



EVALUATION OF TAI CHI CHUAN (TCC) TRAINING EFFECTS ON MUSCULOSKELTAL SYSTEM IN HEALTHY YOUNG SUBJECTS

A.CIMBIZ*

Abstract

Tai Chi Chuan (TCC) can be defined as a series of graceful movements that are made for a spiritual, mental and physical health. The purpose of our study was to evaluate the effects of 37 TCC movements as exercise training on balance, kinesthetic sense and flexibility in sedentary university students. 23 students as TCC group aged 20 ± 2.76 (16 female, 9 male), and 14 students as a control group aged 20.02 ± 3.07 (9 female, 5 male) were participated in and practiced 8 weeks (3 days a week) TCC exercise program. Each session consisted of 20 minutes of warm-up (3-min. breathing controlled walk, calistening and stretching exercises) 24 minutes of practiced 37 postures Yang style TCC program (originally 108 postures) and 10 minutes cool-down exercises. Static and dynamic balance, sit and reach test, flexibility tests and kinesthetic sense were evaluated before and after TCC training. Static balance with eyes closed, dynamic balance with eyes open, flexibility (hyperextension and sit and reach tests) and in kinesthetic sense were improved with statistical significance after TCC training ($p < 0.05$). 8 weeks TCC training has improved the balance, flexibility and kinesthetic sense in sedentary young subjects as in elderly. TCC is a low-technology exercise and can be easily implemented in different communities. TCC has potential benefits in health promotion, and is appropriate for implementation in community.

INTRODUCTION

Shadow boxing (Tai Chi Chuan (TCC)) is a traditional Chinese martial art. It consists of many fundamental postures having graceful movements. During the performance of TCC, deep breathing and mental concentration are required to achieve harmony between body and mind [1,2]. Proponents claim TCC is suitable for older persons and for patients with chronic diseases. Several cross-sectional studies have also suggested that TCC training might be beneficial to health [3,4]. However, the effect of TCC training on the maintenance of balance, kinesthetic sense and flexibility in healthy sedentary young subject are unknown. The purpose of this study is to demonstrate the effect of eight weeks 37 TCC movement as exercise training on balance, kinesthetic sense and flexibility in sedentary healthy university students.

Key Words: Tai Chi Chuan (TCC), unipedal balance test, flexibility, kinesthetic sense.