

# Comparison of the Anxiety of Game and Combat Athletes of Catching Corona Virus

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## ABSTRACT

**Purpose:** The aim of this study is to compare the anxiety of catching the corona virus of game and combat athletes.

**Methods:** A total of 351 university student athletes were asked to fill in the "Anxiety of catching the Corona virus" scale developed by Demir et al., (2020). Independent t-test and one-way Anova tests were used for statistical differences.

**Conclusion:** The difference between the total scale scores of individual anxiety and anxiety of catching a new type of corona virus according to gender was statistically significant ( $p < 0.05$ ). The difference in social anxiety sub-dimension scores according to gender was not statistically significant ( $p > 0.05$ ). A statistically significant difference was found in the anxiety of catching coronavirus 19 according to the students' game and combat sports ( $p < 0.001$ ). The anxiety of catching the corona virus is different for students who play games and fight sports. It has been determined that while the anxiety of catching corona virus 19 in university students who play games and combat sports varies according to gender and the type of sport they do, it is similar according to the sports age category. Students are moderately concerned about contracting coronavirus 19. The fact that the students who do combat sports have a higher level of anxiety than the students who play sports may be due to the close contact of the sports they are doing. In sports that require close contact, it can be recommended to use more mascots instead of paired exercises.

**Keywords:** Corona Virus, Anxiety of Catching The Virus, Gaming Sports and Combat Sports.

## INTRODUCTION

It has been stated that the Corona virus 19 epidemic will cause sharp shocks to the world economies and societies, while it will have negative effects on individuals. For example, according to a study conducted during the Corona virus-19 epidemic, it was determined that 7% of individuals had stress symptoms<sup>1</sup>. Stresses include perceived security, threat and risk of contamination, ignorance of the unknown, quarantine and imprisonment, stigma (a sign of shame associated with a particular situation, quality, or person) and social exclusion, as well as financial loss and job insecurity<sup>2-4</sup>. Common infectious disease outbreaks, such as coronavirus 19, are associated with psychological distress and symptoms of mental illness<sup>5</sup>.

Different exercise and recovery protocols applied to the athletes may cause the performance of the athletes to change<sup>6-9</sup>. However, exercise and recovery protocols, as well as post-coronavirus 19 anxiety can occur in a negative situation between their performance. Due to the corona virus -19 epidemic, it can be seen that performance athletes have a negative effect on physical and mental/psychological aspects<sup>10</sup>. Anxiety means worrying about the future, experiencing tension, and this situation can be called the state of being restless and nervous due to not knowing what to expect<sup>11</sup>. Anxiety is expressed as an unpleasant emotional state consisting of tension, anxiety and physiological arousal that occurs for various reasons in the individual. Anxiety is a condition that often leads people to worry about the future and lead them to a distressed mood<sup>12</sup>. People with anxiety disorders not only experience various physical ailments, but also have difficulty in performing their daily activities. In addition, the increase in anxiety reduces the power of belief and struggle<sup>13</sup>. Corona virus 19 causes anxiety as it negatively affects the normal life of many people at the same time and contains many uncertainties<sup>14</sup>.

In some studies, conducted in Turkey, the Corona virus epidemic process increased people's anger and worsened the patience of university students. Again, corona virus 19 has been effective on people's quality of life, depression, anxiety and nutrition<sup>15-21</sup>. Due to the problems, they encounter in their daily lives, university students experience common mental disorders such as stress and depression, and this is becoming a global concern for university students<sup>22,23</sup>. The aim of this study is to compare the anxiety of catching the corona virus of game and combat athletes.

## MATERIAL AND METHOD

The research was carried out with the athletes who are studying at the Faculty of Sports Sciences of Kayseri Erciyes University in

2020-2021 and who are actively doing sports. Athletes are divided into two as game sports (Football, Basketball, Handball, Volleyball) and combat sports (Wrestling, Judo, Taekwondo, Karate and boxing).

**Population and Sample of the Research:** The universe of the research: The population of the research is the students studying at the faculties of sports in Turkey and participating in sports competitions as contestants.

**Sample:** The sample consists of 351 athletes who are doing games and combat sports, have university education and compete as amateurs.

**Data Collection Tools:** Volunteer participation form, research data descriptive features form, and athletes' anxiety about catching coronavirus 19 scale were used for data collection. Data were collected through an online survey. Before the research, necessary explanations were given to the participants and it was explained that the participation was on a voluntary basis. Participants were informed about the aims of the survey.

**New Type of Corona Virus Anxiety Scale:** It aims to measure the anxiety of athletes about catching Corona virus 19. The scale consists of Individual Anxiety and the second factor Socialization Anxiety sub-dimensions. The scale, which consists of 16 items in total, is in a five-point Likert type. In this context, the items are listed as "I strongly disagree", "I do not agree", "I am undecided", "I agree", "I completely agree"; it is rated 1, 2, 3, 4 and 5. Reverse items should be coded as 5, 4, 3, 2 and 1. Since only item 2 in the scale contains negative statements, it should be reverse coded. Individual Anxiety It consists of the first 11 items. Individuation anxiety is the emergence of feelings that cause anxiety and uneasiness in the face of a feared situation. The lowest score that can be obtained from the Individual Anxiety factor is 11, and the highest score is 55.

Socialization Anxiety consists of Items 12, 13, 14, 15, and 16. Socialization anxiety is anxiety about socialization and avoidance of socialization in fearful cases. The lowest score that can be obtained from the Socialization Anxiety factor, which consists of 5 items, which represents the state of being anxious about socialization in the face of a feared situation and avoiding the socialization environment, is 5 and the highest score is 25. As the state of anxiety increases, the state of being psychologically unhealthy increases. The lowest score that can be obtained from the scale is 16 and the highest score is 80<sup>24</sup>. Getting a high score on the scale increases anxiety.

**Analysis of data:** SPSS 25.00 package program was used in the analysis of the data. To test whether the data is normally distributed, Kolmogorov-Smirnov test was performed and it was

determined that the data showed normal distribution. Independent t-test and one-way analysis of variance were used in statistical operations.

## RESULTS

In this section, the findings and comments regarding the examination of the anxiety levels of the athletes about catching the new type of corona virus are given.

Table 1: Individual and Social Anxiety Status of Contagion with Corona Virus by Gender

	Gender	N	Average	St. deflection	t -test	p
Individual Anxiety	Boy	201	34.01	8.19	2.49	0.019*
	Woman	150	31.95	8.27		
Social Anxiety	Boy	201	15.43	4.93	1.57	0.663
	Woman	150	14.82	4.11		
Total Score	Boy	201	49.44	10.75	2.51	0.021*
	Woman	150	46.77	10.73		

\*p<0.05

It was determined that the anxiety levels of the student athletes participating in the study of catching the corona virus differed according to gender in the individual anxiety sub-dimension and the total anxiety scale dimension (p<0.05). In the social anxiety dimension, there was no significant difference according to gender (p>0.05).

Table 2: Individual and Social Anxiety Status by Competition in Game and Fighting Sports

	Type of Sport	N	Average	St. Deflection	T -test	P
Individual Anxiety	Game Sport	170	31.67	9.03	-4.16	0.001**
	Combat Sport	181	34.82	7.21		
Social Anxiety	Game Sport	170	15.01	4.11	-1.13	0.648
	Combat Sport	181	15.42	3.82		
Total Score	Game Sport	170	46.69	10.09	-4.05	0.001**
	Combat Sport	181	50.26	10.32		

\*\*p<0.001

A statistically significant difference was found in the individual anxiety subscale and the total anxiety score according to the competitive situation in game and combat sports (p<0.001). On the other hand, social anxiety levels were found to be similar (p>0.05).

Table 3: Comparison of Students' Corona Virus Status by Age Category

	Age Category	N	Average	St. Deflection	F
Individual Anxiety	19 years and under	111	33.41	8.69	0.66
	20-24 years	301	33.07	8.41	
	25 years and older	63	34.40	8.84	
	Total	475	33.32	8.47	
Social Anxiety	19 years and under	111	15.54	4.72	0.71
	20-24 years	301	15.07	4.07	
	25 years and older	63	15.46	4.30	
	Total	475	15.23	4.12	
Anxiety Total Score	19 years and under	111	48.95	10.35	0.75
	20-24 years	301	48.13	10.20	
	25 years and older	63	49.87	10.70	
	Total	475	48.55	10.18	

No statistically significant difference was found in individual and social anxiety and total anxiety status according to age category (p>0.05).

## DISCUSSION

While Batu and Aydın (2020) found a significant difference in the "Individual Anxiety" sub-dimension and the general total for the gender variable, they did not find a significant difference in the social anxiety dimension<sup>25</sup>. Many studies in the literature on athletes reported that female athletes have higher anxiety levels than men<sup>26,27</sup>. Sakaoglu et al., (2020) in his study on the level of anxiety during the Covid-19 epidemic, stated that there was a statistically significant difference in the average anxiety score according to gender in women compared to men<sup>28</sup>. In the study of Güler and Cicioğlu (2021), it was determined that the individual anxiety levels of women compared to men and sedentary people compared to athletes in catching Corona virus 19 were significantly higher<sup>29</sup>. Demir et al., (2021) reported that female participants had significantly higher individual anxiety scores about contracting COVID-19 than male participants<sup>24</sup>. In their study, Çölgeçen and Çölgeçen (2020) stated that women are less affected by the corona virus than men<sup>30</sup>. Again, Doğan Memiş and Düzal (2020) found that men's anxiety scores were higher than women's in their study<sup>31</sup>. In this study, social anxiety scores by gender did not show a statistically significant difference (p>0.05). A statistically significant difference was found between the total scale scores of

individual anxiety and anxiety of catching a new type of corona virus according to gender (p<0.05). Total anxiety score is higher in male students. In this study, men's higher anxiety may be due to the fact that they have to travel more in social environments (for work and duty, supply of needs, etc.) or have to move around more than women. Again, we think that this is due to the fact that male students attend more training and competitions. Because the virus is one of the most important reasons for the risk of transmission, because the virus is transmitted from person to person, through direct contact or by coughing or sneezing of an infected person, that the droplets emitted from covid-19 patients remain on the surfaces and that healthy individuals touch these droplets and take their hands to their face, eyes, nose or mouth<sup>32</sup>.

Batu and Aydın (2020) interpreted that female athletes experience more individual anxiety and that their anxiety about catching the new type of corona virus is higher compared to the total score<sup>25</sup>. In the study of Doğan (2021), a statistically significant difference was found between the total scale scores of individual anxiety and anxiety of catching a new type of corona virus according to team and individual sports status. On the other hand, it was stated that there was no statistically significant difference in social anxiety scores according to team and individual

sports<sup>13</sup>. In Doğan's study (2021), no statistically significant difference was found between the total scale scores of individual anxiety, social anxiety, and anxiety of catching a new type of corona virus when looked at according to sports branches<sup>13</sup>. In the study of Namlı (2020), no statistically significant difference was found in individual anxiety, socialization anxiety and total scale scores according to sports branch<sup>33,46,47</sup>. Gümüştül et al., (2020) found no statistically significant difference in the socialization variable between amateur and professional athletes in their study; A statistically significant difference was found in the individual anxiety sub-dimension<sup>34,44,45</sup>. In this study, there was a statistically significant difference between the total scale scores of individual anxiety and anxiety of catching the new type of corona virus according to the competition situation in game and combat sports ( $p < 0.001$ ), while the difference in social anxiety score was found to be insignificant ( $p > 0.05$ ). Sport is a social activity that requires both athletes to be together and sometimes close contacts. Sport is also a means of socialization that attracts many large audiences. In this respect, it creates a situation and danger opposite to the social isolation required for the contagious New Corona virus<sup>35,36,39,40,41</sup>.

In the study of Doğan (2021) and in the studies of Güler and Cicioğlu (2021), no significant difference was found between the levels of individual anxiety about catching covid-19 according to age groups<sup>13,29</sup>. In this study, no statistically significant difference was found between the total scale scores of individual anxiety, social anxiety and anxiety of contracting coronavirus 19 according to age category ( $p > 0.05$ ).

It has been determined that university students have a moderate level of anxiety about catching the corona virus<sup>37</sup>. Şahinler and Ulukan (2020) stated in their study that the individual anxiety of the athletes is slightly above the medium level<sup>38</sup>. In the study of Batu and Aydın (2020), it was concluded that the anxiety levels of catching Covid-19 of swimmers are higher than moderate<sup>25,42,43</sup>. Again, Doğan evaluated the anxiety score of 48.47 in men and 45.85 in women, and stated that the students had moderate anxiety. In this study, it was determined that the total score of anxiety about catching the corona virus was 49.44 for males and 46.77 for female students. Therefore, it can be said that university student athletes participating in this study have moderate anxiety. Keleş et al., (2022) found in their study that during the Corona virus 19 epidemic, the perceived stress level in university students was above the moderate level and the perceived coping level was below the moderate level<sup>22</sup>.

## CONCLUSION

It has been determined that while the anxiety of catching corona virus 19 in university students who play games and combat sports varies according to gender and the type of sport they do, it is similar according to the sports age category. Students are moderately concerned about contracting coronavirus 19. The fact that the students who do combat sports have a higher level of anxiety than the students who play sports may be due to the close contact of the sports they are doing. In sports that require close contact, it may be recommended to use more mascots instead of paired exercises in training.

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