

Identifying Credible Research

Not all published research reports findings that are based on well-designed research. Findings from poorly designed studies are not useful in supporting or not supporting the effects of tai chi. So how does someone who is not a researcher identify credible research?

Although identifying credible research is a complex process for research scientists, a non-researcher can use a few simple guidelines. Many other criteria are used by researchers, but these simple guidelines will be helpful in determining potentially credible research. A lot of this information can be found in the abstract while others will require looking at the article about subjects, measurement and study design.

Where to Find Credible Research

- Obtain research abstracts and articles from good databases:
 - PubMed of the National Library of Medicine
 - Center for Disease Control
- Clinical Guidelines from national clinical societies (e.g., American Geriatrics Society, American Heart Association)
- Clearing houses for evidence-based interventions
 - Cochran Review
 - US Preventative Services Task Force
- Comprehensive reviews of research
- PubMed of the National Library of Medicine
- Clinical guidelines of clinical societies

Criteria for Credible Research

Adequate Sample Size

- The larger the sample the more credible the study is. At least the study should have more than 100 subjects

Information about What Has Happened to Subjects

- Number meeting study criteria and why others did not
- Number and reasons for subjects dropping out or lost to follow-up
- Number left of subjects left for data analysis

Valid Measures of Outcomes

- Standard measures: these are those seen in most studies
- For example,
 - Muscle strength: Timed chair stands, dynamometer

- Mobility: Get up and go, timed chair stands, 6-minute walk

Randomized Controlled Trial

- Random assignment to groups
- Control over the tai chi
 - Protocols for the tai chi
 - Training and monitoring of tai chi instructors and data collectors

Length of the Tai Chi Intervention and Adherence

- The tai chi intervention should be at least 8 weeks and 1 time a week.
- Long term effects of tai chi require the intervention to last about a year.
- Adherence to 75% of intervention (e.g., 9 weeks of a 12-week tai chi intervention)

Examples of High Quality Studies