

# Physical, cognitive performance linked in diabetes patients, research shows

November 13 2018

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Tests of physical performance, especially walking speed and grip strength, have been found to correlate with cognitive function in patients with diabetes, a discovery that could help identify signs of dementia

earlier.

Tingting Liu, assistant professor of nursing in the Eleanor Mann School of Nursing, and colleagues published the findings this week in the *Journal of Advanced Nursing*.

"Examining association of tests of physical performance with cognitive functioning in a diabetic population is important," Liu said. "This could identify patients with preclinical dementia who are otherwise missed." Liu added that this finding supports the practice of encouraging [diabetes patients](#) to exercise, and it underscores the importance of offering multidisciplinary health care for diabetes [patients](#).

The researchers used data from the China Health and Retirement Longitudinal Study, or CHARLS. This study collects a wide range of health and demographic data on Chinese adults over age 45. They used statistical analysis techniques to look for associations between tests of physical performance—including grip strength, walking speed, chair stands and balance—with measures of [cognitive functioning](#), such as figure drawing, word recall and the TICS-10, a measure of mental orientation and attention. The researchers found that walking speed was associated with figure drawing, and [grip strength](#) was associated with episodic memory and TICS-10 score.

Liu explained that with previous research showing that exercise can improve cognition in adults with diabetes, this discovery suggests that targeting [physical performance](#) in these individuals could also improve the associated cognitive skills.

**More information:** Meng Zhang et al. Physical performance and cognitive functioning among individuals with diabetes: Findings from the China Health and Retirement Longitudinal Study Baseline Survey, *Journal of Advanced Nursing* (2018). [DOI: 10.1111/jan.13901](https://doi.org/10.1111/jan.13901)

Provided by University of Arkansas

Citation: Physical, cognitive performance linked in diabetes patients, research shows (2018, November 13) retrieved 5 May 2024 from <https://medicalxpress.com/news/2018-11-physical-cognitive-linked-diabetes-patients.html>

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