

Examining the Healthy Living Behaviors and Health Anxiety Level of Elite Female Volleyball Players During the Covid-19 Process

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ABSTRACT

Background. The results of the effects of the physiological and psychological effects of the Covid-19 Pandemic on volleyball players at elite level are needed. Therefore, such a study was planned.

Methods. A total of 144 female volleyball players, whose average age is 28.5 ± 5.1 years and who play in the Turkish Volleyball Women's Super League teams, voluntarily participated in the study. The data in the study were obtained by applying the Healthy Living Behavior scale and the Health Anxiety scale by filling in an online questionnaire. Data were evaluated in SPSS.

Results. As a result of the analysis; The mean scores of the sub-dimensions of the Healthy Life Behavior Scale of the participants were respectively: Health responsibility average 21.2 ± 3.6 ; Physical activity average 21.2 ± 4.4 ; Nutrition average 24.4 ± 5.6 ; Spiritual Development average 26.5 ± 4.4 ; Interpersonal Relations average $25.6 \pm$. The mean of Stress Management was found to be 4.4 and 20.8 ± 3.5 . In the Health Anxiety Scale, the mean total anxiety score was found to be 32.3 ± 6.4 . It was determined that the sub-dimensions of the Healthy Living Behavior Scale differed significantly among the participants according to monthly income and education level, while the Health Anxiety Scale did not create a significant difference in both variables.

Conclusions. According to the study findings, since the findings of the scale are positive, it may be possible to leave more reliable information for future studies if similar study findings are increased and compared.

Keywords: volleyball, Covid-19, health, anxiety.

INTRODUCTION

The COVID-19 epidemic, which emerged from the SARS-CoV-2 virus that emerged on December 31, 2019 in the city of Wuhan, Hubei province of China, was rapidly seen in all continents and hundreds of countries and took its place in history as the first pandemic caused by corona viruses. Coronaviruses (CoV) are a large family of viruses that can cause disease in humans and animals in nature. Coronavirus (COVID-19), which affects the whole world, is a virus that manifests itself with acute respiratory syndrome in humans and turns into a pandemic. (Zhou et al.,

2020). COVID-19 disease, which has been declared a pandemic by the World Health Organization (WHO), has infected more than 4.5 million people in 216 countries and caused more than 300,000 deaths, according to WHO data on May 19, 2020 (World Health Organization, 2020).

Measures have been taken around the world to combat the pandemic and contain the spread of the virus. Precautionary behaviors such as not leaving the house at certain times, giving importance to social distance, using masks and giving importance to hand cleaning can be given as examples. Staying

at home and the decrease in social relations in order to protect from the pandemic may cause psychological problems such as depression, fear of death, anxiety of not getting adequate and efficient health care services, sleep problems, and anxiety (Torales et al., 2020). The changing lifestyle with the pandemic has also caused changes in people's lifestyles. Lifestyle is the sum of personal decisions over which individuals have control. A healthy lifestyle is defined as an individual's controlling all behaviors that may affect his or her health and regulating one's daily activities by choosing behaviors that are appropriate for one's own health status. Behaviors associated with a healthy lifestyle include exercise, self-actualization, health responsibility, nutrition, interpersonal support and stress management (Fashafsheh et al., 2021)

Health anxiety is defined as an experience involving excessive concern and concern for health, which occurs when bodily sensations or changes are misinterpreted as a sign of serious illness (Reiser et al., 2014) The main psychological problem caused by health anxiety is hypochondriasis. These two states are said to constitute a state of continuity that follows one another. In other somatoform problems, health-related anxiety is thought to be excessive. Health anxiety causes other anxiety problems and shapes the clinical situation by counting as one of the reasons. (Abramowitz et al., 2007, Noyes et al., 2003, Norton et al., 2005).

The effects of the new lifestyle that emerged with the Covid-19 pandemic on healthy lifestyle and health anxiety may have created different effects in every age and occupational group. What is the effect of this situation on elite female volleyball players? This study will try to answer this question.

METHODS

Participants; A total of 144 female athletes, aged between 18–37, playing in the Turkish Volleyball Women's Super League teams participated in the study voluntarily.

Data Collection; After giving information about the study to the individual e-mails obtained through the trainers, the following questionnaires were applied to the athletes who wanted to participate voluntarily.

The Healthy Lifestyle Behavior Scale developed by Walker et al. (1996), translated into Turkish by Baharetal.(2008)was applied. There are 52 questions and 6 sub-dimensions in the scale. Sub-dimensions:

Health responsibility (3,9,15,21,27,33,39,45,51), physical activity (4,10,16,22,28,34,40,46), nutrition (2.8,14,20,26,32,38,44,50), spiritual development (6,12,18,24,30,36,42,48,52), interpersonal relations (1,7,13,19,25,31,37,43,49) and stress management (5,11,17,23,29,35,41,47) (Bahar et al., 2008). Each item in the scale is scored between 1 and 4, and as the score increases in this direction, it means that healthy lifestyle behavior increases.

The Health Anxiety Inventory, developed by Salkovskis et al. (2002), translated into Turkish by Aydemir et al. (2013) was used. The Health Anxiety Inventory is a self-report scale with 18 items. The 14 items in the scale consist of statements containing quartet answers about the mental state of the patients. On the other hand, the other 4 items ask people to imagine what their mental state might be like under the assumption of a serious illness, and they make inquiries accordingly. Each item in the scale is scored between 1 and 4, and it indicates that the higher the score obtained from the scale, the higher the health anxiety (Aydemir et al., 2013).

Ethical approval: This study was approved by the university's human research ethics committee on 18 December 2020.

Statistical analysis

The data were analyzed in the SPSS program as mean standard deviation, percentage and frequency. Pearson Correlation analysis was used for the relationship between the variables.

RESULTS

Table 1. Demographic findings of participants

Variables	Mean	Std. Deviation
Age (year)	23,5	5,1
Body height (cm)	175,8	8,7
Body weight (kg)	63,2	9,5
Sport age (year)	11,5	4,7
Body Mass Index (kg/m ²)	20,4	2,4
Monthly income (Turkish Lira)	3024,6	1350,6

When the table is examined, it is understood that the body mass indexes of 144 female athletes with an average age of 23,5±5,1 who participated in the study are in ideal weight. (20,4±2,4 kg/m²). When the Table 2. is examined, it is seen that the majority of the athletes participating in the study have a high school education (38,2%).

Table 2. Education level of participants

Education Levels	n	%
High school	55	38,2
College	39	27,1
University	43	29,9
Master's degree	7	4,9
Total	144	100,0

Table 3. Findings about scale results

Healthy Lifestyle Behavior Subscales	Mean	Std. Deviation
Health responsibility (HR)	21,1	3,6
Physical activity (PA)	21,2	4,3
Nutrition (N)	21,6	4,8
Spiritual development (SD)	26,4	4,8
Interpersonal relations (IR)	25,5	4,3
Stress management (SM)	20,7	3,5
Health anxiety (HA)	Mean	Std. Deviation
Anxiety score	14,7	6,3

When the Healthy Lifestyle Behavior Subscale scores are examined, it is seen that a higher score is obtained in the spiritual development (26,4±4,8) and interpersonal relations (25,5±4,3) sub-dimension compared to the others. It can be said that the participants have an average healthy lifestyle behavior scores. In addition, the participants' health anxiety mean score was found to be 14,7±6,3. In this respect, it can be said that they have low anxiety.

Table 4. Correlation between scale scores and demographic variables

		Income	Ed. level	Age	HR	PA	N	SD	IR	SM	HA
Income	r	1	,423**	,362**	,225*	,154	,178*	,320**	,201*	,355**	-,128
	p		,000	,000	,010	,081	,043	,000	,022	,000	,155
Ed. level	r	,423**	1	,329**	,302**	,294**	,029	,114	,200*	,144	-,055
	p	,000		,000	,000	,000	,733	,172	,016	,085	,523
Age	r	,362**	,329**	1	,082	,097	-,106	,036	,121	,010	-,131
	p	,000	,000		,326	,247	,205	,670	,149	,905	,127
HA	r	-,128	-,055	-,131	-,018	-,036	,174*	-,097	,017	,040	1
	p	,155	,523	,127	,833	,680	,042	,261	,841	,645	

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

When the Table showing the relationship between scale scores and demographic variables is examined; It has been determined that there is a positive and significant relationship between monthly income and education level with the sub-dimensions of healthy life behaviors (HR,N,SD,IRSM and HR,PA,IR respectively). While there was a positive correlation between HA and N, no correlation was found between age and sub-dimensions.

DISCUSSION

The aim of this study was to examine the healthy lifestyle behaviors and health anxiety levels of elite female volleyball players during the covid-19 pandemic. For this reason, an online questionnaire was applied to 144 elite female volleyball players.

As a result of the study, the participants' mean health anxiety scores were found to be 14,7 ± 6.3. Considering this score obtained from the questionnaire, it can be said that the anxiety levels of the participants are low. The fact that the majority of female volleyball players participating in the study did not have any previous illness, their education level and the strict attitudes of the clubs they played during the pandemic process can be shown as a reason for the low health anxiety scores.

Considering the findings of studies conducted in other fields, Okuyan et al. (2020) found the anxiety scores of the nurses as 17.46±7.91 as a result of the study. As a result of this study, it was stated that the anxiety scores of the nurses who worked under difficult conditions during the pandemic

period were low. In another study conducted by Yılmaz and Dirik (2020) on adults, they found health anxiety scores to be 16.9 ± 7.6 . As a result of the Yılmaz and Dirik study, it was stated that the health anxiety scores of adult participants were low. As a further result of the study, the healthy lifestyle behavior total score was found to be 136.9 ± 20.8 . Considering the healthy lifestyle total average score that the participants got from the questionnaire, it was determined that the scale scores were high. The fact that the total average score of our participants' healthy lifestyle behavior is high; that the female volleyball players participating in the study apply measures such as quarantine in the facilities applied by their clubs during the pandemic process; that they have a healthier and isolated period in line with these measures; that they can continue their training during the quarantine and socialize with their teammates; and that they are supported by professionals. We can put forward the psychological support they receive. Looking at the literature, Cebi's (2018) study on athletes revealed that the total score of the scale was 135.1 ± 22.6 for individual athletes, 140.3 ± 22.4 for team athletes, and 130.3 ± 16.8 for national athletes. It was determined that these scale scores were also high. In this study conducted with university students, it was determined that the scale scores were high.

The mean scores of the sub-dimensions of the healthy lifestyle behavior scale are respectively: (the mean of) health responsibility is 21.2 ± 3.6 ; physical activity is 21.2 ± 4.4 ; nutrition is 24.4 ± 5.6 ; spiritual development is 26.5 ± 4.4 ; and interpersonal relations is $25.6 \pm$. The mean of stress management was found to be 4.4 and 20.8 ± 3.5 . Considering the healthy lifestyle behavior subscale mean scores obtained by the participants from the questionnaire, it was determined that the subscale scores were high. By causing the participants' health responsibility, physical activity and stress management sub-dimensions average scores to be lower than other sub-scales, we can show the COVID-19 pandemic and the fact that they are constantly in the training environment and have to be socially restricted in line with the measures taken during the pandemic process. Furthermore, study proved that there is a positive and significant relationship

between monthly income and education level with the sub-dimensions of healthy life behaviors (HR,N,SD,IRSM and HR,PA,IR respectively). While there was a positive correlation between HA and N, no correlation was found between age and sub-dimensions.

No study results were found on the health anxiety felt by elite volleyball players during the COVID-19 pandemic. However, when we look at the findings of the study on the athlete population, the findings showed that COVID-19 has an impact on the mental health of elite athletes and is linked to stress, anxiety, and psychological distress. The magnitude of the effect differs in relation to the athletes' mood profile, personality, and endurance capacity. (Pellino et al., 2022) It has been determined that Olympic athletes have higher anxiety scores. (Clemente-Suarez et al., 2020). Researchers reported that more anxiety scores appeared in athletes due to the uncertainty of the competition schedule. (Leguizamo et al., 2021). Hakansson et al. (2022) underlined that depression and anxiety are associated with feeling worse during the COVID-19 pandemic and worrying about one's own sporting future, while Mehrsafari et al. reported significant positive correlations between COVID-19 anxiety and somatic competitive anxiety and competitiveness.

As a result, the general score of healthy lifestyle behaviors and physical activity, nutrition, spiritual development, interpersonal relations and stress management sub-dimension scores of the athletes, despite the changes in the training and match schedules during the Covid-19 pandemic, both the quarantine processes and the change in the normal life we know, showed a positive result, which was found to be high. In addition, the general score of the health concerns of the athletes was found to be low in a positive way.

CONCLUSION

Based on the study findings, it can be said that giving seminars to the athletes about the pandemic, and the trainers' following the athletes constantly regarding healthy life recommendations, may cause the athletes to see less searches in similar situations.

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Received on August 26, 2022

Accepted on September 22, 2022