Can Dancing Reverse Brain Aging in the Elderly?

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Athletic activity is associated with improved brain function. But now, recent findings published in the journal Frontiers in Human Neuroscience suggest that aerobic exercise, in particular dancing, can help reverse the signs of aging in the brain among seniors, reports ScienceDaily.

For the study, researchers assigned elderly volunteers with an average age of 68, an 18-month weekly course of learning dance routines versus an endurance and flexibility regimen. Those in the more traditional exercise program participated in repetitive exercises, such as cycling or Nordic walking, while those in the dance group were challenged to grasp new types of choreography, including jazz, square, Latin-American and line dance. Steps, arm patterns, formations, speed and rhythms varied from week to week.

Results showed that both groups experienced an increase in the brain's hippocampus, a region of the organ prone to age-related decline and affected by diseases such as Alzheimer's. But scientists noted that those who danced attained better balance. They attributed this more noticeable change in seniors' behavior on individuals being tasked with memorizing dance routines under time constraints without being given cues by an instructor.

"I believe that everybody would like to live an independent and healthy life, for as long as possible," said Kathrin Rehfeld, a doctor at the German Center for Neurodegenerative Diseases in Magdeburg and the study's lead author. "Physical activity is one of the lifestyle factors that can contribute to this, counteracting several risk factors and slowing down age-related decline. I think dancing is a powerful tool to set new challenges for body and mind, especially in older age."

The researchers are also evaluating a sensor-based system called Jymmin (jamming and gymnastics) that generates melodies and rhythm based on physical activity. The scientists plan to test the program in a feasibility study on patients with dementia to gauge its effects on their brains.

Click here to read more about how dance classes offer seniors major health benefits.

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