

# Investigation of Sports Commitment, Anxiety of Contagion to Corona Virus and Perceived Stress in University Athletes

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## ABSTRACT

**Aim:** The aim of this study is to investigate sports commitment, anxiety about catching the corona virus and perceived stress in athletes who are studying at university.

**Methods:** The data of 581 university students studying in different faculties of Ondokuz Mayıs University and competing in one of the individual and team sports as competitors were evaluated. In the study, the scales of commitment to sports, perceived stress and anxiety about catching the corona virus were used.

**Results:** While the individual anxiety sub-dimension and the total score of anxiety about catching the corona virus were significantly different according to gender ( $p < 0.001$ ), socialization anxiety was found to be similar ( $p > 0.05$ ). There was no statistically significant difference in perceived stress scores according to gender ( $p > 0.05$ ). A significant difference was found between the scores of commitment to sports according to gender, the sub-dimension of being fit, dedication and internalization, and the total score of commitment to sports ( $p < 0.05$  and  $p < 0.001$ ). While there was a significant difference in the anxiety of catching the corona virus according to the team and individual sports status ( $p < 0.05$  and  $p < 0.001$ ), there was no statistically significant difference in the socialization anxiety scores ( $p > 0.05$ ).

**Conclusion:** It has been determined that while the anxiety of catching the corona virus and the state of commitment to sports change according to the gender variable, the perceived stress levels are similar in the university students who compete as individual and team athletes. In order to reduce students' anxiety about catching the corona virus, it may be recommended to take measures to reduce contact in training.

**Keywords:** University student, Sports, Corona virus, Anxiety, Perceived stress, Sports commitment

## INTRODUCTION

Stress is the body's biochemical response to a threatening situation. Stress is a force that causes depression, giving up a need or making a reaction. It is a condition that occurs when the physical and mental limits of the organism are forced and threatened. Stress can be defined as a situation that occurs when physical and mental integrity is forced, or it can also be defined as factors that force or disrupt personal integrity<sup>1</sup>. Stress can be defined as emotional, physical and cognitive reactions that force a person to make a certain effort to preserve his or her functionality<sup>2,3</sup>. Stress threatens and negatively affects the social, emotional and cognitive functions of the person in daily life. Stress affects not only physical and mental health, but also daily behaviors of people<sup>3</sup>. Stress in general, especially chronic stress, is considered effective in the development and acceleration of depression<sup>4</sup>. Although the harmful effects of stress are well known, stress levels are high in the general population<sup>5</sup>. Stress can negatively affect health and wellness, leading to harmful physical and emotional symptoms such as headaches, anxiety and depression<sup>6</sup>.

Commitment means that the individual takes ownership of his duty and proudly fulfills his job. Engagement is at the center of certain activities and has positive effects on regular participation in sports. Commitment has been defined as an athlete's desire to spend time and effort to achieve goals that he or she considers important<sup>7</sup>. It is stated that commitment consists of three basic dimensions: vitality, dedication and internalization. Vitality or Vitality; Being able to perform at an advanced level in different intensity and load periods includes being able to do one's best in the face of difficulties<sup>8-10</sup>. So physical, mental and emotional energy is mobility. It is defined as the state of being a positive mental process in the activity of interest. Vitality/vigor is defined as having a high level of mental stamina when engaging in any physical activity. When this situation is considered in terms of athletes, it means that they try to do their best in the face of difficulties.

Devotion; is to be inspired by the work done and to be proud of the sport and to give meaning to it. In other words, it is the individual's willingness to spend effort and time to achieve his goals. Internalization; refers to absorbing and immersing oneself in the sport<sup>11-13</sup>. Studies have shown that the positive effect of

participation in cultural and sports activities increases commitment to these activities<sup>14-16</sup>. It is thought that commitment has an important place in people's attitudes, feelings and behaviors towards their work<sup>17</sup>. It is seen that commitment to sports is defined by dimensions such as enthusiasm, confidence, vigor, and dedication<sup>7,12, 18-20</sup>. In the literature, there are studies on sports commitment in various sample groups<sup>16,21,22</sup>. Anxiety consists of feelings such as restlessness, worry, delusion and fear<sup>23</sup>. Anxiety is an emotional response to an unknown, unexplained, objectless danger. Fear in the corona virus epidemic increases the anxiety and stress levels of healthy individuals and intensifies the symptoms of those with pre-existing psychiatric disorders<sup>24,25</sup>. Situations such as the thought of catching a coronavirus epidemic and the uncertainty of this disease, instantaneous transmission of death statistics, concerns about the future, whether the measures are sufficient or not can cause anxiety<sup>26,27</sup>. Anxiety means worrying about the future and experiencing tension. Anxiety can be defined as the state of being restless and nervous due to not knowing what to expect<sup>28</sup>. It is known that the corona virus epidemic in recent months has increased the anxiety threshold<sup>29</sup>. Risks such as death, intubation and permanent damage after the corona virus epidemic have caused anxiety and fear in people<sup>30</sup>. The anxiety, fear, and depression caused by the epidemic have made the psychological, sociological and economic effects more and more felt by the individuals, the sectors and the businesses. The economic problems faced by businesses and their reflection on people have increased the effects of the epidemic, especially on sociological and psychological problems experienced at the individual and social level<sup>31</sup>. In the study conducted by Kwok et al., (2020) in Hong Kong, almost all of the participants stated that they were worried about the Corona virus-19 and their daily routines were disrupted<sup>32</sup>. Most athletes can be anxious in certain situations. Anxiety can negatively affect the decision-making process of the athletes' effective thinking skills. As the level of anxiety rises, the athlete moves away from making appropriate decisions and demonstrating his skills. Athletes who are exposed to too much pressure may have an involuntary effect on their behavior and movements. Excessive anxiety can cause confusion in the feelings and thoughts of even the athletes who performed well in their previous training and cause them to make wrong moves<sup>33</sup>. During the Corona virus 19 process, it may be thought

that student athletes' anxiety about catching the corona virus and their perceived stress may be negatively affected by their commitment to sports. Again, it has been wondered whether the state of commitment to sports, catching the corona virus and perceived stress in women and men who have university education changes according to gender, competition and sports age as individual and team athletes. In addition, the relationship between perceived stress during the Corona virus 19 process and the anxiety of catching the corona virus with the state of commitment to sports has also been wondered. For these purposes, sports commitment, anxiety about catching the corona virus, and perceived stress were examined in university education athletes.

## MATERIAL AND METHOD

**Participants:** A study was conducted on students studying at different faculties of Ondokuz Mayıs University and engaged in sports as competitors. Incorrect and incompletely filled scales were excluded from the study. Participation was made on a voluntary basis. In total, the data of 581 university students competing in one of the individual and team sports were evaluated. For the implementation of the scales, permission was obtained from the people who adapted the scales into Turkish via e-mail.

### Applied scales

**Sports Attachment Scale:** Sports Attachment Scale was developed by Guillen and Martinez-Alvarado (2014)<sup>34</sup>. It was adapted into Turkish by Sirganci et al., (2019)<sup>21</sup>. The scale was structured in a 5-category Likert type consisting of 15 items measuring commitment to sports and three sub-dimensions (almost = 1, rarely = 2, sometimes = 3, often = 4, and almost always = 5 points). The sub-dimensions of the scale include the fitness (items 1,2,6,7,8), dedication (items 3,4,5,9,12) and internalization (items 10,11,13,14,15) of the athletes. is measuring. All items are scored positively. The scale includes skill development, being successful in sports, being creative, gaining a reputation, entertainment, physical fitness, anxiety, burnout, stress, self-efficacy, experiencing different experiences, self-development, need for socialization, satisfaction of competition motivation, health, being appreciated by the society, internal and extrinsic motivational tools can be used to identify basic psychological needs. This scale has been accepted as valid and reliable in measuring the level of commitment to sports in adult athletes<sup>21</sup>. The scores that can be obtained from the scale vary between 15-75 point. Higher scores increase commitment to sports. In this study, the Cronbach's alpha ( $\alpha$ ) coefficient for the entire scale was calculated as 0.92.

**Perceived Stress Scale:** Developed by Cohen, Kamarck, and Mermelstein (1983) and adapted into Turkish by Eskin et al., (2013); The "Perceived Stress Scale" consisting of the dimensions of "Perception of Inadequate Self-Efficacy" and "Perception of Stress/Discomfort" was used<sup>3,34</sup>. The Perceived Stress Scale, which consists of 14 items in total, was developed to measure how stressful some situations in one's life are perceived. Participants evaluated each item on a 5-point Likert-type scale ranging from "Never (0)" to "Very often (4)". The first 7 items of the scale include the perception of insufficient self-efficacy and the other items include the dimension of perception of stress and discomfort. Reverse scored items are: 4, 5, 6, 7, 9, 10, 13. The reliability ratio of the questions about perceived stress in the questionnaire of the scale was calculated as Cronbach Alpha 0.84. The scores of PSS-14 range from 0 to 56. A high score indicates an excess of stress perception<sup>3</sup>. In this study, the Cronbach's alpha ( $\alpha$ ) coefficient for the entire scale was calculated as 0.83.

### Athletes' Anxiety Scale for catching New Type Corona Virus (Covid-19):

The Athletes' Anxiety Scale for catching New Type Coronavirus (Covid-19) consists of 2 sub-dimensions as individual anxiety (11 items) and Socialization anxiety (5 items), a total of 16 items. One is individual anxiety and the other is socialization anxiety. The lowest score that can be obtained from the 11-item "individual anxiety" factor, which represents the emergence of feelings that cause anxiety and uneasiness in the face of a feared event, is 11 and the highest score is 55. The lowest score that can be obtained from the 5-item "socialization anxiety" factor, which represents the state of being anxious about the socialization situation and avoiding the socialization environment in the face of a feared situation, 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. The scale, which consists of 16 items, is in the 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<sup>36</sup>. In this study, the Cronbach's alpha ( $\alpha$ ) coefficient for the entire scale was calculated as 0.87.

**Statistical analysis:** SPSS 25.00 package program was used for statistical operations. Kolmogorov-Smirnov test was used to test whether the data showed normal distribution and it was determined that the data showed normal distribution. T-test, one-way analysis of variance and LSD tests were used in statistical operations.

## RESULTS

Table 1: Comparison of students' anxiety about catching the corona virus, perceived stress, and commitment to sports by gender.

		Gender	N	Mean	St. deviation	t	p
Anxiety about catching the corona virus	Individual anxiety	Female	206	19.59	3.25	-5.420	.000**
		Male	375	21.44	4.24		
	Socialization anxiety	Female	206	10.23	2.77	-.799	.432
		Male	375	10.42	2.63		
	Corona fears total	Female	206	29.83	5.39	-3.970	.000**
		Male	375	31.85	6.14		
Perceived stress scale	Inadequacy Perception of self-efficacy	Female	206	13.66	2.20	1.025	.306
		Male	375	13.45	2.48		
	Stress discomfort perception	Female	206	13.48	4.77	-1.778	.194
		Male	375	14.17	4.34		
	Perceived stress total	Female	206	26.87	4.19	-1.301	.124
		Male	375	27.32	3.86		
Commitment to sport	Be fit	Female	206	15.01	3.52	-4.093	.000**
		Male	375	16.54	4.65		
	Devotion	Female	206	17.27	4.55	-2.013	.045*
		Male	375	18.15	5.29		
	Internalization	Female	206	16.18	4.18	-3.919	.000**
		Male	375	17.85	5.26		
	Total commitment to sport	Female	206	48.47	11.49	-3.465	.001**
		Male	375	52.53	14.53		

\*p<0,05 and \*\*p<0,001

Anxiety about catching the corona virus and commitment to sports were statistically different ( $p<0.001$ ), while perceived stress levels were similar ( $p>0.05$ ).

Table 2: Comparison of the students' anxiety about catching the corona virus, perceived stress and sports commitment according to their competition status in individual and team sports.

	Parameter	Sport	N	Mean	St. deviation	t	p
Anxiety about catching the corona virus	Individual anxiety	Individual sport	319	21.27	4.50	3.273	.001**
		Team sport	262	20.19	3.23		
	Socialization anxiety	Individual sport	319	10.46	2.85	1.115	.265
		Team sport	262	10.21	2.44		
	Corona fears total	Individual sport	319	31.74	6.70	2.699	.007*
		Team sport	262	30.40	4.83		
Perceived stress scale	Inadequacy Perception of self-efficacy	Individual sport	319	13.45	2.34	-.765	.445
		Team sport	262	13.61	2.45		
	Stress discomfort perception	Individual sport	319	14.17	4.51	1.447	.148
		Team sport	262	13.63	4.48		
	Perceived stress total	Individual sport	319	27.13	4.01	-1.192	.848
		Team sport	262	27.20	3.95		
Commitment to sport	Be fit	Individual sport	319	16.28	4.51	1.732	.084
		Team sport	262	15.65	4.11		
	Devotion	Individual sport	319	18.34	5.23	2.650	.008*
		Team sport	262	17.23	4.76		
	Internalization	Individual sport	319	17.35	5.29	.488	.625
		Team sport	262	17.15	4.54		
	Total commitment to sport	Individual sport	319	51.97	14.43	1.705	.089
		Team sport	262	50.03	12.61		

\* $p<0,05$  and \*\* $p<0,001$

While the anxiety of catching the corona virus is statistically significantly different ( $p<0.05$ ) according to the competition status as individual and team athletes, the state of commitment to sports and perceived stress are similar ( $p>0.05$ ).

Table 3: Comparison of students' anxiety about catching the corona virus, perceived stress and sports commitment according to their sports background.

		sports year	N	Mean	St. deviation	F/LSD	p
Anxiety about catching the corona virus	Individual anxiety	1-3 year (1)	196	20.20	2.90	12.676 4>1,2,3	.000**
		4-7 year (2)	149	20.09	4.08		
		8-10 year (3)	138	20.86	4.05		
		10 years and above (4)	98	22.90	4.98		
	Socialization anxiety	1-3 year (1)	196	10.16	2.56	2.013	.111
		4-7 year (2)	149	10.27	2.91		
		8-10 year (3)	138	10.28	2.38		
		10 years and above (4)	98	10.94	2.88		
	Corona fears total	1-3 year (1)	196	30.36	5.01	9.034 4>1,2,3	.000**
		4-7 year (2)	149	30.36	5.90		
		8-10 year (3)	138	31.14	5.82		
		10 years and above (4)	98	33.84	7.19		
Perceived stress scale	Inadequacy Perception of self-efficacy	1-3 year (1)	196	13.54	2.24	3.565 3>2,4	.014*
		4-7 year (2)	149	13.34	2.66		
		8-10 year (3)	138	14.02	1.77		
		10 years and above (4)	98	13.06	2.86		
	Stress discomfort perception	1-3 year (1)	196	13.99	4.50	.601	.614
		4-7 year (2)	149	14.04	4.42		
		8-10 year (3)	138	13.50	3.79		
		10 years and above (4)	98	14.22	5.48		
	Perceived stress total	1-3 year (1)	196	26.79	4.33	1.313	.269
		4-7 year (2)	149	27.35	3.83		
		8-10 year (3)	138	27.61	3.28		
		10 years and above (4)	98	27.00	4.34		
Commitment to sport	Be fit	1-3 year (1)	196	14.25	4.33	29.275 1<2,3,4 2<3,4	.000**
		4-7 year (2)	149	15.44	3.11		
		8-10 year (3)	138	17.49	4.23		
		10 years and above (4)	98	18.24	4.49		
	Devotion	1-3 year (1)	196	15.49	5.10	38.187 1<2,3,4 2<3,4	.000**
		4-7 year (2)	149	17.21	3.99		
		8-10 year (3)	138	19.93	4.54		
		10 years and above (4)	98	20.52	4.64		
	Internalization	1-3 year (1)	196	15.43	4.72	24.028 1<2,3,4 2<3,4	.000**
		4-7 year (2)	149	16.66	4.12		
		8-10 year (3)	138	18.87	5.07		
		10 years and above (4)	98	19.56	4.89		
	Total commitment to sport	1-3 year (1)	196	45.17	13.40	33.869 1<2,3,4 2<3,4	.000**
		4-7 year (2)	149	49.31	10.34		
		8-10 year (3)	138	56.29	13.17		
		10 years and above (4)	98	58.33	13.40		

\* $p<0,05$  and \*\* $p<0,001$

According to the sports background, while the anxiety of catching the corona virus and the state of commitment to sports are statistically different ( $p<0.001$ ), the perceived stress levels are similar ( $p>0.05$ ).

Table 4: The relationship between sports commitment, catching the corona virus and Perceived Stress

	Anxiety about contracting the coronavirus	Perceived stress
State of commitment to sport	.156**	-.043
Anxiety about catching the corona virus		.073

## DISCUSSION

In some studies, it has been reported that the anxiety levels of female athletes are higher than that of men<sup>30,37,38</sup>. Memiş- Doğan and Düzel (2020) found in their study that the anxiety levels of male participants were higher than female participants<sup>39</sup>. According to the "socialization anxiety" sub-dimension of the anxiety scale of athletes catching the new type of corona virus in their study (Şahiner and Ulukan (2020), there is a difference in favor of male athletes between the mean scores of the athletes according to gender, it was stated that there was a significant difference in favor of female athletes in terms of the "individual anxiety" sub-dimension and in total scale scoring<sup>40</sup>. Again, in some studies, differences in the anxiety of catching the corona virus were determined between men and women<sup>29, 41</sup>. In their study, Özgün et al. (2021), on the other hand, found that the anxiety of catching the corona virus did not change according to gender. In this study, while the individual anxiety sub-dimension and the total score of anxiety about catching the Corona virus were significantly different according to gender ( $p<0.001$ ), socialization anxiety was found to be similar ( $p>0.05$ )<sup>42</sup>. It can be thought that male athletes experience more individual anxiety than female athletes, and when the general total is considered, their anxiety about catching the new type of corona virus is higher. This situation can be based on the assumption that male athletes participate in more competitions. There are many studies reporting that perceived stress differs in terms of gender<sup>43-46</sup>. In addition, there are studies stating that perceived stress does not differ according to gender<sup>47,48</sup>. In some studies, it has been suggested that the anxiety and stress levels of male students are lower than female students<sup>39</sup>. In some studies, men's stress scores were found to be higher than women<sup>50</sup>. In this study, no statistically significant difference was found in perceived stress scores according to gender ( $p>0.05$ ). Finding different results in the studies may be due to the fact that the study groups are different such as occupation, age, place of residence, education, time of research. In some studies, it has been determined that there is no significant difference in the level of students' commitment to sports according to the gender variable<sup>42, 51-55</sup>. Alpay et al. (2022) found that there was a statistically significant difference in favor of males between the scores of sports commitment in university students according to the gender variable<sup>56</sup>. Sivrikaya and Biricik (2019) found that female athletes in national elite skiers have higher athlete commitment in the sub-dimension of dedication and enthusiasm compared to male athletes<sup>57</sup>. In their study, Uzgur et al. (2021), stated that the level of commitment to sports is higher in female athletes than in men, with the sub-dimension of internalization according to gender. In this study, a significant difference was found between the scores of commitment to sports, the sub-dimension of being fit, dedication and internalization, and the total score of commitment to sports ( $p<0.05$  and  $p<0.001$ )<sup>58</sup>. Gülen et al. (2021), in their study, determined the sports commitment scores of taekwondo women and men as 62.43 and 63.14 and evaluated their commitment to sports as high according to this score. In this study, sports commitment scores were found to be 48.47 for women and 52.53 for men. It is seen that the score to be taken for these scores is 65% for women and 70.04% for men. Calculation for women is  $(48.75 \times 100 / 75 = 65\%)$  and for men:  $(52.53 \times 100 / 75 = 70.04\%)$ . In this study, students' commitment to sports can be considered as high in women and good in men<sup>51</sup>.

In the study of Namli (2020), there was no statistically significant difference in individual anxiety, socialization anxiety and corona virus anxiety scores according to sports branch<sup>30</sup>.

Gümüşgöl 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>38</sup>. In their study, Güney et al. (2021), individual anxiety, socialization anxiety sub-dimension, and anxiety of catching the corona virus were found to be significantly different according to the status of professional and amateur athletes. In this study, while there was a significant difference in the anxiety of catching the corona virus according to the team and individual sports status ( $p<0.05$  and  $p<0.001$ ), there was no statistically significant difference in the socialization anxiety scores ( $p>0.05$ )<sup>41</sup>. Uzun et al. (2021) found that the stress perceptions of those competing as individual and team athletes were similar. In this study, there was no statistically significant difference in perceived stress status as individual and team athletes according to the competition situation ( $p>0.05$ ). This may be due to the fact that the majority of the students are from the faculty of sports sciences, and that they can sometimes compete in both categories or receive joint sports training<sup>48</sup>. Okdan and Güler (2021) stated that the state of commitment to sports changes according to the state of doing sports. Peke (2020) determined that participants who are licensed active athletes have higher levels of commitment to sports, fitness, dedication and internalization compared to athletes who do sports as a leisure time activity. Özgün et al. (2021), in their study, stated that commitment to sports did not change according to the branch variable<sup>53</sup>. Again, Yamaner et al. (2019) stated in their study that there was no significant difference between the sports commitment levels of the students of the faculty of sports sciences, whose branches are volleyball, basketball and football. In this study, no significant difference was found in the sports commitment of the students according to the competition situation as a team and individual athlete ( $p>0.05$ )<sup>54</sup>.

In another study, it was determined that the fear or anxiety of the participants did not change according to the age variable<sup>38</sup>. In some studies, significant differences were determined in anxiety states according to the age variable<sup>29,41,59</sup>. In this study, individual anxiety and anxiety about catching the Corona virus were found to be significantly different according to the sports age variable ( $p<0.001$ ), but no significant difference was found in the socialization anxiety sub-dimension ( $p>0.05$ ). The individual anxiety score of the group whose sports age is 10 years and above is higher than the other groups. Socialization anxiety is lowest in the group whose sports age is 1-3 years. In general, as the age of sports increased, individual anxiety, social anxiety and catching the Corona virus increased more.

Kaya et al., (2020) stated in their study that the average score of perceived stress level in female football players did not make a statistical difference according to the years of sports experience<sup>60</sup>. In the study of Eraslan (2016), no statistically significant difference was found between the perceived stress levels of the participants according to their sports age<sup>43</sup>. In the study of Uzun et al., (2021), it was determined that the perceived stress scores did not differ significantly according to the age variable. In this study, a significant difference was found in the perception of insufficient self-efficacy according to the classification made according to sports age ( $p<0.05$ ), while the difference between the perception of stress/discomfort and perceived stress scores was statistically insignificant ( $p>0.05$ ). The fact that those who do sports between 8-10 years of age perceive themselves as more inadequate suggests that they participate more in competitions and therefore they consider themselves less

competent<sup>48</sup>. In the study of Alpay et al. (2022), no significant difference was found between the scores of sports commitment in university students according to the age variable<sup>56,61,62</sup>. Again, Uzgur et al. (2021), in their study, did not find a significant difference in sports commitment according to age groups<sup>58,63,64</sup>. In the study of Okdan and Güler (2021), it was determined that there was a significant relationship between the age of the participants and the duration of sportive activity and the sub-dimensions of the scale of commitment to sports<sup>53</sup>. In the study of Sivrikaya and Biricik (2019), there was no significant difference in the sub-dimensions of vigor and enthusiasm in the case of athlete commitment according to the age variable; stated that there was a significant difference in the sub-dimensions of trust and commitment<sup>57,65</sup>. While Gülen et al. (2021) found a significant difference in the mean score of the 'Devotion' sub-dimension according to the sports age variable, they did not find any significant difference in the other sub-dimensions. In this study, a statistically significant difference was found between the sub-dimensions of fitness, dedication and internalization and total scale scores according to sports age ( $p < 0.001$ )<sup>33</sup>. In general, those with less than 8 years of sports history have lower scores on sports commitment than those with more than 8 years. We can say that as the years of sports increase, the commitment to sports increases.

In this study, a low level of significant and positive correlation was found between the state of commitment to sports and the anxiety of catching the corona virus. Adherence to sports was found to be negative with perceived stress, and anxiety about catching the Corona virus was found to have a positive insignificant value with perceived stress. If it is accepted that those with high commitment to sports are the ones who compete more (those who have more years of doing sports), it makes us think that the anxiety of catching the corona virus increases as the participation of the athletes in the competition increases.

## CONCLUSION

It has been determined that while the anxiety of catching the corona virus and the state of commitment to sports change according to the gender variable, the perceived stress levels are similar in the university students who compete as individual and team athletes. Men's anxiety was about catching the corona virus, perceived stress score and sports commitment state higher than women. It has been observed that the students' commitment to sports is moderate in women and good in men. According to the competition situation as individual and team athletes, it was seen that while the anxiety of catching the corona virus changed, the perceived stress and sports commitment were similar. The fact that the anxiety of catching the corona virus is higher in those who compete as individual athletes compared to those who compete as team athletes can be attributed to the higher contact with the opponent in competitions and trainings. According to the sports age variable, while the anxiety of catching the corona virus and the state of commitment to sports change, the perceived stress situation is similar. The fact that the group with a high sports age is more likely to catch the corona virus and have a higher commitment to sports suggests that this group participates in more competitions. In order to reduce students' anxiety about catching the corona virus, it may be recommended to take measures to reduce contact in training.

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