



CLSA Approved Project

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Project Title

Examining the Impact of Physical Activity on Cognitive Function and Mental Health: A Structural Equation Modelling Approach

Project Summary

Physical activity and exercise are associated with improved cognitive functioning and mental health. However, most studies rely on a single measure of cognitive function and mental health, which are both complex constructs that cannot be captured by any single measure. Structural equation modeling (SEM) measures relationships among observed and unobserved variables. Observed variables are directly measured, such as a questionnaire score or performance on a cognitive test, while unobserved variables are the constructs that the observed variables are meant to measure. Here, there are multiple variables measured that may better represent the unobserved constructs of cognitive function and mental health. Our purpose is to examine the effect of physical activity on cognitive function and mental health using SEM.

Keywords

Exercise, Physical activity, Cognitive function, Mental health, Structural equation models