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Seth Segall, Ph.D.

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Interventions

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

Chen, S., Gao, X., Shi, T., ...& He, Y. (2023). **Promising Subjective and Objective Benefits of Modified MBSR Training for Chinese Adults with Chronic Pain: A Pilot Randomized Control Study.** *Pain and Therapy.* [\[link\]](#)

Haines, B. A., Hong, P. Y., Immel, K. R., & Lishner, D. A. (2023). **The Mindfulness-Based Kindness Curriculum for Preschoolers: An Applied Multi-Site RCT.** *Mindfulness.* [\[link\]](#)

Huijbers, M. J., Wentink, C., Lucassen, P. L. B. J., ...& Speckens, A. E. M. (2023). **Supporting antidepressant discontinuation using mindfulness plus monitoring versus monitoring alone: A cluster randomized trial in general practice.** *PLOS ONE.* [\[link\]](#)

Imhoff-Smith, T. P., & Grupe, D. W. (2023). **The impact of mindfulness training on posttraumatic stress disorder symptoms, subjective sleep quality, and objective sleep outcomes in police officers.** *Psychological Trauma: Theory, Research, Practice and Policy.* [\[link\]](#)

Kappes, C., Marion-Jetten, A. S., Taylor, G., ...& Stach, P. (2023). **The role of mindfulness and autonomous motivation for goal progress and goal adjustment: An intervention study.** *Motivation and Emotion.* [\[link\]](#)

Leibovitz, S. E., Sevinc, G., Greenberg, J., ...& Lazar, S. W. (2023). **Mindfulness training and exercise differentially impact fear extinction neurocircuitry.** *Psychological Medicine.* [\[link\]](#)

Othman, S. Y., Hassan, N. I., & Mohamed, A. M. (2023). **Effectiveness of mindfulness-based interventions on burnout and self-compassion among critical care nurses caring for patients with COVID-19: A quasi-experimental study.** *BMC Nursing.* [\[link\]](#)

Scafuto, F., Ghiroldi, S., Montecucco, N. F., ...& Iani, L. (n.d.). **Promoting well-being in early adolescents through mindfulness: A cluster randomized controlled trial.** *Journal of Adolescence.* [\[link\]](#)

Seritan, A., Iosif, A.-M., Prakash, P., ...& Eisendrath, S. (2023). **Mindfulness-Based Cognitive Therapy Improves Anxiety and Depression in People with Parkinson's Disease: Evidence from Two Pilot Clinical Trials.** *The American Journal of Geriatric Psychiatry.* [\[link\]](#)

She, X., Tong, L., Wang, H., ...& Rozelle, S. (2023). **Community Mindfulness and Mentorship Preventive Intervention in Migrant Chinese Children: A RCT.** *JAACAP Open.* [\[link\]](#)

Siegmann, E.-M., Eichler, A., Buchholz, V. N., ...& Lenz, B. (2023). **Effects of an App-Based Mindfulness Intervention during Pregnancy on the Infant's Prenatal Androgen Exposure: A Randomized Controlled Pilot Trial.** *Journal of Clinical Medicine.* [\[link\]](#)

Wang, Q., Luan, Y., Liu, D., ...& Bi, H. (n.d.). **Guided self-help mindfulness-based intervention for increasing psychological resilience and reducing job burnout in psychiatric nurses: A RCT** *International Journal of Nursing Practice.* [\[link\]](#)

Young, D. K., Carlbring, P., Ng, P. Y., ...& Ng, S. (2023). **Low-intensity online mindfulness-based intervention for university students with anxiety during the COVID-19**

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pandemic—A RCT with 3-month follow-up. *Internet Interventions.* [\[link\]](#)

Zhu, Q., Wang, Q., & Yang, S. (2023). **Does mindfulness matter in the development of character strengths? A RCT study comparing mindfulness-based strengths practice and character strengths-based intervention.** *The Journal of Positive Psychology.* [\[link\]](#)

Associations

Articles examining the correlates and mechanisms of mindfulness

Cloonan, S., Fowers, R., Huberty, J., & Stecher, C. (2023). **Meditation App Habits and Mental Health: A Longitudinal Study of Meditation App Users During the COVID-19 Pandemic.** *Mindfulness.* [\[link\]](#)

Firth, A., Sütterlin, S., & Lugo, R. (2023). **The Role of Trait and State Mindfulness in Cognitive Performance of Male Adolescents.** *Psychology Research and Behavior Management.* [\[link\]](#)

Ganesan, S., A. Moffat, B., Van Dam, N. T...& Zalesky, A. (2023). **Meditation attenuates default-mode activity: A pilot study using ultra-high field 7 Tesla MRI.** *Brain Research Bulletin.* [\[link\]](#)

Gavrilova, L., & Zawadzki, M. J. (2023a). **Examining How Headspace Impacts Mindfulness Mechanisms Over an 8-Week App-Based Mindfulness Intervention.** *Mindfulness.* [\[link\]](#)

Gavrilova, L., & Zawadzki, M. J. (2023b). **Mindfulness mechanisms in everyday life: Examining variance in acceptance, attention monitoring, decentering, self-compassion, and nonreactivity and their**

links to negative emotions among a workplace sample. *Cognition and Emotion.* [\[link\]](#)

Harris, K., Jackson, J., Webster, H., ...& Hohmann, L. (2023). **MBSR for Chronic Pain Management in the Community Pharmacy Setting: A Cross-Sectional Survey of the General Public's Knowledge and Perceptions.** *Pharmacy.* [\[link\]](#)

Kalmbach, D. A., Reffi, A. N., Ong, J. C., ...& Drake, C. L. (2023). **Preliminary evidence of psychological improvements and increased maternal-fetal attachment associated with a mindfulness sleep programme: Secondary analysis of uncontrolled data in 11 pregnant women with insomnia disorder.** *Journal of Sleep Research.* [\[link\]](#)

Kral, T. R. A., Weng, H. Y., Mitra, V., ...& Davidson, R. J. (2023). **Slower respiration rate is associated with higher self-reported well-being after wellness training.** *Scientific Reports.* [\[link\]](#)

Kruse, J. A., & Seng, E. K. (2023). **Changes in cognitive appraisal in a RCT mindfulness-based cognitive therapy for patients with migraine.** *Headache:* [\[link\]](#)

Toniolo-Barrios, M., & ten Brummelhuis, L. L. (2023). **How does mindfulness reduce stress at work? A two-study examination using a stress appraisal perspective.** *Personality and Individual Differences.* [\[link\]](#)

Methods

Articles developing empirical procedures to advance the measurement and methodology

Børøsund, E., Meland, A., Eriksen, H. R., ...& Nes, L. S. (2023). **Digital Cognitive Behavioral- and Mindfulness-Based Stress-Management**

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Interventions for Survivors of Breast Cancer: Development Study. *JMIR Formative Research.* [\[link\]](#)

Burrows, B. T., Morgan, A. M., King, A. C., ...& Wilund, K. R. (2023). **Virtual Reality Mindfulness and Personalized Exercise for Patients on Hemodialysis with Depressive Symptoms: A Feasibility Study.** *Kidney and Dialysis.* [\[link\]](#)

Cheng, Y. T. D., Young, K. W. D., Carlbring, P., ...& Hung, S. L. S. (2023). **Validation of a Chinese Short Version of the Kentucky Inventory of Mindfulness Skills (KIMS-17) Among People Recovering from Mental Illness.** *Mindfulness.* [\[link\]](#)

Gilbert, P., Basran, J., Plowright, P., ...& Petrocchi, N. (2023). **Fears and Resistances to Mindfulness: Development of a Self-Report Scale.** *Mindfulness.* [\[link\]](#)

Jarukasemthawee, S., Halford, W. K., Fox, A., ...& Sittwong, J. (2024). **Development and validation of the Mindfulness Insight Scale.** *Personality and Individual Differences.* [\[link\]](#)

Kor, P. P. K., Chou, K. L., Zarit, S. H., ...& Chu, L.-W. (2023). **Sequential multiple assignment randomised controlled trial protocol for developing an adaptive intervention to improve depressive symptoms among family caregivers of people with dementia.** *BMJ Open.* [\[link\]](#)

Lee, B. M., Kim, S.-W., Lee, B. J., ...& Chung, Y.-C. (2023). **Effects and safety of virtual reality-based mindfulness in patients with psychosis: A randomized controlled pilot study.** *Schizophrenia.* [\[link\]](#)

Listiyandini, R. A., Andriani, A., Kusrianti, C., ...& Newby, J. M. (2023). **Culturally Adapting an Internet-Delivered Mindfulness**

Intervention for Indonesian University Students Experiencing Psychological Distress: Mixed Methods Study. *JMIR Formative Research.* [\[link\]](#)

Marx, J. M., & Miller, A. (2023). **Evaluating the Accessibility of Mindfulness and Meditation Information Online: A Content Analysis Using the Federal Plain Language Guidelines.** *Journal of Technology in Behavioral Science.* [\[link\]](#)

Mathur Grunewald, N., & Foley-Nicpon, M. (2023). **Exploring the utility of community-based participatory research to investigate mindfulness-based interventions in schools.** *Psychology in the Schools.* [\[link\]](#)

Shang, B., Duan, F., Fu, R., ...& Chang, C. (2023). **EEG-based investigation of effects of mindfulness meditation training on state and trait by deep learning and traditional machine learning.** *Frontiers in Human Neuroscience.* [\[link\]](#)

Wang, Q., Ng, S., & Zhou, X. (2023). **The mechanism and effectiveness of mindfulness-based intervention for reducing the psychological distress of parents of children with autism spectrum disorder: A protocol of randomized control trial of ecological momentary intervention and assessment.** *PLOS ONE.* [\[link\]](#)

Reviews

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

Chambers, R., Stoliker, D., & Simonsson, O. (2023). **Psychedelic-Assisted Psychotherapy and Mindfulness-Based Cognitive Therapy: Potential Synergies.** *Mindfulness.* [\[link\]](#)

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Forbes, Z. N. M., & Miller, K. (2023). **Mindfulness-Based Stress Reduction in the Treatment of Adults with Autism Spectrum Disorder: A Systematic Review of Interventional Studies.** *Review Journal of Autism and Developmental Disorders.* [\[link\]](#)

Hamasaki, H. (2023). **The Effects of Mindfulness on Glycemic Control in People with Diabetes: An Overview of Systematic Reviews and Meta-Analyses.** *Medicines.* [\[link\]](#)

Johnson, B. T., Acabchuk, R. L., George, E. A., ...& Loucks, E. B. (2023). **Mental and Physical Health Impacts of Mindfulness Training for College Undergraduates: A Systematic Review and Meta-Analysis of Randomized Controlled Trials.** *Mindfulness.* [\[link\]](#)

Larsen, J. K., Hollands, G. J., Garland, E. L., ...& Wiers, R. W. (2023). **Be more mindful: Targeting addictive responses by integrating mindfulness with cognitive bias modification or cue exposure interventions.** *Neuroscience & Biobehavioral Reviews.* [\[link\]](#)

Lv, J., Jiang, Y., Li, R., ...& Zeng, X. (2023). **Effects of loving-kindness and compassion meditations on self-compassion: A systematic review and meta-analysis.** *Clinical Psychology: Science and Practice.* [\[link\]](#)

Xu, F., Zhu, W., Chen, Q., & Tang, Y. (2023). **Online mindfulness interventions for improving people's mental health during the COVID-19 pandemic: A meta-analysis of randomized controlled trials.** *Current Psychology.* [\[link\]](#)

Yang, J., Ye, H., Long, Y., ...& Wang, M. (2023). **Effects of Web-Based Mindfulness-Based Interventions on Anxiety, Depression, and Stress Among Frontline Health Care**

Workers During the COVID-19 Pandemic: Systematic Review and Meta-Analysis. *Journal of Medical Internet Research.* [\[link\]](#)

Yu, J., Han, M., Miao, F., & Hua, D. (2023). **Using mindfulness-based stress reduction to relieve loneliness, anxiety, and depression in cancer patients: A systematic review and meta-analysis.** *Medicine.* [\[link\]](#)

Trials

Research studies newly funded by the National Institutes of Health (SEP 2023)

Beth Israel Medical Center (G. Yeh, PI). **Mindful Steps: A Web-Based Mind-Body Exercise Intervention to Promote Physical Activity in Chronic Cardiopulmonary Disease.** NIH/NCCIH project #1R01AT012166-01A1. [\[link\]](#)

Massachusetts General Hospital (J. Foley, PI). **Mindfulness and Behavior Change to Reduce Cardiovascular Disease Risk in Older People with HIV.** NIH/NHLBI project #1K23HL167650-01A1. [\[link\]](#)

University of Rhode Island (J. Bosse, PI). **Evaluating the Feasibility and Acceptability of Mindful Self-Compassion Among Gender Minority Young Adults.** NIH/NCCIH project #1K01AT012495-01. [\[link\]](#)

Worcester Polytechnic Institute (J. King, PI). **IMPACT: Integrative Mindfulness-Based Predictive Approach for Chronic low back pain Treatment.** NIH/NINDS project #1UG3NS135168-01. [\[link\]](#)

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Highlights

A summary of select studies from the issue, providing a snapshot of some of the latest research

A child's ability to self-regulate emotions and attention is the foundation for later social and emotional development. Programs that foster these abilities can have beneficial effects on later academic, work, family, social, and civic functioning. Many primary schools already employ social-emotional learning curricula around the globe, but could those curricula be improved by adding a mindfulness-based component?

Haines et al. [*Mindfulness*] conducted a randomized controlled study to test the effects of a Mindfulness-Based Kindness Curriculum (MBKC) on early childhood social-emotional, executive, and academic functioning.

The researchers randomly assigned 16 pre-school and 4 kindergarten classrooms, comprising 245 children (mean age = 4 years; 77% lower income; 54% male; 42% Caucasian, 24% Hispanic, 13% Black, 12% Asian, 8% mixed ethnicity), to a classroom curriculum-as-usual or the classroom curriculum with the addition of MBKC. Fourteen of the 16 classrooms (including all the control classrooms) already had established social-emotional learning programs as part of their regular curricula.

The 12-week MBKC program consisted of 24 lessons, each lasting 15-20 minutes, and these lessons taught by the children's regular classroom teachers, each of whom received 26 hours of training. The MBKC lessons incorporated children's literature, music, and movement, and they were organized into 8 thematic categories: mindful bodies, inside emotions, emotional expression, emotional caretaking, self-calming, gratitude, caring for others, and caring for the world. The overarching focus of the program was on teaching non-judgmental acceptance, present-moment awareness, and kindness.

To assess the impact of the intervention, students were evaluated 6 weeks before the program's initiation and 4 weeks after its completion. The assessments included a set of social and cognitive tasks, which were scored by blinded raters. Additionally, self-assessments, teacher evaluations, and parent ratings were used to measure social-emotional, academic, and developmental competencies.

The results showed that the MBKC group outperformed controls on a generosity task in which they could keep stickers for themselves or dole them out to various others, including a sick child (partial $\eta^2 = .02$). According to teacher reports, the MBKC group was rated as more prosocial (.07) and empathic (.08) and as showing greater social emotional intelligence (.08), cognitive development (.19), physical development (.41), language ability (.10), math ability (.20), and literacy (.43). According to parent reports, the MBKC group showed higher levels of cognitive empathy (.05) and social-emotional functioning (.02).

On many of the measures, children who initially performed poorly on pre-intervention measures benefitted the least from MBKC, while those who initially performed the best on the baseline showed the greatest improvements. For example, when it came to a task measuring the ability to remain undistracted by extraneous cues (known as the Flanker task), children who initially scored the lowest on the pretest benefitted more from the routine curriculum, while those who initially scored the highest on the pretest benefitted more from MBKC (.07).

The study demonstrates that MBKC has the potential to enhance generosity, empathy, and social-emotional functioning in young children, particularly in those who already possess baseline social-emotional and cognitive competencies. The study suffers some limitations. Ratings provided by teachers and parents who were not blinded to the study group yielded results that were more pronounced than those provided by objective measures that were scored by blind raters. Also, the significant improvements in teacher ratings

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for children's physical, language, and math competencies were unexpected.

Respiration rate, which denotes the number of times we breathe each minute, holds promise as a potential biomarker for subjective well-being. Respiration rate tends to increase during periods of stress, anxiety, or pain, while it tends to decrease during periods of calm and relaxation. Rates are potentially modifiable: the more meditation hours long-term meditators have cumulatively, the slower their baseline respiration rates. Perhaps it is respiration rate that improves subjective well-being in meditators.

Kral et al. [Scientific Reports] tested the effect of Mindfulness-Based Stress Reduction (MBSR) on the respiration rates and well-being of people who were naïve to meditation. They also conducted a cross-sectional analysis to test for a possible association between respiration rate and well-being in more experienced meditators not involved in the MBSR trial.

The researchers randomized 203 meditation-naïve adults (average age = 42 years; 61% female; 90% Caucasian) to MBSR, a Health Enhancement Program (HEP), or a waitlist control. This secondary analysis is part of a larger study of MBSR and asthma. Out of the 203 participants, 70 had been diagnosed with asthma. Participants with asthma were assigned to either MBSR or HEP, while those without asthma were assigned to MBSR, HEP, or the waitlist control.

The MBSR intervention followed standard protocol. HEP matched MBSR in terms of the length and frequency of group sessions and homework. HEP sessions did not teach mindfulness but instead focused on nutrition, music therapy, balance and agility, and aerobic exercise. Participants completed assessments at pre-randomization, post-intervention, and 6-month follow-up, which included baseline respiration rate and self-report measures of physical and subjective well-being and distress. Respiration rates

were measured using an abdominally-placed pneumatic belt while participants underwent fMRI scans (fMRI data were not reported in this article).

The researchers also recruited a cohort of 42 long-term meditators (mean age = 44 years; 62% male; 88% Caucasian) with a minimum of 5 years of daily meditation practice and at least 5 weeks of meditation retreat experience. Long-term meditators were not assigned to interventions and were evaluated once.



The results for the long-term meditators showed a significant association between slower respiration rates and lower distress and greater well-being scores. The meditation-naïve MBSR group showed significantly lowered respiration rates compared to waitlist controls, but this difference was no longer significant at six months. The MBSR group had decreased distress symptoms at post-intervention compared to both HEP and control groups, but scores on well-being showed no group differences after the intervention.

The study suggests that slower respiration rates are associated with greater subjective well-being in long-term meditators. MBSR can lower respiration rates and reduce distress in meditation-naïve participants, but slowed respiration rates do not persist over time, and there is no significant improvement in well-being beyond some stress and anxiety reduction.

The study has limitations, including the differential enrollment and assignment to groups of asthmatic and non-asthmatic samples, as well as by its reliance on a single measure of respiration rate captured only in a controlled laboratory setting. Additionally, the measure of subjective well-being used in this study may not be sensitive to short-term interventions but may primarily reflect long-term shifts in other factors such as relationships and achievements.