

Table S1 Co-citation analysis of authors

Count	Cited author	Institution	Country	Representative paper	Journal
470	Li FZ	Oregon Research Institute	USA	Tai chi and postural stability in patients with Parkinson's disease	New England Journal of Medicine
409	Wolf SL	Emory University	USA	Reducing frailty and falls in older persons: an investigation of tai chi and computerized balance training	Journal of the American Geriatrics Society
338	Wang CC	Tufts University	USA	A randomized trial of tai chi for fibromyalgia	New England Journal of Medicine
323	Lan C	National Taiwan University Hospital	China	Tai chi chuan to improve muscular strength and endurance in elderly individuals: a pilot study	Archives of Physical Medicine and Rehabilitation
252	Wayne PM	Harvard University	USA	Effect of tai chi on cognitive performance in older adults: systematic review and meta-analysis	Journal of the American Geriatrics Society
195	Tinetti ME	Yale University School of Medicine	USA	Preventing falls in elderly persons	New England Journal of Medicine
170	Tsang WWN	Hong Kong Polytechnic University	China	Effects of tai chi on joint proprioception and stability limits in elderly subjects	Medicine and Science in Sports and Exercise
162	Wu G	University of Vermont	USA	Evaluation of the effectiveness of tai chi for improving balance and preventing falls in the older population	Journal of the American Geriatrics Society
140	Yeh GY	Harvard University	USA	Effects of tai chi mind-body movement therapy on functional status and exercise capacity in patients with chronic heart failure: a randomized controlled trial	The American Journal of Medicine
134	Lee MS	Korea Institute of Oriental Medicine	Korea	Tai chi for osteoarthritis: a systematic review	Clinical Rheumatology
134	Li JX	University of Ottawa	Canada	Changes in muscle strength, endurance, and reaction of the lower extremities with tai chi intervention	Journal of Biomechanics
131	Taylor-Piliae RE	University of Arizona	USA	Change in perceived psychosocial status following a 12-week tai chi exercise programme	Journal of Advanced Nursing
128	Lord SR	University of New South Wales	Australia	The effect of group exercise on physical functioning and falls in frail older people living in retirement villages	Journal of the American Geriatrics Society
124	Hong YL	Chinese University of Hong Kong	China	Balance control, flexibility, and cardiorespiratory fitness among older tai chi practitioners	British Journal of Sports Medicine
107	Gillespie LD	University of Otago	New Zealand	Interventions for preventing falls in older people living in the community	Cochrane Database of Systematic Reviews

Table S2 Most cited references

Citation counts	Year	Reference	Knowledge group
97	2012	Li FZ, 2012, NEW ENGL J MED, V366, P511, DOI 10.1056/NEJMoa1107911	Chronic disease intervention
91	2005	Li FZ, 2005, J GERONTOL A-BIOL, V60, P187, DOI 10.1093/gerona/60.2.187	Preventing falls of the elderly
77	2004	Wang CC, 2004, ARCH INTERN MED, V164, P493, DOI 10.1001/archinte.164.5.493	Chronic disease intervention
74	2014	Wayne PM, 2014, J AM GERIATR SOC, V62, P25, DOI 10.1111/jgs.12611	Promotion for psychological well-being
69	2010	Wang CC, 2010, BMC COMPLEM ALTERN M, V10, P0, DOI 10.1186/1472-6882-10-23	Promotion for psychological well-being
66	2010	Jahnke Roger, 2010, Am J Health Promot, V24, P0, DOI 10.4278/ajhp.081013-LIT-248	Promotion for physical fitness
63	2010	Wang CC, 2010, NEW ENGL J MED, V363, P743, DOI 10.1056/NEJMoa0912611	Chronic disease intervention
62	1996	Wolf SL, 1996, J AM GERIATR SOC, V44, P489, DOI 10.1111/j.1532-5415.1996.tb01432.x	Preventing falls of the elderly
58	2012	Gillespie LD, 2012, COCHRANE DB SYST REV, V0, P0, DOI 10.1002/14651858.CD007146.PUB2	Preventing falls of the elderly
53	2008	Wayne PM, 2008, J ALTERN COMPLEM MED, V14, P95, DOI 10.1089/acm.2007.7170A	Chronic disease intervention
52	2000	Hong YL, 2000, BRIT J SPORT MED, V34, P29, DOI 10.1136/bjism.34.1.29	Promotion for physical fitness
49	2002	Wu G, 2002, J AM GERIATR SOC, V50, P746, DOI 10.1046/j.1532-5415.2002.50173.x	Preventing falls of the elderly
49	2007	Voukelatos A, 2007, J AM GERIATR SOC, V55, P1185, DOI 10.1111/j.1532-5415.2007.01244.x	Preventing falls of the elderly
49	2003	Wolf SL, 2003, J AM GERIATR SOC, V51, P1693, DOI 10.1046/j.1532-5415.2003.51552.x	Preventing falls of the elderly
48	1996	Wolfson L, 1996, J AM GERIATR SOC, V44, P498, DOI 10.1111/j.1532-5415.1996.tb01433.x	Preventing falls of the elderly
47	2003	Song R, 2003, J RHEUMATOL, V30, P2039	Chronic disease intervention
47	1998	Lan C, 1998, MED SCI SPORT EXER, V30, P345, DOI 10.1097/00005768-199803000-00003	Promotion for physical fitness
46	2009	Wang CC, 2009, ARTHRIT RHEUM-ARTHR, V61, P1545, DOI 10.1002/art.24832	Chronic disease intervention
46	2014	Wang F, 2014, INT J BEHAV MED, V21, P605, DOI 10.1007/s12529-013-9351-9	Promotion for psychological well-being

Table S3 Significant literatures in each knowledge group

Knowledge groups	First author	Year	Title of paper	Journal	Impact factor (2020 Journal Citation Reports)	Cited times (source: Web of Science)
Preventing falls of the elderly	Wolf SL	1996	Reducing frailty and falls in older persons: an investigation of tai chi and computerized balance training	Journal of the American Geriatrics Society	5.562	714
	Wolfson L	1996	Balance and strength training in older adults: intervention gains and tai chi maintenance	Journal of the American Geriatrics Society	5.562	340
	Wolf SL	2003	Intense tai chi exercise training and fall occurrences in older, transitionally frail adults: a randomized, controlled trial	Journal of the American Geriatrics Society	5.562	207
	Li FZ	2005	Tai chi and fall reductions in older adults: a randomized controlled trial	Journals of Gerontology Series A-Medical Sciences	6.053	393
	Voukelatos A	2007	A randomized, controlled trial of tai chi for the prevention of falls: the central Sydney tai chi trial	Journal of the American Geriatrics Society	5.562	170
	Li FZ	2008	Translation of an effective tai chi intervention into a community-based falls-prevention program	American Journal of Public Health	9.308	80
	Li FZ	2013	Implementing an evidence-based fall prevention program in an outpatient clinical setting	Journal of the American Geriatrics Society	5.562	25
	Li FZ	2018	Effectiveness of a therapeutic tai ji quan intervention vs a multimodal exercise intervention to prevent falls among older adults at high risk of falling	JAMA-Internal Medicine	21.873	38
Promotion for physical fitness	Lai JS	1995	Two-year trends in cardiorespiratory function among older tai chi chuan practitioners and sedentary subjects	Journal of the American Geriatrics Society	5.562	114
	Lan C	1996	Cardiorespiratory function, flexibility, and body composition among geriatric tai chi chuan practitioners	Archives of Physical Medicine and Rehabilitation	3.966	122
	Lan C	1998	12-month tai chi training in the elderly: its effect on health fitness	Medicine & Science in Sports & Exercise	5.411	217
	Lan C	1999	The effect of tai chi on cardiorespiratory function in patients with coronary artery bypass surgery	Medicine & Science in Sports & Exercise	5.411	89
	Hong YL	2000	Balance control, flexibility, and cardiorespiratory fitness among older tai chi practitioners	British Journal of Sports Medicine	13.8	216
	Lan C	2004	The aerobic capacity and ventilatory efficiency during exercise in qigong and tai chi chuan practitioners	American Journal of Chinese Medicine	4.667	54
	Zheng GH	2015	Cardiorespiratory fitness in healthy adults: a systematic review and meta-analysis	PLoS ONE	3.24	34
	Promotion for psychological well-being	Jin PT	1992	Efficacy of tai chi, brisk walking, meditation, and reading in reducing mental and emotional stress	Journal of Psychosomatic Research	3.006
Chou KL		2004	Effect of tai chi on depressive symptoms amongst Chinese older patients with depressive disorders: a randomized clinical trial	International Journal of Geriatric Psychiatry	3.485	85
Li FZ		2004	Tai chi and self-rated quality of sleep and daytime sleepiness in older adults: a randomized controlled trial	Journal of the American Geriatrics Society	5.562	187
Irwin MR		2008	Improving sleep quality in older adults with moderate sleep complaints: a randomized controlled trial of tai chi chih	Sleep	5.849	142
Wang CC		2010	Tai chi on psychological well-being: systematic review and meta-analysis	BMC Complementary and Alternative Medicine	3.659	181
Lavretsky H		2011	Complementary use of tai chi chih augments escitalopram treatment of geriatric depression: a randomized controlled trial	American Journal of Geriatric Psychiatry	4.105	137
Wang F		2014	The effects of tai chi on depression, anxiety, and psychological well-being: a systematic review and meta-analysis	International journal of behavioral medicine	2.229	128
Kong J		2019	Treating depression with tai chi: state of the art and future perspectives	Frontiers in Psychiatry	4.157	14
Chronic disease intervention	Hartman CA	2000	Effects of t'ai chi training on function and quality of life indicators in older adults with osteoarthritis	Journal of the American Geriatrics Society	5.562	138
	Song R	2003	Effects of tai chi exercise on pain, balance, muscle, strength, and perceived difficulties in physical functioning in older women with osteoarthritis	Journal of Rheumatology	4.666	215
	Wang CC	2009	Tai chi is effective in treating knee osteoarthritis: a randomized controlled trial	Arthritis Care & Research	4.794	181
	Wang CC	2016	Comparative effectiveness of tai chi versus physical therapy for knee osteoarthritis	Annals of Internal Medicine	25.391	68
	Hackney ME	2008	Tai chi improves balance and mobility in people with Parkinson disease	Gait & Posture	2.84	153
	Li FZ	2012	Tai chi and postural stability in patients with Parkinson's disease	New England Journal of Medicine	91.245	451
	Li FZ	2014	A randomized controlled trial of patient-reported outcomes with tai chi exercise in Parkinson's disease	Movement Disorder	10.338	48
	Wang CC	2010	A randomized trial of tai chi for fibromyalgia	New England Journal of Medicine	91.245	248
	Wang CC	2018	Effect of tai chi versus aerobic exercise for fibromyalgia: comparative effectiveness randomized controlled trial	BMJ-British Medical Journal	39.89	52
	Taylor-Piliae RE	2010	Effects of tai chi and western exercise on physical and cognitive functioning in healthy community-dwelling older adults	Journal of Aging and Physical Activity	1.961	104
	Nguyen MH	2012	A randomized controlled trial of tai chi for balance, sleep quality and cognitive performance in elderly Vietnamese	Clinical Interventions in Aging	4.458	85
	Mortimer JA	2012	Changes in brain volume and cognition in a randomized trial of exercise and social interaction in a community-based sample of non-demented Chinese elders	Journal of Alzheimer's Disease	4.472	150
	Li FZ	2014	Tai ji quan and global cognitive function in older adults with cognitive impairment: a pilot study	Archives of Gerontology and Geriatrics	3.25	33
	Tao J	2016	Increased hippocampus-medial prefrontal cortex resting-state functional connectivity and memory function after tai chi chuan practice in elder adults	Frontiers in Aging Neuroscience	5.75	61
Tao J	2017	Tai Chi Chuan and Baduanjin practice modulates functional connectivity of the cognitive control network in older adults	Scientific Reports	4.379	50	