

Australian Participation Rates in Tai Chi Chuan and Qigong:

Where is Everyone?

Brian Corless

In the March, 2017 edition of the Tai Chi Association of Australia newsletter I wrote about the benefits of tai chi chuan for mental health and commented on published survey data from the USA by Dr. Romy Lauche* and colleagues (2016) which highlighted differences in U.S. participation rates between yoga and tai chi. At the time I noted that similar rates on participation for tai chi in Australia were difficult to obtain as the Australian Bureau of Statistics (ABS), in its Participation in Sport and Physical Activity report of 2012, grouped participation data for “Tai Chi” under the category of “Martial Arts” together with data for other martial arts such as kungfu, karate and taekwondo etc., whereas yoga was given its own distinct category for participation data. My point was that it would be helpful for the Australian tai chi community to have easier access to this information so that we can assess where we are now and consider how to best promote tai chi’s physical and mental health benefits into the future.

Recapping the results of Dr. Lauche and colleagues’ (2016) paper, it was estimated from the 2012 U.S. National Health Interview Survey of about 35,000 participants, that about 7 million people ($\approx 3\%$) in the U.S., of a population of about 240 million, had practised tai chi at least once in their lifetime, and about 2.6 million ($\approx 1\%$) had done so in the previous 12 months. The estimate of people who had practiced tai chi in the previous 12 months in 2012, showed only a slight increase ($\approx 100,000$ participants) from the estimate of 2002, compared to the larger increase for the 12-month participation rate for yoga which rose from an estimated 10 million in 2002 to 21 million in 2012 (an increase of ≈ 11 million participants). The authors suggested that a more aggressive marketing approach to publicly promoting yoga in the U.S. was a possible explanation for its success. The data also showed that compared to non-tai chi users, tai chi participants in the U.S. were more likely to be female and older than 30 years of age, and that younger age ranges were generally more represented in yoga research studies, compared with older age ranges in tai chi research. Those interested in other characteristics of tai chi and qigong users are referred to Dr. Lauche and colleagues’ (2016) paper.

I am now pleased to say that two recent Australian research studies by Dr Ineke Vergeer* and colleagues from the University of Southern Queensland and Victoria University, Melbourne, go some way towards giving us a better idea of the “lay of the land” for tai chi participation in Australia. The first of these was published in mid-2017 and examined trends in the participation of two groups of “holistic movement practices” (HMPs) in Australia, specifically tai chi/qigong and yoga/Pilates over a 10-year period between 2001 and 2010, with a total of nearly 200,000 respondents surveyed over the 10 years.

Using data from the Australian Sports Commission Recreation and Sport Surveys (ERASS), which are independent national surveys conducted each year between 2001 and 2010, Dr Vergeer and colleagues reported that in the 12 months prior to each yearly survey, over this 10-year period, an average of 0.6% of respondents (range 0.5% to 0.7% across the decade) said that they had engaged in tai chi/qigong activities and an average of 3% (range 1.5% to 3.5%) said that they had engaged in yoga/Pilates activities. From 2001 to 2010, a slight increase in participation in both groups was noted with 0.5% of respondents in 2001 stating that they engaged in tai chi/qigong in the previous 12 months increasing to 0.6% of

respondents in 2010, with a peak of 0.7% in 2008. For yoga/Pilates, a slightly larger increase was reported with 1.5% in 2001 rising to a peak of 3.5% in 2010. From the data, Dr Vergeer and colleagues concluded that overall, 12-month participation rates for both groups remained relatively stable over this time.

Translating these percentages into precise numbers of people participating is difficult and it is common in statistical analysis to provide a range of numbers within which we are very confident that the true number of people participating will fall. So, based on estimates of the average Australian population over the period 2001 and 2010, Dr Vergeer estimated, with 95% confidence, that across the decade there would have been somewhere between 105,000 and 123,500 people participating in tai chi/qigong activities on average each year. For 2010 alone, the estimated number participating in tai chi/qigong would lie between 103,000 and 157,000. The ABS currently estimates that the Australian population is about 25 million, and on the basis of Dr Vergeer's study, it is estimated that there will be between 127,000 and 149,000 people currently participating in tai chi/qigong. Two simple questions that arise for me from this data are: where are they all and what are their characteristics?

In this first paper, Dr Vergeer's research goes some way towards answering these questions. The authors reported that for each year of the decade surveyed, there were more females than males engaging in both category groups with almost 8 times higher odds of women participating in yoga/Pilates than men and almost 5 times higher odds in tai chi/qigong. Over time, age differences were also noted between the groups with a significant increase in the number of older Australians (>55 years) participating in yoga/Pilates over the 10-year period compared to tai chi/qigong which surprisingly remained stable in numbers during that period. Despite this increase, more tai chi/qigong practitioners were found in the older age range (>55 years), however participation in tai chi/qigong activities declined in younger (15-34 years) and middle (35-53 years) age ranges over the decade surveyed.

Dr Vergeer and colleagues also examined data for "fitness-type" (e.g. aerobic and gym) activities over the same 10-year period and found a significant increase in participation rates for those activities compared to the relatively stable rates for tai chi/qigong and yoga/Pilates. They suggested that the public health message in the media during that period for the health benefits of increasing fitness activities yielded greater results for participation rates in those activities, compared to the low-key approach in the media for promoting mind-body, holistic activities, such as tai chi. Interestingly, as I mentioned earlier from Dr Lauche and colleagues (2016) results, the twofold increase in participation rates for yoga in the US between 2002 (est. 10 million) and 2012 (est. 21 million) was attributed to an aggressive marketing campaign promoting the public health benefits of yoga, whereas tai chi rates in Australia, with no major public health message, remained relatively stable over that period.

Dr Vergeer and colleagues' (2017) study provides valuable information and more questions for the Australian tai chi community, given that relatively stable numbers participating in tai chi/qigong over the decade 2001 to 2010, has coincided with a notable absence of any prominent public health message about tai chi's well-documented physical and mental health benefits. In 2015, Yang and colleagues estimated that approximately 450 clinical research studies had been published world-wide demonstrating the health benefits of tai chi chuan in the period 1991 to 2013. Similarly, Husten & McFarlane in 2016 published a review of the health benefits of tai chi including "Excellent" and "Good" levels of evidence supporting tai chi for a range of physical and mental health issues.

In contrast, a more prominent public health message over the decade about fitness-related activities (walking, gym, etc.) coincided with a significant increase in participation rates in those activities. Questions also arise about how to best engage younger and middle-aged people, and others with chronic health conditions, in practising tai chi also given the number of research studies that have reported significant health benefits for these specific groups.

In a second study published this year, Dr Vergeer and colleagues (2018) followed-up their earlier results by further examining the characteristics of users of HMPs, such as tai chi, compared with those who were physically active and using other activities (e.g. walking, running, gym etc.), and specific characteristics of the yoga/Pilates and tai chi/qigong groups.

The authors noted several differences in the characteristics of HMP-users (yoga/Pilates and tai chi/qigong combined) when compared with physically active, non-HMP users, and that overall the HMP group were more likely to be female, above the age of 34, have a higher level of education, a higher socioeconomic status and fewer children at home, and participate more often in a greater range of physical activities. These findings, particularly for female predominance in HMPs, are similar to the results of other HMP studies overseas, particularly for yoga. Similar also to the overseas experience was the result that in Australia younger age ranges were more represented in yoga/Pilates activities whereas older age ranges were more likely to be engaging in tai chi/qigong activities.

Interestingly, although female participation was predominant in both HMP groups, there was a higher proportion of males participating in tai chi/qigong, compared to yoga/Pilates. The authors suggest that the history and martial aspects of tai chi may make it a more appealing exercise for men.

Taken together, these studies provide a much clearer picture of the tai chi landscape in Australia. While sharpening our focus towards the question of who participates in tai chi in Australia, Dr Vergeer and colleagues also present us with questions about how the Australian tai chi community, its representative bodies, governments and commercial interests can better deliver the public health message about tai chi and overcome the barriers to participating, such as improving access to classes for regional areas, those with chronic health conditions and younger age groups.

Those of us old enough to remember the “Life Be In It” media campaigns of the 1970s and 1980s, will recall “Norm the Couch Potato” slothfully laying around and sipping his chai tea (or was that a few beers?). Anyway, although some Australians were more than happy to embrace Norm’s behaviours, for most of us that public health message coincided with a large increase in the number of people exercising and more opportunities to participate in exercise. So, a question for us all to ponder: How can the tai chi community in Australia better engage with the public to promote tai chi’s public health message. If you have any ideas or suggestions, please email me at bcorless@shoalhaven.net.au

Speaking for myself, I know that I would much rather have tai chi than chai tea any day.

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