

Tai Chi Improves Balance Control Of Visually Impaired Older People, Study

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AsianScientist (Dec. 22, 2011) - A study carried out by researchers from the Center for East-meets-West in Rehabilitation Sciences at Hong Kong Polytechnic University has found that practicing Tai Chi improves the balance control of older people with poor vision, usually a major problem for them.

Researchers designed and conducted a 16-week trial in residential care homes involving 40 people aged over 70. The home residents were divided into two groups – Tai Chi participants and the control group.

The Tai Chi participants were taught a modified 8-form Yang style routine and practiced this in 90-minute sessions, thrice a week for 16 weeks. The style emphasized multi-directional weight shifting, head and trunk rotation and awareness of body alignment. Residents in the control group participated in a musical activity instead.

The findings, published in the journal *Age and Ageing*, showed that the Tai Chi participants made significant improvements in knee proprioception (awareness of the position of one's limbs) and in their visual and vestibular ratios (ability to balance) compared to the control group.

The participants were assessed pre- and post-intervention using three tests: 1) passive knee joint repositioning to test knee proprioception; 2) concentric isokinetic strength of the knee extensors and flexors; and 3) a sensory organization test to quantify an individual's ability to maintain balance in a variety of complex sensory conditions.

This study's results support the findings of a previous study published in 2008, which reported that the knee joint proprioception of persons with normal vision could be improved with 16 weeks of Tai Chi training. This study extends those findings to visually impaired older people.

“Our study shows that Tai Chi can be a suitable form of exercise for those with visual impairment and indeed assists with improving their balance control,” said Dr. William Tsang, senior author on the paper.

“It would be interesting to extend this study to involve community dwelling older people, who tend to be more independent and could benefit differently from the training,” he added.

The article can be found at: [Chen EW et al. \(2011\) The effects of Tai Chi on the balance control of elderly persons with visual impairment: a randomised clinical trial.](#)

Source: [British Geriatric Society](#).

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