Tai Ji Quan: Moving for Better Balance®
Program Information

General Program Information

Tai Ji Quan: Moving for Better Balance® (TJQMBB; formally known as Tai Chi: Moving for Better Balance®) is an evidence-based fall prevention program derived from a contemporary routine known as Simplified 24-Form Tai Ji Quan (pronounced tye gee chuwan). TJQMBB consists of an 8-form core with built-in practice variations and a subroutine of Tai Ji Quan - Mini Therapeutic Movements®, which, collectively, comprise a set of functional Tai Ji Quan exercises. TJQMBB represents a substantive enhancement of traditional Tai Ji Quan training and performance as it transforms martial arts movements into a therapeutic regimen aimed at improving postural stability, awareness and mindful control of body positioning in space, functional walking, movement symmetry and coordination, range of motion around the ankle and hip joints, and lower-extremity muscle strength.

Program Objectives

To improve strength, balance, mobility and daily functioning, and prevent falls in older adults and individuals with balance disorders.

Intended Target Population

- The primary focus is on community-dwelling older adults and people with a history of falls, balance disorders, leg muscle weakness, abnormal gait or walking difficulty.
- The program is able to accommodate people with a mild level of mobility difficulty (e.g., people who are occasional cane users).

Instructors

Background requirement: Experience working with and teaching physical activity to older adults is preferred. Knowledge or previous training/practice experience in Tai Ji Quan is not required.

Training requirement: All TJQMBB instructors need to be trained by attending a community instructor training workshop (required) conducted by an authorized TJQMBB trainer.

Training content: The workshop, which lasts 2 full days, covers program objectives, core training protocols, and implementation topics. In addition, a minimally 1-day follow-up refresher course 3-5 months following the 2-day workshop is highly recommended.

Outcomes: At the end of the 2-day training workshop, trainees will have a functional understanding of the TJQMBB program, including its training components, and be familiar with forms/movements in both the core and sub-core protocols, and class teaching emphases and fidelity criteria. The trainees are expected to teach a class, as soon as practical, following the workshop to reinforce the knowledge and skills learned during the training program.

Certification: A certificate of completion is awarded to trainees to indicate successful completion of the training program. The program also offers Level-1 and Level-2 certifications for instructors who have completed certification requirements (review the information at https://tjqmbb.org/index.php/instructor-training/).

Training Protocol

Class practice: Each class session consists of three parts: (1) brief Tai Ji Quan-based warm-up movements, (2) core practice emphasizing integration of individual forms, variation in forms, and mini therapeutic movements, and (3) a brief period of breathing cool-down exercises.

Teaching emphasis: Self-initiated and coordinated movement sway around ankle and hip joints with control of the center of gravity, rotational weight shifting initiated by the trunk, and eye-head-hand coordination are key elements of the program.

Practice parameters: A full 60-minute class session conducted at least twice per week for 24 consecutive weeks or longer.

Teaching evaluation: TJQMBB instructors are expected to adhere to the program's training protocol. Thus, a fidelity checklist is available to provide standardized, peer-to-peer instructor evaluation criteria.

Class Set Up

***Space and equipment*:** A room with approximately 500 square feet, equipped with armless, slide-resistant chairs.

Recommended class size: 8-15 students.

Student clothing preference: Students are encouraged to wear loose, comfortable pants and top; flat-soled shoes.

Program Materials

The following materials are available to TJQMBB instructors:

- Class Teaching Plan
- Teaching videos – a teaching companion that is accessible to trained instructors at: tjqmbb.org (registration is required)

Target Health Outcomes

Recommended measures: Timed Up&Go (an objective measure of mobility), monthly falls surveillance (via a self-report fall diary).

Expected outcomes: Consistent class attendance (at least 70% of available class sessions) is expected to result in improvement in balance and mobility and reductions in the incidence of falls.

Instructor Training

Currently the following two formats are available for a 2-day workshop:

- On-site workshop (≤15 trainees):
  - Cost: between $1,200 and $1,500 per day, plus travel-related expenses
- Local workshop (e.g., conducted at ORI):
  - Cost: $375

Class implementation costs

Expenses include hourly instructor pay and room rental, if applicable.

Program Technical Support

Technical support for teaching classes is provided through following channels:

- Online materials (tjqmbb.org).

- Consultations with the program author and developer – Fuzhong Li, Ph.D., fuzhongl@ori.org and/or local authorized trainers. Fees may apply.

Program Cost-Effectiveness

A preliminary study shows that TJQMBB is potentially a cost effective approach to preventing falls in older adults[8,12-15] and people with Parkinson's disease.[11]

Trademark

The following three are trademarks of Exercise Alternatives, LLC.

- Tai Ji Quan: Moving for Better Balance®
- Tai Chi: Moving for Better Balance®
- Tai Ji Quan – Mini Therapeutic Movements®

Program Licensing

Beginning January 2018, there is a flat $200 annual license fee for the use of the TJQMBB program. The fee covers the following benefits:

1. unlimited use of the program to be delivered in local communities,
2. unlimited number of TJQMBB training and refresher workshops conducted by authorized trainers at local communities,
3. full access to the TJQMBB training materials that are currently available online at tjqmbb.org.

Research Biography

Review articles on the conceptual basis and technical details of TJQMBB

1. Li F. Tai Ji Quan exercise for people with Parkinson's disease and other neurodegenerative movement disorders. *International Journal of Integrative Medicine*. 2012;1:4 doi: 10.5772/56243.
2. Li F, Transforming traditional Tai Ji Quan techniques into integrative movement therapy - Tai Ji Quan: Moving for Better Balance. *Journal of Sport and Health Science*. 2013;3:9-15.

Efficacy studies in people with Parkinson's disease using TJQMBB

3. Li F, Harmer P, Fitzgerald K, et al. Tai Chi and postural stability in patients with Parkinson's disease. *New England Journal of Medicine*. 2012;366:511-519.
4. Li F, Harmer P, Lui Y, et al. A randomized controlled trial of patient-reported outcomes with Tai Chi exercise in Parkinson's disease. *Movement Disorders*. 2013; doi:10.1002/mds.25787.

Dissemination studies on implementation of TJQMBB in community and clinical settings

5. Li F, Harmer, P, Stock R, et al. Implementing an evidence-based fall prevention program in an outpatient clinical setting. *Journal of American Geriatrics Society* 2014;61:2142-2149.
6. Fink D, Houston K. Implementing an evidence-based Tai Ji Quan program in a multicultural setting: A pilot dissemination project. *Journal of Sport and Health Science*. 2014;3:27-31.
7. Leung J. Implementing Tai Ji Quan: Moving for Better Balance in real-world settings: Success and challenges. *Journal of Sport and Health Science*. 2014;3:34-35.
8. Li F, Harmer, P. Protocol for Disseminating an Evidence-Based Fall Prevention Program in Community Senior Centers: Evaluation of Translatability and Public Health Impact via a Single Group Pre-Post Study. *American Journal of Public Health*, 2016;106;2026-2031.

Study on the potential utility of TJQMBB in improving function

9. Li F, Harmer P, Lui Y, Chou LS. Tai Ji Quan and global cognitive function in older adults with cognitive impairment: A pilot study. *Archives of Gerontology and Geriatrics*. 2013;58:434-439. doi: 10.1016/j.archger.2013.12.003.
10. Li, F. The effects of Tai Ji Quan training on limits of stability in older adults. *Journal of Clinical Interventions in Aging*. 2014;9:1261-1268.

Studies on program implementation costs and cost-effectiveness

11. Li F, Harmer P. Tai Ji Quan intervention to reduce falls in Parkinson's disease: An economic evaluation. *Preventing Chronic Disease*, 2015;12:140413.
12. Li F, Harmer P, Glasgow R, et al. Translation of an effective Tai Chi intervention into a community-based falls prevention program. *American Journal of Public Health*, 2008;98(7): 1195-1198.
13. Li F, Harmer P, McAuley E, et al. An evaluation of the effects of Tai Chi exercise on physical function among older persons: A randomized controlled trial. *Annals of Behavioral Medicine*, 2001;2:89-101.
14. Carande-Kulis V, Stevens JA, Florence CS, Beattie BL, Arias I. A cost-benefit analysis of three older adult fall prevention intentions. *Journal of Safety Research*, 2015;http://dx.doi.org/10.1016/j.jsr.2014.12.007.

15. Li F, Harmer P, Eckstrom E, et al. Cost-effectiveness of a therapeutic Tai Ji Quan fall prevention intervention for older adults at high risk of falling. *Journal of Gerontology: Medical Sciences*. 2019;74(9):1504-1510.

Note: All articles can be downloaded free at: http://tjqmbb.org/publications.html