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Interventions

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

Chiodelli, R., de Mello, L. T., de Jesus, S. N., Andretta, I. (2020). **Effects of a Brief Mindfulness-Based Intervention on Depression, Anxiety, and Stress in Senior Students**. *Trends in Psychology*. [link]

Crooks, C. V., Bax, K., Delaney, A.,...Shokoohi, M. (2020). **Impact of MindUP Among Young Children: Improvements in Behavioral Problems, Adaptive Skills, and Executive Functioning**. *Mindfulness*. [link]

Czajkowski, A.M., Greasley, A. E., Allis, M. (2020). **Mindfulness for musicians: A mixed methods study investigating the effects of 8-week mindfulness courses on music students at a leading conservatoire**. *Musicae Scientiae*. [link]

Davies, J., Ugwudike, P., Young, H.,...Raynor, P. (2020). **A Pragmatic Study of the Impact of a Brief Mindfulness Intervention on Prisoners and Staff in a Category B Prison and Men Subject to Community-Based Probation Supervision**. *Int J Offender Therapy and Comparative Criminology*. [link]

Fuller-Tyszkiewicz, M., Richardson, B., Little, K.,...Hutchinson, D. (2020). **Efficacy of a Smartphone App Intervention for Reducing Caregiver Stress: RCT.** *JMIR Mental Health*. [link]

Gucht, K. V. der, Ahmadoun, S., Melis, M.,...Deprez, S. (2020). **Effects of a mindfulness-based intervention on cancer-related cognitive impairment: Results of a randomized controlled functional magnetic resonance imaging pilot study**. *Cancer*. [link]

Hafeman, D. M., Ostroff, A. N., Feldman, J.,...Goldstein, T. R. (2020). **Mindfulness-based intervention to decrease mood lability in at-risk youth: Preliminary evidence for changes in resting state functional connectivity**. *Journal of Affective Disorders*. [link]

Johnstone, J. M., Ribbers, A., Jenkins, D.,...Oken, B. (2020). **Classroom-Based Mindfulness Training Reduces Anxiety in Adolescents: Acceptability and Effectiveness of a Cluster-Randomized Pilot Study**. *Journal of Restorative Medicine*. [link]

Mihić, J., Oh, Y., Greenberg, M., Kranželić, V. (2020). **Effectiveness of Mindfulness-Based Social-Emotional Learning Program CARE for Teachers Within Croatian Context**. *Mindfulness*. [link]

Milbury, K., Li, Y., Durrani, S.,...Bruera, E. (2020). **A Mindfulness-Based Intervention as a Supportive Care Strategy for Patients with Metastatic Non-Small Cell Lung Cancer and their Spouses: Results of a 3-Arm Pilot RCT**. *The Oncologist*. [link]

Nasiri, Z., Alavi, M., Ghazavi, Z., Rabiei, K. (2020). **The effectiveness of mindfulness-based intervention on perceived stress and perception of disease in patients with acute coronary syndrome**. *Journal of Education and Health Promotion*. [link]

Roberts, J. L., Williams, J., Griffith, G. M.,...Edwards, R. T. (2020). **Soles of the Feet Meditation Intervention for People with Intellectual Disability and Problems with Anger and Aggression—A Feasibility Study**. *Mindfulness*. [link]

Song, X., Zheng, M., Zhao, H., Yang, T.,...Lou, T. (2020). **Effects of a Four-Day Mindfulness Intervention on Teachers' Stress and Affect: A Pilot Study in Eastern China**. *Frontiers in Psychology*. [link]

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Yüksel, A., Çetinkaya, F., Karakoyun, A. (2020). **The effect of mindfulness-based therapy on psychiatric symptoms, psychological well-being, and pain beliefs in patients with lumbar disk herniation**. *Perspectives in Psychiatric Care*. [link]

Associations

Articles examining the correlates and mechanisms of mindfulness

Arlt Mutch, V. K., Evans, S., Wyka, K. (2020). **The role of acceptance in mood improvement during MBSR**. *Journal of Clinical Psychology*. [link]

Böge, K., Karadza, A., Fuchs, L. M.,…Hahn, E. (2020). **Mindfulness-Based Interventions for In-Patients With Schizophrenia Spectrum Disorders-A Qualitative Approach**. *Frontiers in Psychiatry*. [link]

Chiarella, S. G., Makwana, M., Simione, L.,…Srinivasan, N. (2020). **Mindfulness Meditation Weakens Attachment to Self: Evidence from a Self vs Other Binding Task**. *Mindfulness*. [link]

Day, M. A., Ward, L. C., Thorn, B. E.,…Jensen, M. P. (2020). **Mechanisms of Mindfulness Meditation, Cognitive Therapy, and MBCT for Chronic Low Back Pain**. *The Clinical Journal of Pain*. [link]

Hessler-Kaufmann, J. B., Heese, J., Berking, M.,…Diedrich, A. (2020). **Emotion regulation strategies in bulimia nervosa: An experimental investigation of mindfulness, self-compassion, and cognitive restructuring**. *Borderline Personality Disorder and Emotion Dysregulation*. [link]

Hussain, M., Egan, H., Keyte, R., Mantzios, M. (2020). **Exploring the Effects of Mindfulness and Self-Distancing on Chocolate Intake After a Negative State Affect**. *Journal of Cognitive Enhancement*. [link]

Kingston, J., Becker, L., Woeginger, J., Ellett, L. (2020). **A randomised trial comparing a brief online delivery of mindfulness-plus-values versus values only for symptoms of depression: Does baseline severity matter**? *Journal of Affective Disorders*. [link]

Matiz, A., Guzzon, D., Crescentini, C.,…Fabbro, F. (2020). **The role of self body brushing vs mindfulness meditation on interoceptive awareness: A non-randomized pilot study on healthy participants with possible implications for body image disturbances**. *European Journal of Integrative Medicine*. [link]

Miyahara, M., Wilson, R., Pocock, T.,…Fukuhara, H. (2020). **How does brief guided mindfulness meditation enhance empathic concern in novice meditators?: A pilot test of the suggestion hypothesis vs. The mindfulness hypothesis**. *Current Psychology*. [link]

Mutch, V. K. A., Evans, S., Wyka, K. (2020). **The role of acceptance in mood improvement during MBSR**. *J of Clinical Psychology*. [link]

Norton, K. R., Griffith, G. M. (2020). The **Impact of Delivering Mindfulness-Based Programmes in Schools: A Qualitative Study**. *Journal of Child and Family Studies*. [link]

Nyklíček, I., Zonneveld, R., Denollet, J. (2020). **Introspective Interest and Insight in the Context of MBSR: A Randomized Trial**. *Mindfulness*. [link]

Roos, C., Bowen, S., Witkiewitz, K. (2020). **Approach Coping and Substance Use Outcomes Following Mindfulness-Based Relapse Prevention Among Individuals with Negative Affect Symptomatology**. *Mindfulness*. [link]

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Roux, B., Philippot, P. (2020). **A Mindfulness-Based Program among Adolescent Boys with Behavior Disorders: A Quasi-Experimental Study**. *Journal of Child and Family Studies*. [link]

Sevinc, G., Greenberg, J., Hölzel, B. K.,...Lazar, S. W. (2020). **Hippocampal circuits underlie improvements in self-reported anxiety following mindfulness training**. *Brain and Behavior*. [link]

Sirotina, U., Shchebetenko, S. (2020). **Loving-Kindness Meditation and Compassion Meditation: Do They Affect Emotions in a Different Way?** *Mindfulness*. [link]

Spadaro, K. C., Hunker, D. F. (2020). **Experience of an 8-Week Online Mindfulness Intervention for Nursing Students: Qualitative Findings**. *Nurse Educator*. [link]

Tang, R., Braver, T. S. (2020). **Predicting Individual Preferences in Mindfulness Techniques Using Personality Traits**. *Frontiers in Psychology*. [link]

Williams, K., Elliott, R., McKie, S.,...Anderson, I. M. (2020). **Changes in the neural correlates of self-blame following MBCT in remitted depressed participants**. *Psychiatry Research: Neuroimaging*. [link]

Zou, Y., Li, P., Hofmann, S. G., Liu, X. (2020). **The Mediating Role of Non-reactivity to Mindfulness Training and Cognitive Flexibility: A RCT**. *Frontiers in Psychology*. [link]

Methods

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

Böge, K., Schaeuffele, C., Jacobsen, P.,...Hahn, E. (2020). **Validation of the German Version of the Southampton Mindfulness Questionnaire (SMQ)**. *Mindfulness*. [link]

Espil, F. M., Rettger, J. P., Weems, C. F.,...Carrion, V. G. (2020). **Measuring the Fidelity of a School-Based Yoga and Mindfulness Curriculum for Youth: A Transdisciplinary Feasibility Study**. *Child & Youth Care Forum*. [link]

Kirby, L. A. J., Kornman, P. T., Robinson, J. L. (2020). **Outcomes of "Brain Breaks": Short Consistent Meditation and Silent Sessions in the College Classroom Are Associated with Subtle Benefits**. *Journal of Cognitive Enhancement*. [link]

Mahlo, L., Windsor, T. D. (2020). **Feasibility, Acceptability, and Preliminary Efficacy of an App-Based Mindfulness-Meditation Program Among Older Adults**. *The Gerontologist*. [link]

Monteiro, L. M. (2020). **Mindfulness as Relational: Participants' Experience of Mindfulness-based Programs Are Critical to Fidelity Assessments**. *Global Advances in Health and Medicine*. [link]

Reviews

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

Amundsen, R., Riby, L. M., Hamilton, C.,...McGann, D. (2020). **Mindfulness in primary school children as a route to enhanced life satisfaction, positive outlook and effective emotion regulation**. *BMC Psychology*. [link]

Billones, R., Saligan, L. (2020). **What Works in Mindfulness Interventions for Medically Unexplained Symptoms? A Systematic Review**. *Asian/Pacific Island Nursing Journal*. [link]

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Fumero, A., Peñate, W., Oyanadel, C., Porter, B. (2020). **The Effectiveness of Mindfulness-Based Interventions on Anxiety Disorders. A Systematic Meta-Review**. *European Journal of Investigation in Health, Psychology and Education*. [link]

Hodann-Caudevilla, R. M., Díaz-Silveira, C., Burgos-Julián, F. A., Santed, M. A. (2020). **Mindfulness-Based Interventions for People with Schizophrenia: A Systematic Review and Meta-Analysis**. *International Journal of Environmental Research and Public Health*. [link]

Lavy, S., Berkovich-Ohana, A. (2020). **From Teachers' Mindfulness to Students' Thriving: The Mindful Self in School Relationships (MSSR) Model**. *Mindfulness*. [link]

Medina, A. M., Mead, J. S. (2020). **An Exploration of Mindfulness in Speech-Language Pathology**. *Communication Disorders Quarterly*. [link]

Molero Jurado, M. del M., Pérez-Fuentes, M. del C.,…Gázquez Linares, J. J. (2020). **Mindfulness in Family Caregivers of Persons with Dementia: Systematic Review and Meta-Analysis**. *Healthcare*. [link]

Osborn, R., Dorstyn, D., Roberts, L., Kneebone, I. (2020). **Mindfulness Therapies for Improving Mental Health in Parents of Children with a Developmental Disability: A Systematic Review**. *Journal of Developmental and Physical Disabilities*. [link]

Reangsing, C., Rittiwong, T., Schneider, J. K. (2020). **Effects of mindfulness meditation interventions on depression in older adults: A meta-analysis**. *Aging & Mental Health*. [link]

Sanchez-Campos, M., MacLean, H., Koszycki, D., Gonsalves, C. (2020). **Mindfulness in medical education: Students' perceptions and four recommendations for implementation of a mindfulness intervention**. *International Journal of Whole Person Care*. [link]

Shires, A., Sharpe, L., Davies, J. N., Newton-John, T. R. (2020). **The efficacy of mindfulness-based interventions in acute pain: A systematic review and meta-analysis**. *Pain*. [link]

Stein, E., Witkiewitz, K. (2020). **Dismantling Mindfulness-Based Programs: A Systematic Review to Identify Active Components of Treatment**. *Mindfulness*. [link]

Tomlinson, D., Sung, L., Vettese, E.,…Plenert, E. (2020). **Mindfulness-Based Interventions for Symptom Management in Children and Adolescents With Cancer: A Systematic Review**. *Journal of Pediatric Oncology Nursing.* [link]

Zhang, Y., Xue, J., Huang, Y. (2020). **A meta-analysis: Internet mindfulness-based interventions for stress management in the general population**. *Medicine*. [link]

Trials

Research studies newly funded by the National Institutes of Health (AUG 2020)

None reported.

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Highlights

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

Mindfulness training can reduce anxiety for some people, yet it is not fully clear how it operates. At the neural level, the brain's hippocampus is one possible target given its involvement in learning to be afraid when in danger, and unlearning fear once danger is gone. Mindfulness-induced hippocampal changes may play a critical role in anxiety reduction.

Sevinc et al. [*Brain and Behavior*] tested mindfulness training against a stress management intervention on hippocampal volume and hippocampal connectivity to other brain regions during fear conditioning and extinction.

The researchers randomly assigned 89 participants (female=64%; average age=32 years) to either Mindfulness-Based Stress Reduction (MBSR) or Stress Management Education as a control group. The control group consisted of didactic presentation and discussion of nutrition, exercise, sleep hygiene, coping skills, and humor. Both 8-week interventions were delivered in weekly 2-hour group sessions, and both were assigned 40-minutes of daily homework (strength training and aerobic exercise for the control group) and a 4-hour intensive session in week six.

Before and after the intervention, all participants underwent fMRI scanning on two consecutive days. On the first day, the researchers induced a classically conditioned fear response by exposing participants to three neutral stimuli (pictures of different colored lamps) and pairing two of them with an annoying electrical shock delivered to their fingers. On the second day, one of the conditioned fear responses was extinguished by exposing participants to the same colored lamp stimuli, but only pairing one color with the electrical shock.

While participants underwent the fear conditioning and extinction activities, the researchers measured their hippocampal volumes and hippocampal connectivity with other brain regions. Participants also completed self-report measures of psychological variables before and after the intervention. A previously published portion of this study showed that both groups significantly reduced their stress levels (d=0.56), and there was a trend towards greater anxiety reduction in the MBSR group (partial η_2=0.63).

Results showed that the MBSR group had increased volume in a region of the hippocampus (the subiculum) after the intervention. The increase in volume was significantly associated with a decrease in functional connectivity between the left hippocampus and regions of the visual cortex during conditioned fear extinction. This makes sense because conditioned fear extinction involved unlearning of the previously learned connections between the colored lamps and the shock. These changes in hippocampal-visual cortex connectivity were significantly correlated with decreases in self-reported anxiety levels (r=-.39).

The study shows that mindfulness training impacts hippocampal size and connectivity in a manner associated with decreases in felt anxiety. Hippocampal changes suggest mindfulness training functions, in part, as an "exposure therapy," extinguishing anxiety reactions though non-judgmental attention to associated thoughts and feelings. The smaller sample size of the control group may have limited detection of significant within-group effects for the controls.

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Up to 78% of women undergoing chemotherapy for cancer report impairment in cognitive functioning, commonly referred to as "chemo fog." These complaints are accompanied by functional connectivity changes in regions of the brain involved in attention and executive functioning. Functional connectivity is a measure of the degree to which different brain regions act in tandem. While the efficacy of mindfulness training for cancer-related emotional difficulties is supported, the effect on cognitive impairment remains unknown.

Gucht et al. [*Cancer*] tested mindfulness training against a wait-list control on cancer survivors' subjective and objective cognitive impairment, psychological symptoms, and brain connectivity.

The researchers randomly assigned 33 Belgian female breast cancer survivors (average age = 45 years) with self-reported subjective cognitive impairment to either mindfulness training or a wait-list control. Mindfulness training was based on Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT), and delivered in four group-based sessions, each lasting three hours. Home practice was encouraged and brief between-session telephone calls for encouragement and support were offered over an 8-week period.

Participants were assessed at baseline, one week after the intervention, and at 3 months after on a subjective measure of cognitive functioning and an objective battery of attention, concentration, memory, executive functioning, and processing speed. Other subjective measures were used to assess emotional distress, fatigue, and mindfulness (Comprehensive Inventory of Mindfulness Experiences). Participants also underwent resting-state fMRI brain scans at all three assessment points. Six mindfulness participants and one control did not complete the study.

Results showed the mindfulness training group had significantly greater improvement in subjective cognitive impairment at post-treatment (Hedge's g=0.99) and follow-up (g=0.95) than controls. The mindfulness group also had significantly greater decreases in emotional distress at post-treatment (g=0.55) and follow-up (g=0.81) as well as significantly greater decreases in fatigue at post-treatment (g=0.46) and follow-up (g=1.16) than controls. There were no significant group differences in the objective cognitive battery or mindfulness scores.

The brain imaging results showed that the mindfulness training group had significantly greater post-treatment increases in functional connectivity in regions controlling attention to sensory stimuli (anterior cingulate cortex and dorsal attention network) than controls. This increased functional connectivity was significantly correlated with decreases in emotional distress (r=-.57). There was a trend towards decreased default mode network connectivity in the mindfulness group.

The study findings support structured mindfulness training with telephone-based encouragement as a treatment for subjective cognitive impairment in cancer survivors who had been treated with chemotherapy. The study is limited by the lack of an active control group and small sample size. The objective battery used may not have been sensitive enough to detect cognitive improvements as the sample performed within the normal range of scores at baseline, leaving little room for improvement.