

## How does physical activity improve cognitive and mental health in children and teens?

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Dr. Lewis First, MD,MA, Editor-in-Chief, Pediatrics

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No one would argue with the premise that exercise is good for one's overall wellness—and often that wellness includes or implies improvements in one's cognitive ability and overall mental health. Yet how does physical activity affect brain development for the better in terms of pathophysiologic mechanisms? Lubans et al. (peds.2016-1642) were intrigued to better understand the connection between physical activity and cognitive and mental health and undertook a systematic review to see whether clear mechanisms for this premise have actually been studied.

25 articles were found sharing data from 22 studies and identifying interesting hypotheses regarding neurobiological, psychosocial, and behavioral mechanisms causing this connection, although no study could actually document a strong association between physical and mental health as a result of the mechanism studied. Thus, while this review is fascinating to read and consider possible pathways for the mechanistic connection, the data is just not as strong as one would like it to be—and perhaps will stimulate additional trials to find the elusive mechanism that will evidence-base the intuitive statement that physical activity is great exercise for the brain. Stretch your mind a bit and read this review to better appreciate the hypotheses being tested, even if not proven, to support the role of physical activity in enhancing or improving our cognitive and mental health.

## **Further Reading**

- · Physical Fitness in Young Adults Born Preterm
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