Is Coronavirus-19 Phobia of Sports Science Students a Barrier to Their Levels of Physical Activity in "Controlled Normalization"?: A Cross-Sectional Study

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ABSTRACT

COVID-19, which affects the world, undoubtedly seems to have affected university students who receive applied education. Sports Science students continue their sports training within the mask and distance rules by switching to face-to-face teaching during the normalization period. This study aimed to reveal whether the physical activity levels of Sports Science students were affected by Coronavirus-19 phobia after switching to face-to-face training. 432 (female; 152, male; 280) university students from Sports Sciences attended the research. Data from the participants were collected using the Coronavirus-19 Phobia Scale and the International Physical Activity Questionnaire-Short Form (IPAQ-SF). The independent sample and Mann-Whitney U test, One-Way, and two-way ANOVA test (Post hoc Tukey) were used in the data analysis. According to the results, the 'psychological' sub-dimension scores of the participants, an increase in body mass index, not doing sports, reducing the vaccine dose, spending COVID-19 in the hospital, and wearing a mask in practical classes increase. In addition, those who wear masks in applied lessons have higher 'somatic,' 'social,' and 'economic' sub-dimension scores. Females' coronavirus-19 phobia, 'psychological' and 'economic' sub-dimensions, and total scale scores are higher than males. Consequently, with the increased physical activity levels of Sports Science students, coronavirus-19 decreases phobia scores.

INTRODUCTION

World Health Organization (WHO) announced 'COVID-19' on January 31, 2020, and a state of emergency was declared on March 11, 2020, trying to get ahead of the epidemic worldwide (Ghebreyesus, 2020). Government officials in China managed to reduce the number of cases by making changes such as mask and distance rules and closing public transportation (Zhai et al., 2020). As in the whole world, restrictions are introduced in Turkey, and the epidemic is tried to be controlled. Attendance in physical activity or sports, which is an essential component of maintaining a healthy lifestyle, is adversely affected as part of the COVID-19 pandemic measures while trying to contain the epidemic (Hull et al., 2020); closing social places, fitness centers, and public parks (Heffernan & Jae, 2020). Losing weight and maintaining a healthy weight, which is necessary for energy expenditure, at least 150 minutes of moderate-intensity physical activity per week is recommended. An increase in TV

watching and sitting times has begun due to the pandemic (Werneck et al., 2019). In addition, people can experience depression in cases of physical inactivity (Khosravi et al., 2015).

During the quarantine process, it was found that individuals increased their physical activity and chose to sleep to cope with their negative emotions (Zhang et al., 2020). In a study aimed at preventing diseases and improving existing health (Caspersen et al., 1985), it has been noted that physical activity has broad effects in preventing diseases and improving mental health (Barr et al., 2018). Infectious diseases such as COVID-19, the treatment of which is not certain, cause fear and anxiety in society, increasing the level of concern (Doğan & Düzel, 2020). This fear and anxiety experienced during the COVID-19 pandemic; maybe because people are encountering this disease for the first time (Sümer, 2020). Usually, during an epidemic, individuals experience anxiety, depression, and a feeling that their loved ones will be harmed, which causes changes in daily rituals (Oflaz, 2008).

The possibility of transmission of COVID-19 disease to a person from someone else may also be preparing the ground for the development of fear in individuals (Elshkawy & Abdelaziz, 2021). Fear is characterized as a 'rational response to life-threatening events' (Brown et al., 1992). With the increase in the number of individuals infected with COVID-19 disease, the loss of life caused by COVID-19 has caused the epidemic to reveal fear psychologically (Pakpour & Griffiths, 2020). With the onset of the COVID-19 pandemic, changes in contact with people began to be observed with the concern of contracting the virus in places such as shopping centers, markets, and hospitals where the public is busy (Doğan & Düzel, 2020). With the fear of COVID-19, changes in lifestyle habits such as nutrition, sleep patterns, and physical activity levels individuals may be observed. In this context, the study aims to reveal how the fear of COVID-19 affects the biological activities of Sports Science students in face-to-face training.

METHODS
Research Sample
In the correlational survey model, this study aims to define the degrees of change of two or more factors together (Karasar, 2009). Demographic information, physical activity, and Coronavirus-19 phobia data in the research are collected through 'Google Forms and collected from sports science students voluntarily.

Research Group
432 (female; 152, male; 280) students from Sports Sciences participated in the research. The average age of the participants is (22.9±6.12), the average height (is 174±8.73), their weight is an average (of 68.2±3.16) and their BMI average (is 22.5±3.16). 72.5% (n:113) of the participants have normal weight, 17.4% (n:75) are overweight, 7.6% (n:33) are underweight, and 2.5% (n:11) are obese. 37.5% (n:162) of the participants are students of Coaching Education, 33.6% (n:145) are Physical Education and Sports teachers, 27.3% (n:118) are Sports Management, and 1.6% (n:7) are Recreation department students. While 67.1% (n:290) of the participants do not smoke, 32.9% (n:142) do. While 87.7% (n:353) of the participants do not drink alcohol, 18.3% (n:79) drink alcohol.

Data Collection Tools
Demographical Data Questionnaire; The individuals' demographic information will be defined with the help of the questionnaire to be created. In the survey are questions about gender, age, height, weight, smoking, drinking alcohol, whether they have Covid-19, whether any of their families have COVID-19, and their vaccination status.

International Physical Activity Questionnaire-Short Form (IPAQ-SF): IPAQ-SF was developed by Michael Booth in 1996, and a Turkish validity and reliability study was conducted by Öztürk (Öztürk, 2005). The IPAQ short form used in this study consists of seven questions and contains information about walking and moderate and high-intensity activities spent in the last week. The MET levels of individuals can be calculated according to the intensity of the activities carried out in the previous week. The MET levels of individuals in the last week are divided into inactive, minimally active, and very active (Sağlam et al., 2010).

Coronavirus- 19 Phobia Scale: In our study, the Coronavirus-19 Phobia Scale developed by Arpacı et al. (2020) will be used. It is created to measure the extreme and persistent fear of the new coronavirus disease. The scale is of the Likert type with five items containing 20 items and four sub-dimensions as 'psychological, somatic, social, and economical.' The psychological sub-dimension (1-5-9-13-17. and 20.), somatic sub-dimension (2-6-10-14. and 18.), the social sub-dimension (3-7-11-15. and 19.) and the economic sub-dimension (4-8-12. and 16.) consists of substances. The total Coronavirüs-19 Phobia scale score is obtained from the sum of the sub-dimensions and varies between 20-100 points. Higher scores indicate higher subscales and general COVID-19 phobia (Arpacı et al., 2020). Cronbach's α=.93 is measured for the scale, and the sub-dimensions of the scale as psychological=.88, somatic=.90, social=.85, and economics=.88. In this study, the Coronavirus-19 phobia scale is found to be Cronbach's α=.84, and the sub-dimensions of the scale are psychological=.78, somatic=.81, social=.79, and economics=.82. According to these results, the Coronavirus-19 phobia scale and its sub-dimensions used in this study have high reliability.

Statistical Analysis

The analyses of the research were performed in the statistical program (Jamovi 2.0.0.0) at the (95%) confidence interval and significance level (0.05). The study determined IPAQ (skewness=0.923, kurtosis=0.127) and Coronavirus-19 phobia data (skewness=0.833, kurtosis=0.960) were between these results (since they are between +1.5 and -1.5) mean that the data has a normal distribution (Tabachnick & Fidell, 2013)". From this point of view, an independent sample t-test is used to compare two groups, and One-Way ANOVA and Two-way ANOVA tests are used in groups of more than two. After determining the significance in the ANOVA test, (Tukey) post hoc analysis is performed to determine which groups this significance is. The Mann-Whitney U test was used in cases where the variances were unequal. The Pearson correlation test was used for relational comparison.

RESULTS

The details of the participants during the COVID-19 pandemic are presented below (Table 1).

Table 1. Variables of The Participants Belonging to The COVID-19 Pandemic Period

Variables	Group	n	%
Have you had COVID-19?	Yes	170	39.4
	No.	262	60.6
How did you get COVID-19?	Have mild disease at home	162	95.2
	Had disease at the hospital	4	2.4
	İntensive care unit	4	2.4
Has anyone in your family had COVID-19?	Yes	274	63.4
	No.	158	36.6
Did someone in your family die of COVID-19?	Yes	28	10.2
	No.	246	89.8
Have you been vaccinated?	Yes	414	95.8
	No	18	4.2
How many doses of the vaccine have you had?	One dose	19	4.6
	Two doses	300	72.5
	Three doses	95	22.9
Do you do sports at least three days a week?	Yes	298	69.0
	No	134	31.0
Do you wear a mask in practical classes?	Yes	91	21.1
	No	341	78.9

As shown in Table 1, 60.6% (n:262) of the participants had not had COVID-19, and 39.4% (n:170) had COVID-19. It is seen that 95.2% (n:162) of the participants who have COVID-19 had mild disease at home, 2.4% (n:4) had the condition in the hospital, and 2.4% had the disease in the intensive care unit.

People's proportion of contracting COVID-19 illness in their family is 63.4% (n:274), and the rate of not contracting COVID-19 in their family is 36.6% (n:158). It is seen in 89.8% (n:246) of family contract COVID-19, one of their family members did not die from COVID-19, and in 10.2% (n:28), a family member died from COVID-19. It is seen that 95.8% of the participants have the COVID-19 vaccine, and 4.2% (n:18) do not have the COVID-19 vaccine. It is seen that 72.5% (n: 300) of those who are vaccinated got two doses, 22.9% (n:95) got three doses, and 4.6% (n:19) got one dose. It is seen that 69% of the participants (n:298) do sports at least three days a week, at least 1 hour a day, and 31% do not do sports. It is seen that 78.9% (n:341) of the participants do not wear masks in applied classes, and 21.1% (n:91) wear masks even though it is not compulsory. The participants' scores on the Coronavirus-19 phobia scale are below (Table 2).

Table 2. The Min, Max, x̄, and sd Values of The Participants' Coronavirus-19 Phobia Scale

Sub-Dimension	n	(min.)	(max.)	(x̄)	(sd)
Psychological	432	6	30	15.6	5.7
Somatic	432	5	25	8.97	4.2
Social	432	5	25	11.5	4.8
Economic	432	4	20	7.9	3.5
Total Scale	432	20	100	43.9	16.6

Min: minimum, Max: Maximum, sd: standard deviation

As we can see in Table 2, in the coronavirus-19 phobia scale, the highest sub-dimension score average is psychological (15.6±5.7), and the lowest sub-dimension score average is economical (7.9±3.5). Participants' BMI and MET scores are given below (Table 3).

Table 3. The Results of BMI and Total MET of The Participants by Gender

	Gender	n	x̄	sd	U	Levene's test F	Levene's test p	p	Dif.
BMI	Female (1)	152	21.1	2.69	12153	8.83	0.00	0.00***	2>1
	Male (2)	280	23.1	3.14					
Total MET	Female (1)	152	2465.7	2052.71	18652	13.21	0.00	0.03*	2>1
	Male (2)	280	3629.7	2610.47					

*p<0.05, ***p<0.001, sd: standard deviation, Dif: Difference

As we can see in Table 3, there is a significant difference between the BMI of the participants and their gender (F (1,430) = 8.83; U = 12153; p = 0.000, Cohen d= 0.43). Accordingly, males (23.1±3.14) have a higher BMI than females (21.1±2.69). Furthermore, there is a significant difference between the participants 'total MET levels and their gender (F (1,430) = 13.21; U = 18652; p = 0.03, Cohen d= 0.12). According to this result, the total MET averages of males (3629.7±2610.47) are higher than the total MET averages of females (2465.7±2052.71). The Coronavirus-19 and MET scores of the participants are given below (Table 4).

Table 4. Participants' Coronavirus-19 Phobia and Total MET Pearson's Correlation Test Results

		Psychological	Somatic	Social	Economical	Coronavirus-19 Phobia
Total MET	r	-0.09	-0.075	-0.052	-0.064	-0.08
	p	0.03*	0.06	0.14	0.09	0.04*

*p<0.05

As shown in Table 4, a statistically significant, lower negative correlation is detected between the participants' 'Coronavirus-19 phobia' scale scores and their 'total MET' scores (r= -0.08; p= 0.04). A statistically significant and higher negative correlation is detected between the 'psychological' sub-dimension of the participants' Coronavirus-19 phobia and their total MET scores (r= -0.09; p= 0.03).

There is no significant between the 'somatic,' 'social,' and 'economic' sub-dimensions of the participants and their total MET scores (p>0.05). The relationship between the participants 'total MET' and the 'Coronavirus-19 phobia' and its 'psychological' sub-dimension is shown in the scatter diagram below (Figure 1).
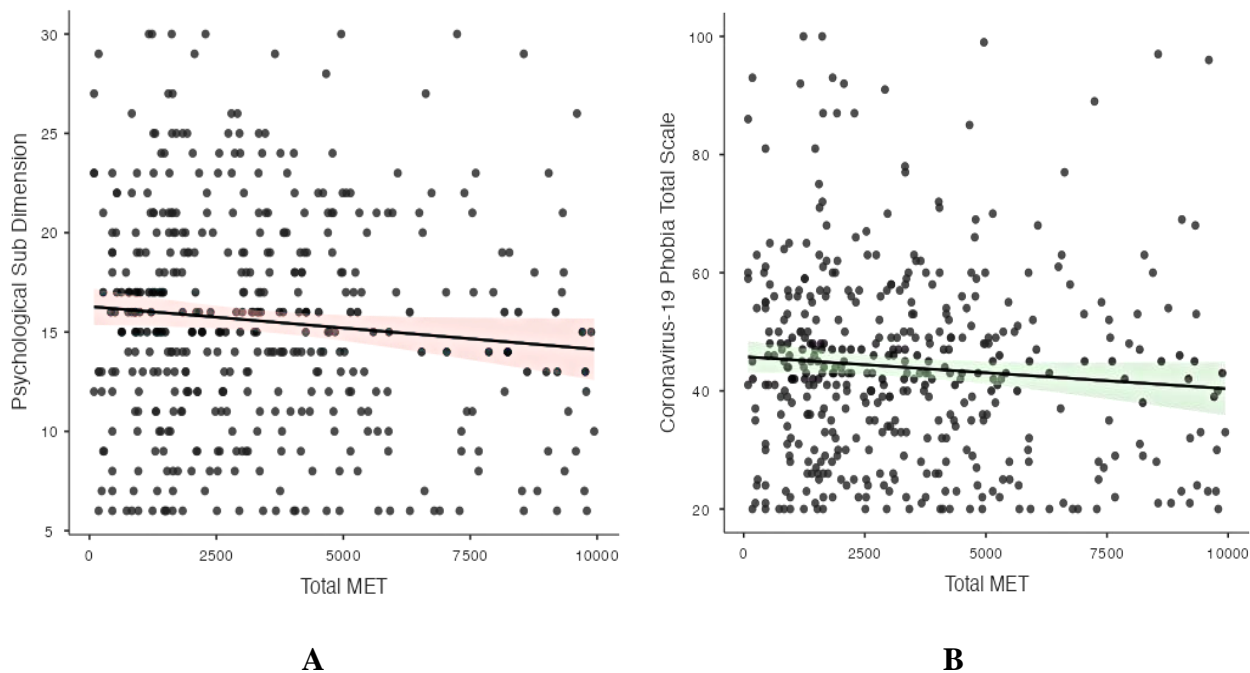

| A | B |

Figure 1. Scatter Diagram of Participants' Total MET and Coronavirus-19 Phobia and Psychological Sub-Dimension (Scatter Plot)

The change in coronavirus-19 phobia scores according to the gender of the participants is given below (Table 5)

Table 5. Coronavirus-19 Phobia Test Results of Participants by Gender

Sub-Dimension	Gender	n	x̄	sd	t	Levene's test F	Levene's test p	p	Dif.
Psychological	Female (1)	152	16.59	5.39	2.80	1.3104	0.25	0.005**	1>2
	Male (2)	280	14.99	5.85					
Somatic	Female (1)	152	9.43	3.86	1.69	2.7725	0.09	0.09	
	Male (2)	280	8.72	4.34					
Social	Female (1)	152	12.15	4.59	1.93	1.2993	0.25	0.05	
	Male (2)	280	11.22	4.88					
Economical	Female (1)	152	8.52	3.48	2.61	0.0183	0.89	0.009**	1>2
	Male (2)	280	7.62	3.41					
Total Scale	Female (1)	152	46.52	15.69	2.38	1.1986	0.27	0.02*	1>2
	Male (2)	280	42.55	16.99					

*p<0.05, **p<0.01, sd: standard deviation, Dif: Difference

As shown in Table 5, there is a significant difference between the 'psychological' sub-dimension of the 'Coronavirus-19 phobia' scale and the gender of the participants (F (1,430) = 1.3104; t= 2.80; p= 0.005, Cohen d= 0.18). The 'psychological' sub-dimension averages of females (16.59±5.39) are higher than the averages of males (14.99±5.85). There is a significant difference between the gender of the participants and the 'economy' sub-dimension (F (1,430) = 0.0183; t= 2.61; p= 0.009, Cohen d= 0.18). The 'economic' sub-dimension means scores of females (8.52±3.48) are higher than the averages of

males (7.62±3.41). There is a significant difference between the participants' Coronavirus-19 phobia total score and gender (F (1,430) = 1.1986; t= 2.38; p= 0.02, Cohen d= 0.18). The scale total means score of females (46.52±15.69), is higher than the mean score of males (42.55±16.99). The 'Coronavirus-19 phobia' scale scores of the participants according to different variables are given below (Table 6).

Table 6. Coronavirus-19 Phobia and Analysis of variance of some variables test results

Sub-Dim.	Variables	Group	n	x̄	sd	F	p	Dif.
Psychological	BMI	Normal weight (1)	313	15.78	5.63	4.02	0.01*	**1>3**
		Overweight (2)	75	15.28	6.09			**2>3**
		Obese (3)	11	10.27	5.1			**4>3**
		Thin (4)	33	15.73	5.51			
	Doing Sport?	Yes (1)	298	15.10	5.67	5.90	0.02*	**2>1**
		No (2)	134	16.55	5.78			
	Vaccine Doses?	1 Dose (1)	19	11.32	4.91	4.80	0.005**	**2>1**
		2 Doses (2)	300	15.81	5.65			**3>1**
		3 Doses (3)	95	15.68	5.49			
	COVID-19 Survivability?	At home (1)	162	15.50	6.0	6.881	0.01*	**2>1**
		At the hospital (2)	4	21.50	2.38			
		İntensive care unit (3)	4	15.0	10.89			
	Use mask?	Yes (1)	91	18.0	6.07	19.5	0.000***	**1>2**
		No (2)	341	14.9	5.48			
Somatic	Use mask?	Yes (1)	91	10.93	4.95	19.8	0.000***	**1>2**
		No (2)	341	8.45	3.79			
Social	Use mask?	Yes (1)	91	14.15	5.37	29.2	<0.0000***	**1>2**
		No (2)	341	10.85	4.38			
Economical	Use mask?	Yes (1)	91	9.74	4.27	22.9	<0.0000***	**1>2**
		No (2)	341	7.45	3.04			

*p<0.05, ****p<0.01, ***p<0.001, sd: standard deviation, Dif: difrerence, Dim: dimession, Post Hoc (Tukey)

As we can see in Table 6, there is a significant difference between the 'psychological' sub-dimension and the 'BMI' of the participants (F=4.02; p= 0.01), doing sports (F= 5.90; p= 0.02), vaccine dose (F= 4.80; p= 0.005) and undergoing COVID-19 (F= 6.881; p= 0.01) (p<0.05). Normal weight people average in the psychological sub-dimension (15.78±5.63) is higher than the means of those who are obese (10.27±5.1), the mean of those who are overweight (15.28±6.09); than the means of the obese (10.27±5.1), the standards of the underweight (15.73±5.51) than those who are obese (10.27±5.1) (p< 0.05). Participants 'psychological' sub-dimension, the average of those who do not do sports (16.55±5.78) is higher than the means (15.10±5.67) of those who do sports (p< 0.05). In the 'psychological' sub-dimension, the People who got two vaccine doses mean (15.81±5.65) is higher (p<0.05) than the means (11.32±4.91) of those who got one dose of vaccine. In the 'psychological' sub-dimension, the People with COVID-19 in hospital mean (21.50±2.38) is higher than the means (15.50±6.0) of those who have mild COVID-19 at home (p<0.05). There is a statistically significant difference between the 'psychological' sub-dimension (F= 19.5; p= 0.000), 'somatic' sub-dimension (F= 19.8; p= 0.000), and 'social' sub-dimension (F= 29.2; p= 0.0000) and 'economic' sub-dimension (F= 29.2; p=0.0000) of the participants' Coronavirus-19 phobia scale and the use of masks in applied lessons (p< 0.05). The average (of 18.0±6.07) of those who use masks in applied courses in the 'psychological' sub-dimension is higher than the average (14.9±5.48) of those who do not use masks (p< 0.05). In the 'somatic' sub-dimension, the standards of those who use masks in applied lessons (10.93±4.95) are higher than the averages of those who do not wear masks (8.45±3.79) (p< 0.05). In the 'social' sub-dimension, the standards of those who use masks in applied lessons (14.15±5.37) are significantly higher than the averages of those who do not use masks (10.85±4.38) (p<0.05). In the 'economy' sub-dimension, the means of those who use masks in applied lessons (9.74±4.27) are higher than the mean of those who do not use masks (7.45±3.04) (p<0.05).

DISCUSSION

The following conclusions were reached when the relationship between physical activity levels of Sports Science students with Coronavirus-19 phobia was examined.

According to the physical activity scale, the first result of the study, the total MET values of males are significantly higher than females. According to the coronavirus-19 phobia scale, females' psychological, economic, and Coronavirus-19 phobia total scores are higher than males' full scores. There is a significant, very low negative correlation between the total MET and the Coronavirus-19 phobia total score and the 'psychological' sub-dimension. It is known that the fear of contracting the disease during the COVID-19 pandemic can harm physical and mental health (Miyor-Rodriguez et al., 2021). Although the COVID-19 pandemic seems to have changed the lifestyle of individuals worldwide, one of the segments that feel this change the most may be university students (Charles et al., 2021). A study conducted during the pandemic has shown that males MET values are higher than females (Maugeri et al., 2020). A survey conducted during the distance education process in Turkey showed that the physical activity levels of Sports Science students decreased compared to before the pandemic, and again, during this period, males MET scores were higher than females (Güler et al., 2021).

The results of these studies support the conclusion that the MET scores of male students in our study are higher than female students. According to the results of a survey conducted with Belgian university students in the distance learning process, it was found that students' worries about catching COVID-19 were positively related to mental health symptoms (Tasso et al., 2021). It is known that women are more afraid of COVID-19 than men during the pandemic period (Broche-Pérez et al., 2020). According to the conclusion of another study conducted during the pandemic, being a female increase the fear of COVID-19 (Modena et al., 2021). In studies conducted on undergraduate students in Ecuador and Spain, it was found that women are more afraid of COVID-19 than men (Rodríguez-Hidalgo et al., 2020; Muyor-Rodriguez et al., 2021). The results of these studies are similar to the results of our study. Research during the pandemic indicates that individuals with high physical activity have a better emotional structure (Qin et al., 2020). In a study conducted with university students in Poland, it was concluded that physically active individuals have a lower fear of COVID-19 (Kuśnierz et al., 2021). These results support the decrease in the scores of Coronavirus-19 phobia as the MET levels of Sports Science students increased in this study.

The second study result: Obese participants have higher psychological sub-dimension scores than those with normal weight, overweight and underweight. In addition, of those who do not do sports, psychological sub-dimension scores are higher than those who do sports. The COVID-19 epidemic has also brought with it health problems related to inactivity (Souza & Tritanty, 2020), and when looking at the death rates due to COVID-19, it was concluded that there are individuals with a higher BMI (Peters et al., 2021). A study conducted during the pandemic in the United States shows that 33% of the 4.899,447 COVID-19 patients hospitalized are obese (Kompaniyets et al., 2020). These studies support the conclusion that the 'psychological' sub-dimension scores of the Sports Science students in the obese class in our study are high. It has been reported that there is a positive relationship between the COVID-19 fears of undergraduate students in Ghana and their psychological distress (Oti-Baoadi et al., 2021). Based on the results of previous studies, it can be said that psychological distress decreases as the level of physical activity increase for both genders (Romero et al., 2013). In general, it is said that the closure of universities and sports facilities due to the COVID-19 pandemic prevents individuals from doing moderate to vigorous physical activity (Tan et al., 2021). It has been reported that one of the ways that undergraduate students and academics applied to deal with stress during the pandemic is through participation in physical activity (Sabbah et al., 2021). A recent study in China suggests that exercise can effectively protect mental health (Yao et al., 2022). During the pandemic, it was found that the physical activity levels of health sciences students in Croatia decreased in general, and this situation was associated with a group of negative emotionality (anxiety, stress, depression) (Talapko et al., 2020). A study conducted on Sports Science students in the distance education process concluded that taking 10.000 steps per day significantly decreased their BMI values, waist-hip ratios, and average mental well-being (Yanar & Güler, 2021). The results of these studies are in parallel with our research on the inspiration of physical activity.

The latest result of the study is that of the participants who have a single dose of vaccine; compared to those who have two doses and three doses of vaccine, those who have COVID-19 in the

hospital; compared to those who have a mild illness at home, those who use masks in applied classes; have higher 'psychological' sub-dimension scores than those who do not use masks. In addition, the 'somatic,' 'social,' and 'economic' scores of those who use masks in applied lessons are higher than those who do not. For the public, a pandemic and its associated societal disruption are stressful even when the person is not infected or when the risk of exposure to infection is particularly high (Charles et al., 2021). Recent studies have stated that people are hesitant about vaccination against COVID-19 disease in all age groups (Punsalan, 2021). The current population of Turkey is (84,680,273 million), and as of 13.03.2022, vaccines are at higher levels compared to the vaccination program over 12 years of age (TCSB, 2021), with the first dose (57,734,203 million) and second dose (52,896,306 million). We believe that the low proportion of participants in our study who did not receive the COVID-19 vaccine, and the majority who received 2 and 3 doses of vaccine, may have slightly improved the disease at home. According to the results of the systematic review, most of those who have COVID-19 disease have mild (at home) and moderate (hospital) disease (Talevi et al., 2020). A study conducted at a hospital in Wuhan, China, found that COVID-19 patients experience uncertainty, sadness, and fear of death after leaving the hospital (Liu and Liu, 2021). This result supports that the psychology sub-dimension scores of the students who have COVID-19 at home are also lower in this study. The fear of COVID-19 may prevent people from thinking clearly and rationally, as it is directly related to high transmission and death rates (Martínez-Lorca et al., 2020). It has been found that among Brazilian university students, those who wore masks during the pandemic and followed the rules of social distancing had higher fears of COVID-19 (Modena et al., 2021). A study conducted on university students after switching to face-to-face education in Ethiopia found that 72.7% of students did not suffer from COVID-19, and 93.8% did not lose a friend or family member from COVID-19 (Tadese et al., 2021). It has been reported that athletes who practice indoor sports and do not have COVID-19 have a significantly higher fear of COVID-19 (Vitali et al., 2022). In our study, we believe that the low scores of the 'psychology' sub-dimension of Sports Science students are because most students have not had COVID-19, do not use masks in practical classes, and have not died a family member from COVID-19. In addition, the fact that students study sports may be related to their scores in the 'somatic' (physical) and 'social' sub-dimensions.

CONCLUSION

As a result, in the 'Controlled Normalization,' Sports Science students mostly have high physical activity levels, BMI scores are in the normal weight class, the proportion of those who are vaccinated is high, those who do not prefer to use masks in applied lessons are high, and most of them have mild COVID-19 at home. It can also be considered that female students have higher psychology scores and lower MET scores than males. It may be because females are more emotional and have less free time than males. In addition, increasing students' physical activity levels may reduce psychology sub-dimension scores and COVID-October 19 phobia. Finally, because students have a mild COVID-19 period at home, vaccination rates are high, and the death rate from COVID-19 in their families is low. In this context, necessary support and practices can be implemented, considering that students who receive applied training, such as Sports Sciences, acquire COVID-19 phobia during the pandemic period in 'Controlled Normalization.' In addition, physical activity and exercise can be recommended to university students to protect both physical and mental health.

The first study's limitation was that it assessed coronavirus phobia participants by questionnaire, not clinical setting. Another study end is that participants were evaluated according to the results of the PCR (Polymerase Chain Reaction) test they had done in the past, whether they had COVID-19 or not. No antibody testing is requested from those who did not have COVID-19 disease to confirm this condition. In the future, clinical randomized controlled studies can be done.

Funding and Conflicts of Interest

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