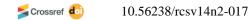


# The influence of physical activity on mental health: a systematic review

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# RESUMO

This study aims to analyze the relationship between regular physical activity and mental health. A systematic review of the literature was conducted, using electronic databases, such as PubMed and Scopus, to identify relevant studies published in the last 10 years. The results indicate a significant association between physical activity and reduced risk of mental disorders such as anxiety and depression. It is concluded that the promotion of physical activity can play an important role in the prevention and treatment of mental health problems.

Keywords: Physical activity, mental health, systematic review.

# **1 INTRODUCTION**

Mental health is a growing concern around the world, with disorders such as anxiety and depression affecting millions of people. Physical activity has been increasingly recognized as an important protective factor for mental health (Rosenbaum et al., 2014). This study aims to critically analyze the available evidence on the relationship between physical activity and mental health, highlighting the importance of this relationship for preventive and therapeutic interventions.

### **2 LITERATURE REVIEW**

The existing literature provides ample evidence that regular physical activity is associated with better mental health outcomes (Mammen & Faulkner, 2013). Longitudinal studies have consistently shown that physically active individuals have a lower risk of developing mental disorders, such as depression and anxiety, compared to those who are sedentary. In addition, physical exercise

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has been associated with a reduction in stress symptoms and improved self-esteem and psychological well-being (Schuch et al., 2016).

#### **3 METHODOLOGY**

A systematic review of the literature was conducted using the PubMed and Scopus databases. The search terms used included "physical activity", "mental health", "depression", "anxiety" and "systematic review". Studies published in the last 10 years that investigated the relationship between physical activity and mental health in adults were included. The inclusion criteria were original studies with robust methodology and results relevant to the research question.

### **4 RESULTS**

Analysis of the studies included in this systematic review revealed a consistent association between regular physical activity and better mental health (Stubbs et al., 2016). Several longitudinal studies have shown that physical activity is inversely related to the prevalence and incidence of mental disorders, such as depression and anxiety. In addition, exercise-based interventions have shown efficacy in treating these disorders, both alone and in combination with other therapeutic approaches (Gordon et al., 2017).

#### **5 DISCUSSION**

The results of this systematic review corroborate previous evidence indicating the benefits of physical activity for mental health (Hallgren et al., 2018). Promoting an active lifestyle should be a public health priority, especially considering the growing burden of mental disorders in society. However, more research is needed to elucidate the mechanisms underlying this relationship and to develop more effective interventions.

# **6 CONCLUSION**

Based on the findings of this systematic review, it is clear that regular physical activity is associated with better mental health. The inclusion of physical exercise programs in public health policies can contribute significantly to the prevention and treatment of mental disorders. However, more research is needed to fully understand this relationship and maximize its benefits.



#### REFERENCES

Rosenbaum, S., Tiedemann, A., Sherrington, C., Curtis, J., & Ward, P. B. (2014). Physical activity interventions for people with mental illness: a systematic review and meta-analysis. \*The Journal of Clinical Psychiatry\*, 75(9), 964-974.

Mammen, G., & Faulkner, G. (2013). Physical activity and the prevention of depression: a systematic review of prospective studies. \*American Journal of Preventive Medicine\*, 45(5), 649-657.

Schuch, F. B., Vancampfort, D., Richards, J., Rosenbaum, S., Ward, P. B., & Stubbs, B. (2016). Exercise as a treatment for depression: A meta-analysis adjusting for publication bias. \*Journal of Psychiatric Research\*, 77, 42-51.

Stubbs, B., Koyanagi, A., Schuch, F. B., Firth, J., Rosenbaum, S., Veronese, N., & Solmi, M. (2016). Physical activity and depression: a large cross-sectional, population-based study across 36 low-and middle-income countries. \*Acta Psychiatrica Scandinavica\*, 134(6), 546-556.

Gordon, B. R., McDowell, C. P., Lyons, M., & Herring, M. P. (2017). The effects of resistance exercise training on anxiety: A meta-analysis and meta-regression analysis of randomized controlled trials. \*Sports Medicine\*, 47(12), 2521-2532.

Hallgren, M., Herring, M. P., Owen, N., & Dunstan, D. (2018). Exercise, physical activity, and sedentary behavior in the treatment of depression: broadening the scientific perspectives and clinical opportunities. \*Frontiers in Psychiatry\*, 9, 1-6.