

# Physical activity weakly associated with better late-life cognition

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Physical activity is associated with better late-life cognition, but the association is weak, according to a systematic review and meta-analysis published online Feb. 1 in *JAMA Network Open*.

Paula Iso-Markku, M.D., Ph.D., from the University of Helsinki, and colleagues examined how length of follow-up, baseline age, amount of [physical activity](#), and study quality modify the longitudinal associations of physical activity with cognition in a review of observational studies. Overall, 104 studies with 341,471 participants were included in the analyses.

The researchers found that after correction for funnel plot asymmetry, physical activity was associated with reduced incidence of cognitive impairment or decline (pooled risk ratio, 0.97), but in follow-ups longer than 10 years, there was no significant association observed. Physical activity was associated with follow-up global cognition and change in global cognition (standardized regression coefficients, 0.03 and 0.01, respectively) from trim-and-fill analyses; no clear dose-response or moderation was seen based on follow-up length, baseline age, study quality or adjustment for baseline cognition. Episodic memory and verbal fluency were the specific cognitive domains associated with physical activity (standardized regression coefficients, 0.03 and 0.05, respectively).

"This systematic review and meta-analysis found that the association between physical activity and [cognitive decline](#) was very small, with no evident dose-response association," the authors write. "With that said, even weak associations can be clinically significant from a population health perspective when physical activity continues over decades."

**More information:** Paula Iso-Markku et al, Physical Activity and Cognitive Decline Among Older Adults, *JAMA Network Open* (2024). [DOI: 10.1001/jamanetworkopen.2023.54285](https://doi.org/10.1001/jamanetworkopen.2023.54285)

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