

New Medical Innovations and Research

Onur Oral *

Open Access

Review Article

The Effect of Physical Activity on Psychological Health in The Process of Healthy Aging: A Narrative Review

Onur Oral 1*, Zeinab Rezaee 2, George N. Nomikos 3, Mumtaz enser 4, Taha Ucan 5

¹Ege University, Faculty of Sports Sciences, Izmir, Turkey

²Department of Exercise Physiology, Ferdowsi University of Mashhad, Mashhad, Iran

³Chios Hospital, Department of Orthopedic Surgery, Chios, Greece

⁴Anadolu University, Open Education Faculty, Depatment of Philosophy, Eskişehir, Turkey.

⁵Department of Radio TV and Cinema, Social Sciences Institute, Atatürk University, Erzurum, Turkey

*Corresponding Author: Onur Oral, Ege University Faculty of Sports Sciences, Department of Health Sciences and Sports, Izmir, Turkey.

Received date: April 15, 2024; Accepted date: April 23, 2024; Published date: April 30, 2024

Citation: Onur Oral, Zeinab Rezaee, George N. Nomikos, Mumtaz enser, Taha Ucan, (2024), The Effect of Physical Activity on Psychological Health in The Process of Healthy Aging: A Narrative Review, *J New Medical Innovations and Research*, 5(4); **DOI:**10.31579/2767-7370/101

Copyright: © 2024, Onur Oral. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract:

Background:

This review article aims to emphasize the psychological and overall health effects of regular physical activity during the healthy aging process.

Materials and Methods:

In the search for scientific literature for this review, data from the US National Library of Medicine (PubMed), MEDLINE, PsycINFO and SportDiscus were used, and the terms "physical activity", "psychological health", "healthy aging", and "overall health" were used. The relevant literature has also taken its source from the research of relevant articles from reference lists derived from data searches.

Results:

The literature on the effects of regular exercise on psychological and overall health is extensive and has elucidated the shortand long-term consequences of physical activity on mood, cognitive function, anxiety, depression, mental health, and overall health.

Conclusion:

Since it is known that regular exercise can be an effective tool in improving psychological health at almost all ages, but especially in older adults, attention should be paid to the importance of exercise in the healthy aging process. For this reason, it is thought that the implementation of exercise programs in residential areas and workplace environments will have a wide range of contributions to overall health and psychological health.

Keywords: physical activity; psychological health; healthy aging; overall health

Introduction

Aging is an inevitable biological process that is often associated with disease, but a healthy lifestyle can improve the quality of life as we age. A healthy lifestyle encompasses physical, mental, and psychological health, and a healthy diet and regular physical activity habits can be emphasized as supportive life choices to improve quality of life in old age. In scientific studies, it is shown that many psychological and mental problems, especially depression, are among the important factors affecting aging, as well as a wide range of biological factors such as social lifestyle, cell destruction, metabolic processes, psychological and physiological performance losses [1,9]. The most widely accepted medical approach for a healthier aging process suggests that maintaining an active level in terms of physical, mental, and psychological aspects during the aging process supports healthier aging. Since it is known that

the ability of individuals to disconnect from various activities as they get older is a factor that accelerates the aging process and reduces the quality of life, the intensity and diversity of social activities carried out by the individual during the aging process are of great importance for the quality of life in old age [13]. Since everyone may have to struggle with some diseases during the healthy aging process, medical support may be needed at different stages in terms of healthy living. Adequate and effective medical care and medication to eliminate these diseases can increase the individual's quality of life during the aging process, as well as preserving physiological performance. An individual's lifestyle choice stands out as an extremely determining factor in determining the quality of life in old age. [4, 17] It is observed that natural, balanced nutrition and regular physical exercise habits play an important role in increasing life expectancy and reducing many chronic health risks such as obesity,

osteoporosis, psychological problems, cognitive function, anxiety, depression and mental health. Regular physical activity is essential to maintain musculoskeletal health and prevent bone metabolism problems such as osteoporosis in old age. [18, 21] The relationship between healthy lifestyle and aging. highlights the importance of physical activity in maintaining a healthy lifestyle in old age [5]. Regular physical activity habits have the role of providing critical psychological support, such as improving mood, reducing stress, preventing or activating the treatment of depression, as well as increasing the quality of life in the healthy aging process. So, it's clear that the impact of physical activity on healthy aging is substantial, encompassing physical, cognitive, and mental health benefits. The fact that regular exercise habits are associated with symptoms of anxiety and depression and that exercise can have some therapeutic effects on the mind and brain can reveal the psychological health contributions of physical activity in the healthy aging process [16]. So, engaging in regular physical activity is a key component of successful aging, promoting independence, well-being, and a higher quality of life for older adults [15].

Discussion:

There are many scientific studies showing the positive contributions of regular exercise habits to psychological and general health. The majority of scientific research on this subject emphasizes that physical activity has a positive effect on psychological mood during healthy aging, and it is especially underlined that physical activity improves mood, reduces symptoms of depression and anxiety, and improves general psychological health [15, 22].

Exercise, as is often known, not only helps improve physical health parameters but it has also been shown in many studies to provide many benefits in terms of psychological and mental health as well as cognitive functions. It has been emphasized that exercise is effective in reducing depression and anxiety symptoms and can have a positive impact on quality of life, and can help improve mood and increase self-confidence [2, 11, 14]. Also, it is underlined that physical activity also reduces stress and helps people develop better ways to cope with it [19] Dishman & Sallis (1994) emphasized that physical activity is associated with increased general health and well-being and reduced symptoms of depression and anxiety in older adults. In another study conducted on this subject, Biddle & Mutrie (2001) revealed that the mood of older adults with regular physical activity habits improved and depression and anxiety symptoms tended to decrease.

In another study examining the relationship between physical activity and psychological health; McAuley & Blissmer (2000) found that physical activity improved self-efficacy and psychological well-being in older adults and underlined that regular physical activity habits are an effective factor in maintaining psychological health during healthy aging. Another study revealing similar results also showed that regular physical activity leads to a reduction in symptoms associated with various mental health conditions and, therefore, has a positive effect on psychological, mental and emotional well-being [7, 10].

In the light of the findings obtained from various studies, the supportive aspect of regular exercise habits, especially supported by aerobic exercises, in the protection and development of psychological health and in the treatment of anxiety and depression has been revealed in the process of healthy living and healthy aging. It is observed that it comes to the fore. [8, 20].

A review of numerous literature studies on exercise and psychological health suggests that physical activity during healthy aging can improve mood, reduce symptoms of depression and anxiety, and improve overall psychological and general health. However, in order to determine the optimal type, frequency and duration of physical activity required to achieve all these psychological and physical benefits, more research is needed to clarify the positive contributions of exercise on psychological health in the healthy living process. In addition, the physiological Auctores Publishing LLC - Volume 5(4)-101 www.auctoresonline.org

mechanisms through which the beneficial effects of physical activity on psychological mood occur need to be fully elucidated. So, it can be thought that more research is needed in this area to better understand these physiological mechanisms.

Conclusion:

Recent years have seen rapid urbanization and technological developments. However, it is important to recognize that these developments have led to a sedentary lifestyle for many individuals. While technology has improved living conditions, it has also led to a lack of physical activity, which can have negative effects on physical, metabolic and psychological health. It is widely accepted that regular physical activity is crucial for lifelong health, as it can help alleviate health problems caused by a sedentary lifestyle. Moreover, scientific studies have shown that regular exercise has a far-reaching effect on psychological health, especially in middle-aged individuals and older adults, improving cognitive functions and alleviating mental health problems such as anxiety and depression. It is widely accepted that maintaining an active lifestyle and participating in regular physical activity is crucial for lifelong health. According to scientific evidence, the habit of regular physical activity leads to an increase in blood levels of hormones such as serotonin and endorphins, an improvement in the circulatory system and an increase in blood flow to the brain. It is important to note that these benefits are objective and supported by scientific evidence. In the search for a healthy lifestyle, it has been emphasized by numerous studies that regular exercise is important for psychological well-being, as well as for its positive effects on general health. Clinical studies predict that regular physical activity can have a positive impact on brain function and emotional health, improve mental and psychological health, and even have positive effects on neurological disorders such as Alzheimer's, epilepsy, migraines and movement disorders.

As a result, it is possible to maintain the quality of life in old age, which is considered a progressive and natural process in physical, mental, and psychological terms. For this purpose, maintaining a healthy lifestyle; balanced, healthy nutrition preferences, regular physical activity habits, and a socio-psychologically healthy lifestyle are important. Such an aging process will bring many positive developments, including a healthy, long life and high quality of life.

Acknowledgment:

We would like to express our special thanks to Evangelia STAVROPOULOU for her very successful contribution to the literature research process and unique academic support in the publication during the process of this review article.

Conflict of interest:

The author certifies that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

Funding:

The author certifies that there is no funding from any financial organization regarding the material discussed in the manuscript or contributions:

Author contributions:

All the authors read and approved the final version of the manuscript.

References:

- 1. American Psychological Association. (2021). Aging and mental health.
- Andersson, E., Hovland, A., Kjellman, B., Taube, J., & Martinsen, E. (2015). Fysisk aktivitet lika bra som KBT eller

- läkemedel vid depression [Physical activity is just as good as CBT or drugs for depression]. Lakartidningen, 112, DP4E.
- 3. Biddle, S. J., & Mutrie, N. (2001). Psychology of physical activity: Determinants, well-being and interventions. Routledge.
- Bowling, A. (2005). Ageing well: Quality of life in old age. McGraw-hill education (UK).
- Brown, W. J. (2018). Physical activity and aging. In Encyclopedia of gerontology and population aging (pp. 1-7). Springer.
- Dishman, R. K., & Sallis, J. F. (1994). Determinants and interventions for physical activity and exercise. In C. Bouchard, R. J. Shephard, & T. Stephens (Eds.), Physical activity, fitness, and health: *International proceedings and* consensus statement (pp. 214-238).
- 7. Huppert, F. A. (2009). Psychological well-being: Evidence regarding its causes and consequences. Applied psychology: health and well-being, 1(2), 137-164.
- 8. Guiney, H., & Machado, L. (2013). Benefits of regular aerobic exercise for executive functioning in healthy populations. Psychonomic Bulletin & Review, 20(1), 73-86.
- Johnson, R. E. (2019). Mental and psychological health in aging. In Encyclopedia of gerontology and population aging (pp. 1-6). Springer.
- Mackenzie, K., & Williams, C. (2018). Universal, school-based interventions to promote mental and emotional well-being: What is being done in the UK and does it work? A systematic review. *BMJ open*, 8(9).
- Mahindru, A., Patil, P., & Agrawal, V. (2023). Role of physical activity on mental health and well-being: a review. *Cureus*, 15(1)
- 12. McAuley, E., & Blissmer, B. (2000). Self-efficacy determinants and consequences of physical activity. Exercise and Sport Sciences Reviews, 28(2), 85-88.

- 13. National Institute on Aging. (2021). Aging and your health.
- O. Oral, P. Tatlibal, U. Oral. (2022). Psychological and Social Results of COVID-19 Pandemic in Relation to Physical Activity: A Narrative Review. Scientific Chronicles; 27(2): 282-288.
- Penedo, F. J., & Dahn, J. R. (2005). Exercise and Well-Being: A Review of Mental and Physical Health Benefits Associated with Physical Activity. *Current Opinion in Psychiatry*, 18(2), 189-193.
- 16. Roman, M. (2010). Physical exercise as psychotherapeutic strategy: How long? What will it take? Issues in Mental Health Nursing, 31, 153-154.
- 17. Sarvimäki, A., & Stenbock-Hult, B. (2000). Quality of life in old age described as a sense of well-being, meaning and value. *Journal of advanced nursing*, 32(4), 1025-1033.
- Suominen, H. (2007). Physical activity and health: Musculoskeletal issues. Advances in Physiotherapy, 9(2), 65-75
- Swan, J., & Hyland, P. (2012). A review of the beneficial mental health effects of exercise and recommendations for future research. Psychology & Society, 5, 1-15.
- 20. Taylor, A. W. (Ed.). (2022). Physiology of exercise and healthy aging. Human Kinetics.
- 21. Witard, O. C., & Ball, D. (2018). The interaction between nutrition and exercise for promoting health and performance. Proceedings of the Nutrition Society, 77(1), 1-3.
- Wolf, S., Seiffer, B., Zeibig, J. M., Welkerling, J., Brokmeier, L., et. al., (2021). Is Physical Activity Associated with Less Depression and Anxiety During the COVID-19 Pandemic? A Rapid Systematic Review. Sports medicine (Auckland, N.Z.), 51(8), 1771–1783.



This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article Click Here:

Submit Manuscript

DOI:10.31579/2767-7370/101

Ready to submit your research? Choose Auctores and benefit from:

- > fast, convenient online submission
- > rigorous peer review by experienced research in your field
- > rapid publication on acceptance
- > authors retain copyrights
- unique DOI for all articles
- > immediate, unrestricted online access

At Auctores, research is always in progress.

 $\label{lem:lemmore} \textbf{Learn more at: } \underline{\text{https://auctoresonline.org/journals/new-medical-innovations-and-research}}$