

# Applying Tai Chi for Memory program to Older Adults at High Risk for Dementia

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# Introduction

- Tai Chi as a mind-body exercise has been introduced to those with various health problems, and getting more attention from health professionals for its health benefits.
- An adapted form of Tai Chi can be applied to those with impaired cognitive function, focusing on physical and cognitive functioning and quality of life.

# **Study Aims**

■ The purpose of this study was to explore the feasibility of Tai Chi based health promotion program specifically developed for older adults at high risk for dementia for 3 months, and to examine its effects on mobility, balance, cognitive function, and quality of life.

## Methods

- Feasibility study with one group pretest-posttest design
- Approved by the institutional review board
- Potential subjects invited from two community health centers located in rural area of South Korea.
- Tai Chi for memory program
- Delivered twice a week for 60 minutes for 12weeks.
- Safety monitoring during TCM training sessions.

#### Principle Outcomes Tai Chi program Balance • Warming up 10mins Movement control **Mobility (TUG) 5-10mins Cognitive function** Body structure • Main exercise 20-30mins (MOCA-K) • Internal component **Depression(GDS-K)** 10mins Cool down **Quality of Life (SF-12)**

Program features of Tai Chi for older adults at high risk for dementia

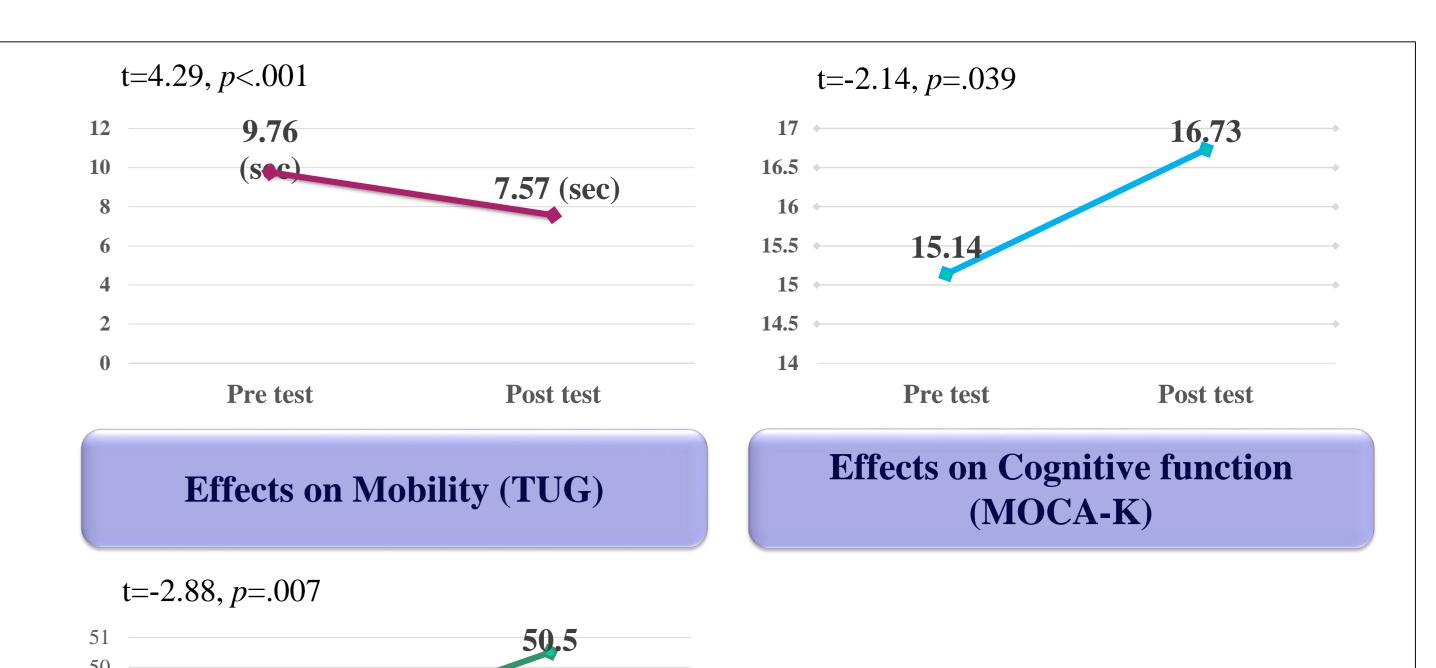
- Inclusion criteria
- 1) 75 years or older
- 2) referred by community health centers for mild cognitive impairment or high risk for dementia
- 3) willing to participate in the program for 12 weeks
- Outcomes were measured at pretest and after 12 weeks of the TC program.





## Results

- Demographic of Participants (n=33)
- 2 men, 31 women
- Average age 78
- Average attendance rate 78%
- Paired t-test indicated that older adults at high risk for dementia who participated in 78% of TC for memory program showed improved mobility (TUG, t=4.29, p<.001), improved cognitive function(MOCA-K, t=-2.14, p=.039), and mental component of quality of life(SF-12, t=-2.88, p=.007).
- Balance and physical component of quality of life showed the tendency to improve but not statistical significant.



### Conclusions

- Tai Chi has been safely applied to older adults who are at high risk for dementia for 12 weeks with no adverse effects.
- The program was well received by the participants.

Pre test

Effects on Mental component of QoL

(SF-12)

■ The study findings revealed the potential for Tai Chi as community health promotion program to improve physical and cognitive functioning and their quality of life. Further studies are warranted to examine the health benefits of Tai Chi in this population with randomized clinical trial and longer study period.

# Acknowledgments

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