

Mindfulness and mental health

1 Summary

Mindfulness is a meditation-based practice designed to increase present moment awareness, and to bring in a quality of accepting experience as it is, without judgements or analysis. The habit of thinking about something rather than experiencing it directly fills life with pale verbal echoes rather than the richness of experience itself. For example, the experience of smelling the lovely fragrance of a flower is displaced by the thought “What a lovely fragrance”. Mindfulness involves a shift of attention away from mind-wandering - incessant and often repetitive thinking - and refocusing the attention towards immediate sensate experiences, many of which are inherently pleasurable when we stop to take notice.

Numerous research studies have shown that, when it is combined with a regular meditation practice, bringing mindfulness to daily life activities can bring many mental health benefits, such as improved focus and concentration, reduced anxiety and brighter mood. Mindfulness has been researched on a spectrum from wellbeing to stress to mental illness. Therapeutic developments involving mindfulness are counted amongst “third wave” cognitive-behavioural approaches. They include Mindfulness-Based Interventions (MBI), Dialectic Behaviour Therapy (DBT), Compassion Focused Therapy (CFT) and Acceptance and Commitment Therapy (ACT).

2 Research on Clinical Applications of Mindfulness

The most established clinical use of mindfulness is Mindfulness-Based Cognitive Therapy in relapse prevention in **recurrent depression**, as promoted by the NICE clinical guidance for mental health professionals, CG90 section 1.9.1.8 <https://www.nice.org.uk/guidance/cg90/chapter/1-Guidance>

Reviews of research studies that investigate the use of mindfulness in specific mental health conditions have predominantly positive results, with mindfulness-based approaches performing as well as other psychological interventions:

“Mindfulness-based treatments for **posttraumatic stress disorder (PTSD)** have emerged as promising adjunctive or alternative intervention approaches.” Boyd et al (2018) Mindfulness-based treatments for posttraumatic stress disorder: a review of the treatment literature and neurobiological evidence. *Journal of Psychiatry & Neuroscience*, 43(1): 7–25.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5747539/?report=classic>

“MBIs are safe, portable, cost-effective, and can be recommended as an adjunct to standard care or self-management strategy for **major depressive disorder** and **PTSD**” but not for **generalised anxiety disorder**.

Khusid & Vythilingam (2016) The Emerging Role of Mindfulness Meditation as Effective Self-Management Strategy, Part 1: Clinical Implications for Depression, Post-Traumatic Stress Disorder, and Anxiety. *Military Medicine*, 181(9): 961-968. <https://www.ncbi.nlm.nih.gov/pubmed/27612338>

The conclusion above that mindfulness was not found effective enough to recommend for generalised anxiety disorder (GAD) should be taken in the context of the finding from a very large meta-analysis that medications are significantly more effective than psychotherapies (including CBT) in the treatment of clinical anxiety such as panic disorder, social phobia, and GAD. That having been said, mindfulness had the biggest effect size over other psychotherapies. Bandelow et al (2015) Efficacy of treatments for anxiety disorders: a meta-analysis.

International Clinical Psychopharmacology, 30(4):183-92. <https://www.ncbi.nlm.nih.gov/pubmed/25932596>

Moreover, there are individual studies that show significant benefit. For example, ACT outperforms wait-list controls in social phobia. Craske et al (2014) Randomized controlled trial of cognitive behavioral therapy and

acceptance and commitment therapy for **social phobia**: outcomes and moderators. *Journal of Consulting and Clinical Psychology*, 82(6): 1034–1048. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4244236/>

With regard to **eating disorders**: “Third-wave therapies were not superior to active comparisons generally, or to cognitive-behaviour therapy (CBT) in randomised controlled trials.” Linardon et al (2017) The empirical status of the third-wave behaviour therapies for the treatment of eating disorders: A systematic review. *Clinical Psychology Review*, 58: 125-140. However, another 2017 literature review found that “Mindfulness and mindful eating have the potential to address problematic eating behaviours and the challenges many face with controlling their food intake. Encouraging a mindful eating approach would seem to be a positive message to be included in general weight management advice to the public.” Warren et al (2017) A structured literature review on the role of mindfulness, mindful eating and intuitive eating in changing eating behaviours: effectiveness and associated potential mechanisms. *Nutrition Research Reviews*, 30(2):272-283. <https://www.ncbi.nlm.nih.gov/pubmed/28718396>

“Overall, findings indicate that third wave interventions show beneficial effects on symptoms in persons with **psychotic disorders**.” Louise et al (2018) Mindfulness- and acceptance-based interventions for psychosis: Our current understanding and a meta-analysis. *Schizophrenia Research*, 192: 57-63. <https://www.ncbi.nlm.nih.gov/pubmed/28545945>

In a systematic review and meta analysis of mindfulness in **bipolar disorder** (BD), “Our meta-analysis showed significantly beneficial effects on depressive and anxiety symptoms of BD patients in within-group analysis” though no better than active control groups. Chu et al (2018): The effectiveness of adjunct mindfulness-based intervention in treatment of bipolar disorder: A systematic review and meta-analysis. *Journal of Affective Disorders*, 225:234-245. <https://www.ncbi.nlm.nih.gov/pubmed/28841486>

Compassion-based interventions (CBIs) are a newer development within the field of therapeutic applications of mindfulness. “CBIs were effective in treating psychotic disorders, affective disorders with psychotic features, major depressive disorder, eating disorders, and patients with suicide attempts in the past year; Loving Kindness Meditation (LKM) was effective in treating chronic pain; and a combination of both was effective for borderline personality disorder. A larger number of nonrandomized studies indicate that CBIs and LKM may be effective in treating a wide range of clinical conditions, including **depression, anxiety disorders, chronic pain, and posttraumatic stress disorder**.” Graser & Stangier (2018) Compassion and Loving-Kindness Meditation: An Overview and Prospects for the Application in Clinical Samples. *Harvard Review of Psychiatry*, 26(4):201-215. <https://www.ncbi.nlm.nih.gov/pubmed/29975338>

There is not much research into the value of mindfulness for younger people with psychiatric conditions. In an overview of research involving various meditation techniques for children, adolescents, and their families, it was found that “The most researched techniques in children and adolescents are mindfulness-based stress reduction, mindfulness-based cognitive therapy, yoga meditation, transcendental meditation, mind-body techniques (meditation, relaxation), and body-mind techniques (yoga poses, tai chi movements). Current data are suggestive of a possible value of meditation and mindfulness techniques for treating symptomatic **anxiety, depression, and pain** in youth.” Simkin & Black (2014) Meditation and mindfulness in clinical practice. *Child and Adolescent Psychiatric Clinics of North America*, 23(3): 487-534.

Researchers found evidence for the benefits of mindfulness when delivered by **web based courses**: “Overall, our results indicated that Web-Based Mindfulness Interventions effectively reduced depression and anxiety symptoms and increased quality of life and functioning and mindfulness skills.” Sevilla-Llewellyn-Jones et al (2018) Web-Based Mindfulness Interventions for Mental Health Treatment: Systematic Review and Meta-Analysis. *JMIR Mental Health*, 5(3): e10278. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6231788/>

3 Neuroscientific Research

In the last couple of decades, there has been an explosion of neuroscientific research investigating the brain changes that accompany the practice of meditation, giving mindfulness meditation a solid scientific basis. One example is a paper that reviews “some of the psychological and neural mechanisms behind mindfulness practice in order to explore the unique factors that account for its positive impact on emotional regulation and health”. Grecucci et al (2015) Mindful Emotion Regulation: Exploring the Neurocognitive Mechanisms behind Mindfulness. *Biomed Research International*, 2015:670724 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4475519/>

It is beyond the scope of these pages to provide more information about the neuroscience of mindfulness.

4 Caveats

Despite the numerous studies devoted to various aspects of mindfulness, definitive statements about its efficacy in clinical conditions are difficult because of the questionable quality of much of the research. Van Dam et al expand at length on the issues in *Mind The Hype: A Critical Evaluation and Prescriptive Agenda for Research on Mindfulness and Meditation. Perspectives on Psychological Science*. 2018;13(1): 36–61 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5758421/>

An important issue with the research in this area - and for any individual who practices meditation and mindfulness - is adhering to the practice. Traditional Buddhist meditation practice requires at least 30 minutes daily to be set aside, and preferably 45 minutes. It should be borne in mind that the positive results of studies are diluted by the inclusion of participants who did not stick to the practice requirements. In my personal experience of teaching the 8 week Mindfulness-Based Stress Reduction Programme, I saw that students who did a daily half-hour guided practice invariably reaped benefits, as was shown by both glowing personal testimony and validated rating scales comparing mood and anxiety before and after the course. Modern lifestyles can make it difficult to set aside half an hour a day, so researchers have tried to test whether shorter practice periods are effective or not. However, in clinical conditions, longer practice times may well be advantageous, for example “interventions with longer mindfulness training were more efficacious in reducing symptoms of PTSD.” Hopwood & Schutte (2017) A meta-analytic investigation of the impact of mindfulness-based interventions on post traumatic stress. *Clinical Psychology Review*, 57:12-20. <https://www.ncbi.nlm.nih.gov/pubmed/28806536>

The practice of meditation, especially if done intensively, can occasionally have a destabilising effect for some people, and those with current or past mental health issues are advised to seek the advice of a mental health professional before embarking on learning meditation, especially if there is a history of psychosis. A good review on the topic can be found at <http://www.heretohelp.bc.ca/visions/mindfulness-vol12/is-mindfulness-useful-or-dangerous-for-individuals-with-psychosis>

There is also debate about the wisdom of meditating for people with epilepsy, see <https://www.epilepsy.com/article/2014/3/meditation-epilepsy-silent-debate-wages>

In seeking to learn mindfulness it is important to watch out for any trend towards diluting mindfulness down to something lesser than the form that has been widely researched. Clinicians must be properly trained before using these techniques. Proper training involves the clinician having their own mindfulness practice; how to practice meditation and mindfulness is something that can only be passed on to others from personal experience and not solely from book learning.

5 Suggested reading:

William Marchand: *Mindfulness for Bipolar Disorder: Discover How Mindfulness Is the Powerful Missing Piece in Managing Your Bipolar Disorder Symptoms*. 2015, New Harbinger.