

The role of exercise and physical activity in improving mental-being

Introduction:

The prevalence of mental health issues such as anxiety, stress and depression on this fast-paced world and growing evidence suggests that including physical exercise in our day to day lives can help improve the state of our mental health. In this research paper I will be delving further into the effects of physical activity in mental health and answering the following question: What areas of our mental health does physical activity improve? What can we do to improve our mental health against common mental disorders?

Thesis:

physical activity and mental health go hand in hand and improves different aspects of our mental state, and not engaging in regular physical activity can have a negative impact on one's mental health.

What areas of our mental health does physical activity improve?

Studies show that exercise can treat mild to moderate depression as effectively as antidepressant medication—but without the side-effects, of course. A recent study done by the Harvard T.H. Chan School of Public Health found that running for 15 minutes a day or walking for an hour reduces the risk of major depression by 26%. In addition to relieving depression symptoms, research also shows that maintaining an exercise schedule can prevent you from relapsing.[2]

Major depression is a common disorder in the US, higher among the female population than males, engaging in regular physical exercise reduces the risk of having depression and can improve symptoms experienced by people with depression [1] Compared to inactive people, people who are more physically active may experience improvements in cognition, including academic tests and neuropsychological tests involving processing speed and memory including executive functions.

[1] In addition to this physical activity had proven to reduce the risk of cognitive impairments such as Alzheimer's disease [1] Exercise is a powerful antidepressant for several reasons, one of them being it promotes positive changes in the brain including neural growth, reduced inflammation and promote the feeling and well-being and calm.[2]

- **Anxiety**

Exercise and physical activity relieves tension and stress, boosts physical and mental energy and released endorphins which improves well-being [2]

You can try:feeling the sensation of your feet hitting the ground or focusing on your breathing, by focusing on your body and how it feels as you exercise can be able to interrupt the flow of constant worries running around [2]

- **ADHD**

Exercising regularly is one of the effective ways to reduce common symptoms of ADHD and improve concentration. Memory and mood as physical exercise boosts the brain's dopamine, norepinephrine, and serotonin levels.[2]

You can try: studies show that engaging in complex activities such as martial arts, ballet, ice skating and rock climbing has a great impact on children with ADHD.[5] A study done by a graduate student in Hofstra university found that boys involved in martial arts finished more homework, broke fewer rules and got better grades[5] this is because aerobic activities boost cognitive activity

- **PTSD and Trauma**

Evidence shows that focusing on your body while exercises help your nervous system become 'unstuck' and move out of the immobilization stress response that is seen in PTSD or trauma.[2]

You can try: outdoor activity such as hiking, swimming, mountain climbing, skiing have been proved to reduce PTSD and trauma symptoms

Benefits of physical exercises on young children and older adults:

Older people who are active are shown to be healthier and, on an average live a longer life.[3] in addition to this exercise improves sleep which is important for older adults who suffer from insomnia [6].

Sports benefit children almost the same way it does adults, but the main difference is when kids start participating in sports at a young age tend to stay active when they are older, studies also suggest participating in team sports helps improve academic performance and leads to more after school participation.[3]

Conclusion:

In this research paper we have discussed the impact of physical on our mental wellbeing and have seen how physical exercise helps with our mental wellbeing and what exercises and activities you should consider while experiencing certain mental disorders such as anxiety, ADHD, PTSD and trauma. We have also seen the effects of physical exercises on kids and senior citizens.

1. [Physical Activity Guidelines 2nd edition.pdf](#)
2. <https://www.helpguide.org/articles/healthy-living/the-mental-health-benefits-of-exercise.htm>
3. <https://www.activenorfolk.org/2021/05/mental-benefits-of-sport/#:~:text=Exercise%20reduces%20the%20levels%20of,hard%20workout%20on%20the%20field.>

- 4.** <https://www.simplypsychology.org/mindbodydebate.html#:~:text=Descartes%20argued%20that%20the%20mind,people%20act%20out%20of%20passion>
- 5.** [https://thegreenfields.org/5-benefits-exercise-seniors-aging-adults/#:~:text=Improved%20Mental%20Health&text=Exercise%20produces%20endorphins%20\(the%20%E2%80%9Cfeel,insomnia%20and%20disrupted%20sleep%20patterns](https://thegreenfields.org/5-benefits-exercise-seniors-aging-adults/#:~:text=Improved%20Mental%20Health&text=Exercise%20produces%20endorphins%20(the%20%E2%80%9Cfeel,insomnia%20and%20disrupted%20sleep%20patterns).
- 6.** <https://www.aboutkidshealth.ca/article?contentid=641&language=english#:~:text=%22Feel%20good%22%20chemicals%20in,day%20are%20also%20better%20sleepers>.