Yoga and the Elderly

Yoga Alliance Webinar
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Aging Consequences and Challenges

- Diminution in most psychological and physical functioning
- Decline in brain function and structure: risk for cognitive decline, memory deterioration, depression, anxiety
- Bone shrinkage in size and density: risk of fracture
- Loss of muscle strength, endurance, flexibility: risk of falls/balance
- Stiffening blood vessels/arteries: risk of hypertension and CVD’s
- Reduced immune function: risk for infectious diseases and cancer
- Weakened sleep integrity: risk for insomnia
- Structural changes in intestines, bladder and prostate: risk for constipation, weak and/or frequent urination, incontinence
- Declines in vision, hearing, skin integrity, sexual health, metabolism
- Overall increase in stress and fall in well-being and quality of life
Yoga Practices
Postures, Breathing, Relaxation, Meditation

Fitness
- Flexibility
- Strength
- Coordination/Balance
- Respiratory Function
- Self-Efficacy

Self-Regulation
- Stress Regulation
- Emotion Regulation
- Resilience
- Equanimity
- Self-Efficacy

Awareness
- Attention
- Mindfulness
- Concentration
- Cognition
- Meta-cognition

Spirituality
- Unitive State
- Transcendence
- Flow
- Transformation
- Life Meaning/Purpose

Global Human Functionality
- Physical & Mental Health
- Physical Performance
- Stress & Emotion Regulation
- Awareness/Mindfulness
- Meta-cognition
- Positive Behavior
- Wellbeing
- Values
- Life Purpose & Meaning
- Spirituality
Yoga for Seniors
with Jane Adams
3 Complete Programs for Different Levels of Ability
Gentle * Easy to Follow * Effective

Jane Adams Yoga™

Age Without Limits
Over 200 Chair and Standing Yoga Poses for Seniors and the Health-Challenged
Janet Rae Humphrey, E-RYT
Certified Therapeutic Yoga for Seniors Instructor

CHAIR YOGA FOR SENIORS & BEGINNERS
Learn to practice chair yoga for seniors or people with limited mobility with this program and yoga props.
MJ FLIC

Chair Yoga
Seated Exercises for Health and Wellbeing
Edeltraud Rohnfeld

The Best is Yet to Come
Yoga on a chair? Try if you dare!
Willem Wittstamm, Mangala Singh

CHAIR YOGA FOR SENIORS
Stretches and Poses that You Can Do Sitting Down at Home
Lynn Lehmkuhl, Registered Yoga Teacher

Sit N Fit Chair Yoga
Simple Chair Yoga
By Kristine Lee
Aging Consequences and Challenges

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Psychoneuroimmunology and Stress


**Fig. 1** Psychoneuroimmunology crosstalk. The brain communicates with the immune system, thereby influencing immune function (red lines: stimulating; green lines: inhibiting). The immune system communicates with the brain by reciprocal pathways. Both directions are linked to the development of diseases. This is mainly relevant when either psychological stress lasts too long or immune system activation is chronic. In both situations, physical and mental activity are low, which can lead to illness. RAA renin–angiotensin–aldosterone system, T3 triiodothyronine (active thyroid gland hormone)
Yoga Therapy in Practice

The Psychological Benefits of Yoga Practice for Older Adults: Evidence and Guidelines

Kimberlee Bethany Bonura, PhD, RYT

Walden University, Minneapolis, MN

Table 1. Yoga Practice Recommendations for Older Adults

| Benefits of Yoga Practice (Based on Scientific and Clinical Evidence) | • Increased ability to maintain activities of daily living.  
• Increased self-efficacy for maintaining activities of daily living.  
• Reduced levels of stress, anxiety, anger, and depression.  
• Increased self-control over thoughts and emotions.  
• Improved sleep quality.  
• Reduced levels of pain.  
• Opportunity for self-reflection and spiritual inquiry. |
"...regular practice of Yoga can be considered as an effective intervention in improving...mental (reduces depression, anxiety), emotional (reduces anger, stress, tension and improve self-efficacy)...planes of elderly individuals, offering a better quality of sleep and quality of life."
Yoga-based exercise improves health-related quality of life and mental well-being in older people: a systematic review of randomised controlled trials

Alice Tulloch¹, Hannah Bombell¹, Catherine Dean¹, Anne Tiedemann²

¹Department of Health Professions, Macquarie University, NSW 2109, Australia
²Sydney School of Public Health, The University of Sydney, NSW 2050, Australia

Figure 3 Effect size (95% CI) of yoga on mental well-being by pooling data from 12 studies comparing yoga versus control using random effects meta-analysis (n = 752).

Yoga on Stress in the Elderly

Fig. 2. Perceived Stress Scale (PSS) scores before and after the yoga intervention. Values are mean ± SE. Significant difference: *p ≤ 0.05.

Yoga on Stress in the Elderly

**Figure 2.** Salivary cortisol concentration (a) and cortisol secretion rate (b) before and after rest and yoga stretching. Data are expressed as mean ± SD values. *p < .05, **p < .01 vs. before yoga (pre), †p < .05; rest vs. yoga.

Sleep Deprivation/ Disturbance and Immune Function


The Effect of a Meditative Movement Intervention on Quality of Sleep in the Elderly: A Systematic Review and Meta-Analysis

Wei-wei Wu, RN, MSc, Enid Kwong, RN, RM, PhD, Xiu-yan Lan, RN, BN, and Xiao-ying Jiang, RN, BN
older adults practicing Yoga regularly had better overall sleep quality, less episodes of disturbed sleep, took less time to fall asleep, less day time dysfunction, less use of sleep medications and also felt more rested and energetic in the morning.
Age also behaved in an interesting manner in...this population. While older individuals commonly experience higher rates of fatigue and sleep disturbances, no such relationship existed in this population of yoga practitioners. Sleep disturbance was unrelated to age, and fatigue levels significantly decreased with age.

Yoga on Sleep in the Elderly


https://pdfs.semanticscholar.org/41bf/877920ffbf8e1baac1b9c5feefb38f5171.pdf
After 6 months of performing yoga exercises, participants’ overall sleep quality had significantly improved, whereas depression, sleep disturbances, and daytime dysfunction had decreased significantly.

It is recommended that yoga exercise be incorporated as an activity program in assisted living facilities or in other long-term care facilities to improve sleep quality and decrease depression in institutionalized elders.
Yoga on Immune Function in the Elderly

Serving the Yoga Community

Yoga Alliance® is committed to promoting and supporting the integrity and diversity of the teaching of yoga.
Scientific Research on Yoga

Substantial research has been done on many of the populations and parts of the body that COVID-19 preys on most. Use this section of Yoga Alliance’s website to learn more about scientific research on the effects of yoga on the elderly, respiratory function, anxiety, and depression, to name a few.

Perhaps more than ever, yoga is being widely studied and evaluated for its positive effects and benefits. At Yoga Alliance, we curate the latest and most relevant research on yoga’s applications in health, wellness, and disease. We have filtered it in a digestible manner for our Registered Yoga Schools and Registered Yoga Teachers as well as for the broader yoga community.

This evidence-based research not only reveals the science of yoga, it also explains its therapeutic efficacy when used in conjunction with conventional medicine. Our goal is that this impactful content will be utilized in a way that highlights even more of yoga’s ancient, multi-faceted ability to improve lives.

Join us! Let us know how research on yoga is important or valuable to you on social media (@YogaAlliance) or by emailing us at research@yogaalliance.org. We honor and value your personal experiences and look forward to featuring your stories.

Our Research Conversation

Our Director of Yoga Research

Our Director of Yoga Research Dr. Sat Bir Singh Khalsa is a renowned yoga research expert and yoga teacher who has committed his professional life to clinical research surrounding yoga’s full spectrum of healing efficacy.

Learn More

Featured Research Video

Learn about the process of aging and how yoga effects (and even slows down) aging.

Watch Now

Featured Health News

Visit our COVID-19 website, YouYA.org, for the most recent and applicable information on the coronavirus and the COVID-19 pandemic.

Learn More
The Elderly and Aging
Balance, Falling, Mobility, Cognition, Memory, Sleep, Dementia

Video Spotlight: Aging

Our hope is for yoga schools and yoga teachers to utilize this impactful content in their teachings to promote and highlight yoga’s evident multi-faceted ability to improve lives. Let us know how research on yoga is important or valuable to you on social media (@YogaAlliance) or by emailing us at research@yogaalliance.org. We honor and value your personal experiences and look forward to featuring your stories.

These citations were curated by Yoga Alliance’s Director of Yoga Research, Dr. Sat Bir Singh Khalsa.

Review Papers (What’s this?)

The effects of yoga compared to active and inactive controls on physical function and health related quality of life in older adults: systematic review and meta-analysis of randomised controlled trials.

Yoga-based exercise improves health-related quality of life and mental wellbeing in older people: a systematic review of randomised controlled trials.
Tulloch A, Bombell H, Dean C, Tiedemann A.
Age Ageing. 2018 Jul 1;47(4):537-544. [full text]

Mind-Body Therapies for Late-Life Mental and Cognitive Health.
Laird KT, Paholpakt P, Roman M, Rahi B, Lavretsky H.

Notable Publications (What’s this?)

Greater Anteroposterior Default Mode Network Functional Connectivity in Long-Term Elderly Yoga Practitioners.
Front Aging Neurosci. 2019 Jul 2;11:158. [full text]

Effects of yoga on well-being and healthy ageing: study protocol for a randomised controlled trial (FitForAge).
Öst J, Diwan V, Jinwe M, Diwan Y, Choudhary A, Mahadik VK, Pascoe M, Hallgren M.
BMJ Open. 2019 May 29;9(5):e027386. [full text]

Hatha Yoga Practice Improves Attention and Processing Speed in Older Adults: Results from an 8-Week Randomized Control Trial.
Gothe NP, Kramer AF, McAuley E.