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Investigation of the Effect of Doing Sports Frequency on Fear of Covid-19

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Abstract

Examining the novel type of corona virus (COVID-19) fear levels of female and male athletes constitutes the purpose of this study. The screening method, which is one of the quantitative research models, has been adopted in the study. The population of the research is composed of volunteer individuals (n=139) who are actively engaged in sports in the various sports clubs and different disciplines in the districts of Istanbul province, on the European coast (Küçükçekmece, Bakırköy, Zeytinburnu). All the data have been collected in an online environment by applying the questionnaire technique. The COVID-19 Fear Scale of athletes has been utilised as a data collection tool. T-test and single-way ANOVA analyses have been utilised as statistical procedures since it has been determined that the data are normally distributed. No significant discrepancy is found between the fear of COVID-19 levels of athletes according to their gender, age, education level, chronic disease level, training status, financial level of their families, sports branch and years of participation in sports. Depending on the number of training days per week of the athletes, a significant difference has been identified between the levels of fear of COVID-19. The weekly training frequency affects the level of fear of COVID-19. For instance, the decrease in fear levels in people who train 5 or more days a week may be due to the fact that the people concerned are exposed to COVID-19 more as they go out and thus their anxiety decreases. People who maintain a routine may also be less afraid of COVID-19 than those who socialise less. That is because such persons go out 5 or more days a week, maintain their routines and socialise at the same time, which may have an adverse effect on their level of fear and cause them to feel less fear.

Keywords: COVID-19, level of fear, athletes

INTRODUCTION

The COVID-19 pandemic, originating in Wuhan, China in December 2019, has rapidly spread and affected throughout China (20). In accordance with the preliminary assessments conducted by Chinese doctors, it has been concluded that COVID-19 is a potentially fatal disease, as the symptoms are similar to those of severe acute respiratory syndrome (SARS) (27). The symptoms of COVID-19 in individuals have been identified as diarrhoea, fever, shortness of breath, cough, headache and muscle pain (26).

Soon after the outbreak in China, the pandemic began to affect the rest of the world (16). Announcing that the globe is encountering a significant challenge,

the World Health Organisation (WHO) has declared the outbreak as a pandemic (28). The virus has infected nearly 52 million individuals worldwide and caused more than 1.28 million fatalities, despite the measures such as distancing between people and the remote attendance of education and training institutions worldwide to prevent the spread of the virus (WHO Coronavirus Disease (COVID-19) Dashboard, n.d.). As the world struggles with the COVID-19 pandemic, the sports community has also been affected by the crisis caused by COVID-19. Many adverse events such as athletes in quarantine due to the social distancing rule, cancelled competitions and postponed important events have been encountered (14).

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As Kilcigil (1985) states, sports; It is defined as all of the socio-cultural, cognitive and physical activities, including struggle, performed individually or as a team, using many recreational and competitive materials with certain rules (5,18). The fact that athletes are mentally fit for the competitions and contests they have participated in so as to optimise their physical and cognitive conditions and skill capacities against all kinds of challenges are among the key factors that lead to achievement in sports (25). Furthermore, the cancellation or rescheduling of sports events has adversely impacted the athletes participating in the competitions both socially and psychologically (24).

For the duration of the pandemic, the cancellation of the events to be conducted during the pandemic and schedule changes caused concern for the athletes. They also wondered how their opponents were training during the pandemic. During the pandemic, the state of anxiety varies from individual athletes. The state of anxiety is much more frequent in adolescents and underachieving athletes. Throughout the pandemic, irregularities in conditions such as sleep, and nutrition have been observed in athletes. Regular, planned and scheduled physical activities are reported to have positive effects in reducing psychological problems such as stress, depression, anxiety, and fear (6).The fact that the training areas of the athletes are closed and that they mostly spend their time in the home has caused irregularities in their nutritional habits (11). In such an adverse course of events, it has become nearly inconceivable not to experience fear.

The fear is labelled as an undesirable emotional state that is induced by the perception of a threatening stimulus (10). In contrast, Apaydın describes fear as a fundamental impulse that can be encountered by all and as an affective reactivity to a physical or psychological condition that emerges abruptly (3). Along with the physical impacts of the COVID-19 pandemic, its psychological impacts are known to be significant (21). COVID-19 induced fear heightens the distress of people who are physically and psychologically sound, and further exacerbates the disorders of people with pre-existing psychological disorders (23). Where individuals who are not affected by the pandemic may tend to feel unwell and to be suicidal in cases caused by fear. 15).

Furthermore, there are no accurate projections regarding the length of the pandemic, the exact number of people infected with the disease worldwide, or the severity to which it will disrupt the lives of individuals (29). This may naturally provoke psychological conditions such as loneliness, anger, sadness, anxiety, frustration, guilt, helplessness and fear, as well as material and moral repercussions of the condition, such as quarantine, social distancing and isolation. Such circumstances constitute the major commonly shared attributes of psychological distress that people may face before and after unusual events (2).

It has become crucial determining the fear levels of athletes against COVID-19 pandemic by considering the COVID-19 pandemic on top of the physical and psychological phases they have been undergoing. In the light of such considerations, the disruption of the training processes, the fear of lack of performance, the distress suffered during the pandemic, and the emotional complexity perceived during the COVID-19 pandemic will affect the fear states. Over the course of the pandemic, numerous activities and athletes have been affected. Therefore, examining the fear states of athletes during the epidemic period remains essential. This study was conducted with the aim of examining the COVID-19 fear status of athletes.

MATERIAL AND METHOD

Research modelling

Screening method, of quantitative research models, has been utilised in this study. The situations and events in quantitative research are quantified in a way that different people can agree on by consensus, by making them available to the common senses (7), and moreover, the study can be illustrated with numerical data through this method (8). The screening method can be defined merely as a method aiming to depict the present situation with no modifications (17).

Population and Sample of the Study

The population in our study, which has been carried out to identify the fear levels of athletes to the novel type of corona virus (COVID-19), is composed of individuals who are actively engaged in sports in various sports clubs and different branches in Bakırköy Zeytinburnu and Küçükçekmece districts of Istanbul province. A total of 139 athletes, 41 women and 98 men, volunteered to participate in the study.

Scale for Fear of COVID-19

A personal information form consisting of nine questions was compiled by the researcher after

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reviewing the relevant literature on the subject and included questions about demographic characteristics (gender, age, education level, number of years of sport, financial status of the family, sport branch, whether there is any chronic disease, whether they train or not, how many days a week they train).

For the purpose of identifying the fear levels of the participants regarding COVID-19, the fear of COVID-19 scale designed by Ahorsu et al. (2) and adapted by Satıcı et al. (22) for the Turkish society has been adopted in the study.

The scale comprises 7 items and is single scaled. The scale items ranged from 1 (strongly disagree) to 5 (strongly agree). The maximum scale score is 35 while the minimum is 7. A high score indicates an excessive fear of COVID-19, while a low score indicates a low fear of COVID-19. Cronbach alpha internal consistency coefficient for the Turkish form

of the scale is .84. For the current study, it is calculated as .87.

Statistical Analysis

In the analysis, using the SPSS25.0 package programme, the data collected from the personal information form and the data on the athlete's fears of contracting the new coronavirus (COVID-19) are processed and analysed through the programme. The participants' personal information was presented with frequency (f) and percentage (%) values. For groups larger than 50, the normal distribution curve, skewness and kurtosis values and histograms were analysed to check the normal distribution curve. Since the data are statistically conformed to normal distribution, T-test and One-way ANOVA analyses have been utilised to test the hypotheses formulated for the purpose of the research.

FINDINGS

Table 1. Demographic Characteristics of Participants			
Personal Details	Variables	F	%
Your Gender	Female	41	29,5
	Male	98	70,5
Your Age	18-20	26	18,7
	21-23	42	30,2
	24-26	23	16,5
	27-29	18	12,9
	30 and higher	30	21,6
Your Educational Background	Primary	1	0,7
	Secondary	1	0,7
	High School	22	15,8
	Undergraduate	105	75,5
	Postgraduate	10	7,2
For how many years have you been practising sport?	1 to 3 years	19	13,7
	4 to 6 years	23	16,5
	7 to 9 years	28	20,1
	10 to 12 years	25	18,0
	13 and higher	44	31,7
Can you describe your family's financial situation?	Poor	1	0,7
	Middle	83	59,7
	Good	53	38,1
	Very Good	2	1,4
What is the branch of sport you do?	Volleyball	40	28,8
	Football	81	58,3
	Basketball	18	12,9
Do you have any chronic illnesses?	Yes	9	6,5
	No	130	93,5
Do you train?	Yes	87	62,6
	No	52	37,4
If yes, how many days a week do you train?	1 to 2	84	60,4
	3 to 4	35	25,2
	5 and higher	20	14,4

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It can be observed in Table 1 that 70.5% of the athletes participating in the study were male and 29.5% were female. Analysing the data regarding the age variable, 18.7% of the athletes were 18-20 years old, 30.2% were 21-23 years old, 16.5% were 24-26 years old, 12.9% were 27-29 years old and 21.6% were 30 and over. Considering the data on the educational background of the participants, it can be observed that 0.7% of the athletes are primary school graduates, 0.7% are secondary school graduates, 15.8% are high school graduates, 75.5% are university graduates and 7.2% are postgraduate graduates. Examining the data on the variable "For how many years have you been practising sport?", it can be observed that 13.7% of the athletes have been doing sports for 1-3 years, 16.5% for 4-6 years, 20.1% for 7-9 years, 18.0% for 10-12 years, and 31.7% for 13 and more years. As regards the family financial status variable, it can be observed that 0.7% of the athletes were at a poor condition, 59.7% were at a medium condition, 38.1% were at a good condition and 1.4% were at a very good condition. Based on the branch variable, it can be observed that 28.8% of the athletes were volleyball, 58.3% were football and 12.9% were basketball. Examining the athletes according to the variable "Do you have any chronic illnesses?", it can be observed that 6,5% of them have chronic diseases and 93,5% of them do not have any chronic diseases. Regarding the variable of training, it can be observed that 62.6% of the athletes were engaged in sports while 37.4% of the athletes were not. Based on the variable of how many days a week the athletes train, it can be observed that 60,4% of the athletes train 1 to 2 days, 25,2% of the athletes train 3 to 4 days and 14,4% of the athletes train 5 or more days a week.

Table 2. T-Test Analysis Findings of Fear Levels of Novel type Corona Virus (COVID-19) Based on Gender Variables of Athletes

Gender	N	X	Ss	T	P
Male	98	16,60	6,68	-.402	.68
Female	41	16,14	5,83		

*P<0.05

It can be observed upon the examination of Table 2 that there is no significant difference between the novel type of corona virus (COVID-19) fear levels of the athletes and between men and women (p>0.05).

Table 3. T-Test Analysis Findings of Fear Levels of Novel Type Corona Virus (COVID-19) Based on the Variable of Whether Athletes Have Chronic Diseases

Do you have any chronic illnesses?	N	X	Ss	T	P
Yes	9	14,5	6,62	-.976	.33
No	130	16,6	6,04		

*P<0.05

It can be observed upon the examination of Table 3 that there is no significant difference between the novel type of corona virus (COVID-19) fear levels of the athletes according to the variable of whether the participants have a chronic disease (p>0.05).

Table 4. T-Test Analysis Findings of Fear Levels of Novel type Corona Virus (COVID-19) Based on the Variable of Training Status of Athletes

Training Status	N	X	Ss	T	P
Yes	87	16,64	6,01	.441	.66
No	52	16,17	6,23		

*P<0.05

It can be observed upon the examination of Table 4 that there is no significant difference between the novel type of corona virus (COVID-19) fear levels of the athletes according to the training status variable of the participants (p>0.05).

Table 5. ANOVA Test Findings of Fear Levels of Novel type Corona Virus (COVID-19) Based on Age Variables of Athletes

Extent	Age Group	N	X	Ss	F	P	Significant Difference
Athletes' Fear of COVID-19	18-20	26	15,42	7,15	.641	.63	-
	21-23	42	16,24	6,89			
	24-26	23	16,17	5,15			
	27-29	18	18,28	5,55			
	30 and higher	30	16,83	4,78			

*P<0.05

It can be observed upon the examination of Table 5 that there is no significant difference between the novel type of corona virus (COVID-19) fear levels of the athletes and their education backgrounds according to the age variable of the participants (p>0.05).

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Table 6. ANOVA Test Findings of the Fear Levels of Novel type Corona Virus (COVID-19) Based on the Educational Status Variable of Athletes

Extent	Educational Background	N	X	Ss	F	P	Significant Difference
Athletes' Fear of COVID-19	Primary	1	20,00	.			
	Secondary	1	25,00	.			
	High School	22	14,18	1,23	1,959	.10	-
	Undergraduate	105	16,56	,59			
	Postgraduate	10	19,30	1,76			

*P<0.05

It can be observed upon the examination of Table 6 that there is no significant difference between the novel type of corona virus (COVID-19) fear levels of the participants and the variable of educational background (p>0.05).

Table 7. ANOVA Test Findings of Fear Levels of Novel type Corona Virus (COVID-19) Based on Sports Branch Variables of Athletes

Extent	Sport Branch	N	X	Ss	F	P	Significant Difference
Athletes' Fear of COVID-19	Volleyball	40	17,12	6,81			
	Football	81	16,17	5,73	.331	.72	-
	Basketball	18	16,33	6,11			

*P<0.05

It can be observed upon the examination of Table 7 that there is no significant difference between the novel type of corona virus (COVID-19) fear levels of the participants and the variable of sports branch (p>0.05).

Table 8. ANOVA Test Findings of Fear Levels of Novel type Corona Virus (COVID-19) Based on the Variable of Athletes' Year of Practising Sports

Extent	For how many years have you been practising sport?	N	X	Ss	F	P	Significant Difference
Athletes' Fear of COVID-19	1 to 3 years	19	15,16	7,40			
	4 to 6 years	23	14,22	5,47			
	7 to 9 years	28	15,96	6,73	2,377	.06	-
	10 to 12 years	25	19,04	5,91			
	13 and higher	44	17,06	4,94			

*P<0.05

It can be observed upon the examination of Table 8 that there is no significant difference between the novel type of corona virus (COVID-19) fear levels of the participants and the year of doing sports (p<0.05).

Table 9. ANOVA Test Findings of Fear Levels of Novel type Corona Virus (COVID-19) Based on Financial Status Variable of Athletes

Extent	Financial Status	N	X	Ss	F	P	Significant Difference
Athletes' Fear of COVID-19	Poor	1	20,00	.			
	Medium	83	17,05	6,25			
	Good	53	15,58	5,87	.846	.47	-
	Very Good	2	14,00	,0			

*P<0.05

It can be observed upon the examination of Table 9 that there is no significant difference between the novel type of corona virus (COVID-19) fear levels of the participants and the financial status variable (p>0.05).

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Table 10. ANOVA Test Findings of Fear Levels of Novel Type Corona Virus (COVID-19) Based on Weekly Training Frequency Variable of Athletes

Extent	Sport Branch	N	X	Ss	F	P	Significant Difference
Athletes' Fear of	1 to 2	84	17,03	6,08			
COVID-19	3 to 4	35	17,26	1,01	4.755	.01	+
	5 and higher	20	12,70	1,13			

*P<0.05

It can be observed upon the examination of Table 10 that there is a significant difference between the novel type of corona virus (COVID-19) fear levels of the participants and the training frequency variable (p<0.05).

DISCUSSION AND CONCLUSION

There have been some setbacks in sports activities, occupying an important place in the daily lives of individuals in such times with restrictions in some aspects of our lives due to the COVID-19 outbreak. Such setbacks have not only affected individuals but also many sports, which has become an important sector in the whole world and in our country. It has also impacted the audience profoundly as well as those who are engaged in sports activities. Subsequent to the spreading of the outbreak, in order to ensure that individuals involved in sports are not affected by the outbreak, sports events have been halted for a period of time. The resumption of sports events during the period when the conditions of the epidemic continued caused fear among individuals. Thus, it has caused discomfort both among individuals who do and do not engage in sports accordingly.

The purpose of the study conducted in the light of the information we have provided is to analyse and assess the COVID-19 fear levels of male and female athletes in terms of some variables, as the COVID-19 pandemic has affected the whole world.

Depending on the gender variable of female and male athletes, it can be observed that there is no significant difference between the novel type of corona virus (COVID-19) fear levels of athletes and female and male athletes. The mediating role of gender in fear of COVID-19, intolerance of uncertainty, depressive state, anxiety and stress has been evaluated in the literature, and the research has been undertaken with the participation of 960 people aged between 18-76 years. The study found that women's fear of COVID-19 was higher than men's fear of COVID-19 (4).

A significant difference was not determined in the corona virus fear levels of the participants compared to the presence or absence of a chronic disease in female and male athletes as a result of the research. Individuals with chronic diseases had higher coronavirus fear levels in the study of Bakioğlu, Korkmaz, and Ercan (2020). It has also been established in a study conducted to evaluate situations such as anxiety, fear, worry and loss of health during the COVID-19 outbreak in our country that accompanying chronic diseases pose a risk for health anxiety (19).

There are similar and moderate levels of fear of COVID-19 in male and female athletes. Another study conducted during the pandemic period showed no significant difference between the COVID-19 anxiety levels of male and female teachers (9).

When the educational status variables of female and male athletes were compared, the difference between the fear levels of the variables between primary education and postgraduate educational background were not found to be significant. Postgraduates were not found to have a significant difference between the fear levels of athletes with primary, secondary, high school, undergraduates and postgraduates. Educational background was not found to affect the level of fear in the study.

Regarding the fear levels of female and male athletes for COVID-19 according to the age variable, no significant difference was observed. In the study conducted by Erbaş and Küçük (2012) on elite basketball players, they examined the ages of the athletes in a chronological order and found that there was no significant difference in this regard (13).

The COVID-19 fear levels of female and male athletes based on the sport branch variable did not show a significant difference. The fact that the fear and anxiety states of athletes differ according to the sports branches they have done is a scientific phenomenon. According to the study conducted by Ağduman (2021) on the anxiety of athletes regarding

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contracting COVID-19, it has been concluded that individuals who are engaged in team sports have higher anxiety levels than individuals who are engaged in individual sports (1).

Given the variable of training status of female and male athletes, it was observed that there was no difference between COVID-19 fear levels according to whether they were training or not. The fact that those who do not train have a higher level of fear than those who do is a scientific fact. Extraordinary circumstances such as the large-scale cancellation or rescheduling of major tournaments and competitions due to the pandemic have occurred. Such extraordinary developments resulted in the suspension of the training facilities and the cancellation of the training sessions. The athletes are uncertain about the time when the pandemic ends and when the social transition will take place. Therefore, athletes have continued their training by utilising outdoor spaces instead of indoor facilities.

The weekly training frequency variable of female and male athletes showed a significant difference between the novel type of corona virus (COVID-19) fear levels and the training frequency variable. This may be due to the fact that the frequency of weekly training varies in COVID-19 fear levels and the least fear level is observed in those who train 5 or more times a week, as people are more exposed to COVID-19 as they go out, thus their anxiety decreases. It may also be that people who maintain their routine are less afraid of the Coronavirus than those who are less likely to socialise. This may be explained by the fact that people who go out 5 or more days a week and keep their routines and engage in social activities at the same time may have a reverse effect on their level of fear, causing them to feel less fear.

Gender of female and male athletes does not differ between the levels of fear of COVID-19 according to their gender, and there is no difference between the fear levels of women and men. No difference was observed between the level of fear of COVID-19 according to the education level of the athletes, and athletes with high education levels did not show variability compared to athletes with low education levels. The athletes' level of fear of Covid-19 did not differ according to whether or not they had a chronic disease. No difference between the levels of fear of COVID-19 depending on whether the athletes are training or not, and those who do not train do not have a change in their fear levels compared to those who train. A difference was not revealed between the COVID-19 fear levels of the athletes with respect to their age, sports branch and years of engaging in sport activities.

All in all in conclusion, it should be noted that the fear of COVID-19 generates numerous adverse feelings and behavioural patterns in individuals. Uncertainty in mood regulation can also lead to overwhelming emotions, which tend to be outwardly expressed (12). Consequently, to be able to reflect on the demanding circumstances of the COVID-19 pandemic and to make such a situation much more favourable, it would be crucial to conduct training programmes in addition to exploring the fear levels of the athletes and providing the necessary psychological guidance.

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