

Climbing trees can help cognitive skills

Physical activities that require people to control their bodies while processing new information helps improve working memory.

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Physical activity that makes a person process new information, such as navigating a tree with the hands and feet, can improve cognitive skills and working memory in children and adults. Photo by mimagephotography/Shutterstock

JACKSONVILLE, Fla., July 31 (UPI) -- Physical activities such as climbing a tree, running barefoot and navigating obstacles, even for a few minutes a day, can improve cognitive abilities, researchers found in a new study.

The aim of the study was to see the effect of proprioceptive activities, which involve the awareness of body positioning and orientation, on potential gains in working memory.

"Improving working memory can have a beneficial effect on so many areas in our life, and it's exciting to see that proprioceptive activities can enhance it in such a short period of time," said Tracy Alloway, an associate professor at the University of North Florida, in a [press release](#).

Researchers in the study recruited adults between the ages of 18 and 59. They tested their working memory and then asked them to complete physical activities that included proprioception and at least one other element such as route planning or locomotion. The activities included climbing trees, walking and crawling on a beam, moving while maintaining posture, running barefoot, and navigating obstacles.

Two hours after the tests, researchers tested the participants' working memory again, finding it had increased by 50 percent.

The researchers also tested two other groups, one a college class learning new information and the other a yoga class, to see if static activity had any effect on working memory. Neither group showed improvement after their activities.

"This research suggests that by doing activities that make us think, we can exercise our brains as well as our bodies," said Ross Alloway, a research associate at the University of North Florida. "This research has wide-ranging implications for everyone from kids to adults. By taking a

break to do activities that are unpredictable and require us to consciously adapt our movements, we can boost our working memory to perform better in the classroom and the boardroom.”

The study is [published in Perceptual and Motor Skills](#).