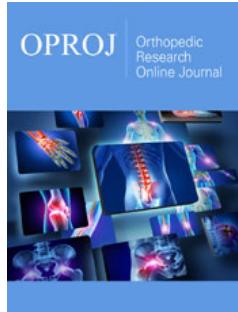


# The Role of Regular Exercise in Psychological Health: A Mini Review

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## Abstract

The concept of healthy life is evaluated together with both physical and psychological health. Enjoying life, happiness and quality of life will only be possible with the combination of physical, and psychological health. Some unusual and unexpected events that can be experienced from time to time in human life like sadness, anxiety, stress and similar psychological negativities. In such cases, feelings such as apathy, reluctance, sadness, unhappiness, pessimism, hopelessness and guilt is often seen in daily life habits. It has been determined that the individual moves away from social life and the quality of life decreases gradually due to the sense of helplessness felt against the disease. And in these mood disorders, it is observed that the individual tends to decrease in work performance, decrease in daily life activities and not enjoyment, and gradually deteriorate social relations. And in the following processes, the quality of life of the individual may deteriorate due to the negative effects on the individual's psychological and cognitive performance. However, it's understood that physical activity can not only help prevent psychological illness but do a lot of good in treating it. Exercise does not limit itself to just being about aerobic capacity, strength, or the size of muscles. It is beneficial for physical health, it cuts excess weight, improves one's mood. And also, weight balance is very important for a healthy life. Maintaining weight balance, that is, regular exercise habits is as important as healthy nutrition in weight control. In its most general definition, exercise can be defined as a series of activities that occur with energy consumption by using muscles and joints in daily life, increase heart and respiratory rate and result in fatigue of different intensities. It is certain that the quality of life will increase with the positive contributions of exercise in weight control, which is necessary for a healthy life.

## Introduction

While the psychological benefits are only part of all the benefits that come with increased physical activity, they should be considered as one of the reasons why more and more people are starting to exercise and becoming more physically active [1]. Regular exercise is one of the most effective ways to reduce ADHD symptoms. Exercise not only reduces ADHD symptoms but also improves concentration, memory, mood, and motivation [2].

Exercising regularly can have a highly beneficial effect on depression, ADHD, anxiety, and much more since exercise has been proven to treat mild to moderate depression as well as antidepressant medications [3]. With the physical and psychological effects that occur with the increase of endorphin secretion when exercise is done; depressed mood, stress, and tension are observed to decrease. Any physical activity can work, but regular exercise programs are known to contribute more. However, due to the positive contributions of well-adjusted aerobic exercises as a tool to reduce anxiety sensitivity; it can be said that exercise can be used naturally and effectively as an anti-anxiety treatment [4]. Physical activity programs, which are applied in addition to the medical treatment of many common psychological problems in recent years, give very successful results. Therefore, it can be said that exercise is a powerful

drug to treat much common mental health disorders such as depression, anxiety, stress, Attention Deficit Hyperactivity Disorder (ADHD), and Post-Traumatic Stress Disorder (PTSD) [5]. In addition to this, a good schedule to do during the day is known to be a very effective stress reliever as exercise facilitates sleep at night [6]. So it can be said that one of the most important contributions of exercise is by stimulating the release of "feel good" chemicals it helps the individual to improve your mood [7].

And also, according to the World Health Organization, one in four people worldwide is likely to experience psychological or neurological problems at some point in their lives. Approximately 450 million people suffer from such conditions, and psychological disorders appear to be among the leading causes of very common health problems worldwide. Psychological or neurological problems, which tend to increase day by day, affect large populations all over the world [8].

## Discussion

Physical activity is defined as any bodily movement that requires energy expenditure by skeletal muscles [9]. It is emphasized that it is very important for the health of people of all ages to lead a physically active life. Even after just a single session of physical activity (moderate to vigorous), positive effects can be seen on blood pressure, insulin sensitivity, sleep, anxiety symptoms, and cognitive status. Within a few weeks or longer, other benefits of physical activity begin to appear, such as increased cardiorespiratory fitness, reduction in blood pressure, improvement in muscle strength, and reduction in depressive symptoms [10]. For example, it improves the quality of life of people with non-psychiatric disorders such as peripheral arterial occlusive diseases [11] and fibromyalgia [12]. It also helps to relieve various conditions such as nicotine withdrawal [13] and menopause [14]. There are many studies showing that physical activity is effective in the treatment [15,16] and even prevention [17-20] of depressive and anxiety disorders. A physically active lifestyle is increasingly being recommended to people with or without the disease [21].

The most common mental disorders are anxiety and anxiety disorders. Participation in regular physical activity (moderate-to-vigorous) in adults and older adults has been reported to reduce anxiety symptoms. In addition, regular physical activity has positive effects on reducing the risk of depression in children and adults, and symptoms in people with depression [10]. Regular physical activity is reported to have antidepressant effects [22]. A meta-analysis study (1,837,794 people-49 prospective cohort studies) found that people with low physical activity were more likely to have depression than those with high levels of physical activity [22]. It is emphasized that the increased risk of cardiovascular disease in people with depression can be reduced with exercise programs added to the treatment of depression [23,24]. Lobitz et al. [24] applied a 7-week exercise program and anxiety management training to adult participants in a study investigating the effect of physical activity on anxiety levels. Afterwards, they achieved significant reductions in the State-Trait Anxiety Inventory scores of

the participants compared to the control group, and concluded that both aerobic exercise and anxiety management training should be a part of anxiety treatment programs [25]. Rief et al. [25], in their study with 40 patients with panic disorder (20 inpatients) and major depressive disorder (20 inpatients), and 20 healthy volunteers, found that physical activity increased the anxiety level of patients with panic disorder, but decreased the anxiety level in other groups [26]. In a survey conducted by De Mello et al. [26] on more than 1000 adult participants, it was determined that those who do not engage in physical activity are twice as likely to show symptoms of depression and anxiety compared to individuals who regularly engage in physical activity [27]. Remarkably, Mumba et al. [27] found that moderate to vigorous-intensity activity was significant predictors of depression [28]. Anxiety, nervousness, stress, fear and distrust are the main problems experienced by young people in the middle and late periods of adolescence [29]. The benefits of regular physical exercise are well known [30,31]. Araújo et al. [31] showed that physical activity, in addition to drug treatment, has a positive effect on anxiety and depression. However, it has shown that it has a positive effect on adolescent mental health, reducing the need for medication, public health expenditures, and future risks of mental illness [32]. It is emphasized that hormonal changes during and after childbirth are effective in the development of postpartum depression in women [33]. Mohammadi et al. [33] 127 women with an Edinburgh score below 15 weeks of gestation were randomly divided into three groups; the non-intervention group, the group that received training for exercise, the group that received exercise training during pregnancy and up to 2 months postpartum, and the postpartum period. It was found that there were no significant differences between the groups 1 and 2 months after birth ( $P>0.05$ ). Therefore, they found that there was no preventive effect on depression and fatigue for them to exercise during or after pregnancy [34]. Aguilar-Cordero et al. [34], in a study examining the effect of physical activity in water on the prevention of postpartum depression in pregnant women between 20-37 weeks, a statistically significant lower depression level was observed in pregnant women who participated in water activity three times a week according to the SWEP (Pregnant Water Exercises Research) method (Exp. gr.= $6.41\pm3.68$ ; Con. gr.= $10.17\pm2.38$ ) [35].

The understanding of the effects of physical activity on mental health by psychologists or psychiatrists can affect clinical practice in several ways. Being physically active can play a helpful and important role in the prevention and treatment of psychiatric diseases and in providing a more satisfying quality of life [21].

## Conclusion

During periods of psychological health deterioration, not only individual health but also daily living conditions, including work performances and social relationships, change for a certain period of time, due to the decrease in physical activity levels due to the increase in feelings of depression, irritability and fatigue. This mood disorder, loss of energy, reluctance in daily activities, and feelings of fatigue and pessimism can make themselves felt

intensely. In these periods, when thinking, speech, movements, and physiological functions slow down, the physical and psychosocial balance of individuals is adversely affected. For this reason, the psychological and social life balance of the individual is disturbed and psychological incompatibilities often occur. In these processes, psychological events such as the feeling of worthlessness and difficulty in making decisions affect the feelings and thoughts of the individual intensely. Regular exercise support to be provided to the individual in such cases where psychological health deteriorates gives very satisfactory results. Thus, while the individual's psychological and social structure develops, positive developments can be achieved in coping with this situation and preventing the recurrence of these relapses. As a result, with the support of physical exercise, the individual's quality of life will increase and he will be able to fully regain his psychological health.

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