A Simpler Eight-Form Easy Tai Chi for Elderly Adults

Fuzhong Li, K. John Fisher, Peter Harmer, and Machiko Shirai

Low-impact exercise that appeals to elderly adults and can be done almost anywhere provides both societal and individual benefits. One such program is Tai Chi, a traditional Chinese dance-like conditioning exercise. The article presents an easily adopted and adapted 8-form Tai Chi program (Easy Tai Chi) designed for older adults or individuals with mobility challenges or physical impairments. Derived from a simplified 24-form Yang-style Tai Chi, it stresses postural control and body-limb rotational movements. Easy Tai Chi can be performed either standing or sitting, depending on the physical and functional limitations of participants. Preliminary data indicate a number of health benefits of Easy Tai Chi compared with a traditional exercise program. Although subject to further empirical evaluation, Easy Tai Chi can be applied in research settings to investigate prevention or amelioration of hypokinetic diseases and in clinical settings to treat physically frail seniors or others with functional impairments of the musculoskeletal or cardiovascular system.

Key Words: exercise, balance, older adults

Tai Chi (or to be exact, Tai Ji Quan, as it is known in China), which was originally developed for martial-arts purposes more than 300 hundred years ago (China Sports, 1980), is an exercise modality with increasing appeal and relevance to the elderly. In a continually evolving process, Tai Chi has been used in China as a traditional health-enhancing exercise, for individuals of all ages, to improve fitness, health, and longevity (Hong & Lu, 1999). With growing recognition of its physical- and mental-health benefits, its popularity is on the rise, and it has become one of the most popular forms of exercise in the world. Tai Chi is especially appealing to the elderly because of its low to moderate intensity and beneficial effects on strength, flexibility, breathing, and balance (Lan, Lai, & Chen, 2002; Levandoski & Leyshon, 1990; Li, Hong, & Chan, 2001).

Basically, Tai Chi is a series of individual movements (or forms) linked together to flow smoothly from one form to another. The movements of Tai Chi, when performed with continuity, involve characteristics such as body and trunk rotation, flexion/extension of the hips and knees, weight shifting, postural alignment, coordinated arm movements, and postural control (Swaim, 1999). Coordination

Li, Fisher, and Shirai are with the Oregon Research Institute, 1715 Franklin Blvd., Eugene, OR 97403. Harmer is with the Dept. of Exercise Science, Willamette University, Salem, OR 97301.
of these movements with deep diaphragmatic breathing and mental concentration is also required as an integral part of Tai Chi and is purported to promote harmony between body and mind. Thus, Tai Chi is not only a physical exercise but also involves training the mind, which is why it has often been referred to as “moving meditation” (Reid, 1998).

In addition to the physical movement and meditational features of its practice, Tai Chi is intended to cultivate qi (pronounced “chee”), an internal force or vital energy (although the nature of qi is not fully understood). According to Chinese medical theory, Tai Chi movements allow qi to circulate throughout the body via channels or meridians, which can be thought of as energy pathways connecting organs, joints, and muscle groups to each other. Along meridians are points that are used in Tai Chi as foci to direct the flow of qi and control body-balance mechanisms through the constant, complementary forces of Yin and Yang. Yin (inactivity) and Yang (activity) involve a dynamic interplay of opposite but complementary forces of nature (e.g., male/female, static/moving, active/passive, tension/relaxation, forceful/yielding) that need to be “in balance” for optimal functioning. The dynamic relationship between Yin and Yang underpins all movements of Tai Chi and is based on shifting body weight to create a continuous reciprocity of Yin states and Yang states. The resulting equilibrium of Yin and Yang through the integration of qi and controlled movement is purported to bring about sustained health, prolonged life, and emotional healing (Liang & Wu, 1996).

To successfully learn and practice Tai Chi, learners must adopt practice principles (or essentials) that have been accumulated over the centuries by masters of this ancient art. Table 1 lists 10 essential principles of Tai Chi practice (Swaim,

<table>
<thead>
<tr>
<th>Essentials</th>
<th>Lay description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straightening the head</td>
<td>Holding the head in vertical alignment</td>
</tr>
<tr>
<td>Containing the chest and raising the</td>
<td>Relaxing the chest and straightening the back</td>
</tr>
<tr>
<td>back</td>
<td></td>
</tr>
<tr>
<td>Relaxing the waist</td>
<td>Initiating all movements from the waist</td>
</tr>
<tr>
<td>Distinguishing insubstantial and</td>
<td>Distinguishing “solid” (weight bearing) and “empty” (non-weight-bearing)</td>
</tr>
<tr>
<td>substantial</td>
<td></td>
</tr>
<tr>
<td>Sinking the shoulders and elbows</td>
<td>Lowering the shoulders and dropping the elbows</td>
</tr>
<tr>
<td>Using consciousness, not strength</td>
<td>Using mental focus instead of physical force</td>
</tr>
<tr>
<td>Upper and lower following one another</td>
<td>Coordinating upper and lower body movements</td>
</tr>
<tr>
<td>Uniting internal and external</td>
<td>Uniting internal and external energies (driven by deep breathing)</td>
</tr>
<tr>
<td>Continuity</td>
<td>Moving smoothly and continuously without stopping</td>
</tr>
<tr>
<td>Tranquility in movement</td>
<td>Seeking calmness of mind in movement</td>
</tr>
</tbody>
</table>

Note. Details can be found in Swaim (1999) and Yang (1991).
These generally accepted Tai Chi principles ensure that all Tai Chi movements are done in a relaxed, coordinated, calm, fluid, and balanced fashion.

Although Tai Chi has gained popularity among seniors (Yan & Downing, 1998), few Tai Chi programs have been modified to suit the physical and mental needs of this population, many of whom face the challenge of declining physical function. To address this problem, this article introduces a modified and simpler Tai Chi form, Easy Tai Chi, which reduces the number and complexity of the forms of the 24-form Yang style (China Sports, 1980). Easy Tai Chi entails eight movements and contains all of the natural characteristics of traditional Tai Chi but with the advantage of a less complex movement sequence that can be modified to suit individual needs. The article concludes with a discussion of some practical issues related to the use of Easy Tai Chi.

**Tai Chi Styles**

There are several styles of Tai Chi, some of which are historic/traditional and some of which are of more recent origin. The earliest known form can be traced to the Chen style and evolved and progressed into multiple styles or schools. Currently, there are five main schools of Tai Chi (People's Sports, 1996), each named after the style's founding family: Chen, Yang, Sun, Wu (Jian Qian), and Wu (He Qin). Each style has a characteristic protocol that differs from other styles in the postures or forms included, the order in which they appear, the pace at which movements are executed, and the level of difficulty. For example, one significant difference between Chen and Yang styles is that Yang-style movements are relaxed, evenly paced, and graceful. In comparison, the Chen style is characterized by alternating slow movements with quick and vigorous movements, with restrained and controlled actions/motions (Yang, 1991), reflecting a more martial origin. This article focuses on the Yang style.

Yang style, which evolved from the Chen school, is probably the most popular Tai Chi style being practiced today (e.g., Swaim, 1999). It originated in the 18th century (China Sports, 1980) and is often considered the gentlest and most suitable style for elderly individuals. Movements are performed in a relaxed and flowing manner with the trunk erect as the axis of all movements, making it immediately suitable for elderly, frail, or disabled populations. Regular, persistent practice of the Yang style not only benefits physical and mental well-being but also provides artistic enjoyment for the performer. To date, the Yang style, with its variations, has been used in the majority of medical and behavioral research on Tai Chi.

Although there are multiple versions of the Yang style (both short and long, covering 24, 48, 88, and 108 forms; China National Sports Commission, 1983), the 24-form, based on the most popular sequences of the Yang Chengfu school (China Sports, 1980; People's Sports, 1996), is the most readily adaptable to the lifestyles

---

1The latter two styles of Wu represent two different Tai Chi schools. In Chinese, the two characters are distinguished by tones in Chinese pin yin (phonics). The two words representing the two styles are pronounced differently in terms of tones, with the former carrying the second tone and the latter the third tone.
and living situations of aging populations. It is also the most accommodating, requiring minimal demands of personal strength, speed, endurance, flexibility, and motor skills for participation.

**Research on Tai Chi**

The therapeutic value of Tai Chi to the health and well-being of older adults is well documented (Lan et al., 2002; Li, Hong, & Chan, 2001; Ross & Presswalla, 1998; Schaller, 1996; Wolf, Coogler, & Xu, 1997; Wu, 2002; Yan & Downing, 1998). Studies using various populations have shown that Tai Chi training is positively associated with posture/balance and gait stability (Hain, Fuller, Weil, & Kotsias, 1999; Schaller, 1996; Tse & Bailey, 1992), reductions in falls risk and fear of falling (Wolf et al., 1996), improved cardiovascular function (Lai, Lan, Wong, & Teng, 1995; Wolf et al., 1996; Young, Appel, Lee, & Miller, 1999), strength of knee extensors (Lan, Lai, Chen, & Wong, 2000), physical functioning (Li, Fisher, Harmer, & McAuley, 2002; Li, Harmer, McAuley et al., 2001), reductions in tension/stress (Chen & Sun, 1997; Jin, 1992), enhanced movement confidence/arthritis self-efficacy (Hartman et al., 2000; Li, McAuley, Harmer, Duncan, & Chaumeton, 2001), physical self-esteem (Li, Harmer, Duncan, Duncan, & Chaumeton, 2002), and sense of overall well-being (Kutner, Barnhart, Wolf, McNeely, & Xu, 1997; Li, Duncan, et al., 2001). Collectively, the existing research provides substantial evidence of the multidimensional health benefits of Tai Chi, but questions still remain regarding optimal levels of Tai Chi frequency, duration, and intensity (Wu).

Tai Chi has been recommended as an important part of exercise programs to promote balance, prevent falls, and reduce fear of falling, especially among the elderly (Howland, Peterson, & Lachman, 2001; Lane & Nydick, 1999; Wu, 2002). For example, the American Geriatrics Society, British Geriatrics Society, and American Academy of Orthopaedic Surgeons Panel on Falls Prevention (2001) recommended that Tai Chi be considered for balance training as a preventive strategy to reduce falls among the elderly. Although Tai Chi has been shown to produce health benefits, little attention has been paid to issues associated with facilitating its delivery and instruction to populations of most need.

**Practical Difficulties in Learning and Teaching Tai Chi for Seniors**

Despite the therapeutic values of Tai Chi, few people are aware that learning it is not as easy as it appears. Teaching Tai Chi to older adults can be a challenge for both instructors and learners. Tai Chi is a dynamic sequence of movements that requires complex whole-body coordination and includes inherent challenges posed by single-leg stances (during transitional moves), backward/side stepping, and intricate arm and body swaying movements, all accompanied by demands for mental concentration and selective attention (Chen, 2002; Wolf et al., 1997; Yan & Downing, 1998). Practice requires considerable hand–eye and upper and lower extremity coordination, rotational activities, movement continuity, coordinated breathing, and a clear differentiation between solid and empty stances. Many
seniors might avoid learning Tai Chi if they perceive these requirements to be too physically or mentally challenging.

There are challenges to learning Tai Chi. First, learning its sequence is a cognitive challenge. Tai Chi practice usually involves the need to memorize names associated with each posture and sequence of postures. Senior beginners are usually too occupied with mastering a single form to consider learning a sequence of movements and related techniques. Second, Tai Chi practice often requires high levels of coordination between upper and lower extremities, such as exactly where a foot or a hand should be at each moment in a posture. A common comment from senior learners during a practice session is “I got lost in the transition,” meaning that the learner had to pause and recall the movements that connect one posture to the other. These pauses compromise the training effect. Third, from a safety standpoint, not every Tai Chi posture is physically appropriate for seniors. For example, the form “Sweep Down” in the simplified 24-form Yang Tai Chi style involves a squatting move with a forward inclination of the upper body while stretching one leg sideways. This movement is physically difficult for seniors and increases the possibility of knee injuries or falling.

Therefore, even though the benefits of regular Tai Chi exercise are quite clear, the challenge of maximizing the opportunity for older adults remains because certain movements might be beyond the capabilities of some elderly individuals or others with disabilities. Thus, there is a need to modify existing Tai Chi to develop forms that are simple, easy to perform, and enjoyable (Chen, 2002; Wolf et al., 1997) and that do not require years of sustained practice to master.

Wolf et al. (1997) introduced a 10-form sequence, which was modified from the original 108-form. The 10-form sequence covered some of the fundamental Tai Chi movements (e.g., Grasp Peacock’s Tail, Cloud Hands) and was successfully implemented in Wolf et al.’s 1996 study and other fall-related studies (Wolf et al., 2001). These movements were arranged to be brief and to flow from posture to posture and were considered therapeutically beneficial to seniors. The reduced complexity of this 10-form Tai Chi, as noted by Wolf et al. (1997), is most suitable for independent, community-dwelling older adults. Nonetheless, certain movements in the 10-form Tai Chi can still present a challenge to most senior learners and practitioners. For example, the heel-kicking movement (Forms 8 and 9), which involves standing on one leg while performing a foot thrust with the other, is challenging for most adults, regardless of age. For physically limited elders, this movement is virtually impossible, as is the transition from Form 9 (left heel kick) to Form 10 (closing form), which involves a 180° turn on a single support leg. Thus, designing a Tai Chi program suitable for individuals with different disabilities, physical conditions, and exercise patterns is still necessary.

Chen (2002) tried to address these concerns by presenting a 20-movement Tai Chi program with modifications made to several movements contained in the original 24-form. A unique feature of this modified program is that it simplified several difficult movements found in the original form. As a result, Chen suggests that the routine can be performed in a nearly stationary position, thus accommodating individuals with physical limitations. Although it is a significant improvement in simplifying the original 24-form movements and was specifically targeted for seniors and individuals with disabilities, the overall number of movements remained largely unchanged. Further simplification and reduction of movements
would accommodate more diverse populations, including healthy, fit, or frail elderly people and individuals with mobility challenges and physical impairments.

**Proposing an Eight-Form Easy Tai Chi for Seniors**

Without compromising the training principles of Tai Chi (see Table 1) but at the same time addressing the need to further reduce the number and complexity of the 24-form Tai Chi, this article presents an eight-form Easy Tai Chi program for seniors. The routine consists of six movements plus the commencing and closing forms, all of which are derived from the contemporary 24-form simplified Tai Chi (China National Sports Commission, 1983). The names of the eight forms are listed in Table 2.

The eight-form Easy Tai Chi follows a gradual, simple-to-difficult progression with the movement execution beginning with upper body motion (involving arm, shoulder, and trunk movements) and minimal demands on postural control. It

<table>
<thead>
<tr>
<th>Form</th>
<th>Movement direction/ Number of repetitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Commencing form</td>
<td>Both hands rise to shoulder level</td>
</tr>
<tr>
<td>2. Curving back arms (Repulse Monkey)</td>
<td>Right, left; 3 times each side</td>
</tr>
<tr>
<td>3. Stepping sideways and moving arms</td>
<td>To the left, then to the right</td>
</tr>
<tr>
<td>(Grasp Peacock’s Tail: ward off, rollback, press, push)</td>
<td></td>
</tr>
<tr>
<td>4. Moving hands (Wave Hands Like Clouds)</td>
<td>Left side leads, 3 times</td>
</tr>
<tr>
<td>5. Diagonal strides (Fair Lady Works at</td>
<td>Left, then right</td>
</tr>
<tr>
<td>Shuttles)</td>
<td></td>
</tr>
<tr>
<td>6. Standing on one leg (Golden Cock Stands</td>
<td>Right, then left</td>
</tr>
<tr>
<td>on One Leg)</td>
<td></td>
</tr>
<tr>
<td>7. Stepping and pushing (Brush Knees and</td>
<td>Left, then right</td>
</tr>
<tr>
<td>Twist Steps)</td>
<td></td>
</tr>
<tr>
<td>8. Closing form</td>
<td>Both hands fall to the side, left leg drawn to the right leg.</td>
</tr>
</tbody>
</table>

*Note.* Interim transitional movements are not included. The names in parentheses are the standard Tai Chi names.

---

2. A video clip of the full set of Easy Tai Chi forms (performed in standing and sitting positions) can be viewed through authors’ Web site at http://healthyaging.ori.org. The training manual can also be found on the site.
then moves to forms with increasing postural demands involving whole-body–limb coordination. It is important to note that one can perform Easy Tai Chi while seated.

After the commencing form, the progression starts with the Repulse Monkey form, which involves upper limb movements (anterior-posterior arm swing) coupled with lateral neck and trunk rotation and weight shifting. The Repulse Monkey form is followed by the composite movements of Grasp Peacock's Tail (involving ward off, rollback, press, and push), which entail linked movements of the upper body (lateral arm extension and trunk rotation) and lower limbs (sideway stepping, or bow stance; heel kicking; and weight shifting). In its full expression, the form involves a gradual shifting of weight from one foot to the other with smooth, coordinated body (torso) and ankle rotation, arm swing, and leg extension. The movement is performed to both the left and right sides of the body.

The Grasp Peacock's Tail form is followed by the Wave Hands Like Clouds form. The movement begins with moving hands and simultaneous side-stepping to the left, coordinated with eyes following the movements of the leading hand. Next, from a holding-a-ball-in-hand posture, the movement flows into Fair Lady Works at Shuttles by stepping forward diagonally (Shuttle at Left) while raising the left arm circularly to the left side of the forehead and pushing forward and up with the right arm, thus completing the Shuttle at Left movement. This is repeated to the right (Shuttle at Right). Next, the left leg is drawn forward to land adjacent to the right leg with the simultaneous lowering of the arms; weight is slowly transferred to the left leg in preparation for a single-leg stand (Golden Cock Stands on One Leg). With the weight on the left leg, the right hand is raised at the same time as the right knee, in a single movement. The single-leg standing movement is repeated with weight now transferred to the right leg. The last posture before the closing form is Brush Knees and Twist Steps. This involves stepping forward to the left and brushing the palm of the left hand across the left knee; the waist naturally rotates to the left as the right hand pushes slowly forward. This stepping and brushing movement is repeated on the right side. Easy Tai Chi ends with the usual closing form, with arms lowering to the sides and the left foot drawing to the right foot.

As in all forms of Tai Chi, breathing is an important part of Easy Tai Chi and is linked closely with all movements (e.g., breathing in when raising arms and breathing out when pressing arms down). This has the effect of sinking the qi to the dantian (pronounced "dan-tee-ann"); the dantian is considered the energy center located in the lower abdomen slightly below the navel. Breathing should be natural, rhythmic, and full but not forced. Breaths should originate from the diaphragm (i.e., deep abdominal breathing, not the usual chest breathing), and the inhale–exhale rhythm should be comfortably coordinated with the flow of all movements.

The proposed Easy Tai Chi movements are preferably done while standing but can be performed in a sitting position by individuals for whom standing is a problem or who are dependent on ambulatory supports such as walkers, canes, or wheel chairs. When it is performed in a seated position, Easy Tai Chi works the full range of motion for arms, shoulders, and the torso. For example, individuals with standing difficulty can still benefit from Easy Tai Chi by engaging in upper-body–based movements such as "curving back arms," which focuses on upper limbs and trunk rotation, and even lower limb movements such as lifting the legs (similar to that of standing on one leg), which works on hip flexion and stable posture.
alignment. The sequence of Easy Tai Chi can be completed in about 3 min, depending on the mobility level of the individual. Therefore, compared with the 10-form (Wolf et al., 1997), 20-form (Chen, 2002), and the contemporary 24-form Tai Chi, Easy Tai Chi lends itself to being adapted to underserved populations such as those who are physically or functionally challenged and for whom a lengthy learning period would be problematic.

The simpler movements and shorter sequence of Easy Tai Chi are also likely to make the learning experience less stressful, particularly for seniors. The fewer, simpler movements are less demanding to memorize, making Tai Chi potentially more enjoyable for the learner. From a teaching standpoint, the movements can be taught and performed in pieces (i.e., single movements) or in a combination of movements (e.g., two or three movements) before they are practiced as a complete routine. Tai Chi instructors benefit in teaching Easy Tai Chi because it avoids the need to simplify the lengthy routines of many other Tai Chi forms. As a result, instruction can be focused more on teaching basic fundamental movements including footwork, body position, eye-hand coordination, and breathing. All of the previously mentioned characteristics of Easy Tai Chi are likely to encourage learners to persist in practicing the movements and enhance their commitment to perform Tai Chi as a lifelong exercise.

Preliminary Data on the Eight-Form Easy Tai Chi

To provide preliminary evidence of the efficacy and utility of the eight-form Easy Tai Chi, we analyzed a subset of data ($N = 48$, mean age = 68.88, $SD = 5.6$) from a Tai Chi intervention trial in which eight-form Easy Tai Chi was implemented and compared with a conventional low-stress stretching exercise program (Li & Fisher, 2002). Participants, who were randomly assigned to one of the two experimental conditions (Tai Chi = 26, low stress = 22), engaged in an exercise intervention three times per week for 3 months. For the purposes of this article, only data collected on functional-ability measures (involving time to rise from a chair, 50-ft-walk speed, single-leg standing, instrumental activities of daily living, and health status [SF-12 mental and physical scores, Ware, Kosinski, & Keller, 1995]) taken at baseline and 3 months were analyzed.

Results indicated that, compared with the low-stress-exercise controls, Tai Chi participants experienced significant improvements on the self-reported SF-12 mental and physical scores ($p < .05$), instrumental activities of daily living ($p < .05$), and the physical-performance measures of one-leg balance ($p < .05$), 50-ft walking speed ($p < .05$), and time to rise from a chair ($p < .04$). Although the results are preliminary, they collectively suggest that eight-form Easy Tai Chi might be potentially as effective in enhancing functional ability and health status in elderly individuals as the more complex 24-form version.

Format for a Typical Training Session

A general plan for an in-class practice session of Easy Tai Chi might involve the following components: a 10-min warm-up, 25–30 min of practicing Easy Tai Chi
movements/postures, and a 5-min cool-down. Five-minute breaks between practice sessions are recommended to allow learners to rest and interact socially.

After the warm-up, it is recommended that single static positions be practiced. This can be done by holding each single movement listed in Table 2 statically (in a stationary position) for a period of 5–10 s. The static-movement practice is easy to perform because it has the lowest attentional demand on postural control and fewest between-limbs movement-coordination tasks for beginners. It also enables the learners/performers to get the idea of setting a correct posture and a sense of body alignment and weight centering. This preliminary session might be followed by performing each single motion. This increases selective attention and allows learners/performers to experience appropriate alignment for balance and to coordinate rotations of limbs and trunk. Each movement should be practiced repetitively (8–10 repetitions) at a slow, self-controlled speed. After some successful initial practice of these static and moving positions, learners/performers should be ready to move on to linking the eight postures of Easy Tai Chi in a sequential, continuous manner. Each daily session should consist of a minimum of five sets of Easy Tai Chi, along with repeated practice of each movement.

Tai Chi can be practiced in a high, medium, or low stance, depending on the age, physical limitations, and training purposes of the performers (China National Sports Commission, 1983; Yang, 1991). A low stance is one in which the body is in a semisquatting position, with knees bent almost 90°, placing most demand on the large muscle groups of the thighs. A high stance is one in which the knees are bent at an angle of only slight discomfort. For seniors, a high stance is recommended for two reasons. First, it does not impose extra stress on the lower extremities. Second, it facilitates both anatomic alignment and flexibility for posture maneuvers. The low stance, in contrast, imposes more stress on the legs (the knees in particular) and is physically demanding on the quadriceps for seniors and others who have weak lower limb muscles or physical impairment (e.g., hip replacement).

Application of the Eight-Form Easy Tai Chi

Easy Tai Chi is such a versatile exercise modality for seniors that it can be adapted to numerous research and clinic settings. For example, it can be used as an exercise regimen for interventions designed to promote strength, balance, flexibility, and improved overall physical functioning among older adults. As alluded to previously, Easy Tai Chi provides training that is likely to improve muscle strength through static and moving exercises while addressing the need to control balance over a dynamically changing base of support. It also improves balance by including interlimb coordination and coordination between lower extremity and upper body movements. Furthermore, the training is likely to increase balance-response repertoires that older adults can use in balance-challenging situations.

Easy Tai Chi is perhaps most suitable for studies that target frail elders with functional deficits or limitations (i.e., limited in activities of daily living or instrumental activities of daily living) and as an excellent physical activity modality referral option for primary-care physicians who work with older patients. It can also be used in home-based exercise programs to allow older adults to experience success and move toward achieving mastery in their own living environment. The
additional benefit of home practice is that it removes the transportation barrier of coming to a class and allows participants to work on their routines on their own time, thereby potentially increasing exercise adherence.

Two important features of Easy Tai Chi as exercise are that it can be performed at any time or place after initial training and that it requires no special equipment, clothing, or footwear. It can be modified to accommodate the functional level of seniors, including individuals in wheelchairs, individuals with restricted levels of physical activity, and those who are in the process of recovering from injury or previously debilitating pathologies. Modifications of Easy Tai Chi can be made (in whole or in part) to fit a variety of rehabilitative endeavors, including individuals who have experienced a cerebrovascular accident, traumatic brain injury, orthopedic impairment, or cardiorespiratory decline. Most of the Tai Chi postures are flexible enough to allow individuals to perform to their potential. The following features of Easy Tai Chi can be adjusted to accommodate individual levels of function and progress.

VARIED PLANES OF MOTION

Easy Tai Chi movements can be practiced as uni-, bi-, or multiplanar motions. For example, the movements/postures can be performed with reciprocal (backward and forward) or rotational arm motion. The modified movements can be performed either standing (doing arm or leg movements) or sitting (arm and trunk movements), depending on a performer's level of physical mobility.

ISOLATED OR INTEGRATED SEGMENTS

When a full Easy Tai Chi movement practice is perceived to be too difficult for seniors with various physical impairments, the movements can be broken down into component parts (e.g., single-arm vs. two-arm movement, upper body vs. lower body movement). For example, a single-arm (or -leg) circular movement can be practiced initially to accommodate those who are physically frail or who have mobility limitations. As the client progresses or becomes more functional, the movement can then be integrated into two-arm (or -leg) movements and be performed in a coordinated manner. Similarly, a lower extremity movement without upper extremity involvement (isolated movement) can be performed. This can be followed by integrating arm and leg movements, that is, upper and lower extremities following one another, with the torso acting as one unit (as is done in traditional Tai Chi).

NO-IMPACT WEIGHT BEARING OR NON-WEIGHT-BEARING

Although Tai Chi movements are normally done in a semisquat (low center of gravity) position for better training effects, this can be modified in clinical situations requiring remedial or rehabilitative therapy. For example, seniors with a history of knee injuries might be initially encouraged to keep their center of gravity high (legs straight) while practicing movements. As strength, neuromuscular control, and range of motion improve with practice, participants can progressively place increased stress on the thighs and knees by lowering their center of gravity.
STATIC OR DYNAMIC BALANCE

In its fullest expression, Tai Chi is a dynamic system of movement that requires complex whole-body coordination, but it can be adjusted to fit seniors with special needs. For example, as part of a rehabilitation program for an individual with balance problems, one can start with a wide base of support in a static standing position (or a holding posture), with or without the knees bent. The arms can be in a shoulder-high position (just as one starts with the opening form of Easy Tai Chi). The emphasis here is on holding the posture to develop stamina or build strength. Arm movements can be added to test the individual’s ability to maintain balance, or the client can be encouraged to shift his or her weight (left and right) in place while varying his or her center of gravity. As the client makes progress, the therapist can encourage the individual to engage in unilateral weight bearing with constant shifting, gradually putting full weight on one leg, alternating from one leg to the other, stepping backward and forward and from side to side, and so forth.

Conclusions

This article presents a simple eight-form Easy Tai Chi program that is considered appropriate for seniors whose motor abilities are compromised or who find existing Tai Chi forms or similar exercise modalities difficult or unappealing. Preliminary data support the potential of Easy Tai Chi for achieving health outcomes similar to those derived from more complex Tai Chi forms. Easy Tai Chi maintains the principal features of the traditional simplified 24-form and incorporates elements of body balance, postural alignment, attention/concentration, and breathing. The easy-to-perform, soft, and fluid movements of Easy Tai Chi are ideal for older adults, regardless of their exercise experience. The versatile and modifiable characteristics of Easy Tai Chi are likely to motivate program involvement and adherence among the elderly and other individuals who are constrained by personal conditions (e.g., cognitive impairments, physical limitations) or environmental factors (e.g., living conditions, lack of transportation). It is also a useful foundation for those who wish to study advanced forms of Tai Chi. In addition, it can be used as complementary medicine and alternative therapy or as part of a comprehensive rehabilitation program in research or clinical settings for physically frail seniors and others with functional impairments or cardiovascular disease.

Acknowledgments

Preparation of this manuscript was supported by Grant Nos. MH62327 from the National Institute of Mental Health and AG18394 from the National Institute on Aging and in part by Grant Nos. AG17053 and AG17510 from the National Institute on Aging. The work presented in this article is based on the authors’ practical and research experiences in Tai Chi over 2 decades. The authors would like to acknowledge that the work has also benefited from discussions with Tai Chi masters, specialists, and practitioners in China and the United States. They also acknowledge the comments on an earlier version of this manuscript from Shawn Boles and editorial assistance from Ron Renchler.
References


18 • Li et al.


Ware, J.E., Kosinski, M., & Keller, S.D. (1995). *SF-12: How to score the SF-12 physical and mental health summary scales* (2nd ed.). Boston: The Health Institute, New England Medical Center.


Copyright of Journal of Aging & Physical Activity is the property of Human Kinetics Publishers, Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.