**Contents**

37 New Cites p1

8 Interventions

15 Associations

6 Methods

6 Reviews

2 Trials

Highlights p4

Announcements p5

---

**Interventions**

*Articles testing the applied science and implementation of mindfulness-based interventions*


---

**Associations**

*Articles examining the correlation and mechanism between mindfulness and other variables*


---

**METHODS**

*Articles developing empirical procedures to advance the measurement and methodology of mindfulness*


Contents

37 New Cites p1
8 Interventions
15 Associations
6 Methods
6 Reviews
2 Trials

Highlights p4
Announcements p5

Editor
David S. Black, PhD, MPH

Highlights by
Seth Segall, PhD

Subscribe at
www.mindfulexperience.org
/newsletter.php

MAY 2013

Vol. 4 - Num. 5

Node


REVIEWS

Articles reviewing content areas of mindfulness or conducting meta-analyses of published research


TRIALS

Research trials on mindfulness newly registered at ClinicalTrials.gov

Brown University (W. Britton, PI). Dismantling mindfulness. Trial# NCT01831362. [link]

Oregon Health and Science University (R. Nardos, PI). Examining bladder control using mindful based approach. Trial# NCT01843543. [link]
Highlights

A summary of new studies or events, providing a snapshot of some of the latest research findings

Nearly 450 researchers, MBSR teachers, and clinicians assembled for the 11th Annual International Scientific Conference of the Center for Mindfulness in Medicine, Healthcare and Society this April in Norwood, Massachusetts. Presentations by Norman Farb, Ph.D., Wendy Hasenkamp, Ph.D., David Creswell, Ph.D., Eileen Luders, Ph.D. and David Vago, Ph.D. focused on the neuropsychological correlates of mindfulness. Each of the researchers presented data from past studies along with new findings from as yet unpublished work.

Norman Farb presented MRI data on two opposing neural systems: the interoceptive pathway where bodily awareness is represented, and the default network which is often associated with self-referential narrative awareness and mind wandering. He presented studies showing that MBSR training is associated with increased recruitment of the interoceptive awareness pathway along with increased connectivity of the posterior insula (a key component of that pathway) to the prefrontal cortex. This increased connectivity had both state-and-trait features.

Wendy Hasenkamp’s MRI research showed how different neural networks are deployed during different moments of focused meditation, depending on whether focus is established, the mind wanders off-focus, the mind becomes aware of wandering or the mind re-establishes its focus. She identified activity in the brain’s default network during mind wandering, activity in a neural salience network with awareness of mind wandering, and activity in a neural executive network for shifting and maintaining focus. More experienced meditators had increased resting-state functional connectivity between the right insula and the dorsolateral prefrontal cortex, and between the ventromedial prefrontal cortex and the bilateral inferior parietal lobe, suggesting increased functional connectivity within and between attentional networks. Experienced meditators also showed decreased ventromedial prefrontal activity while shifting back to focus, perhaps reflecting a decreased “stickiness” of their thoughts.

David Creswell also presented MRI functional connectivity data showing that a three-day mindfulness retreat increased connectivity between the posterior cingulate cortex and the bilateral dorsolateral prefrontal cortex. This increased functional connectivity was shown to mediate a decrease in the participants’ interleukin-6 inflammatory response.

Eileen Luders reviewed a series of studies showing structural brain changes in long-term meditators (participants had an average of 21 years of practice) compared with matched controls. Meditators had greater grey matter concentration, greater fiber connectivity, greater cortical gyriﬁcation, and a thicker corpus callosum and larger hippocampus compared with controls. They also showed a slower decline of white matter connectivity with age.

David Vago proposed a neurobiological model to help guide mindfulness investigation called S-ART (Self-Awareness, Self-Regulation and Self-Transcendence), which hypothesizes the brain networks and processes undergirding meta-awareness, emotional and behavioral modulation, and prosocial transcendence of self-focused needs. Vago hypothesizes that meditation training modules self-specifying and narrative-self brain networks through an integrative fronto-parietal control network. He presented preliminary data using experienced meditators illustrating the role of the integrative fronto-parietal network (along with the basal ganglia and primary somatosensory cortex). Hours of formal meditation practice correlated with higher frontopolar cortical activation and lower self-reflective hippocampal-cortical-memory network activation.

Taken together, these studies point to significant changes in brain structure and functional connectivity that occur over time with meditative experience, as well as progress in identifying brain networks that are responsible for different aspects of meditative experience.

Image source: usa.gov
Submit your announcements online at www.mindfulexperience.org/announcements.php

Categories: Books & Media, Events & Conferences, Jobs & Volunteer, and Research & Education

Events & Conferences

Self-Compassion & Mindfulness Workshop Germer Neff

Come to Amsterdam NLD this Summer for a two day intensive workshop with Kristin Neff and Christopher Germer on Self-Compassion and Mindfulness. Take this professional training for personal development and be able to bring the transformative power of self-compassion to the people you work with.

INFO: Date: 7 & 8 August 2013. Visit http://centrumvoormindfulness.nl/workshop-compassion-germer-neff

Mindful Art Experience

Mindful Art at the Tree Frog Gallery, Maleny, Queensland is an inspiring interactive event offering: • Mindful viewing • Sensory trails • Visualizations • Musical Inspirations • Treasured Tips from Artist Heather Be creative in your own quiet space facebook 'MindfulArtAtTheTreeFrogGallery'

INFO: info@treefroggallery.com Heather & Janet

Research & Education

Online UCLA Mindfulness Class

UCLA Mindful Awareness Research Center (MARC) offers a 6-week online class: Mindful Awareness Practices for Daily Living. This class is an excellent introduction to mindfulness. You will learn meditation practices including sitting meditation, walking meditations and how to work with difficult thoughts and emotions. The pre-recorded course can be accessed from anywhere at your own pace. Includes weekly live text chats with instructors and other participants. Offered throughout the year. Advanced classes available.

INFO: More information at http://marc.ucla.edu/body.cfm?id=112

Books & Media

INFO: None posted