
NEWSLETTER

Effects of Exercise Intervention on Child Mental Health

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PUBLISHED in *Sports and Science*, this study conducted a 12-week experiment on 169 primary school students, to examine the effects of exercise intervention on child physical self-esteem (Physical self-esteem is an important part of overall self-esteem and the earliest developed component of self-consciousness, involving the individual's views and evaluations on their own appearance, physique, physical ability, etc.), self-concept, and mental health, as well as the mediating role of physical self-esteem and self-concept in the influence of exercise intervention on child mental health. The findings of the study include:

- According to data analysis, exercise intervention has a positive impact on child physical health, self-concept, and mental health. Child physical self-esteem and self-concept are significantly and positively correlated with child mental health, so is child self-concept to child mental health.
- As per mediating effect analysis, total effect of exercise intervention on child mental health is 0.281; the path coefficients of exercise intervention to physical self-esteem, physical self-esteem to mental health, exercise intervention to self-concept, self-concept to mental health, and physical self-esteem to self-concept is 0.149, 0.394, 0.175, 0.517, and 0.280, respectively. All the path coefficients reach the significant level.
- The specific components of mediating path are displayed as follows: (1) indirect path (exercise intervention → physical self-esteem → mental health); (2) indirect path (exercise intervention → self-concept → mental health); (3) indirect path (exercise intervention → physical self-esteem → self-concept → mental health). The effect sizes of the three paths are 0.059, 0.091, and 0.021, accounting for 21%, 32.38%, and 7.47% of the total effect, respectively. The mediating effects of all three paths reach significant levels.

The study drew the following conclusions: (1) Exercise intervention significantly promotes child physical self-esteem, self-concept, and mental health. It imposes a direct effect on child mental health; the longer children exercise, the better their mental health. (2) Exercise intervention affects children's mental health through the mediating role of physical self-esteem and self-concept; that is, the longer the children's physical exercise, the higher the levels of their physical self-esteem and self-concept, which in turn, raise their mental health levels.

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