Selected Research on Mindfulness

Document format
Broad Categories: executive functioning, stress and mood management, health benefits, impact on job fulfillment
More specific result/outcome link
Article Title
Article Citation and link to the Abstract or article

Improvement in Job Satisfaction and Job Performance in Physicians and Healthcare Providers

Small group physician intervention improved meaning and engagement in work, reduced depersonalization. Mayo Clinic conducted a physician intervention using a facilitated small-group curriculum. It improved meaning and engagement in work and reduced depersonalization, with sustained results at 12 months after the study. Physicians had 1 hour of paid protected time to participate in the intervention. Mindfulness was used in the curriculum.


Formal MBSR class effective in reducing healthcare providers’ burnout rates
Healthcare providers who completed a formal mindfulness course (2.5 hours/week for 8 weeks and a retreat) significantly improved in burnout and well-being scores.

Full text: http://ijp.sagepub.com/content/43/2/119.short?rss=1&ssource=mfc

Randomized controlled trial shows mindfulness training reduces key drivers of burnout in physicians
Randomized controlled trial with MBI training for PCPs resulted in significant improvements in stress, mindfulness, emotional exhaustion and depersonalization. There were no improvements in the control group.

doi: 10.1177/1559827616629121
Brief ahead of publication: http://www.mdlinx.com/family-medicine/medical-news-article/2016/02/08/mindfulness-burnout-perceived-stress-resilience/6530485/

An observational study of physicians and APPs found clinicians who rated themselves as mindful had more patient-centered communication and more satisfied patients.

doi: 10.1370/afm.1507
Full text: http://www.annfammed.org/content/11/5/421.full
Mindfulness and Brain Functioning

When looking at executive functioning, mindfulness helps enhance inhibitory improvement specifically
doi: 10.1016/j.concog.2016.01.005

Small RCT found mindfulness meditation reduced IL-6 suggesting reduced inflammation
DOI:10.1016/j.biopsych.2016.01.008

Alterations in Brain and Immune Functioning Produced by Mindfulness Meditation
doi: 10.1097/01.PSY.0000077505.67574.E3

A small study that demonstrated that MBSR is associated with changes in gray matter concentration in brain regions involved in learning and memory processes, emotion regulation, self-referential processing, and perspective taking.
Mindfulness practice leads to increases in regional brain gray matter density
doi: 10.1016/j.psychresns.2010.08.006
Full text: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3004979/

Even short mindfulness meditation training can improve the ability to sustain attention
doi: doi:10.1016/j.concog.2010.03.014

Supports the hypothesis that mindfulness meditation is brain-protective and associated with a reduced age-related tissue decline. Nevertheless, the observed effects may not only be a consequence of meditating, but also of other factors allowing for a successful long-term meditation practice.
doi: 10.3389/fpsyg.2014.01551
Mindfulness and Health

Meditation programs can result in small to moderate reductions in multiple negative dimensions of psychological stress.


Results of meta-analysis suggest that MBSR can be used to help a broad range of individuals cope with clinical and nonclinical problems.


Possible effects of mindfulness meditation on specific markers of inflammation, cell-mediated immunity, and biological aging, but these results are tentative and require further replication.


Randomized controlled trial shows benefits of mindfulness on smoking cessation.

doi: 10.1016/j.drugalcdep.2011.05.027
Full text: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3191261/

Mindfulness and Technology

Although many apps claim to be mindfulness apps, most are meditation or guided meditation. Little evidence on efficacy.

Mani M, Kavanagh DJ, Hides L, Stoyanov SR. Review and Evaluation of Mindfulness-Based iPhone Apps. JMIR mHealth uHealth. 2015;3(3):e82.
doi: 10.2196/mhealth.4328
Full text download: http://mhealth.jmir.org/2015/3/e82/