

Original Article

The Old Adults' Emotional Wellness and Spiritual Well-being with an Emphasis on Physical Activity during COVID-19 PandemicHouriyhe Dehghanpouri^{1*} Safiye Ebrahimi² Hossein Donyapour³ Mansoureh Mokaberian⁴

1. Assistant Professor of Sport Management, Department of Physical Education and Sport Sciences, Shahrood University of Technology, Shahrood, Iran
2. Master of Motor Behavior, Department of Physical Education and Sport Sciences, University of Tabriz, Tabriz, Iran
3. Master of Sport Management, Department of Physical Education and Sport Sciences, University of Tabriz, Tabriz, Iran
4. Assistant Professor of Motor Behavior, Department of Physical Education and Sport Sciences, Shahrood University of Technology, Shahrood, Iran

*Correspondence to: Houriyhe Dehghanpouri
h.dehghanpouri@shahroodut.ac.ir

(Received: 3 Aug. 2021; Revised: 30 Oct. 2021; Accepted: 11 Nov. 2021)

Abstract

Background and Purpose: COVID-19 pandemic is a challenge for improving health during lockdown. Unfortunately, the concern which is expressed as for the welfare and the health of the elderly contradicts the actions undertaken for their health and welfare. The psychological research conducted during COVID-19 pandemic rarely include the people over 60 years old. Hence, the purpose of the current study was to compare emotional wellness and psychological health of active and inactive old adults in Shahrood city with an emphasis on physical activity during COVID-19 pandemic. The subject of the present research is an interdisciplinary one.

Materials and Methods: The current study was a practical descriptive survey. The statistical population of the research were all the elderly aged over 60 years in Shahrood in 2020 (based on the latest census equal to 17173 people). The sample size was estimated based on Cochran formula following convenience sampling method. The data collection tool was a questionnaire, and the data were analyzed using SPSS and Excel Software.

Results: The findings indicated that the level of emotional wellness and spiritual well-being of active old adults was more than that of inactive old adults, and inactive old adults had higher levels of unpleasant feelings than active old adults.

Conclusion: Based on the findings, it is essential that the elderly keep doing the recommended amount of exercise and physical activity. Although this could be challenging for them both to have access to sport clubs and parks and to follow health protocols, there are extensive creative activities which could be replaced in order to stay in health and active at home.

Keywords: Emotions; Spirituality; Exercise; COVID-19

Citation: Dehghanpouri H^{*}, Ebrahimi S, Donyapour H, Mokaberian M. The Old Adults' Emotional Wellness and Spiritual Well-being with an Emphasis on Physical Activity during COVID-19 Pandemic. Iran J Health Sci. 2021; 9(4): 20-34.

1. Introduction

The outbreak of COVID-19 pandemic was first reported in December 2019 and has spread in many countries in the world (1). This disease caused a striking downfall in health systems all over the world and led to salient damages in the health and private life of people specially the elderly who need intensive care (3). Several primary studies and research reports from Italy and the United States emphasize that the old adults (specially over 60 years old) are among the most vulnerable group against COVID-19 (4, 5). This is while considering the industrial and scientific developments and birth control, population pyramid has changed to cylindrical in many countries around the world which is indicative of the fact that the world population is aging (6). According to WHO, the number of the elderly will increase from 650 million to 2 billion up until the year 2050 (7). The results of studies on Iranian elderly also demonstrated that in Iran, the number of elderly in 2036 will increase up to 14% and in the year 2046, up to 22%. (8). Generally, aging is a process which is accompanied with extensive changes in three physiological, psychological, and social aspects of human life (9).

In general, COVID-19 has brought about many challenges in human quality of life. Apart from psychological pressure with regard to the probability of catching a potentially serious and fatal disease, the health officials in many countries have established broad limitations which can negatively affect the elderly's psychological performance. The investigations confirm that inexorable flow of news about COVID-19 (the number of infections, death rates, insufficient control and medical actions), creating disturbance in daily routines (including meeting friends,

children, grandchildren and closing parks and other entertainments stuff) have led to psychological stress which is a normal response to any stressful situation. These factors have also negatively affected their health condition and their emotional and social aspects of life (1, 12, 13). Regarding this topic, Krendl and Perry have pointed out in their research that in the short-run, COVID-19 pandemic has affected psychological health, emotional wellness, and social well-being of the elderly (14).

Spiritual well-being is considered to be one of the important aspects of life during old age when people are more emotional and vulnerable (15), because research shows that with an increase in age, there is also an increase in psychological problems (17).

Spiritual well-being is a term which was first introduced by WHO in 1979 into new medical sciences as the fourth pillar of health (18). It is human's spiritual experience in two different perspectives of life; one is religious well-being perspective which focuses on how one recognizes health in their spiritual life when they are connected to a higher power and the other one is existential well-being perspective which focuses on social and psychological concerns of people and discusses how people are adjusted with themselves, society, or the environment (19). Spiritual well-being causes integration and completeness in people and gives meaning and purpose to their lives. Elderly people who have spiritual well-being can more effectively adjust themselves with their disease and their new life condition and can even spend a better life despite the presence of their disease (20). There has been a variety of studies on the spiritual well-being and its role in the improvement of physical and psychological health of the elderly, the

quality of their lives, and diminution of their depression, heightening their patience, etc., (21).

This is while welfare and emotional well-being are among the basic components of people's health and life. Emotional wellness which is normally mentioned as Hedonic welfare or welfare related to feeling good and enjoying the life is a part of positive psychological health which leads to one's control over feelings and activities in life. One can comprehend feelings, draw a conclusion, and find a positive feeling in all negative situations, which can finally lead to one's success (23, 24).

Various studies have been conducted about the emotional wellness between the youth (18), teenagers (20), university students (15), and staff's (16) and elderly (25). The results of all indicate that emotional wellness is an important factor in the elderly's welfare.

During previous decades, considering this fact that as individuals get older, they lose some of their physiological, social, and psychological functions, it should be said that being deprived of social activities can lead to depression and loneliness. One can claim that emotional wellness during the old age and adulthood is of high importance (27); specially in stressful and life-threatening situations, such as during the COVID-19 pandemic (2).

One of the factors which has an important role in improving the elderly's lifestyle is constant and regular physical activity (28), which is defined as physical actions produced by skeletal muscles which lead to using energy (1). Research proved that physical activity is vital for the elderly, especially in order to increase their independence, welfare, physical and psychological function (5, 29-31), and

emotional wellness. It can be known as a protective barrier against unavoidable complications, such as health and cognition failures which occur during old age, and can decrease nervous disorders (34) to make them healthier and happier (35). Nevertheless, the results of the reporters demonstrated that during COVID-19 pandemic, more than half of the adults and the elderly temporarily spend their lives in an inactive state or with insufficient physical activity which can have extensive danger for their health. However, there are few studies about the effect of physical activity either in or outside home or sightseeing in the elderly during COVID-19 (1, 36, 38). They have concluded that physical activity can prevent such psychological disorders as depression and anxiety, improve living conditions during COVID-19 (31), let elderly have better psychological health through suppressing stress and severe psychological pressure caused by disease (1), and exhibit less sign of stress and more good feelings (36).

Considering the limitations imposed on people's activities during COVID-19, keeping an active life is essential for all, and especially for the elderly (39).

Unfortunately, the concern which is expressed for the welfare and health of the elderly contradicts the actions undertaken for their health and welfare (13), and psychological studies conducted during COVID-19 rarely include people over 60 years old (12). Hence, considering the already-mentioned points, it is emphasized that old age is a sensitive period of human life, so paying attention to the problems and needs of the elderly during this period is considered as a social necessity. Besides, the topic can open a broad range of fields to analyze the problems of the elderly from various perspectives. Thus, the researchers

of the current paper have undergone to analyze and compare the emotional wellness and spiritual health in active and inactive old adults in Shahrood City with an emphasis on physical activity during COVID-19 pandemic.

2. *Materials and methods*

The current research was a cross-sectional study in terms of purpose, practical in terms of nature, and a descriptive survey.

The statistical population of the research consisted of all the aged people of Shahrood city in 2020 who were over 60 years old. In order to define "the aged people", we used the age 60, as it is recommended by WHO (2015). The size of the statistical society based on the last census in 2015 was 17373 people (6002 people in the age range of 60 to 64; 4231 in the age range of 65 to 69; 3005 people in the age range of 70 to 74; 1938 people in the age range of 75 to 79; 1271 people in the age range of 80 to 84; 635 people in the age range of 85 to 89; 235 people in the age range of 90 to 94; 50 people in the age range of 95 to 100; and 6 people over 100 years old). The size of the statistical sample was estimated as to be 376 people based on Cochran formula with a 0.05 error. Sampling method was convenience sampling (through going to parks, jogging paths, and gathering places for the elderly). Generally, the questionnaire was distributed among the people in a society consisted of the aged people who were over 60 years old in Shahrood city based on convenience sampling method. After collecting the responses to distributed questionnaires and putting aside incomplete or distorted ones, 376 questionnaires were found complete and faultless for analysis.

Data collection tool: Data collection in the present research was based on field data

collection. The used questionnaire included three sections; the first section consisted of demographic information (age, gender, marital status, being active or inactive, or the amount of physical exercise, and education). In order to understand their being active or inactive, a question about the amount of their physical activity and exercise (like jogging, and sightseeing) was asked during several sessions in one week. Accordingly, the statistical sample was divided into two groups: active and inactive. The active group of the elderly included those aged people who had at least two sessions of 30-45 minutes of exercise and physical activity including jogging, morning workout, etc. either inside or outside home during a week. Inactive group of the elderly included those who had no physical activity and exercise during a week. The second part of the standard emotional wellness scale of Diener and Biswas included 16 questions with the Likert five-point scale (never to always) (42). Reliability and validity of this questionnaire was approved in Diener and Biswas research (42). The third part of the Spiritual Well-Being Scale (SWBS) of Palutzian and Ellison includes twenty items in two subscales (10 questions related to religious well-being and 10 questions related to existential health; the phrases with odd numbers are related to religious well-being and the phrases with even numbers are related to existential well-being) and Likert six-point scale (from completely disagree to completely agree) which is based on reverse scoring of some of the questions (43). The spiritual health degree is obtained from the total of the two groups was in the range of 20 to 120. Based on the obtained degrees, people's spiritual health was divided into three groups of low (20-40), average (41-99), and high (100-

120); the validity and reliability of the questionnaire in Iran was analyzed and approved by Sayed Fatemi et al. (44). In the current research, the content validity of the questionnaires were approved by three sport professors. The validity of the questions in the present research was also measured through Cronbach's alpha which was 0.815 for emotional wellness and 0.883 for spiritual well-being both of which were above 0.7, leading to the validity of the questionnaire to be approved.

Data analysis: After data collection through questionnaire, data analysis was done by Excel and SPSS in two levels of descriptive and inferential statistical level. First, data distribution was analyzed through Kolmogorov Smirnov test. Then, nonparametric statistical methods such as Mann-Whitney U, Kruskal-Wallis H, Friedman Test were used in order to compare the emotional wellness and spiritual well-being of the active and inactive old adults with an emphasis on physical activity during COVID-19. The significance level was considered to be $p < 0.05$ for all analyses. This research has an ethics code number (UMIN000044367) from UMIN.

3. Results

In the present study, 376 people were divided into two groups of active and inactive old adults based on their answers to the questions in the questionnaire which were related to the amount of their physical activity and exercise during a week (the

amount of physical activity and exercise which should be done in different sessions during a week). The active group of the elderly included those aged people who had at least two sessions of 30-45 minutes of exercise and physical activity including jogging, morning workout, etc. either inside or outside home during a week. Inactive group of the elderly included those who had no physical activity and exercise during a week or had less than two 30 to 45-minute sessions of physical activity and exercise. The results showed that 257 aged people (68.4%) belonged to the active group, and 119 aged people (31.6%) belonged to the inactive group. In terms of variable of gender, there were 228 aged women (60.6%) (192 of whom were active and 35 were inactive); men were 148 aged people (39.4) (64 of whom were active and 84 were inactive); in terms of variable of age, the highest abundance was for the ages 60 to 65 (192 people, 51.1%) (161 people of whom were active and 31 were inactive); and the least abundance was for the ages 76-80 and more (16 people; 4.2%) (13 people of whom were active and 3 were inactive). In terms of variable of marital status, 46 people were married (12.2%) and 237 people were single (63%), and 93 of them had lost their spouses. In terms of variable of education, the highest abundance was for diploma (179 people; 47.6%), and the least abundance was for illiterate people (26 people; 6.9%).

Table 1. The results of Kolmogorov-Smirnov test (evaluating normality of data distribution)

Group variable	Active old adults		Inactive old adults	
	Statistics	P-Value	Statistics	P-Value
Emotional wellness	0.115	0.001	0.211	0.001
Feeling pleasant	0.074	0.001	0.206	0.001
Feeling unpleasant	0.123	0.001	0.156	0.001
Happiness	0.112	0.001	0.217	0.001
Spiritual well-being	0.138	0.001	0.169	0.001
Religious well-being	0.199	0.001	0.176	0.001
Existential well-being	0.085	0.001	0.177	0.001

In order to analyze the normality or abnormality of data distribution, Kolmogorov and Smirnov test was used the results of which are referred to in Table 1. Considering the fact that the significance level for both active and inactive groups was less than 0.05 – that is $\text{Sig} < \alpha$ – the hypothesis of normality of distribution of

observations was rejected. Thus, nonparametric statistical methods like Mann-Whitney U, Kruskal-Wallis H, Friedman Test were used in order to compare the emotional wellness and spiritual well-being of the active and inactive old adults with an emphasis on physical activity during COVID-19.

Table 2. The results of Mann-Whitney U and Kruskal-Wallis test between field variables and research variables in active and inactive old adults

variable		Emotional wellness	Feeling pleasant	Feeling unpleasant	Happiness	Spiritual well-being	Religious well-being	Existential well-being
Gender								
Active and inactive old adults	M 1	203.36	202.66	194.11	192.54	192.04	198.05	196.97
	2	165.61	166.69	179.86	182.28	183.05	173.79	175.45
	M-W U	13485	13644.5	14593	14951	14066	14694.5	14940
	P-Value	0.001	0.001	0.023	0.044	0.008	0.034	0.038
Age								
Active and inactive old adults	M 1	190.98	214.04	173.34	208.20	203.29	221.81	208.63
	2	159.17	145.57	193.76	161.00	164.00	116.97	129.06
	3	161.83	153.82	173.82	164.60	162.20	191.68	192.86
	4	256.44	199.66	241.75	145.94	163.60	153.38	147.75
	5	250.62	145.15	224.50	142.50	164.00	189.12	266.53
	K-W P-Value	22.379 0.001	34.281 0.001	17.813 0.001	34.562 0.001	63.734 0.001	67.432 0.001	50.581 0.001
Marital status								
Active and inactive old adults	M 1	192.68	167.22	208.12	163.54	208.96	210.92	192.95
	2	188.56	192.81	176.74	190.00	181.45	171.20	181.32
	3	186.27	188.05	208.75	197.03	196.34	221.50	204.60
	K-W P-Value	5.108 0.035	8.801 0.013	7.016 0.019	5.947 0.041	9.173 0.010	16.615 0.001	6.163 0.006
Education								
Active and inactive old adults	M 1	175.79	194.73	200.75	211.87	221.85	263.38	241.67
	2	210.13	178.57	216.80	164.63	184.00	167.62	169.01
	3	164.93	170.14	190.71	174.81	188.16	192.77	190.16
	4	199.99	188.42	172.08	183.94	164.00	128.93	138.32
	5	250.95	315.41	106.16	322.63	211.00	248.86	263.86
	K-W P-Value	23.680 0.001	51.066 0.001	24.856 0.001	60.276 0.001	43.413 0.001	39.660 0.001	34.392 0.001

Kruskal-Wallis test was used in order to analyze the relationship between field variables (such as Marital status, Education and Age) and research variables. Mann-Whitney U test was used in order to analyze the relationship between field variables (such as Gender) and research variables (Because considering the abnormality of research data and also nominality of field

variables, one cannot use correlation tests). According to the results in all four field variables of gender, age, marital status, and education, the emotional wellness, spiritual well-being and their components in both active and inactive groups were not equal and had significant differences with each other (Table 2).

Table 3. The results of Whitney U. for research variables in two groups of active and inactive old adults

Variable Statistics	Group	Number	Mean	SD	The Mann-Whitney U test	Z	P-Value
Emotional wellness	Active	257	48.97	8.573	10350.0	-5.054	0.001
	Inactive	119	44.38	5.581			
Feeling pleasant	Active	257	27.96	6.873	6188.5	-9.304	0.001
	Inactive	119	20.30	6.212			
Feeling unpleasant	Active	257	21.01	5.340	12075.5	-3.290	0.001
	Inactive	119	24.08	7.369			
Happiness	Active	257	6.95	8.833	7687.5	-7.774	0.001
	inactive	119	-3.77	12.435			
Spiritual well-being	active	257	82.49	16.792	9304.5	-6.112	0.001
	Inactive	119	70.12	12.227			
Religious well-being	active	257	43.38	9.211	8996.5	-6.437	0.001
	inactive	119	35.91	7.350			
Existential well-being	active	257	39.11	8.966	10158.0	-5.247	0.001
	inactive	119	34.21	5.618			

Considering the obtained average in Table 3, the level of emotional wellness, feeling pleasant, happiness, spiritual well-being, religious well-being, and existential well-being in active older adults were more than those of inactive ones. And in the level of feeling unpleasant, the inactive older adults had higher degrees than active ones. The results of tests also showed that in terms of

emotional wellness variables ($p=0.001$), pleasant feelings ($p=0.001$), feeling unpleasant ($p=0.001$), happiness ($p=0.001$), spiritual well-being ($p=0.001$), religious well-being ($p=0.001$), and spiritual well-being ($p=0.001$), there was a significant difference between active and inactive elderly.

Table 4. The results of Friedman for identifying prioritizing emotional wellness and spiritual well-being variables in active and inactive old adults

	Variable	Average degree	Degree	Chi-square	Degrees of freedom	Significance
Emotional wellness	Feeling pleasant	2.14	1	6.356	2	0.022
	Feeling unpleasant	1.92	3			
	Happiness	2.04	2			
Spiritual well-being	Religious well-being	1.47	2	4.064	1	0.035
	Existential well-being	1.53	1			

The results of Table 4 show prioritizing emotional wellness and spiritual well-being variables in active and inactive old adults with an emphasis on physical activity during COVID-19. Since based on normality test, the data were not normal and also the number of the questions was not also equal for each perspective, first the standard Z degree was calculated for each perspective, and then Friedman test was applied based on Z degrees. In emotional wellness variable, feeling pleasant (2.14), happiness (2.4), and feeling unpleasant (1.92) had the highest degree among the emotional perspectives in active and inactive old adults, respectively, which, considering the $DF=2$ and $X^2=6.356$, were significant ($p<0.05$). Also, in spiritual well-being variable, existential well-being (1.53) and religious well-being (1.47) had, respectively, the highest grades in spiritual well-being of active and inactive old adults which, considering $DF=1$ and $X^2=4.064$ were significant. ($p<0.05$). Therefore, there was found a significant difference between emotional wellness and spiritual well-being perspectives, and these perspectives did not have equal grades.

4. Discussion

The obtained results showed that during COVID-19, the level of emotional wellness, feeling pleasant, and happiness in

active old adults was more in comparison with inactive old adults; besides, in the level of feeling unpleasant, the inactive old adults obtained higher degrees than inactive old adults. Nowadays, the problems of psychological health are among the most important and increasingly significant problems of human societies. The previous findings indicated the fact that old adults experienced more negative social feelings. In other words, the changes brought about by the modern lifestyle cause different life experiences during this period of human life and cause depression, sensitivity, waiting for gradual death, inefficiency, tiredness, feeling of failure, humiliation, sadness, and melancholy (46). Experiencing negative and positive feelings during this period builds up emotional well-being of the old adults, the experience of whom can form the quality of their life in another way. Hence, based on the findings of the previous research about successful old adulthood, it is demonstrated that lifestyle and habits of these people affect their physical and psychological health and their lifestyle helps improve their health and the quality of life. Such factors as having active lifestyle, a constant and regular schedule for exercise and physical activity delay aging process and help the old adults have more health and happiness. In other words, having desirable emotional

and psychological conditions let people adjust themselves with the aging and be dependent during old ages and finally build up a better feeling and end to their lives. As a matter of fact, positive social feelings are specifically important and constructive in bringing about the feeling of felicity in old adults (47). The results of the study undertaken by Seeman and Adler (1998) (48), Iman and Shirdel (2016) (46) also go with the study conducted by Sohrabi et al. (2015), which show the average of psychological well-being of the active old adults is higher than that of the inactive of adults and physical activity acts as an intermediate factor between psychological stability and psychological well-being (49). The results of the study conducted by Goethals et al. (2020), similarly, proved that physical activity was important for adults and especially for keeping their independence, psychological health, and emotional wellness (45). Lack of physical activity was found to be the fourth dangerous factor causing death all over the world and is the major factor in causing impairment. Among the people who do not have regular physical activity, the danger of decreased performance is more, so keeping physical exercise during old age is vital, and insufficient physical activity during COVID-19 can also have negative effects on psychological and emotional well-being of the old adults. According to the obtained results of the current study, and considering the gist of the previous studies, this was concluded that among many cases which predict this factor, the physical activity factor and social communications made by this factor had outstanding effects. It was also revealed that having an active lifestyle and a regular exercise schedule lead to a higher level of psychological well-being and its components. Considering the

recommendations given in some countries, persuading people to keep a physically active way of life as a way for preventing disease during this period of pandemic in order to fight the spread of the virus, and having physical exercise as a useful activity to improve immunity is clearly detectable in the literature (50). As Simpson and Katsanis (2020) mentioned in their research, exercise might not prevent one from catching COVID-19, but physical activity helps preserving and neutralizing the negative effects of loneliness and psychological pressure. Thus, physical health should be strengthened during this epidemic (51).

The findings of the current research also demonstrated that spiritual well-being, religious well-being, and existential well-being are higher in active old adults than in inactive ones. The results of the present study go with those of the research conducted by Kashani Movahed (2017) (52) which is about the relationship between regular physical activity and spiritual intelligence and psychological well-being in old adults in Tehran. The findings were also consistent with those of Grant et al. (2004) (53) about the effect of physical exercise on improving health condition of old adults and also the research done by Simpson and Katsanis (2020) (51) about the effects of physical activity during COVID-19 pandemic. In order to state the results, considering the review of literature on the same topic, one can say that psychological well-being alongside physical, social and psychological perspective leads to increasing one's general health condition. Psychological well-being also improves the other aspects of health which, in turn, leads to improvement of one's adjustment ability and psychological functions (16). The

results of the present study on active old adults approves this point of view that components and subscales of spiritual well-being in people and their tendency towards sports and physical activity can, in some way, improve spiritual well-being and lead to success in different social and familial aspects of life, as well as their improvement in sports. It is clear that spiritual well-being has a reasonable connection with immunity against physical and psychological diseases (which is one of the main plans of sports organization) and also decreases mental disorders in the elderly (54). Spiritual well-being can lead to one's tendency towards having a sense of identity, satisfaction, enjoyment, happiness, respect, optimism, peace, balance and giving direction to one's life (15). Therefore, the old adults' activeness leads to their general health, and their general health, in turn, provides their spiritual health (55). Nevertheless, constant staying at home and lack of physical activity leads to extensive physical inactivity. Some of the old adults who do not move a lot, lose a considerable amount of their muscular power and flexibility which can accelerate their dependency and fragility. This is while the present evidence proves that having physical activity can heighten one's antivirus immunity (56). As Abdelbasset (2020) concluded in the research with a purpose of analyzing the effect of physical exercise on the immunity of old adults during COVID-19, training exercise and physical activity during COVID-19 pandemic can have a significant role in decreasing the negative effects of seclusion on the elderly during the pandemic and lead to their optimism (57). What has been obtained from the rest of the findings of the research about prioritizing emotional wellness and spiritual well-being in the active and inactive old adults with an

emphasis on physical activity during COVID-19 pandemic indicate the fact that, in the emotional well-being variable, feeling pleasant perspective, happiness perspective, and feeling unpleasant perspective respectively have the highest degrees among the different perspectives of emotional well-being. Also, in the spiritual well-being, the existential and religious well-being have the highest degree respectively among different perspectives of spiritual well-being in active and inactive old adults. Thus, there was found a significant difference between different perspectives of emotional well-being and spiritual well-being, and these perspectives did not have equal degrees. Generally, one can state that COVID-19 pandemic has had an extensive effect on old adults' physical activity and has probably affected the number of times they participate in such activities. However, they need physical activity which can be induced by simple and immune methods of physical activity, even in a bounded space. In this regard, the government policy for supporting the old adults for physical activity at home is essential (45). Having this part of the findings of the current research in mind and also considering the limitations of the routine life and such habits as inactivity which has been brought about by the lockdown, physical activity is recommended for inactive people in order to improve their health condition (58). Paoli and Musumeci (2020) have pointed out this issue in their research that in such serious issues as COVID-19, exercise and physical activity should be the principal approach for improving psychological well-being of active and inactive people and also recovering a healthy condition (37), since physical activity has optimistic advantages for the psychological state of humans

through reducing anxiety and depression and improving one's patience against stress and creating self-confidence (36). Furthermore, constant and regular bodily exercise at home is an immune and important method for improving one's healthy state and preserving one's physical readiness during lockdown (59). In this respect, a special exercise is recommended by the researchers to be practiced during the COVID-19 pandemic. These recommendations include aerobic exercise in an average level which does not require any special equipment for the elderly (60). Additionally, Yoga is recommended for the elderly during this period because it does not call for any special sport equipment or space (61).

5. Conclusion

In most of the previously conducted studies, crises, psychological and behavioral issues, as well as impairments and the negative aspects of old age were referred to. In the present research, based on the role of positive psychology in the life of the elderly, the positive aspects of the life of the old adults were focused on, and the obtained results showed that one can provide the background for heightening psychological well-being and the quality of life in old adults through physical activity and structures of positive psychology. Considering the results of the current study, it can be said that the level of spiritual well-being and emotional wellness have been reported as to be more in active old adults than in inactive old adults with the help of physical activity. Hence, in the present situation, protecting the elderly against infection is vital; at the same time, supporting them in such complicated conditions is even more significant. In order to heighten spiritual well-being and

emotional wellness of the elderly during COVID-19, it is essential for the elderly to have the recommended amount of exercise and physical activity. Although this can be challenging without their having access to sport clubs and parks and having to follow health protocols, there are plenty of creative methods which can be used to try and experience physical activity when you are staying at home.

Limitations

There were some limitations in the present study; first, this study was conducted in one of the cities of Semnan Province, that is, Shahrood. Not analyzing the other cities of Semnan Province may affect the popularization of the findings. Second, analyzing the state of physical activity, emotional wellness and spiritual well-being of the old adults have been based on self-reports in the current research which might lead to biasedness. Third, the participants' possible background of physical and psychological illnesses was not taken into account which might affect the results of the study. Fourth, access to the research samples was so extensively difficult and limited due to COVID-19 pandemic and due to the age of the participants, sending the questionnaires electronically and through email or social networks was not possible, which in itself caused the process of data collection to become very time-consuming. Fifth, answering the questions in the questionnaires was not easy for the elderly and some of them were not patient enough to do that, which might have also caused biasedness in the results of the study; in such situations, the researchers were supposed to ask the questions orally and check the answers-

Acknowledgements

Hereby the authors of the current paper acknowledge the help of all those who have cooperated in conducting the present research.

Conflicts of interest

None declared.

References

1. Suzuki Y, Maeda N, Hirado D, Shirakawa T, Urabe Y. Physical activity changes and its risk factors among community-dwelling Japanese older adults during the COVID-19 epidemic: associations with subjective well-being and health-related quality of life. *International journal of environmental research and public health*. 2020;17(18):6591.
2. Rababa M, Hayajneh AA, Bani-Iss W. Association of Death Anxiety with Spiritual Well-Being and Religious Coping in Older Adults During the COVID-19 Pandemic. *Journal of religion and health*. 2021;60(1):50-63.
3. D'Adamo H, Yoshikawa T, Ouslander JG. Coronavirus disease 2019 in geriatrics and long-term care: the ABCDs of COVID-19. *Journal of the American Geriatrics Society*. 2020;68(5):912-7.
4. Onder G, Rezza G, Brusaferro S. Case-fatality rate and characteristics of patients dying in relation to COVID-19 in Italy. *Jama*. 2020;323(18):1775-6.
5. Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, et al. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *The New England journal of medicine*. 2020; 382:1199-1207.
6. Volai N, and Zalipour S. The Effectiveness of Mean Therapy on Elderly Death Anxiety. *Journal of Aging Psychology*. 2015;1(1):49-55.
7. Seyedoshaohadayi M, Heshmat S, Seyedfatemi N, Haqqani H, Mehrdad N. Spiritual health of the elderly living in a nursing home and living at home. *Iranian Journal of Nursing*. 2014;26(81):11-20.
8. Sadridamirchi E, Smadifard H. The Role of Religious Adherence, Arak Social Support and Spiritual Welfare in Predicting the Fear and Anxiety of Elderly Death. *The Rise of Psychology*. 2018;7(1):232-46.
9. Bitarafan L, Kazemi M, Afrashteh YM. The relationship between attachment styles to God and coping with death anxiety in the elderly. *Elderly Journal*. 2017;4(12):446-57.
10. Hall G, Laddu DR, Phillips SA, Lavie CJ, Arena R. A tale of two pandemics: How will COVID-19 and global trends in physical inactivity and sedentary behavior affect one another? *Progress in cardiovascular diseases*. 2021;64:108.
11. Mukhtar S. Psychological health during the coronavirus disease 2019 pandemic outbreak. *International Journal of Social Psychiatry*. 2020;66(5):512-6.
12. Bidzan-Bluma I, Bidzan M, Jurek P, Bidzan L, Knietzsch J, Stueck M, et al. A Polish and German population study of quality of life, well-being, and life satisfaction in older adults during the COVID-19 pandemic. *Frontiers in psychiatry*. 2020;11: 585813.
13. Flett GL, Heisel MJ. Aging and feeling valued versus expendable during the COVID-19 pandemic and beyond: a review and commentary of why mattering is fundamental to the health and well-being of older adults. *International Journal of Mental Health and Addiction*. 2020:1-27.
14. Krendl AC, Perry BL. The impact of sheltering in place during the COVID-19 pandemic on older adults' social and mental well-being. *The Journals of Gerontology: Series B*. 2021;76(2):e53-e8.
15. SaidiMehar S, Gharavandi S, Izadmehar A, Mohammadi M, Hassani M. Study of relationship between spiritual health and depression among elderly people. *Scientific Journal of Ilam University of Medical Sciences*. 2015;23(3):16-25.
16. Chavoshian SA, Moeini B, Bashirian S, Fardmal J. The Role of Spiritual Health and Social Support in Predicting the Quality of Life of Nurses. *Journal of Education and Community Health*. 2015;2(1):19-28.
17. Jafari I, Hajlo N, Faghani R, Khazan K. The relationship between spiritual well-being and psychological hardness with mental health of the elderly. *Behavioral Science Research*. 2013;10(6):431-41.
18. Khalili Z, Sadrullahi A, Nazari R. Spiritual health and its related factors in the elderly referring to the parks of Khalkhal city. *Journal of Nursing Research*. 2015;10(4):127-35.

19. Brown DR, Carney JS, Parrish MS, Klem JL. Assessing spirituality: The relationship between spirituality and mental health. *Journal of spirituality in mental health*. 2013;15(2):107-22.
20. Memari A, Dalundi A, Mohammadi F, Falahikshoknab M, Bighlariyan A. The effect of spiritual care on the spiritual health of the elderly hospitalized in Kahrizak Charity Sanatorium. *Journal of Rehabilitation Research in Nursing*. 2016;3(1):1-8.
21. Khoshbakht M, Mohammadi Shahbolaghi F, Khankeh H, Dalvandi A. Spiritual health in the Iranian elderly: Concept analysis with Walker and Avant approach. *Iranian Journal of Aging*. 2019;14(1):96-113.
22. Choi A. Emotional well-being of children and adolescents: Recent trends and relevant factors. 2018.
23. Kakunje A, Mithur R, Kishor M. Emotional well-being, mental health awareness, and prevention of suicide: Covid-19 pandemic and digital psychiatry. *Archives of Medicine and Health Sciences*. 2020;8(1):147.
24. Kahneman D, Deaton A. High income improves evaluation of life but not emotional well-being. *Proceedings of the national academy of sciences*, 2010; 107(38):16489-16493.
25. Jackson SE, Hackett RA, Pardhan S, Smith L, Steptoe A. Association of perceived discrimination with emotional well-being in older adults with visual impairment. *JAMA ophthalmology*. 2019;137(7):825-32.
26. Khodadadi MR, Najdrahmati B, Farid Fathi M. Relationship between Sports Participation Motivation, Happiness and Academic Achievement of Secondary School Boys' Student in Bonab City. *Research on Educational Sport*. 2017;5(13):155-74.
27. Sharifi M, Mohammad Aminzadeh D, Soleymanisefat E, Sodmand N, Younesi S.J. The relationship between deterministic thinking and feelings of loneliness and depression in the elderly. *Journal of the Elderly*. 2016;12(3):276-87.
28. Sahaf R, Shams A, Fadayivatan R, Delbari A, Saboor M, Miraei S, Resafyani M. Determining the validity and reliability of the physical activity level questionnaire in the elderly of Tehran. *Elderly Journal*. 2014;9(3):206-48.
29. Bahrami Ain AlQasi H, Khodabakhshkolayi A, Taghvayi D. The effectiveness of group physical activity on sleep quality and quality of life of male elderly in Kahrizak nursing home. *Journal of Gerontology*. 2015;1(1):29-38.
30. Ceci R, Duranti G, Di Filippo ES, Bondi D, Verratti V, Doria C, et al. Endurance training improves plasma superoxide dismutase activity in healthy elderly. *Mechanisms of ageing and development*. 2020;185:111190.
31. Sun F, Norman IJ, While AE. Physical activity in older people: a systematic review. *BMC public health*. 2013;13(1):1-17.
32. Zhu J, Fan Y. Daily travel behavior and emotional well-being: Effects of trip mode, duration, purpose, and companionship. *Transportation Research Part A: Policy and Practice*. 2018;118:360-73. <https://doi.org/10.1016/j.tra.2018.09.019>.
33. Bahrami Einolqasi H, Khodabakhshi koolaei A, Taghvaei D. Efficacy of group physical activity on sleep quality and quality of life among older adults in Kahrizak nursing home. *joge*. 2016; 1(1):29-39
34. Bherer L, Erickson KI, Liu-Ambrose T. Physical exercise and brain functions in older adults. *Hindawi*; 2013.
35. Ahmadi M, Nodehi M, Ismaili M, Sadrullahi A. Comparing the quality of life of active and inactive elderly women with emphasis on physical activity. *Elderly Journal*. 2016;12(3):262-75.
36. Maugeri G, Castrogiovanni P, Battaglia G, Pippi R, D'Agata V, Palma A, et al. The impact of physical activity on psychological health during Covid-19 pandemic in Italy. *Heliyon*. 2020;6(6):e04315.
37. Paoli A, Musumeci G. Elite athletes and COVID-19 lockdown: future health concerns for an entire sector. *Multidisciplinary Digital Publishing Institute*; 2020;5(2):30.
38. Nguyen HC, Nguyen MH, Do BN, Tran CQ, Nguyen TT, Pham KM, et al. People with suspected COVID-19 symptoms were more likely depressed and had lower health-related quality of life: the potential benefit of health literacy. *Journal of clinical medicine*. 2020;9(4):965.

39. Chtourou H, Trabelsi K, H'mida C, Boukhris O, Glenn JM, Brach M, et al. Staying physically active during the quarantine and self-isolation period for controlling and mitigating the COVID-19 pandemic: a systematic overview of the literature. *Frontiers in psychology*. 2020;11:1708.
40. Kahneman D, Deaton A. High income improves evaluation of life but not emotional well-being. *Proceedings of the national academy of sciences*. 2010;107(38):16489-93.
41. Rego A, Ribeiro N, e Cunha MP, Jesuino JC. How happiness mediates the organizational virtuousness and affective commitment relationship. *Journal of business research*. 2011;64(5):524-32.
42. Diener E, Biswas-Diener R. *Happiness: Unlocking the Mysteries of Psychological Wealth (Chapter 8: The Happiest Places on Earth: Culture and Well-Being)*. Malden, MA: Blackwell. 2008:127-44.
43. Paloutzian RF, Ellison CW. Loneliness, spiritual well-being and the quality of life. *Loneliness: A sourcebook of current theory, research and therapy*. 1982;1.
44. Seyedfatemi N, Rezaei M, Gyuri A, Hosseini F. The effect of prayer on the spiritual health of cancer patients. *Monitoring Quarterly*. 2006;5(4):304-295.
45. Goethals L, Barth N, Guyot J, Hupin D, Celarier T, Bongue B. Impact of home quarantine on physical activity among older adults living at home during the COVID-19 pandemic: qualitative interview study. *JMIR aging*. 2020;3(1):e19007.
46. Iman MT, & Shirdel, E. The emotional well-being experience of the elderly living in a nursing home: a phenomenological study. *Journal of Qualitative Research in Health Sciences*. 2016;6(3):277-95.
47. Rodríguez GS, Antón AJM. Effect of induced emotions on strength in older people. *Scientific Research and Essays*. 2011;6(25):5369-73.
48. Seeman TE, Adler N, editors. *Older Americans: who will they be?* Phi Kappa Phi Forum; 1998: National Forum: Phi Kappa Phi Journal.
49. Sohrabi M, Abedanzadeh R, ShetabBushehri N, Parsai S, Jahanbakhsh H. The relationship between psychological well-being and psychological strength in the elderly: The mediating role of physical activity. *Elderly Magazine*. 2015;11(4):538-48.
50. Ferreira MJ, Irigoyen MC, Consolim-Colombo F, Saraiva JFK, De Angelis K. Vida fisicamente ativa como medida de enfrentamento ao COVID-19. *Arq Bras Cardiol*. 2020;114(4):601-2.
51. Simpson RJ, Katsanis E. The immunological case for staying active during the COVID-19 pandemic. *Brain, behavior, and immunity*. 2020;87:6.
52. KashaniMovahed B, Nikfarjad H, Shahbazzpour H.R, Davoodzadeh SK, Molay P, Molamahmoodi M. The relationship between regular physical activity and spiritual intelligence and psychological well-being in the elderly in Tehran. *Journal of Research in Religion and Health*. 2018;4(2):81-93.
53. Grant S, Todd K, Aitchison T, Kelly P, Stoddart D. The effects of a 12-week group exercise programme on physiological and psychological variables and function in overweight women. *Public Health*. 2004;118(1):31-42.
54. McFarland MJ. Religion and mental health among older adults: Do the effects of religious involvement vary by gender? *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. 2010;65(5):621-30.
55. Sadrullahi A, Khalili Z. Evaluation of spiritual health and related factors in the elderly of Kashan. *Quarterly Journal of Nursing*. 2015;1(2):94-104
56. Aung MN, Yuasa M, Koyanagi Y, Aung TNN, Moolphate S, Matsumoto H, et al. Sustainable health promotion for the seniors during COVID-19 outbreak: a lesson from Tokyo. *The Journal of Infection in Developing Countries*. 2020;14(04):328-31.
57. Abdelbasset WK. Stay Home: Role of physical exercise training in elderly individuals' ability to face the covid-19 infection. *Journal of Immunology Research*. 2020.
58. Lesser IA, Nienhuis CP. The impact of COVID-19 on physical activity behavior and well-being of Canadians. *International journal of environmental research and public health*. 2020;17(11):3899.
59. Chen P, Mao L, Nassis GP, Harmer P, Ainsworth BE, Li F. Coronavirus disease (COVID-19): The need to maintain regular physical activity while taking precautions.

- Journal of sport and health science. 2020;9(2):103.
60. Jiménez-Pavón D, Carbonell-Baeza A, Lavie CJ. Physical exercise as therapy to fight against the mental and physical consequences of COVID-19 quarantine: Special focus in older people. Progress in cardiovascular diseases. 2020;63(3):386. d
61. Fallon K. Exercise in the time of COVID-19. Aust J Gen Pract 2020; 49 Suppl 13. doi: 10.31128/AJGP-COVID-13.