

# The Impact of Tai Chi on Mobility, Strength, Balance and Flexibility on Elderly.

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## Result

### Introduction and Objective

- Global population aging increases the need for effective health interventions for the elderly.
- Assess improvements in Mobility, Strength, Balance, and Flexibility after Tai Chi intervention .
- Aims to enhance Mobility, Strength, Balance, and Flexibility in older adults.
- Contribute to better health outcomes and quality of life.

### Methodology

- 30 elderly participants aged 65 or above recruited from a community center in Sham Shui Po.
- 3-week intervention after attending two health seminars and demonstration on Tai Chi, practicing 20 minutes daily
- Fitness assessments conducted before and after the intervention, including:
  - 8-Foot Up and Go test (mobility)
  - Chair stand test (strength)
  - Single leg stand test (balance)
  - Chair sit-and-reach test (flexibility)



(Tai Chi Health Seminars and Demonstration)

Table 1: Comparison of body fitness before and after the Tai Chi intervention

Variable Intervention	Intervention Group (Before) (n=30)	Intervention Group (After) (n=30)
Strength (mean)	13.0 (reps)	14.7 (reps)
Mobility (mean)	7.63 (s)	6.57 (s)
Flexibility (mean)	4.65 (cm)	4.66 (cm)
Balance (mean)	4.58 (s)	4.73 (s)

### Discussion

- **Lower Body Strength:**
  - Chair stand test: Mean repetitions increased from **13.0 to 14.7**.
- **Mobility:**
  - 8-Foot Up and Go test: Mean time decreased from **7.63 seconds to 6.57 seconds**.
- **Balance:**
  - Single Leg Stand test: Mean time increased from **4.58 seconds to 4.73 seconds**.
- **Flexibility:**
  - Chair Sit and Reach test: Mean score increased from **4.65 cm to 4.66 cm**
- General slight improvement is seen after a 3-week Tai Chi exercise intervention.

### Conclusion

- Results indicate Tai Chi effectively enhances Strength, Mobility, and Balance in our cohort.
- Tai Chi is effective for improving physical function and prevents falls in elderly populations.
- Further long-term study on the effectiveness and muscle strength sustainability is suggested.