

The team

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Bournemouth University

ADRC Ageing & Dementia Research Centre
Bournemouth University



The TACIT TRIAL
Tai Chi for people with dementia

The benefits of Tai Chi for people with dementia



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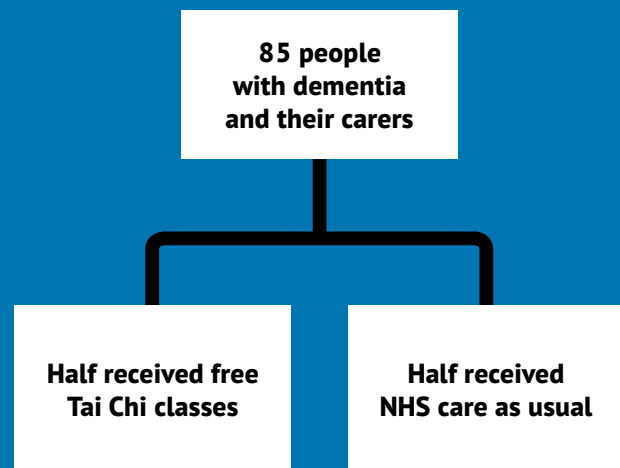
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This leaflet summarises the results of a 3-year project that started in January 2016. It looked into the benefits of Tai Chi for people with dementia living in their own homes and their family carers.

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Tai Chi

- Is an ancient form of Chinese mind-body exercise, combining smooth and continuous body movements with deep breathing and mental concentration.
- Is equivalent to moderate-intensity exercise with quiet meditation.
- Is recommended by the NHS, particularly for older people who have not done exercise for some time.
- Is particularly suited for people with dementia as it uses slow, gentle, and repetitive movements.

Why we did the project

- Evidence supports the use of exercise to improve balance and prevent falls among older people with and without dementia.
- While Tai Chi may be the best way to improve balance and prevent falls among people with dementia, this needs to be tested.
- This is the first study in the world to formally test if Tai Chi can improve balance to prevent falls among people with dementia.

What we did

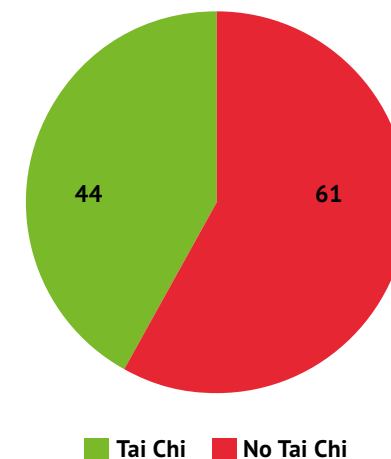
- 85 people with dementia and their family carers were recruited together as pairs into the study
- We tested their balance and they completed questionnaires.
- They were then randomly put into two groups
 - One group got free weekly Tai Chi classes for 20 weeks and were asked to practise Tai Chi at home (led by the carer)
 - Another group did no Tai Chi
- Both groups were asked weekly about falls for 6 months
- At the end of the 6 months they repeated the balance tests and questionnaires to see if they had changed over time
- We hoped to show that those who did Tai Chi were better than those who did no Tai Chi on the assessments at 6 months.

What we found

Those who did Tai Chi:

- On average attended 11 classes (67% of classes offered)
- On average did 17 hours' home practice, which was lower than the target of 36 hours.
- **Balance tests**
 - Surprisingly, Tai Chi did not improve people with dementia's performance on balance tests
 - Even more surprisingly, balance scores for family carers who did Tai Chi seemed to get worse. This may be because the group that did not do Tai Chi decided to do more exercise (but we can't be sure if they did)
- **Questionnaires**
 - People with dementia who did Tai Chi had better quality of life at the end of the study
 - Tai Chi did not reduce fear of falling, but this was difficult to improve as many were not afraid of falling at the start of the study
 - Tai Chi did not improve scores of cognitive functioning (a test used in NHS memory clinics)
 - Carers did not improve or get worse in quality of life or carer burden from doing Tai Chi and supporting the person with dementia to practise at home
- **Falls**
 - During the study, 38 people with dementia experienced falls and overall 122 falls were reported
 - There were fewer falls in the Tai Chi group. However, this was rather dependent on the results from one individual; the difference was reduced when they were removed from the analysis (see pie chart).

Number of falls by people with dementia



What this means

- **Tai Chi is safe for people with dementia** to do in class and to practise at home
- Quality of life and carer burden is not increased or decreased when carers support people with dementia to attend Tai Chi classes and practise Tai Chi at home
- **Tai Chi can help maintain good quality of life among people with dementia**
- Tai Chi has potential to reduce falls among people with dementia,
 - This needs testing in a larger study to be sure
 - We also need to find out how Tai Chi reduces falls
- Home practice was difficult even with the use of colourful, illustrated booklets
 - Future research is needed to find ways to help people increase the amount of time spent practising Tai Chi, e.g. with the use of a DVD or more classes.