Data Acquisition

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Guided by the literature search procedure in Gu et al. (2015), we acquired published studies up to 11/05/2018from the following electronic databases: PsycInfo, Scopus, Web of Knowledge, PsycArticles, ASSIA and Science Direct. The same keywords were used as in the original synthesis study: ("mindfulness based cognitive therapy" OR "mindfulness based stress reduction" OR MBSR OR MBCT) AND (mechanism* OR mediat* OR predict* OR process* OR "structural equation modelling" OR caus* OR path* OR correlat* OR relationship OR associat*). Similar inclusion and exclusion criteria were used, except for those criteria concerning mediation analysis, given that mediation analysis was not required in primary studies for the three studied MASEM methods. In particular, the inclusion criteria were as follows: studies that used 1) an adult sample (i.e., > 18 years of age), 2) a randomized control trial or quasi-experimental design measuring pre- to post-MBI change in variables, 3) a control group, and 4) an MBSR or MBCT intervention. The exclusion criteria were as follows: 1) uncontrolled studies, 2) reviews, 3) qualitative studies, and 4) studies in which the MBI was not delivered in person. After screening articles based on titles and abstracts, we located 965 studies. Given that the main objective of this study was method comparison, we randomly assessed the full text of 60 identified studies to focus on the main objective of the present study. For those 60 studies, bivariate correlations between X (MBI versus control), post-pre-intervention change in M (mindfulness) and post-pre-change in Y (depression) were extracted from each primary study. Corresponding sample sizes and information of a moderator (baseline depression severity) were also extracted. For studies that did not explicitly report bivariate correlation coefficients, t-statistics, F-statistics, effect sizes, and mean change scores and their SDs, standardized regression coefficients of simple regression were extracted and converted into correlation coefficients. In total, 22 out of the 60 coded studies provided insufficient data to calculate correlations, leaving 38 primary studies in our MASEM analysis. Altogether, 12 out of 38 studies reported findings based on multiple post-MBI measurements. This gave a total of $K = 38 + 12 = 50.3 \times 3$ correlation matrices (among X, M, and Y).

References

Gu, J., Strauss, C., Bond, R., & Cavanagh, K. (2015). How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improve mental health and wellbeing? a systematic review and meta-analysis of mediation studies. *Clinical Psychology Review*, 37, 1–12. http://dx.doi.org/10.1016/j.cpr.2015.01.006.