Yoga Research 101: The Basics of Yoga Research for Therapists, Instructors, and New Investigators

September 28, 2015
Preconference Workshop
IAYT Symposium on Yoga Research
Kripalu Center for Yoga & Health
Yoga as a Therapeutic Intervention:
A Bibliometric Analysis of Published Research Studies from 1967 to 2013

Pamela E. Jeter, PhD,1,2 Jeremiah Slutsky, BS,3 Nilkamal Singh, MSc,4,5 and Sat Bir S. Khalsa, PhD6

Abstract

Objective: A comprehensive bibliometric analysis was conducted on publications for yoga therapy research in clinical populations.

Methods: Major electronic databases were searched for articles in all languages published between 1967 and 2013. Databases included PubMed, PsychInfo, MEDLINE, IndMed, Indian Citation Index, Index Medicus for South-East Asia Region, Web of Knowledge, Embase, EBSCO, and Google Scholar. Nonindexed journals were searched manually. Key search words included yoga, yoga therapy, pranayama, asana. All studies met the definition of a clinical trial. All styles of yoga were included. The authors extracted the data.

Results: A total of 486 articles met the inclusion criteria and were published in 217 different peer-reviewed journals from 29 different countries on 28,080 study participants. The primary result observed is the three-fold increase in number of publications seen in the last 10 years, inclusive of all study designs. Overall, 45% of the studies published were randomized controlled trials, 18% were controlled studies, and 37% were uncontrolled studies. Most publications originated from India (n = 258), followed by the United States (n = 122) and Canada (n = 13). The top three disorders addressed by yoga interventions were mental health, cardiovascular disease, and respiratory disease.

Conclusion: A surge in publications on yoga to mitigate disease-related symptoms in clinical populations has occurred despite challenges facing the field of yoga research, which include standardization and limitations in funding, time, and resources. The population at large has observed a parallel surge in the use of yoga outside of clinical practice. The use of yoga as a complementary therapy in clinical practice may lead to health benefits beyond traditional treatment alone; however, to effect changes in health care policy, more high-quality, evidence-based research is needed.
A Systematic Scoping Review of Yoga Intervention Components and Study Quality

A. Rani Elwy, PhD, Erik J. Groessl, PhD, Susan V. Eisen, PhD, Kristen E. Riley, MA, Meghan Maiya, MA, Jennifer P. Lee, MSW, Andrew Sarkin, PhD, Crystal L. Park, PhD

Comparison groups in yoga research: A systematic review and critical evaluation of the literature

Crystal L. Park\textsuperscript{a,*}, Erik Groessl\textsuperscript{d,e}, Meghan Maiya\textsuperscript{f}, Andrew Sarkin\textsuperscript{f}, Susan V. Eisen\textsuperscript{b,c}, Kristen Riley\textsuperscript{a}, A. Rani Elwy\textsuperscript{b,c}

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Adverse Events Associated with Yoga: A Systematic Review of Published Case Reports and Case Series

Holger Cramer¹*, Carol Krucoff², Gustav Dobos¹

¹ Department of Internal and Integrative Medicine, Kliniken Essen-Mitte, Faculty of Medicine, University of Duisburg-Essen, Essen, Germany, ² Duke Integrative Medicine, Duke University, Durham, North Carolina, United States of America


Systematic Reviews and Meta- and Pooled Analyses

The Safety of Yoga: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

Holger Cramer*, Lesley Ward, Robert Saper, Daniel Fishbein, Gustav Dobos, and Romy Lauche

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Short communication

Are Indian yoga trials more likely to be positive than those from other countries? A systematic review of randomized controlled trials

Holger Cramer *, Romy Lauche, Jost Langhorst, Gustav Dobos

Department of Internal and Integrative Medicine, Kliniken Essen-Mitte, Faculty of Medicine, University of Duisburg-Essen, Essen, Germany
# Preconference Schedule

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<td>Arlene Schmid</td>
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The Need for and Value of Yoga Research

Arlene A. Schmid, PhD, OTR

Arlene is an Associate Professor in the Colorado State University Department of Occupational Therapy. Clinically, she is an occupational therapist with nearly 20 years of experience. She is a rehabilitation scientist specializing in balance and falls efficacy programming for older adults, people with stroke, and other neurological conditions. She has been funded by the VA to examine the effects of yoga in people with chronic stroke and traumatic brain injury as well as adding yoga to ongoing rehabilitation therapy. Most recently she has been awarded a grant from the American Occupational Therapy Associated to merge yoga and occupational therapy to reduce falls in adults with chronic stroke. She is the Co-Director of the Integrative Rehabilitation Lab.
Gurjeet Birdee, MD, MPH,

Gurjeet is an Assistant Professor in Internal Medicine and Pediatrics and Director of Research at the Vanderbilt Center. Dr. Birdee’s research focuses on the therapeutic application of mind-body practices for chronic disease. He has been awarded a K23 Career Development Award from the National Institutes of Health National Center for Complementary and Alternative Medicine. Dr. Birdee received his medical degree at the University of Rochester and completed an Internal Medicine and Pediatrics Residency at the University of Miami/Jackson Memorial Hospital. He completed a fellowship in Integrative Medicine at Osher Research Center Harvard Medical School and Master of Public Health at Harvard School of Public Health. Dr. Birdee completed a 500 hour yoga teacher training program with Krishnamacarya Healing and Yoga Foundation in Chennai, India, and Healing Yoga Foundation in San Francisco, CA. Dr. Birdee practices Internal Medicine and Pediatrics and yoga therapy at Vanderbilt University Medical Center.
Measurement and Enhancement of Yoga Treatment Compliance in Research

Erik Groessl, PhD

Dr. Groessl received his Clinical Psychology PhD in 1999 from the SDSU/UCSD Joint Doctoral Program with a specialization in behavioral medicine/health psychology. He is an Associate Professor at the University of California San Diego, Department of Family and Preventive Medicine and a researcher at the VA San Diego Medical Center. He is also the Center Director of the UCSD Health Services Research Center. He is PI on several projects at the VA San Diego UCSD that focus on yoga interventions and broader integrative medicine, including a 4-year RCT studying yoga for chronic low back pain among VA patients. He also continues to do research in the areas of Hepatitis C, health services research, outcomes assessment and quality of life, and cost-effectiveness.
Joseph F. Signorile, PhD

Dr. Signorile is a Professor of Exercise Physiology at the University of Miami. His research on developing novel tools to assess and improve independence and reduce falls has produced over 50 manuscripts and 250 scientific presentations. The most recent evolution of his work includes the assessment of muscle utilization patterns across common yoga poses and the modifications of classic yoga poses and pose sequences to develop targeted programs that address the specific needs of elder fallers and Parkinson’s patients. In 2011, Dr. Signorile published his definitive exercise prescription text, *Bending the Aging Curve*, which was recently translated into Cantonese. (Also a Pre-conference Workshop Presenter)
PROMIS Outcome Measures for Yoga Research

Alyson Ross, PhD, RN

Dr. Alyson Ross is a Nurse Researcher at the National Institutes of Health (NIH) Clinical Center in Bethesda, Maryland. She graduated from Vanderbilt University with a BSN and MSN in psychiatric mental-health nursing. Dr. Ross received a Doctor of Philosophy from University of Maryland School of Nursing. Dr. Ross was awarded Predoctoral and Postdoctoral Intramural Research Fellowships at the NIH Clinical Center, where she currently works for the Department of Nursing Research and Translational Science researching the impact of health behaviors, particularly the effect of mind-body interventions such as yoga, on stress in both family and professional caregivers. Dr. Ross has studied yoga for over 25 years and is a certified iyengar yoga teacher. She has lectured and published extensively on the health benefits of yoga.