

Abstract: Kock, M. (2026). *Maximising benefit, minimising harm: How individual differences impact the effects of mindfulness meditation*.

Mindfulness-based interventions (MBIs) are increasingly implemented in both clinical practice and preventive contexts, including public education and businesses. Although meta-analyses demonstrate benefits of MBIs for mental and physical health, efficacy has been shown to vary across (subgroups of) individuals. Emerging evidence also indicates that MBIs, and meditation more broadly, can elicit adverse effects that impair daily functioning. Despite these findings, it remains unclear for whom mindfulness meditation is beneficial and for whom it may yield undesired effects.

The overarching aim of this dissertation was therefore to investigate how individual differences influence the outcomes of mindfulness meditation. The first part of this dissertation focused on mechanisms of change (Objective 1). **Chapter 2** tested whether mindfulness-related attitudes and maladaptive cognitive-affective processes mediated treatment outcomes in an MBI for adolescents with chronic conditions. Two mediators were identified: increases in repetitive negative thinking (RNT) mediated increases in emotional distress, while decreases in self-coldness mediated improvements in emotional distress.

The second part of this dissertation examined whether individual differences in RNT, adverse childhood experiences, and posttraumatic stress disorder (PTSD) symptoms influence meditation outcomes (Objective 2). In a direct replication, **Chapter 3** tested whether pain catastrophizing and RNT moderated the effects of an open monitoring meditation compared to distraction on experimental pain. In contrast to the original findings, neither pain catastrophizing nor RNT moderated the effects of the meditation on pain outcomes. **Chapter 4** assessed whether the three putative moderators influence the relative efficacy of two meditation practices in a randomised cross-over study. Of these, only adverse childhood experiences emerged as a significant moderator. Individuals with elevated levels of adverse childhood experiences reported lower perceived stress following loving-kindness meditation compared to focused attention meditation.

The third part of this dissertation investigated predictors, appraisal, and coping strategies related to meditation-related adverse effects (Objective 3). Using a qualitative design, **Chapter 5** explored appraisal and meaning making following adverse effects. Positive reappraisal and causal attribution emerged as key meaning-making strategies, with childhood experiences shaping these processes toward distress for some or resilience for others. The cross-sectional survey in **Chapter 6** examined psychological distress, adverse childhood experiences and retreat attendance as predictors of adverse effects and investigated the role of coping strategies. Psychological distress and adverse childhood experiences, but not retreat attendance, were linked to both adverse effects and functional impairment. Psychological distress also appeared to impede reductions in harm appraisal over time, whereas positive reappraisal functioned as an adaptive coping strategy in response to adverse effects.

Finally, **Chapter 7** synthesised the main findings and discussed their contribution to both mindfulness research and clinical practice.

Please cite the summary as follows:

Kock, M. (2026). *Maximising benefit, minimising harm: How individual differences impact the effects of mindfulness meditation*(LIRIAS4398539) [Doctoral dissertation, KU Leuven]. Lirias.