekli literatürü taramak <i>Review the literature required for the study</i>	Sedat KAHYA Yeliz AY YILDIZ
Veri Toplama ve İşleme <i>Data Collecting and Processing</i>	Verileri toplamak, düzenlemek ve raporlaştırmak <i>Collecting, organizing and reporting data</i>	Sedat KAHYA Yeliz AY YILDIZ
Tartışma ve Yorum <i>Discussion and Commentary</i>	Elde edilen bulguların değerlendirilmesi <i>Evaluation of the obtained finding</i>	Sedat KAHYA Yeliz AY YILDIZ
Destek ve Teşekkür Beyanı/ Statement of Support and Acknowledgment		

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Researchers do not have any personal or financial conflicts of interest with other people and institutions related to the research.

Etik Kurul Beyanı/ Statement of Ethics Committee

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This research was conducted with the decision of Aydın University Social and Human Sciences Ethics Committee dated 21.11.2022 and numbered 21.11.2022-345.



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