ORIGINAL ARTICLE

Physical Activity Recommendations for Sedanter Individuals in Covid-19 Period in Quarantine Times - The Effects on Happiness and Anxiety Levels of Individuals

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ABSTRACT

Background: According to the World Health Organization, well-being in physical, mental and social fields is defined as health. Statistics based on the results of the research show that one out of every five people has encountered criteria that could be diagnosed with a psychiatric disorder at any time in their life. Activity limitations are not only considered as a clinical consequence in the etiology of anxiety disorders, but also as a diagnostic and treatment criterion that has both preventive and therapeutic importance. The effect levels of physical activity on learning, memory and cognitive functions have been proven, which will strengthen and rejuvenate the structure of the brain. Planned physical activities increase muscle strength and flexibility, provide relaxation, effects on the autoimmune system, protect the mobility and musculoskeletal system in elderly individuals, provide weight control, improve the sense of confidence in individuals, improve mood and well-being, alleviate the symptoms of anxiety and depression, healthy mental body integrity and, most importantly, to reduce social isolation, it contains a set of targets specific to the individual and produces results.

Aim: The main goal is to prevent the impairment of functionality such as loss of energy, insomnia or excessive sleep caused by decreased psychomotor activity in anxiety, unwillingness to fulfill responsibilities, weight changes due to irregular nutrition, and the importance of physical activity, which is known to effectively correct these symptoms with non-clinical treatment processes. draws attention.

Methods: In line with the purpose of the study, 50 female and 36 male volunteers participated in the study. "Happiness Scale", "Corona Virus Anxiety Scale", "International Physical Activity Scale" were used as data collection tools. Data were analyzed by Spearman Correlation Test and Mann Whitney U Tests. In the analyzes, the significance level was determined as $p < 0.05$.

Results: In this study, based on the evidence, the results of regular physical activity, which eliminate the negative effects of inactive living in the general population of individuals, overlap with the well-being and health of the physical, mental, health and immune systems, and increase the effects on the level of happiness. In line with these findings, it can be stated that regular physical activity in life is associated with anxiety, happiness, coronavirus and psychological well-being.

Conclusion: Our study also contributes to the literature by determining that the decrease in happiness level is due to a number of factors by increasing the level of emotional well-being and anxiety of the epidemic process, which is becoming widespread. Specifically, individuals over the age of 40 can avoid this aspect of the epidemic with the least harm, in other words, physical activity and home-based exercises that can increase the sense of struggle and control can mitigate the harmful effects of the epidemic on happiness.

Keywords: Anxiety, Coronavırus, Happıness, Physical Activity

INTRODUCTION

The coronavirus emerged in Wuhan, China in December 2019 (WHO). It is assumed that the emergence or spread of Covid-19 is a product of laboratory experiments or technology[1]. Unlike previous epidemics, Covid-19 has become a global threat in the world with its rapid and easy spread. It has put state policies, financial and economic strategies into a difficult situation. If we consider the deaths in general, it is seen that the virus poses a greater risk and threat, especially for those with chronic diseases and individuals with weak immune systems[2]. It is inevitable that this process envelope, which affects our lives deeply, also affects mentally and spiritually. It should be known that especially elderly adults are affected by psychological depression, physical health problems and loss of function during crisis periods such as lack of mental and physical activity in their homes or in the institutions and organizations they work in[3].

The fact that the Covid-19 pandemic process started with the spread of the world has invited countries to take some measures on their own. It is of great importance to pay attention to cleaning and hygiene rules. With people working in the home environment and keeping the shopping markets closed, 861.7 million students in the world have started to receive distance education from the home environment (WHO). In order to minimize the spread of the epidemic process and keep it under control, measures such as the closure of schools in Turkey, travel restrictions, closing of shops and shopping centers, closure of cafes and restaurants have been taken in Turkey.

While curfews were imposed in many countries, quarantine was applied voluntarily in Turkey. Only individuals over the age of 65 and under the age of 20 were forced to stay at home. The sleep patterns, anxiety, happiness and nutritional habits of people imprisoned in homes with the slogan of "stay at home" were negatively affected, and in this process, physical inactivity started to pose some threats to human health. One of the best ways

to counter this is to do physical activity. Physical activity is a personal therapy such as socialization of people, lowering the level of depression, providing self-confidence, building a wall against stress and violence[4]. The rapid spread of the COVID-19 pandemic has resulted in the usual mortality rates and seriously causes them to think about psychological diseases such as fear, panic, psychosis, anxiety, loss of function, trauma and suicide worldwide[5]. Therefore, there is an urgent need for us to perceive the psycho-social effects of the COVID-19 outbreak and to investigate the factors that can reduce the negative mental and psychological effects of people.

Newly published studies show that during the COVID-19 pandemic, there were serious mental health problems where the population was diverse. For example, while the prevalence rates of mental problems in Italy range from 8.27% (insomnia) to 49.38% (post-traumatic stress disorders, PTSD), severe depression (24.73%), anxiety (19.80%) and perceived stress (21.90%) are the results of mental problems in the plan[6]. More than 1200 studies in China reported that most of the participants complained of moderate levels of psychological problems, anxiety, depression and stress[7]. In a survey study conducted on the total population in England, the results regarding the health effect of social isolation are as follows; depression, anxiety, stress, happiness level and other negative emotions[8]. Other studies have reported that different mental problems such as depression, fear, unhappiness, sadness, insecurity, loneliness and helplessness occur during the pandemic[9].

MATERIAL & METHODS

In this study we conducted, "International Physical Activity Scale (IPAQ)" was applied to determine the physical activity level of individuals over the age of 40. The questionnaire consists of 7 questions. It was developed by Craig et al. In 2003 in order to provide us with data on the level of activity by reporting the daily routine physical activity in international fields and make it comparable[10]. The validity and reliability study of the scale in Turkey was conducted by Öztürk in 2005[11]. The 29-item, 6-point Likert-type "Happiness Scale" developed by[12] and adapted to Turkish by[13] was used as a data collection tool to determine the happiness levels of individuals, and Lee (A brief mental health screening (CMS) that identifies the types of dysfunctional anxiety cases associated with the COVID-19 pandemic crisis was used. It is a 5-type scale for KAÖ. The scale consists of 5 questions and one dimension. Scoring of the scale "0" "never", "1" "Rare, less than a day or two", "2" "a few days", "3" "more than 7 days" and "4" "almost every day in the last two weeks. "Was carried out as.

Research Group: A total of 86 individuals, aged 40 and over, 58.1% (n = 50) women and 41.1% (n = 36) men, voluntarily participated in the study.

Research Model: The relational screening model was used in our study. Relationships between dependent and independent variables that may be suitable for this model were examined and the score was tried to be revealed.

Data Analysis: Microsoft Excel and SPSS 22.0 computer program were used for the statistical analysis of the data obtained from the scales. After the current data was transferred to the SPSS package program, the lost and empty data was first scanned. At the end of this evaluation, it was seen that there were no data other than the study. After this stage, the edge data evaluation was made taking into account the Mahalanobis distance. At the end of the Mahalanobis values, it was observed that there were no subjects left out of the study and the analysis of the data was made on 86 people. After this stage, taking into account the -2, + 7 skewness kurtosis values proposed by[14] for the normality assumptions, it was observed that the distribution was not normal. It was determined as .91 for the Happiness Scale used in the study, .90 for the Coronavirus Anxiety Scale, and .83 for the International Physical Activity Scale. Meanwhile, Spearman Correlation test was used to examine the relationship between variables and Mann Whitney-U tests were used to check whether there was a difference between them.

RESULTS

Table 1. Some demographic features and descriptive statistics

Variable	Frequency	%
Gender		
female	50	58,1
male	36	41,1
Age		
40-49	58	67,44
50-59	22	25,58
60 and above	6	6,97
Working Status		74,41
Yes	64	74,41
No	22	25,58
Marital status		
married	69	80,23
single	17	19,76
Educational level		
literate	1	1,16
primary school graduate	4	4,65
middle school graduate	4	4,65
high school graduate	7	8,13
faculty / college graduate	70	81,39
Do You Have a Smoking Habit?		
Yes	14	16,27
No	61	70,93
Quit	11	12,79
What do you do?		
independent	22	25,58
worker	10	11,62
civil servant	35	40,69
Do You Exercise Regularly?		
Yes	39	45,34
No	47	54,65
Total	86	100

When the demographic characteristics of the participants in the study were examined, 58.1% (n = 50) were female, 41.1% (n = 36) were male, 67.44% (n = 58) were 40-49%. It was observed that 25.58 (n = 22) were 50-59 years old and 6.97% (n = 6) were over 60 years old. When the working status of the participants was examined, it was observed that 74.41% (n = 64) answered yes and 25.58% (n = 22) answered no. When the marital status of the participants was examined, it was found that 80.23% (n = 69) were married and 19.76% (n = 17) were single. When

the education level of the participants was examined, 1.16% (n = 1) were literate, 4.65% (n = 4) were primary school graduates, 4.65% (n = 4) were secondary school graduates, 8.13% (n = 7) were high school graduates, and 81.39% (n = 70) were faculty / college graduates. When the smoking habits of the participants were examined, it was observed that 16.27% (n = 14) answered yes, 70.93% (n = 61) answered no, and 12.79% (n = 11) quit. When the work of the participants was examined, it was seen that 25.58% (n = 22) were freelance, 11.62% (n = 10) were workers, and 40.69% (n = 35) were civil servants. When the answers given by the participants to the question of do you exercise regularly, it was observed that 45.34% (n = 39) gave yes and 54.65% (n = 47) answered no.

Table 2. Coronavirus, happiness and physical activity basic analysis results

	X	Ss	Skiwness	Kurtosis
Coronavirus	2,17	3,46	2,081	4
PA	1,97	1,01	-0,502	-2
Happiness	2,17	3,46	2,08	4

When examined, it was determined that Happiness, Corona Virus and FA skewness and kurtosis values were not between +1 and -1 and they did not show a normal distribution in the light of the obtained data.

When the averages for Corona are examined, X = 2.17, when the averages for FA are examined, X = 1.97, when the averages for happiness are examined, X = 2.17, the highest average is Corona X = 2.17 and Happiness X = 2.17. It has been determined that.

Table 3. The relationship between coronavirus anxiety and happiness spearman correlation

	Happiness	Coronavirus
Happiness	1	-.017
Coronavirus	-.017	1

As a result of the Spearman Correlation analysis, one of the nonparametric analyzes performed to determine whether there is a significant relationship between Happiness and Corona Virus Anxiety scores, the participants (r = -, 017, p> 0.05), Oxford Happiness Scale (Mean = 21.95, SD = 5.48) A weak, negative (r = -, 017; p> 05) and significant correlation was found between the scores of the Corona Virus Anxiety Scale (Avg = 2.17, SD = 3.46).

Table 4. The relationship between physical activity and happiness Spearman Correlation

	IPAQ	Happiness
IPAQ	.077	1
Happiness	1	.077

As a result of the Spearman Correlation analysis, one of the Nonparametric Analyzes performed to determine whether there is a significant relationship between Physical Activity and Happiness scores, the participants (r = .077; p> 05), International Physical Activity Scale (Avg = 1.97; SD = 1.01) and The relationship between the Oxford Happiness Scale (Mean = 21.95, SD = 5.48) scores was not found to be weak, negative (r = 0.77; p> 05) and significant between the variables.

Table 5. The relationship between happiness and moderate physical activity

	N	Average	Sd	r	P
Happiness	86	21.95	5.48	.311**	.004
IPAQModerate	86	239.30	279.18	.311**	.004

Happiness and Physical Activity As a result of the Spearman Correlation analysis from Nonparametric Analysis, the participants' Oxford Happiness Scale (Avg = 21.9, Sd = 5.48, r.311 **, p <05), International Physical Activity The relationship between the scores of moderate exercise (Mean = 239.30, Sd = 279.18,, r.311 **, p <05) is moderate, positive (r.311 **; p <0.05) and there seems to be a meaningful relationship.

Table 6. Mann whitney-u test result regarding the difference between coronavirus and gender Mann Whitney-U

	N	Average		Total	U	P
female	50	48.48		2424	651.00	.021
male	36	36.58		1317		

As a result of the Mann Whitney U test conducted to determine whether there is a significant difference between the Corona Virus scores of the female and male groups, a significant difference was found between them (U = 651,00, p <0.05).

Table 7. Relationship between walking and happiness

	Walk	Happiness
Walk	.354	1
Happiness	1	.354

Happiness and Physical Activity As a result of the Spearman Correlation analysis from Nonparametric Analysis, participants' Oxford Happiness Scale (Avg = 21.9, Sd = 5.48, r.311 **, p <05), International Physical Activity The relationship between the scores of the activity walking exercise (Mean = 747.48, Sd = 750.13,, r.354, p> 05) is a moderate, positive (r.311 **; p <0.05) and significant relationship between the variables. does not appear to be.

Table 8. Relationship analysis between happiness, coronavirus anxiety level and physical activity spearman correlation

	Coronavirus	Happiness	PA
Coronavirus	1	-.017	-.099
Happiness	-.017	1	.077
PA	-.099	.077	1

According to the Spearman correlation analysis given, it is not seen that there is a weak (r = -.017; p> 05) and a weak (r = .077; p> 05) significant relationship between physical activity and Happiness of individuals over the age of 40 and Corona Virus.

DISCUSSION

In this study, we aimed to examine the relationship roles between coronavirus anxiety, happiness and physical activity. As a result of the research, it was found that there are positive and negative significant relationships between coronavirus, happiness and physical activity, and the sexes. It was concluded that the level of happiness predicted a positive significant relationship with moderate physical activities.

When the literature is examined, it has been shown in prospective studies that active individuals increase the level of participation in physical activities to combat stressful situations, and the effect that stress is directed towards people who participate less in physical activities and that negative situations may occur in this case[14].

Less active individuals have substantially less opportunities for benefit, happiness, confidence, assistance, and mobility than active individuals. Moreover, low-mobility individuals have had serious difficulties in participating in physical activities since the COVID-19 outbreak. When individuals with high anxiety levels and individuals with low anxiety levels were compared in both active and inactive individuals, it was observed that individuals with low anxiety levels exercised moderately or intensely. In addition, it has been found that individuals who do physical activity during the COVID-19 pandemic have less anxiety than individuals who reduce their physical activity level[15]. It may play an important role in activating the sympathetic nervous system too much during physical activity and suppressing the stress response[16]. In different studies, it has been determined that there is a difference between the genders. While it appears that there is a positive relationship between PA and happiness in men, it does not appear to be the opposite for women. In a possible explanation, it is seen that the positive orientation in the emotional states of men in their participation in physical activity is higher than that of women[17].

Although studies on the benefits of exercise in the literature have increased based on evidence, individuals aged 65 and over who do regular physical activity are 40% less than the general population and most of the elderly population is sedentary[18,19]. As a result, elderly individuals cannot benefit from the positive benefits of physical activity and are greatly affected by the negative effects of inactive living. Therefore, it is extremely important to do very simple and applicable exercises at home to prevent coronavirus and to protect and maintain physical well-being. Balance and resistance exercises or their modifications can be applied for the home. Examples include walking at home or to the market, lifting water or food bags, climbing stairs, sitting on a chair, pilates, yoga, or various physical exercises using body weight. In the meantime, it is recommended that e-health and exercise videos are a powerful alternative to encourage physical activity via internet, mobile devices and TV[20]. In order to prevent the inactive life cycle that increases with aging, many studies have been done in the literature. In 1995, the Centers for Disease Control and Prevention (CDC) and the American College of Sports Medicine (ACSM) issued a proposal reporting that "every US adult should do moderate physical activity for at least 30 minutes or more every day of the week" in the light of their studies[21]. Despite some recommendations that staying at home for a long time during the pandemic period should not be inhibited in terms of physical activity[5], the results show that COVID-19 levels of long stay at home (PA) have decreased significantly.

As a result of their study in[22], they saw that a significant portion of the infected individuals in China had increased anxiety levels and some psychological disorders. They concluded that the decreased intensity of physical activity, as well as the fear of infection, worsened the physical health and immune systems of the patients.

The consequences of physical inactivity are well known. When people focus more on physical activity, risk conditions such as heart diseases, cancer, musculoskeletal diseases and diabetes are minimized, they use their bodies more functionally, their physical work capacity increases, and a visible increase in psychological and quality of life is achieved. It has been explained by the research results that with physical activity, not only the prolongation of life span but also the quality of life will increase. In this review, when looking at the relationship between PA, COVID-19 and happiness, it is concluded that moderate physical activity is an important spectrum in achieving an increase in the level of happiness in humans. Studies applied 3-5 times a week at moderate intensity 30 minutes 5 days / week or high intensity 20 minutes 3 days / week or a combination of both create differences in the level of happiness. However, our study contributes to the literature by determining that the decrease in happiness level is due to a number of factors by increasing the level of emotional well-being and anxiety of the epidemic process, which is becoming widespread. Specifically, individuals over the age of 40 can avoid this aspect of the epidemic with the least harm, in other words, physical activity and home-based exercises that can increase the sense of struggle and control can mitigate the harmful effects of the epidemic on happiness.

CONCLUSION

In this study, it was aimed to examine the happiness, physical activity levels and Corona Virus Anxiety levels of individuals who had to stay at their homes during the pandemic process. According to the findings of the research, according to the data obtained from the result of our study, which aims to determine the relationship between the happiness, physical activities and Corona Virus anxiety levels of individuals over the age of 40 who are obliged to stay in their homes during the pandemic period; It was found that Happiness, International Physical Activity and Corona Virus Anxiety scale scores applied to the individuals participating in the study were not between +1 and -1, and did not show a normal distribution according to the data obtained. It was observed that there was a statistically significant relationship between the individuals over the age of 40 who participated in the study, according to the relationship between Happiness and Corona Virus. The relationship between physical activity and Happiness, on the other hand, was found to be not statistically significant in line with the hypothesis we determined. In the comparison between physical activity (walking) exercises and happiness, it was observed that the happiness level of the individuals who walk was statistically significant. It was found that there was no statistically significant relationship between Happiness, Physical Activity and Corona Virus.

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