

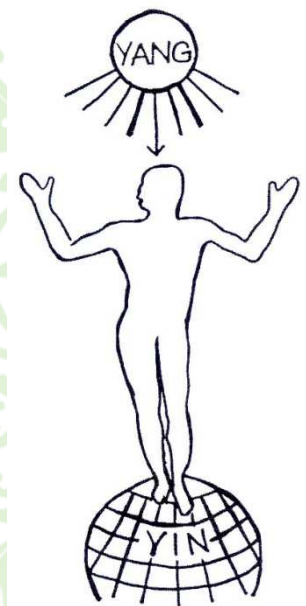


# Effectiveness Research

## Taiji/Qigong



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University of Munich, Germany



# TAIJI AND QIGONG – BROTHER AND SISTER

practised for centuries

aiming to promote health and self development and to prevent diseases

singular or partner exercise or in a group setting



especially developed for the treatment of disease and health prevention.

influenced by Daoism, Buddhism and TCM

different static and dynamic exercises,  
breathing and mediation

developed as martial art

includes a series of dance-like  
movements that combine  
to postures or forms

# TAIJI AND QIGONG

- better physical condition  
coordination, balance, stretching, flexibility
- adjusts the vegetative state
- calms down the spirit
- Exercises for self-application
- Group therapy helps to foster contact and social support



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# A Systematic Review and Meta-Analysis of Qigong for the Fibromyalgia Syndrome



Romy Lauche,<sup>1</sup> Holger Cramer,<sup>1</sup> Winfried Häuser,<sup>2,3</sup> Gustav Dobos,<sup>1</sup> and Jost Langhorst<sup>1</sup>

Evidence-Based Complementary and Alternative Medicine Volume 2013, Article ID 635182, 12 pages

Patients with fibromyalgia syndrome  
qigong vs. control intervention  
major outcome measure: pain and QoL

7 trials, 395 participants

low quality evidence for short term improvement of pain, QoL  
and sleep quality compared to usual care

No evidence for superiority of qigong compared to active treatment  
No serious adverse events

Conclusion: **Qigong may be a useful approach for FMS patients**  
**Acc. to quality of evidence only a weak recommendation can be made**

# A SYSTEMATIC REVIEW AND META-ANALYSIS OF TAI CHI FOR OSTEOARTHRITIS OF THE KNEE

Lauche R, Langhorst J, Dobos G, Cramer H. Complement Ther Med, 2013, 21(4):396-406.

- Five RCTs with a total of 252 patients
- Four studies had a low risk of bias
- moderate overall evidence for short-term effectiveness for pain, physical function, and stiffness
- Strong evidence was found for short-term improvement of the physical component of quality of life

Given that Taiji appears to be at least effective and safe in the short-term, it might be preliminarily recommended as an adjuvant treatment for patients with osteoarthritis of the knee.



# Effectiveness of Tai Chi for Chronic Musculoskeletal Pain Conditions: Updated Systematic Review and Meta-Analysis

Hall A, Copsey B, Richmond H, Thompson J, Ferreira M, Latimer J, Maher CG.  
Physical Therapy, Volume 97, Issue 2, 1 February 2017

Fifteen studies were identified

moderate-quality evidence was found that tai chi was more effective than no treatment or usual care at short term on pain (SMD=−0.66 [95% CI=−0.85, −0.48]) and disability (SMD=−0.66 [95% CI=−0.85, −0.46]).

The evidence for other outcomes was of low or very low quality and there was little information regarding long-term effects.

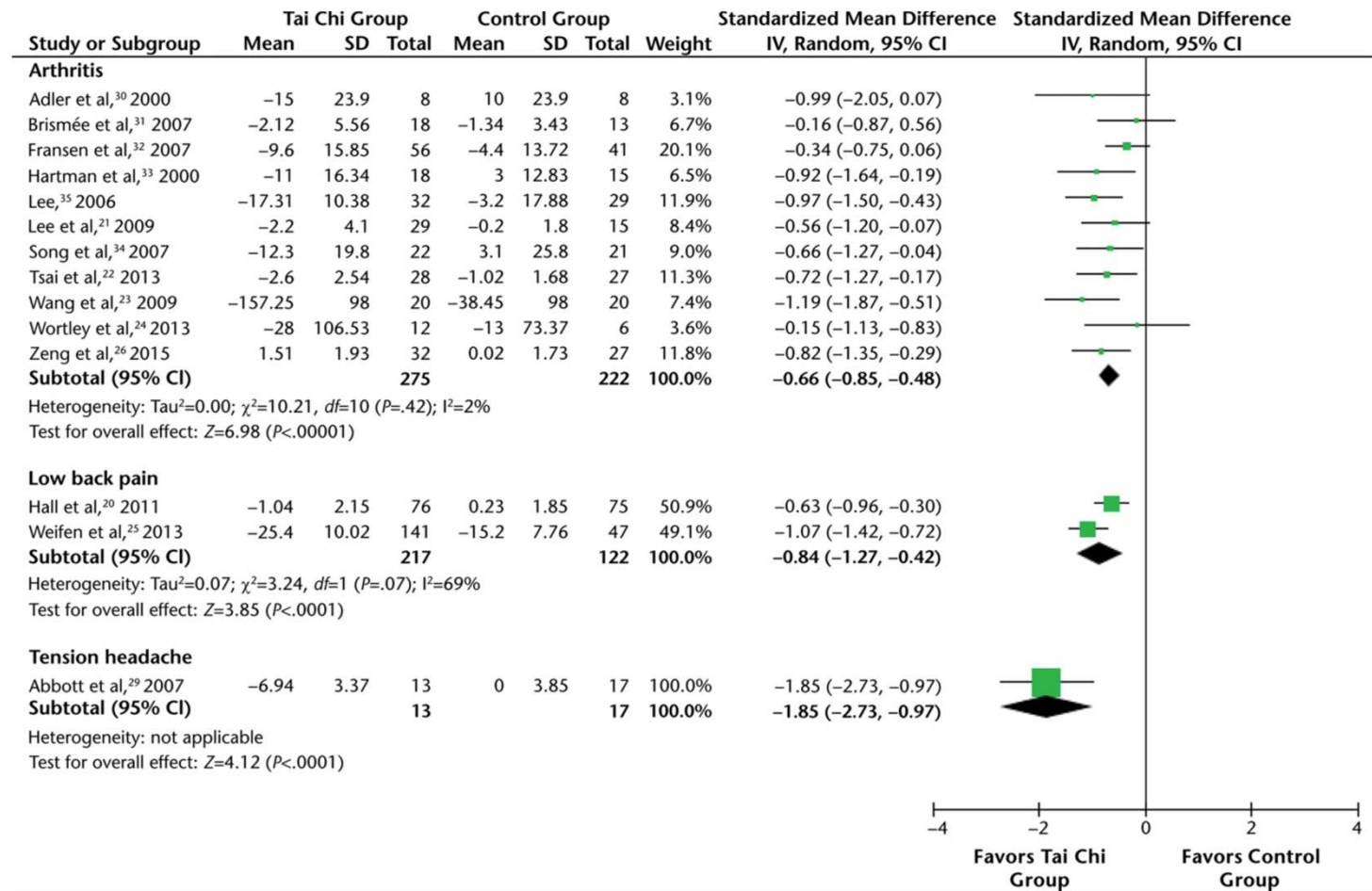
Thus, although the number of publications in this area has increased, the rigor has not, hindering physical therapists' ability to provide reliable recommendations for clinical practice.



# Effectiveness of Tai Chi for Chronic Musculoskeletal Pain Conditions: Updated Systematic Review and Meta-Analysis

Hall A, Copsey B, Richmond H, Thompson J, Ferreira M, Latimer J, Maher CG.  
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Effect of tai chi  
versus  
no treatment  
on pain



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## QIGONG – MORE STUDIES IN CNP UND LBP

Qigong seems to be superior to waiting list in patients with chronic neck pain and equal to exercises

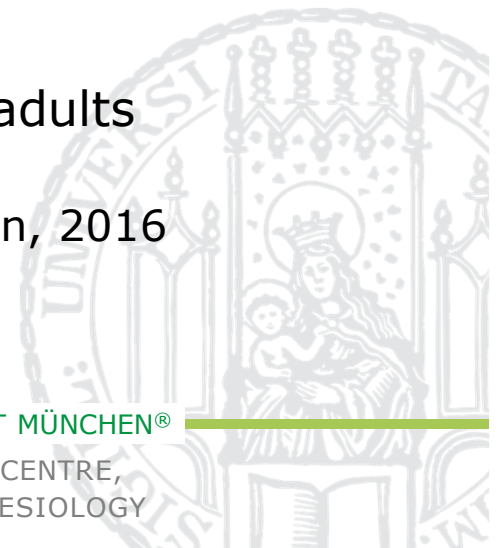
Qi-ling Yuan et al. PLOS ONE, 2015

In chronic low back pain Taiji and Qigong can improve restricted mobility, coordination and self perception, at least equal to exercises therapy (12 sessions with 1 × 90 min/week over 3 months)

Blodt et al. Europ. journal of pain 2015

Qigong and Yoga not superior to no treatment in older adults with chronic low back pain

Teut et al, J of Pain, 2016



# Tai Chi for Risk of Falls. A Meta-analysis

JAGS 65:2037–2043, 2017

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*Rafael Lomas-Vega, PhD,\* Esteban Obrero-Gaitán, MSc,\* Francisco J. Molina-Ortega, PhD,\* and Rafael Del-Pino-Casado, PhD†*

Older adults population and at-risk population  
RCTs analyzing the effect of taiji vs. other treatments

Incidence of falls, short term (< 12 months)

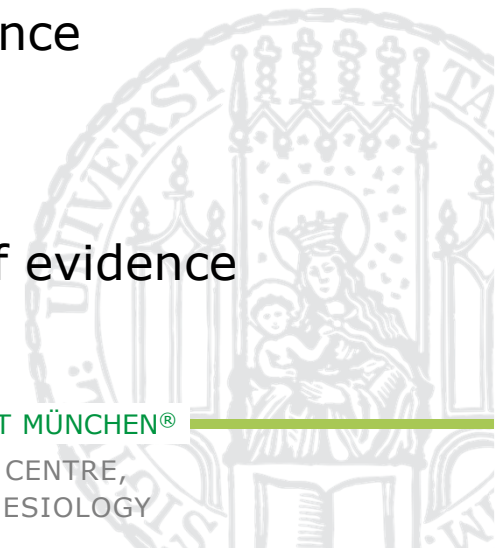
- 5 studies, 1432 participants
- High quality of medium protective effect for fall incidence

Incidence of falls, longterm (< 12 months)

- 6 studies, 1546 participants
- High quality of a small protective effect for fall incidence

Time to first fall

- 5 studies, 1320 participants
- No effect on time to first fall with moderate quality of evidence



# Tai Chi for Risk of Falls. A Meta-analysis

Rafael Lomas-Vega, PhD,\* Esteban Obrero-Gaitán, MSc,\* Francisco J. Molina-Ortega, PhD,\* and Rafael Del-Pino-Casado, PhD†

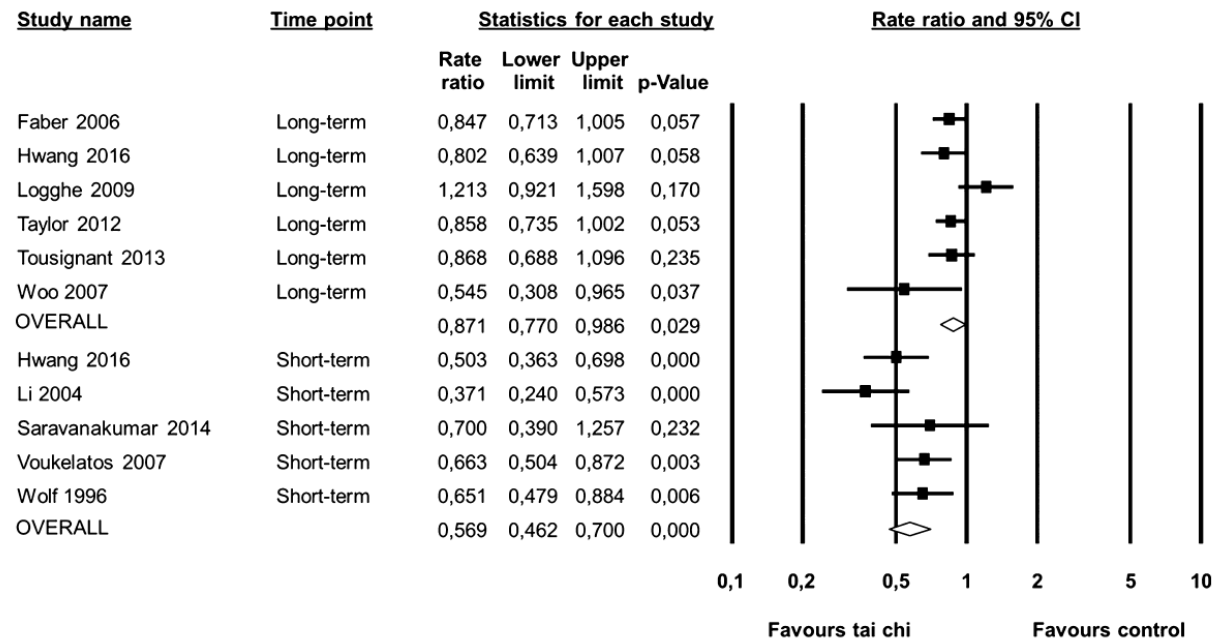
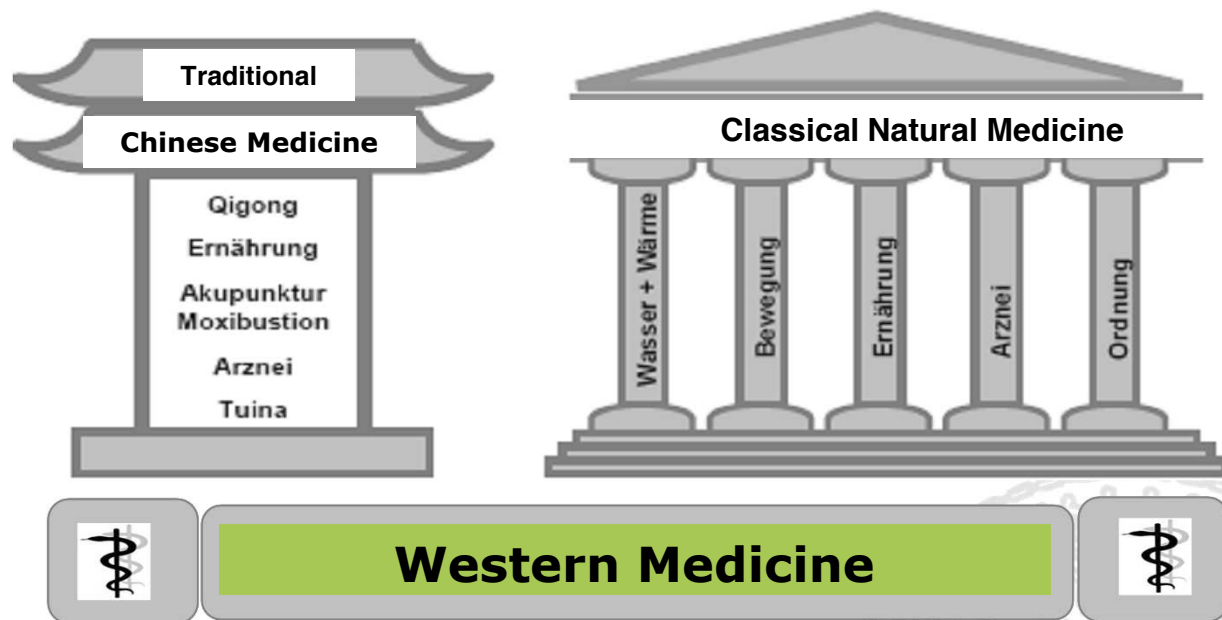


Figure 1. Forest plot for fall incidence (effect sizes are expressed as incidence rate ratio). Short-term follow-up indicates less than 12 months; long-term follow-up indicates equal to or greater than 12 months.

Taiji practice may reduce the rate of falls and injury related falls over the short term by approx. by 43% and 50% respectively

# MUNICH OUTPATIENT PROGRAM IN COMPLEMENTARY AND ALTERNATIVE MEDICINE FOR CHRONIC PAIN



- Psychosomatics
- Salutogenesis

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# MUNICH OUTPATIENT PROGRAM IN COMPLEMENTARY AND ALTERNATIVE MEDICINE FOR CHRONIC PAIN



## Therapy

Hydrotherapy  
Acupuncture  
Reflexology  
TENS  
Physiotherapy  
Occupational therapy  
CNM  
Self treatment



## Body Awareness, Self Treatment, Stress Reduction

Meditation and Imagination  
Breathing Therapy  
Qigong  
Art Therapy  
Rhythmics  
Psychotonic



## Information and Education



Bio-psycho-social model  
Anatomy, Physiology  
Pharmac. and non-pharmac. treatment  
Theory of TCM and CNM  
Stress reduction  
Work and life balance  
Diet as a general approach to wellbeing and health

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# MUNICH OUTPATIENT PROGRAM IN COMPLEMENTARY AND ALTERNATIVE MEDICINE FOR CHRONIC PAIN



## Part 1

Interdisciplinary  
outpatient group program

## Part 2

Continuous training  
on a weekly basis

## Part 3

Long term support:  
meetings, seminars,  
lectures, media



# MUNICH OUTPATIENT PROGRAM IN COMPLEMENTARY AND ALTERNATIVE MEDICINE FOR CHRONIC PAIN



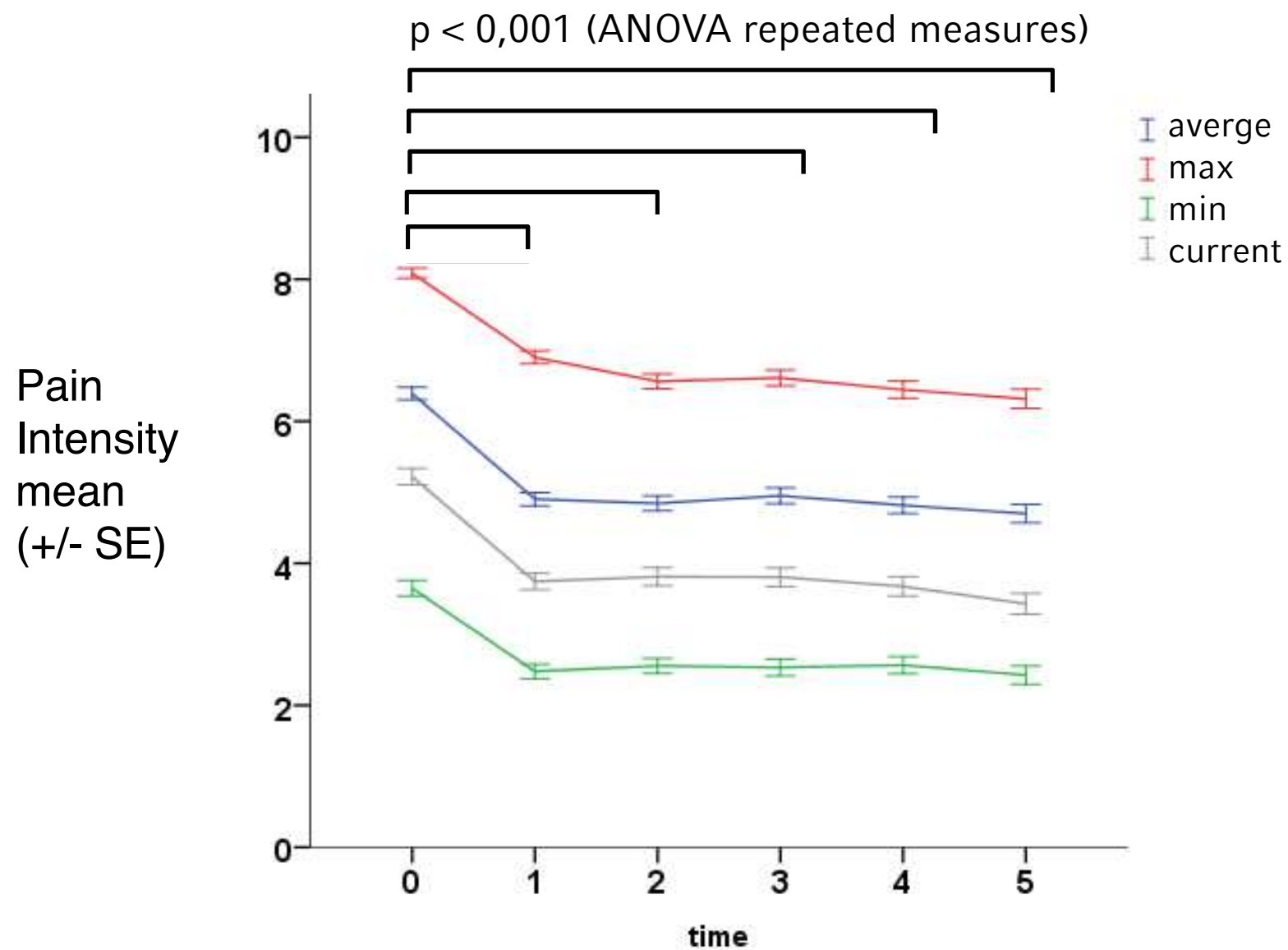
488 patients (77 groups)  
20.11.2001 – 17.04.2015



<b>Age (Mean,SD)</b>	53.1 (13.1)
<b>female, n (%)</b>	396 (81.1%)
<b>Patients highly chronified n (%)</b> Chronifizierungsgrad nach Gerbershagen III	317 (65.0%)
<b>Duration of pain, Median (IQR)</b>	53.5 (18.0 – 140.5)
<b>Duration of pain, Mean (SD)</b>	102.1 (118.6)
<b>Pain at 2 sites and more</b>	240 (49.2%)
<b>Continuous pain n (%)</b>	313 (64.1%)

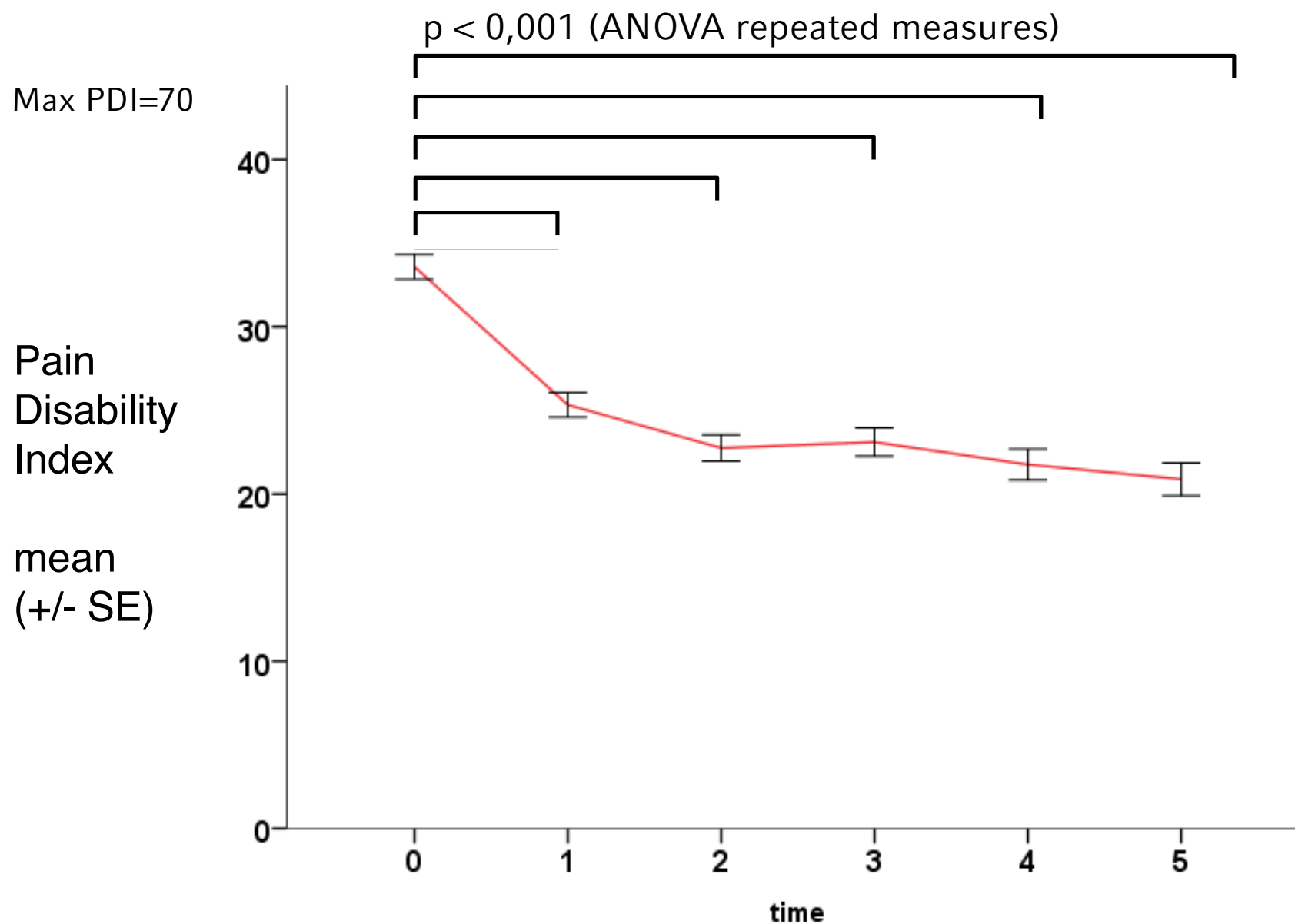


## RESULTS – PAIN INTENSITY





## RESULTS – PAIN DISABILITY INDEX (PDI)





## RESULTS – CLINICAL RELEVANCE

Effect size (Cohen`s)		t1	t2	t3	t4	t5
Pain Intensity [NRS 0-10]	mean	0.80	0.76	0.75	0.73	0.84
	maximum	0.81	0.95	0.90	0.90	1.01
	minimum	0.50	0.51	0.52	0.43	0.51
Disability (PDI)		0.50	0.79	0.76	0.77	0.81

# SUMMARY

- There is moderate to strong evidence for short term effects of Qigong and Taiji in osteoarthritis and FMS compared to no treatment control
- Qigong and Taiji seems to be equal to exercises in CNP and LBP
- More research is required, but adequate for CAM
- Qigong can easily integrated into multimodal treatment approaches

