THE RELATIONSHIP BETWEEN FEAR OF COVID-19 AND QUALITY OF LIFE IN PHYSICAL EDUCATION AND SPORTS SCHOOL STUDENTS: A CASE OF ORDU PROVINCE

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ABSTRACT

This study investigated the relationship between fear of COVID-19 and quality of life in physical education and sports school students. The sample consisted of 232 students (137 men and 95 women) above 18 years of age. Participants were recruited using random sampling. It was determined that the data showed normal distribution and parametric tests were applied. The results showed that the data were normally distributed. Therefore, the data were analyzed using parametric tests. The data were analyzed using the Statistical Package for Social Sciences (SPSS) at a significance level of 0.05. The results showed that female participants had significantly higher FCV-19S scores than male participants. According to participants', age, department, COVID-19 experience (having tested positive for COVID-19 before), chronic diseases, adequate knowledge of COVID-19, and regular physical activity engagement was not found a significant difference in scores of FCV-19S and COV19-QoL. Lastly, there was a moderate positive correlation between FCV-19S and COV19-QoL scores, indicating that participants with a greater fear of COVID-19 had a lower quality of life. Consequently, we should teach students more about COVID-19 to ensure that they feel less mental pressure and have a higher quality of life.

Keywords: Fear of COVID-19, Quality of Life, High school of Physical Education and Sports

INTRODUCTION

The novel coronavirus disease (COVID-19) broke out in China at the end of 2019 and has taken hold of the whole world since then. The epidemic, poses a significant risk of death with viral infection. Moreover, the ongoing COVID-19 pandemic affects every aspect of life and takes a toll on mental health (Bao et al., 2020; Xiao, 2020; Duan and Zhu, 2020). It is not surprising that such a sudden change will unsettle many people and affect their mental health. Since the onset of the pandemic, there has been a growing body of research into the impact of the pandemic on laypeople, patients, healthcare professionals, older adults, and children (Chen et al., 2020; Yang et al., 2020; Li et al., 2020).

Fear has been a typical response to the pandemic worldwide, resulting in numerous psychological problems. Fear is an emotional state triggered by a particular threat or stimulus. Pandemics have always been a source of panic and fear. Some people were so afraid of the pandemic that they thought they had the virus and even committed suicide (De Hoog et al., 2008; Goyal et al., 2020; Mamun and Griffiths, 2020). Another thing that scares people is the uncertainty revolving around the pandemic. There is so much hearsay and misinformation around this whole issue that people are bombarded with confusing and unscientific news and messages, making them more worried than they already are. Researchers highlight the mental health impacts of the coronavirus pandemic and suggest that policymakers and officials take steps to allay the public's fears (Egunjobi, 2020; Pakpour and Griffiths, 2020).

The pandemic also affects people's quality of life (QoL). Researchers have difficulty assessing QoL because it is affected by socioeconomic and cultural factors. People with high QoL are healthy and happy people who enjoy their lives (Akdemir, 1998; Peel et al., 2007). High quality of life implies active life, physical and

mental well-being, healthy family and social relationships, and satisfaction. One way to improve the quality of life of people is the sense of pleasure achieved through physical activity (Testa and Simonson, 1996; Karakaya, 2009).

The last two years have been trying times for everybody because of all the challenges of the pandemic (fear, pressure, drastic change in lifestyle, social isolation, etc.). The pandemic has also taken a toll on athletes. Ordinarily, it takes athletes years of practice, hard work, and dedication to reach a certain physical and mental fitness level. However, the pandemic has gradually forced them to adopt a sedentary lifestyle. This study investigated the relationship between fear of COVID-19 and quality of life in physical education and sports school students.

METHODS

This section addressed the research model, study group, and data collection tools.

Research Model

In the study, relational screening model, which is one of the quantitative research methods and has a descriptive quality, was used.

Study Group

The study population consisted of all physical education and sports students above 18 in the 2021-2022 academic year. The sample consisted of 232 students (137 men and 95 women) from the School of Physical Education and Sports of Ordu University. Participants were recruited using random sampling.

Table 1. Demographic Characteristics

Factor	Variable	Frequency	%
Age (year)	18-24	223	96.1
	≥25	9	3.9
Gender	Woman	95	40.9
	Man	137	59.1
Department	Physical Education and Sports Teaching	22	9.5
	Sports Management	210	90.5
Have you ever tested positive for COVID-19 before? (COVID-19 experience)	Yes	63	27.2
	No	169	72.8
Do you have any chronic diseases? (Chronic diseases)	Yes	9	3.9
	No	223	96.1
I know enough about COVID-19. (knowledge of COVID-19)	Yes	218	94
	No	14	6
I exercise regularly (regular exercise)	Yes	161	69.4
	No	71	30.6

Data Collection

The data were collected online (Google Drive, WhatsApp, etc.) using a seven-item demographic characteristics questionnaire, the Fear of COVID-19 Scale (FCV-19S), and the COV19 – Impact on Quality of Life (COV19-QoL).

Data Collection Tools

The researcher developed the seven-item demographic characteristics questionnaire. The Fear of COVID-19 Scale was created by Ahorsu et al. (2020). The Turkish version was made by Bakioğlu et al. (2020). The COV19-Impact on Quality of Life (COV19-QoL) was created by Repišti et al. (2020). The Turkish version was made by Sümen and Adibelli (2021). Authorization was obtained from the authors of the original instruments.

Fear of COVID-19 Scale

The Fear of COVID-19 Scale consists of seven questions. The scale scored on five item (1=strongly disagree … 5=strongly agree) Likert-type scale. There are no reverse-scored items. The total score ranges from 7 to 35. Higher scores indicate a greater fear of COVID -19. The Turkish adaptation of the scale has a Cronbach's alpha (α) of 0.880 (Bakioğlu et al., 2020), which was 0.901 in the present study.

COV19 – Impact on Quality of Life (COV19-QoL)

The COV19 – Impact on Quality of Life (COV19-QoL) scale consists of six questions. The scale scored on five items (1=totally disagree … 5=completely agree) Likert-type. The items assess participants' feelings and thoughts during the past seven days. No items are reverse scored. The scale score is the total score divided by the number of items. Higher scores indicate a more adverse impact of the pandemic on QoL. Cronbach's alpha of this study was 0.866. In their study, Sümen and Adıbelli (2021) determined Cronbach's alpha coefficient as 0.910.

Statistical Analysis

The data were analyzed using the Statistical Package for Social Sciences (IBM, SPSS, v.21.0) at a significance level of 0.05. Skewness – Kurtosis values were used for normality testing. The skewness and kurtosis ranged from -2 to +2, suggesting that data were normally distributed, and therefore, parametric tests were used for analysis. According to Skewness and Kurtosis values, the data show normal distribution between -2 and +2. (George and Mallery, 2016). According to independent variables, the Student's t-test was used. Pearsons Correlation analysis was used to examine the relationship between scales. For the reliability of the scales, Cronbach's alpha internal consistency coefficients were calculated.

RESULTS

Table 2. T-Test results regarding FCV-19S and COV19-QoL scores

Independent Variable	Category	FCV-19S				COV19-QoL			
		x̄	SD	t	p	x̄	SD	t	p
Age (year)	18-24	15.56	6.51	-1.468	.172	2.769	.966	-.647	.518
	≥25	17.44	3.60			2.981	.835		
Gender	Woman	16.93	6.50	2.591	.010*	2.984	.958	2.761	.006*
	Man	14.73	6.25			2.635	.939		
Department	Physical Education and Sports Teaching	15.40	6.35	-.175	.861	2.780	.991	.012	.991
	Sports Management	15.66	6.45			2.777	.959		
Have you ever tested positive for COVID-19 before? (COVID-19 experience)	Yes	15.73	7.36	.133	.894	2.740	.964	-.360	.719
	No	15.60	6.07			2.791	.961		
Do you have any chronic diseases? (Chronic diseases)	Yes	16.55	4.71	.435	.664	2.925	.755	.470	.639
	No	15.60	6.50			2.772	.968		
I know enough about COVID-19. (knowledge of COVID-19)	Yes	15.54	6.36	-.859	.391	2.764	.975	-1.150	.266
	No	17.07	7.60			2.988	.683		
I exercise regularly (regular exercise)	Yes	15.60	6.79	-.126	.900	2.743	.966	-.829	.408
	No	15.71	5.58			2.856	.948		

* p<0.05

There was a significant difference in FCV-19S (p=0.010) and COV19-QoL (p=0.006) scores between male and female participants. However, age, department, COVID-19 experience, chronic diseases, knowledge of COVID-19, and regular exercise did not affect FCV-19S and COV19-QoL scores (p>0.05).

Table 3. Correlation between FCV-19S and COV19-QoL scores

	x̄	SD	r	p
FCV-19S	15.63	6.43	0.451	0.001*
COV19-QoL	2.77	0.960		

*p<0.05

There was a moderate positive correlation between FCV-19S and COV19-QoL scores (r=.451, p<0.05).

DISCUSSION AND CONCLUSION

This study investigated the relationship between fear of COVID-19 and quality of life in physical education and sports school students.

There was no found a significant difference in FCV-19S and COV19-QoL scores according to age variable. Participants over 25 years of age had a greater fear of COVID-19 than those aged 18-24. Aydın et al. (2021) and Tutal and Efe (2020) also reported no effect of age on FCV-19S scores. However, Gencer (2020) and Aksoy and Atılgan (2021) found that age affected students' FCV-19S scores. The pandemic has hit every country hard. Therefore, it has caused fear and panic in all age groups.

There was found a significant difference in FCV-19S and COV19-QoL scores according to gender variable. Female participants had a higher mean FCV-19S score than their male counterparts. Researchs also show that women have higher FCV-19S (Tutal and Efe, 2020; Bolat and Ayvaz, 2021; Aksoy and Atılgan, 2021; Arısoy and Çay, 2021; Gencer, 2020; Altundağ, 2021) and lower COV19-QoL scores (Eriş and Anıl, 2015; Sönmezoğlu et al., 2020; Amin and Özyol, 2020) than men. This is probably because women are more sensitive than men, and therefore, have a greater fear of COVID-19 and a lower QoL.

There was no significant difference in FCV-19S and COV19-QoL scores according to department variable. Sönmezoğlu et al. (2020) found no significant difference in COV19-QoL scores between students who received daytime and evening education. Nehir and Tavşanlı (2021) reported no effect of grade level on students' FCV-19S and COV19-QoL scores. Eriş and Anıl (2015) also according to department of students, determined was not difference students' COV19-QoL scores. The pandemic has taken a department toll on students who have battled school closures, distance education, quarantine, and isolation. Therefore, it has affected all students, regardless of department and grade level.

There was no significant difference in FCV-19S and COV19-QoL scores according to tested positive for COVID-19 before and those who had not. Researchs also show no effect of COVID-19 experience on people's FCV-19S and COV19-QoL scores (Rahman, 2021; Arıkan et al., 2021; Arısoy and Çay, 2021). The ongoing COVID-19 pandemic has created uncertainty in nearly every aspect of daily life worldwide. Although vaccines and treatments have proven safe and effective, they do not provide full protection against the virus because it keeps mutating until herd immunity develops by repeated infection or vaccination. Therefore, the pandemic has caused fear and low quality of life in everybody whether they have tested positive for COVID-19 before or not.

There was no significant difference in FCV-19S and COV19-QoL scores according to have a chronic disease and those who did not, similar findings have also been reported in the other studies (Gencer, 2020; Taspinar et al., 2021). On the other hand, Nehir and Tavşanlı (2021) found that university students with chronic diseases had higher FCV-19S scores than those without chronic diseases. Older adults and those with chronic diseases are at higher risk of developing serious complications from the coronavirus. It is thought that these findings were obtained because the majority of participants in the study did not have chronic diseases and had sports backgrounds.

There was no significant difference in FCV-19S and COV19-QoL scores according to participants who knew enough about COVID-19 and those who did not. Similar findings have also been reported in the study of Nehir and Tavşanlı (2021). Although vaccines and treatments have been available, the virus keeps mutating, and the uncertainty revolving around the pandemic is causing fear and anxiety. Although the vaccine studies and treatments developed have taken effect, there is no completely preventive treatment method. Therefore, we always need new data to prevail over the challenge. This may be the reason behind our result.

There was no significant difference in FCV-19S and COV19-QoL scores between participants who were engaged in physical activity and those who were not, Similar findings have also been reported in the study of Arıkan et al. (2021). However, Çelik (2021) found that people who were engaged in physical activity had a lower mean FCV-19S score than those who were not. Sönmezoğlu et al. (2020) determined that people who did sports had a higher QoL than those who did not. The fact that most of our participants were physical education and sports college students engaged in physical activity and sports may explain why we did not detect any significant difference in FCV-19S and COV19-QoL scores between the two groups.

There was a moderate positive correlation between participants' FCV-19S and COV19-QoL scores, indicating that the greater the fear of COVID-19, the lower the QoL. Taspinar et al. (2021) also reported a moderate positive correlation between FCV-19S and COV19-QoL scores in physiotherapists. Our result suggests that fear of COVID-19 negatively affects students' QoL.

In conclusion, physical education and sports school students who have a greater fear of COVID-19 are likely to have a lower QoL. Female students have a greater fear of COVID-19 and thus a lower QoL than their male colleague. Therefore, we should raise students' awareness of the COVID-19 pandemic to help them take necessary measures and avoid pandemic-related stressors that cause fear, anxiety, and stress.

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