

Acute physical exercise improves executive function

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Lot Verburgh, from VU University Amsterdam, and colleagues conducted a literature review and meta-analysis of 19 studies to assess the effects of [physical exercise](#) on executive functions in children (age 6 to 12 years), adolescents (age 13 to 17 years), and young adults (age 18 to 35 years).

The researchers found that acute physical exercise had a significant

overall effect on executive functions, with no significant differences between the age groups. There was no significant overall effect of chronic physical exercise on executive functions. In meta-analyses, acute physical exercise had a significant effect on the domain's inhibition/interference control (d, 0.46: P

"The results suggest that acute physical exercise enhances executive functioning, which is highly relevant in preadolescent children and adolescents, given the importance of well-developed executive functions for academic achievement and daily life functioning," write the authors. "The results are highly relevant, given the current increase in obesity in children and adolescents and the increase in [sedentary behavior](#) in these age-groups."

More information: [Abstract](#)
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