

Learning several new things at once increases cognitive abilities in older adults

17 July 2019



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UCR psychologist Rachel Wu says one important way of staving off cognitive decline is learning new skills as a child would. That is, be a sponge: seek new skills to learn; maintain motivation as fuel; rely on encouraging mentors to guide you; thrive in an environment where the bar is set high.

"The natural learning experience from infancy to emerging adulthood mandates learning many real-world skills simultaneously," Wu's research team writes in a paper recently published in *The Journals of Gerontology, Series B: Psychological Sciences*.

Likewise, the group's hypothesis held, learning multiple new skills in an encouraging environment in older adulthood leads to [cognitive growth](#). The prize: maintaining independence in old age.

Building on lifelong learning research, previous studies have demonstrated the cognitive gains of older people learning new skills, such as photography or acting. But these skills were learned one at a time, or sequentially.

For Wu's studies, the researchers asked adults 58 to 86 years old to simultaneously take three to five classes for three months—about 15 hours per week, similar to an undergraduate course load. The classes included Spanish, learning to use an iPad, photography, drawing/painting, and [music composition](#).

The participants completed cognitive assessments before, during, and after the studies to gauge working memory (such as remembering a [phone number](#) for a few minutes); [cognitive control](#) (which is switching between tasks) and episodic memory (such as remembering where you've parked).

After just 1 ½ months, participants increased their cognitive abilities to levels similar to those of middle-aged adults, 30 years younger. Control group members, who did not take classes, showed no change in their performance.

"The participants in the intervention bridged a 30 year difference in cognitive abilities after just 6 weeks and maintained these abilities while learning multiple new skills," said Wu, who is an assistant professor of psychology.

"The take-home message is that older adults can learn multiple new skills at the same time, and doing so may improve their cognitive functioning," Wu said. "The studies provide evidence that intense learning experiences akin to those faced by younger populations are possible in older populations, and may facilitate gains in [cognitive abilities](#)."

More information: Shirley Leanos et al, The Impact of Learning Multiple Real-World Skills on Cognitive Abilities and Functional Independence in Healthy Older Adults, *The Journals of Gerontology: Series B* (2019). [DOI: 10.1093/geronb/gbz084](https://doi.org/10.1093/geronb/gbz084)

Provided by University of California - Riverside

APA citation: Learning several new things at once increases cognitive abilities in older adults (2019, July 17) retrieved 4 June 2021 from <https://medicalxpress.com/news/2019-07-cognitive-abilities-older-adults.html>

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