Doing the Tango Keeps the Brain in Step, Too

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WASHINGTON — The hot moves of the Argentine Tango not only keep the aging body in shape, they also may help sharpen the aging brain, according to a study out Tuesday.

That study, presented here at the annual meeting of the Society for Neuroscience, adds to a growing body of evidence indicating that such challenging leisure activities as dancing, chess or even gardening may offer a boost in brainpower that could offset the declines that can come with old age.

Previous studies in animals and in humans had suggested that a sweat-breaking workout may help keep brain cells in top form. But Patricia McKinley of McGill University in Montreal also knew that the activity had to be something that seniors would enjoy.

McKinley picked the tango, a dance that's both fun to do and involves a series of complex moves that can improve balance. Her team recruited 30 seniors ages 68 to 91. Half the group got tango lessons, and the other half were assigned to a walking group.

The dancers got a boost in self-esteem almost right away.

"They would come in with sweatpants and sneakers, but after the third or fourth class, they had on makeup and jewelry," McKinley says. The class was mostly older women, but older men came, too.

After 10 weeks, the team looked for improvements in brainpower. Both walkers and tango dancers had better scores on memory tests, but only the tango dancers improved on a multitasking test. Such a boost may translate to better abilities off the dance floor, such as the ability to talk on the phone while responding to an e-mail.

Tango dancers also gained improvements in balance and motor coordination. That finding suggests they'd be at less risk of falling, a significant gain for older, frail people who can break a hip and never fully recover, McKinley says.

Tango dancing isn't the only way to power up the brain.

A second study, also presented at the Society for Neuroscience meeting, suggests that a specialized computer game might do the same.

Michael Merzenich at the University of California-San Francisco and his colleagues designed a gamelike computer program that might improve the ability to retain information.

The game also trains older people to listen carefully to words, strings of words or sentences and then answer questions about what they've learned. Older people often have trouble with their hearing, and that can slow down or impair their ability to learn a new task, Merzenich says.

The group trained 42 seniors to use the computer program. They found the seniors did better on standard tests of memory and attention compared with 33 control-group seniors, some of whom used a computer during the eight weeks but not the specialized game.

Both studies underscore the importance of a good mental workout. "The brain is like a muscle," says Paul Coleman at the University of Rochester Medical Center. Seniors should pick an activity they enjoy, such as tennis or bridge, and then "just do it," Coleman says.