

PICO Question Rationale

Is Tai Chi or Yoga more effective in improving Berg Balance scores in community dwelling adults over 65?

Falls can be detrimental to older adults in terms of finance and independence which affects their quality of life¹⁻⁵. To find the best intervention to improve balance and prevent falls will help the older population enjoy their golden years as fully as possible. Tai Chi and Yoga both have theories supporting their use in improving balance but, it is not known which method is more beneficial. The purpose of this question and literature review was to determine which method proves to be more beneficial in improving balance scores and therefore functional balance.

Summary Points

1. A greater body of research exists that supports tai chi as an effective intervention in improving balance and preventing falls in the older adult population.
2. Both tai chi and yoga sessions include warm-up, intervention, and cool-down although each have varying lengths of time devoted to each section.
3. Only one study was found that directly compares tai chi and yoga. Tai chi proved to be more beneficial in improving balance in older adults.
4. Both tai chi and yoga are more effective in improving balance than no exercise at all.

Clinical Application

Based on these findings, recommending physical activity to older adults is important in improving their physical well-being as well as socialization⁶. Interaction with peers as well as focusing on balance improvement can help improve or maintain their quality of life with increasing age. Although there is no strong research to support the use of tai chi over yoga or vice versa, research has shown that either intervention may improve balance. Making recommendations for either intervention should be based on the clients' ability. Positions and poses from tai chi or yoga may be used in isolation as treatment during a physical therapy session. As with any recommendation, it is important to understand the client's abilities before recommending a program.

References:

1. American Geriatrics Society, British Geriatrics Society, American Academy of Orthopedic Surgeons Panel on Falls Prevention. Guideline for the prevention of falls in older persons. *Journal of American Geriatrics Society*. 2001; 49:664-72.
2. Campbell AJ, Borrie MJ, Spears GF. Risk factors for falls in a community-based prospective study of people 70 years and older. *Journal Gerontological Medicine Science* 1989; 44: M112-7.
3. Robertson MC, Devlin N, Scuffham P et. al. Economic evaluation of a community based exercise programme to prevent falls. *Journal of Epidemiology Community Health* 2001; 55:600-6.

4. Guidelines for the prevention of falls in older persons. American Geriatrics Society, British Geriatrics Society, and American Academy of Orthopedic Surgeons Panel on Falls Prevention. *Journal of the American Geriatric Society*. 2001; 49:664-7.
5. Vellas BJ, Wayne SJ, Romero LJ, Baumgartner RN, Garry PJ. Fear of falling and restriction of mobility in elderly fallers. *Age and Ageing* 1997;26:189–193.
6. Zettergren KK, Lubekski JM, Viverito JM. Effects of a yoga program on postural control, mobility, and gait speed in community-living older adults: a pilot study. *J Geriatr Phys Ther*. 2011; 34: 88-94.