

---

## A review of clinical trials of tai chi and qigong in older adults

Rogers CE, Larkey LK, Keller C

---

### CRD summary

This review concluded that physical activity interventions that involving t'ai chi or qigong may improve outcomes that include physical function, blood pressure, risk of falls and depression and anxiety in older people. Poor reporting of review methods, risk of language bias and lack of validity assessment of the included trials mean that the reliability of the conclusions is uncertain.

### Authors' objectives

To assess the effects of t'ai chi and qigong on physical and psychological health outcomes in people aged over 55 years.

### Searching

CINAHL, PsycINFO, PubMed and The Cochrane Library were searched for articles published between 1993 and 2007. Searches of Google Scholar, unspecified secondary sources and handsearching were performed. Search terms were reported. Only English-language studies were included.

### Study selection

Randomised controlled trials (RCTs) in which t'ai chi or qigong was the principal intervention and where participants were older than 55 years were eligible for the review. Participants had to live in the community or in independent living facilities. Included studies reported a wide variety of outcomes, mainly related to falls and balance, physical function, cardiovascular health and psychological health (depression or anxiety). Most participants were women. Most included trials recruited participants with a history of chronic disease, but some involved healthy older people. Details of the intervention varied between trials, but typically involved a 60-minute session two or three times a week. Intervention length ranged from three weeks to 12 months (three to six months was most common). Control groups received a variety of interventions, which included other exercise interventions, health education, usual care and remaining on a waiting list.

The authors stated neither how the studies were selected for the review nor how many reviewers performed the selection.

### Assessment of study quality

The authors did not state that they assessed validity.

### Data extraction

The authors stated neither how data were extracted for the review nor how many reviewers performed the extraction

### Methods of synthesis

A narrative synthesis by type of outcome (balance and falls, physical function, cardiovascular health, psychological outcomes and disease outcomes) was presented. Differences between studies were evident from tables and were discussed in the text.

### Results of the review

Thirty-six RCTs with 3,799 participants (range 14 to 702) were included.

Most studies reported improvements in outcome in the t'ai chi or qigong group compared with the control group.

### Authors' conclusions

Interventions that used t'ai chi and qigong may help older adults to improve physical function and reduce blood pressure, fall risk and depression and anxiety.

### CRD commentary

This review addressed a clear question and had clear inclusion criteria for participants, intervention and study design. Inclusion criteria for outcomes were broad. The authors searched a reasonable range of sources, but limitation of the search to studies published in English implied a significant risk of language bias: t'ai chi and qigong originate from traditional Chinese medicine and any trials published in Chinese would have been missed. Risk of publication bias was not assessed. Validity of included trials was not assessed, which meant that reliability of the trials and any synthesis based on them was uncertain. Review methods were not reported, so the risk of reviewer errors and/or bias affecting study selection and data extraction was unclear. Relevant details of included studies were presented. Use of a narrative synthesis by type of outcome was appropriate. The authors' conclusions reflected the evidence presented, but the limitations of the review, particularly risk of language bias and lack of validity assessment, suggest that the reliability of the conclusions is uncertain.

### Implications of the review for practice and research

**Practice:** The authors did not state any implications for practice.

**Research:** The authors stated that future research should consider the spiritual elements of t'ai chi and qigong and should address applicability of t'ai chi and qigong to different racial and ethnic groups.

### Funding

National Institute of Nursing Research, Award Number F31NR010852.

### Bibliographic details

Rogers CE, Larkey LK, Keller C. A review of clinical trials of tai chi and qigong in older adults. *Western Journal of Nursing Research* 2009; 31(2): 245-279

### PubMedID

19179544

### DOI

10.1177/0193945908327529

### Original Paper URL

<http://wjn.sagepub.com/cgi/content/abstract/31/2/245>

### Other URL

<http://ukpmc.ac.uk/articlerender.cgi?artid=1978735&rendertype=abstract>

### Indexing Status

Subject indexing assigned by NLM

### MeSH

Adaptation, Psychological; Aged; Breathing Exercises; Health Promotion; Humans; Middle Aged; Physical Fitness; Postural Balance; Randomized Controlled Trials as Topic; Tai Ji

### AccessionNumber

12009105017

### Date bibliographic record published

05/08/2009

### Date abstract record published

31/03/2010

### Record Status

This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.