

# Practice T'ai Chi – Get A Bigger Brain

June 21, 2012

Can the ancient martial art of T'ai Chi help our brains grow larger? Maybe. That's the initial findings of research being headed up by University of South Florida professor James Mortimer. Mortimer teaches epidemiology and biostatistics at the Tampa campus of USF and has studied Alzheimer's disease for almost 40 years.

Charlotte Sutton, a staff writer with the Tampa Bay Times, wrote this about Mortimer's research.

“Chinese seniors who practiced tai chi three times a week increased their brain volumes and scores on tests of memory and thinking, according to a study by scientists from the University of South Florida and Fudan University in Shanghai, published this week in the *Journal of Alzheimer's Disease*. An eight-month, randomized controlled trial compared seniors without dementia who practiced tai chi to a similar group that participated in stimulating discussions, a group that walked together, and a group that received no intervention. All told, the study had 120 participants.” (Tampa Bay Times, June 21, 2012)

T'ai Chi has been practiced in China for many centuries. Chinese masters of T'ai Chi introduced the art and healthcare science to people in the United States and other western nations during the 20th century – many after World War II. One of those masters was John Chung Li. He studied martial arts as a child in Shanghai during the early part of the 20th century and later moved to Hong Kong where he taught for many years. Grand Master Li moved to the United States during the 1960s and taught T'ai Chi at Yale University, Boston College, and at his own studio in Boston's Chinatown. Before his death Grand Master Li passed the lineage of [Hwa Yu T'ai Chi Ch'uan](#) to Master Robert Xavier, who lives and teaches in Bradenton, Florida.

Grand Master Xavier has been my teacher and friend for the past 15 years and it is a joy to share the art of Hwa Yu with people in the Tampa Bay area. Classes are held every Monday evening from 7:30-8:30pm at 801 E. Hillsborough Avenue in Tampa.

You can read Charlotte Sutton's article about T'ai Chi and brain growth in the June 21st edition of the Tampa Bay Times (Daily Briefing, Health & Science

Edition) or online at <http://www.tampabay.com/news/health/research/tai-chi-helps-brain-grow-says-study-involving-usf/1236395> .

If you are interested in learning T'ai Chi, please contact [Senior Instructor Mark McGee](#) for more information.



## Tai chi helps brain grow, says study involving USF

Grand Master Robert Xavier and Senior Instructor Mark McGee

TAMPA — Tai chi, the martial art that has become popular as a gentle mind-body workout, may have another benefit: Helping to increase the size of the brain. And brain growth, scientists hope, could unlock a clue to staving off and even preventing dementia.

Chinese seniors who practiced tai chi three times a week increased their brain volumes and scores on tests of memory and thinking, according to a study by scientists from the University of South Florida and Fudan University in Shanghai, published this week in the *Journal of Alzheimer's Disease*.

An eight-month, randomized controlled trial compared seniors without dementia who practiced tai chi to a similar group that participated in stimulating discussions, a group that walked together, and a group that received no intervention. All told, the study had 120 participants.

Lead researcher James Mortimer, a USF professor of epidemiology and biostatistics who has studied Alzheimer's disease since the 1970s, cautioned that the study is preliminary and needs to be expanded. Still, it's intriguing.

Among the heralds of dementia is brain atrophy. "So if we can increase brain size, we might be able to replace brain that's been lost," he said in an interview.

"In the tai chi group, we saw brain growth of one-half of 1 percent over eight months" measured through MRIs.

How exactly that growth occurred — and whether genetics or other factors might play into it — is a topic for a new study Mortimer and his colleagues hope to undertake, pending federal funding. This tai chi study was funded by Tampa's Byrd Alzheimer's Center.

Numerous studies have drawn connections between physical activity and brain health. Much of the attention has been paid to aerobic activities such as fast walking, also shown to increase brain size. Tai chi has been investigated for its impact on cognitive function, but this new report is the first to look at brain volume, he said.

The discussion group also showed improvement in brain volume and cognition, though it was more limited. These weren't just idle chats — Mortimer said that the participants so enjoyed their rousing discussions that they are still meeting even though the study ended two years ago.

Overall, the walkers showed no change in brain volume or cognitive function, perhaps because they were not required to raise their heart rates sufficiently. Still, the faster walkers in the group did better on the tests of memory and thinking.

The group that did nothing showed brain shrinkage and scored worse on cognitive tests than it had at the beginning.

Tai chi can be gentle, but it requires concentration to master and move correctly through the precise sequence of poses. That mind-body involvement could be what makes it effective for brain health, researchers theorized.

It's particularly useful once age or infirmity has made more strenuous workouts difficult. Its many benefits include improvements in balance, cardiovascular health and stress relief.

"Tai chi is the kind of exercise you can do for a long time," Mortimer said.

"I'm going to take it up."

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