The Investigation of Anxiety of Athletes to Catch the Novel Coronavirus (Covid-19)

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Abstract
The purpose of the present study was to examine the anxiety levels of athletes regarding being infected with the novel Coronavirus (Covid-19). A total of 211 athletes participated in the study, 92 of whom were engaged in individual sports and 119 of whom were engaged in team sports with a mean age of 25.24±7.78. The Anxiety Scale of Athletes of Catching the Novel Coronavirus Disease (Covid-19), which was developed by Tekkurşun Demir, G. et al. (2020) was used to collect the data in the study. According to the study findings, it was determined that athletes experienced the anxiety of being infected with the novel Coronavirus disease (Covid-19) in individual and socializing terms. Significant differences were detected in the sub-dimensions of the scale in terms of gender. In this respect, it was found that the individual and socializing anxiety of the female athletes was higher than the individual and socializing anxiety of the male athletes. It was also found that the individual and socializing anxiety levels of those with 10 years or more sports history were significantly higher than those who did sports for 5 years or more. In addition, the individual anxiety levels of the athletes who stayed with friends was found to be higher than those staying in student houses. No significant differences were detected in the sub-dimensions of the scale according to the branches and being national athletes. As a conclusion, it might be argued that athletes have high anxiety levels regarding being infected with the novel Covid-19, and as the sports years increased, the anxiety about being infected with Coronavirus also increased.
Keywords: Athletes, Novel coronavirus, Covid-19, Anxiety, Sport.

Introduction

The Covid-19 pandemic, which emerged in Wuhan, China at the end of 2019, which was caused by SARS-CoV-2 virus, and which spread rapidly to continents and countries, remains as a serious public health problem (WHO, 2020). The spectrum of the disease caused by Coronavirus in humans can vary from simple cold to severe acute respiratory syndrome. Basically, the disease is transmitted through droplets, taking hands to the mouth, nose or eye mucosa, and contacting the hands of other people after the droplets that diseased individuals spread to their surroundings by coughing, sneezing, and coming into contact with the hands of other people. The average incubation period, which is 5-6 days (2-14 days), has been observed to last up to 14 days in some cases. Respiratory symptoms like fever, cough and dyspnea are among the common symptoms. Pneumonia, severe acute respiratory infection, kidney failure and even death may develop in more serious cases (Ministry of Health, 2020).

It is observed that the anxiety level experienced during a pandemia is associated with perceived high mortality levels and high risk of being infected (Çırakoğlu, 2011). Anxiety is a discomforting feeling (Ikizler, 1994). Anxiety is the process of becoming emotional of the stimuli that will arise with the sense of fear, which is not connected to reality, and cannot be understood and explained. This condition causes stress, and weakens the immune system both physiologically and psychologically.

Anxious people cannot focus their attention because they constantly watch their own behaviors, are exhausted by conflicts, unable to sleep during nights, cannot rest because of fearful dreams even if they sleep, cannot focus their attention, show their true potential, and cannot succeed (Sahin, 2019). The transformation of Covid-19 into a pandemic has paralyzed the sports systems of the countries where the pandemic is experienced, both economically and psycho-socially. This pandemic, which removed the borders all over the world, not only suspended sports events, but also caused great damage to the sector due to cancellations and postponements (Türkmen and Özsarı, 2020). Due to Covid-19 outbreak, it is possible that athletes are unable to train, social distance measures are spread more, and the physical and psychological aspects of athletes are affected negatively, especially for performance athletes. One of the main factors in athletes' ability to successfully reach their potential under pressure and stress is their ability to control their own physiology (Bertollo et al., 2013). The key points of athletes are their ability to manage stress and anxiety. In cases of stress, talented athletes might also have problems from time to time, and may have trouble in exhibiting their true potentials (Davis and Sime, 2005). The effect of sports and psychological factors should not be ignored because it is not possible to achieve success without psychological skills like motivation, concentration and mental endurance (Sandweiss and Wolf, 1995). In this respect, Covid-19 can have permanent effects on human health, and can affect careers of athletes like in other people in the society. Athletes may live with the anxiety that, when they catch Covid-19, their performance will fall or their sporting life will end. Such a situation can also cause that athletes experience a sense of burnout. In this context, the purpose of the study was to examine the anxiety levels of athletes of catching the novel Coronavirus (Covid-19).

Method

Study Group

A total of 211 athletes with a mean age of 25.24±7.78, actively engaged in team and individual sports in 2020 participated in the study. A total of 92 of the participants did individual, and 119 did team sports. In addition, 107 of the athletes were female, 104 were male, 86 were national athletes, and 125 were not national athletes.

Data Collection

The Anxiety Scale of Athletes of Catching the Novel Coronavirus Disease (Covid-19) and personal information form were used as the data collection tools to collect the data in the study.

The Anxiety Scale of Athletes of Catching the Novel Coronavirus Disease (Covid-19):
The validity and reliability study of the scale was conducted by Tekkurşun Demir, Cicioğlu and Ilhan (2020). The scale consists of two sub-dimensions as the individual anxiety and socializing anxiety. The individual anxiety factor consists of 11 items, the lowest score that can be received from the scale is 11, and the highest score is 55. The socializing anxiety factor consists of 5 items, the lowest score that can be received is 5, and the highest score is 25. The scale consisting of 16 items is in the Five-Point Likert type. In this context, the items of the scale are listed as "I do not agree at all", "I disagree", "I am undecided", "I agree", "I totally agree"; and were rated as 1, 2, 3, 4 and 5. The reverse items must be encoded as 5, 4, 3, 2 and 1. In the scale, only item 2 must be reverse-encoded because it contains a negative expression. As the state of anxiety increases, the state of being psychologically unhealthy increases. Although individual anxiety refers to the anxiety about socializing and avoidance from socializing environment when faced with a fearful situation, the socializing anxiety represents the emergence of feelings causing anxiety when faced with a fearful situation (Tekkurşun Demir, Cicioğlu and Ilhan, 2020).

Data Analysis

The SPSS 20 Package Program was used in the analyses of the data obtained in the study. The Kolmogorov-Smirnov test was used to determine whether the study data showed normal distribution, the resulting *p* values were examined, and it was found that the scores fit normal distribution (p>0.05). Descriptive statistics (frequency, arithmetic mean, standard deviation), T-test, One-Way Variance Analysis (ANOVA), and the Tukey Multiple Comparison Test were used in the study as the statistical methods in the evaluation of the data.

Findings

In this section, the findings obtained from the participants were subjected to various statistical analyzes.

Table 1. Average Scores of Athletes' Anxiety Scale to Catch New Type of Coronavirus (Covid-19)

Sub-dimensions	N	Min.	Max.	Mean ± Sd.
Individual Anxiety	211	11,00	55,00	37,40±9,49
Anxiety of Socializing	211	5,00	25,00	18,88±4,12

According to the scale average scores in Table 1, it was determined that the athletes experienced the new type of coronavirus (covid-19) as an individual and social anxiety.

Table 2. The Scale of Anxiety of Athletes to Catch a New Type of Coronavirus (Covid-19) According to Gender

Sub-dimensions	Gender	n	Mean ± Sd.	t	p

Individual Anxiety	Female	107	40,39±8,17	4,877	,000
	Male	104	34,33±9,81		
Sub-Dimensions	Female	107	20,25±3,02	5,170	,000
	Male	104	17,48±4,61		

When Table 2 is analyzed, a significant difference was found in terms of gender in the sub-dimensions of the anxiety scale of athletes catching new type of coronavirus (covid-19) (p <0.05). It was found that female athletes have individual anxiety (40.39 ± 8.17) and socialization anxiety (20.25 ± 3.02). This situation was found to be higher than male anxiety (34.33 ± 9.81) and socialization anxiety (17.48 ± 4.61).

Table 3. The Scale of Anxiety of Athletes to Catch a New Type of Coronavirus (Covid-19) According to Branch

Sub-dimensions	Banch	n	Mean ± Sd.	t	p
Individual Anxiety	Individual Sports	92	37,23±9,75	-,225	,822
	Team Sports	119	37,53±9,32		
Sub-Dimensions	Individual Sports	92	19,23±3,62	1,123	,263
	Team Sports	119	18,61±4,47		

In Table 3, there was no significant difference in the sub-dimensions of anxiety scale to catch new coronavirus (covid-19) according to the branches of the athletes (p> 0.05).

Table 4. The Scale of Anxiety of Nationality Athletes to Catch a New Type of Coronavirus (Covid-19)

Sub-Dimensions	Nationality	n	Mean ± Sd.	t	p
Individual Anxiety	Yes	86	38,50±8,44	1,436	,152
	No	125	36,65±10,11		
Sub-Dimensions	Yes	86	19,27±3,25	1,380	,223
	No	125	18,61±4,62		

In Table 4, there was no significant difference in the sub-dimensions of the anxiety scale to catch new coronavirus (covid-19) according to the nationality status of the athletes (p> 0.05).

Table 5. The Scale of Anxiety of Athletes to Catch a New Type of Coronavirus (Covid-19) According to Sports Year

Sub-Dimensions	Sports year	n	Mean ± Sd.	F	p	Tukey
Individual Anxiety	5-9	52	26,00±8,58	94,396	,000	1<2
	10-15	68	40,67±6,40			1<3
	≥16	91	41,48±6,15			
Sub-Dimensions	5-9	52	14,80±4,64	49,812	,000	1<2
	10-15	68	20,50±3,05			1<3
	≥16	91	20,01±2,76			

When Table 5 is examined, a significant difference was found in the sub-dimensions of the anxiety scale of the athletes to catch the new type of coronavirus (covid-19) (p <0.05). Accordingly, the individual anxiety of those who do sports for 10-15 years (40.67 ± 6.40) and 16 years and above (41.48 ± 6.15) is among those who do sports between 5-9 years (26.00 ± 8.58). It was determined to be higher.

Table 6. The Scale of Anxiety of Athletes to Catch a New Type of Coronavirus (Covid-19) According to Place of Residence

Sub-Dimensions	Place of Residence	n	Mean ± Sd.	F	p	Tukey
Individual Anxiety	Next to parents	173	37,30±9,50	3,393	,035	2<3
	Alone	8	30,25±11,43			
	Next to friend	30	39,90±8,06			
sub-dimensions	Next to parents	173	18,86±4,32	,802	,450	
	Alone	8	17,37±3,54			
	Next to friend	30	19,43±2,86			

In Table 6, a significant difference was found in the individual anxiety sub-dimension of athletes' anxiety scale to catch new type of coronavirus (covid-19) (p <0.05). There was no significant difference in socialization anxiety (p> 0.05). Accordingly, it was determined that the individual anxiety of the athletes staying with friends (39.90 ± 8.06) was higher than the athletes staying in the student house (30.25 ± 11.43).

Discussion and Conclusion

In this part, the anxiety levels of the athletes who constituted the sampling group about being infected with the novel Coronavirus (Covid-19) were examined in terms of gender, branch, being national athletes, sports years, and where they stayed were examined, and the findings were discussed and interpreted. In this context, new findings were obtained with the Anxiety Scale of Athletes of Catching the Novel Coronavirus Disease (Covid-19), which was developed by Tekkurşun Demir, G. et al. (2020) in the literature. Determining the anxiety levels of athletes of being infected with Covid-19 plays an important role in identifying the psycho-social status of athletes and in determining how their performances can be affected. As a result of the study in which the aggression levels of the students of the faculty of sports sciences who do physical activity during the Covid-19 process were examined by Şahinnler, Ulukan and Ulukan (2020), it was seen that their general aggression levels were above the medium level.

According to the findings of the present study, it was concluded that the athletes experienced the anxiety of catching the novel Coronavirus (Covid-19) as an individual and socializing anxiety. In other words, it might be argued that athletes generally experience the anxiety of being infected with the novel Coronavirus (Covid-19). It is possible to consider that athletes do not enter crowds and refrain from training with the fear that the pandemia will limit their lives and they will be infected. No significant differences were detected in the sub-dimensions of the scale of athletes' anxiety of being infected with the novel Coronavirus (Covid-19) according to individual or team sports. However, it could be argued that the athletes involved in team sports were likely to be more anxious about being infected with Covid-19, considering the social group harmony they formed with their teammates in team sports. In other words, it might be argued that the differences in the branches of athletes were not effective on the anxiety of being infected with Coronavirus (Covid-19).

A significant difference was detected in the sub-dimension of the anxiety of being infected with the novel Coronavirus (Covid-19) of athletes according to gender (p<0.05). In this respect, the individual and socializing anxiety levels of female athletes were higher than the individual and socializing anxiety levels of male athletes. The emotional characteristics, attitudes and behaviors of women are different from those of men. In this respect, it might be argued that female athletes experience more anxiety than males, like the uncertainty of the recovery time or the negative effects of the virus on performance. When the studies conducted on other pandemics that have occurred so far were examined, Leung et al. (2005) reported that women were at risk in terms of anxiety levels during pandemics. As a result of the literature review, Çırakoğlu (2011) concluded that the public anxiety increased during outbreaks, the prevention and avoidance behaviors increased together with increasing anxiety levels, and women's anxiety and avoidance levels were higher than men's in the face

of the responses during pandemics. Akan et al. (2010) reported that women perceived the risk of being infected with H1N1 at a high level together with high anxiety levels. According to the findings regarding the athletes' being national, no significant differences were detected in the sub-dimensions of the scale regarding the anxiety of being infected. In this respect, it can be argued that the anxiety levels between national athletes and non-national athletes regarding being infected with Covid-19 were close to each other. As a result of the study conducted by Batu and Aydın (2020), it has been determined that female athletes experience more individual anxiety and when the general total is considered, their anxiety about catching the novel coronavirus is higher.

In this study, it was also found that the anxiety levels regarding being infected with Coronavirus (Covid-19) was significantly lower in younger athletes than in older athletes. As experience in sports increases and as the athlete becomes professional, sports are considered as a source of financial income besides having healthy living habits. In this respect, it is possible to argue that especially professional athletes at certain stages, who make transfers at high wages, have increased levels of anxiety of being infected with Coronavirus (Covid-19) because they know that when the virus enters the body it causes many negative effects on people like losing jobs or the loss of performance because of the time the athletes spend away from sports. As a result of the study conducted by Batu and Aydın (2020), it has been determined that the individual anxiety and socialization anxieties and general anxiety states of the athletes in the 19-25 age range are higher than the athletes in the other age range.

As a conclusion, it was found that athletes have the anxiety of being infected with the novel Covid-19, and as the sports year increased, the anxiety of being infected with coronavirus increased. It was determined that the anxiety levels of female athletes were higher in particular. It is known that sports and physical activity have useful effects on mental health in addition to the positive effects on physical health. However, when the results of the present study are considered, athletes should be given trainings on coping strategies regarding anxiety to deal with the problems accompanied by anxiety that arise in social lives outside games and training.

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