

Effects of a Combined Mindfulness and App Intervention Compared to Single Interventions: 1-Year Follow-Up of a Randomized Controlled Trial

Constance Karing

Friedrich-Schiller-University, Jena, Germany

ABSTRACT

Objectives: The aim of the study was to investigate the short-, middle- and long-term effects of a combined intervention (face-to-face mindfulness intervention plus the mindfulness app 7Mind) compared to single interventions (face-to-face mindfulness intervention alone and an intervention via app 7Mind alone). These interventions were compared with an active control group. Further, the study explored whether participants' engagement with the app and their mindfulness practice at home improved outcomes. **Methods:** The study included 177 university students who were randomly assigned to a mindfulness + app group ($n = 45$), a mindfulness group ($n = 42$), a mindfulness app group ($n = 44$), and an active control group ($n = 46$). The duration of the interventions was four weeks. Outcome variables included mindfulness, mindful characteristics, emotion regulation, mental health, and attentional abilities. These outcomes were assessed at pre- and post-intervention, at 4- and 12-months post-intervention. **Results:** At post-intervention and during both follow-ups, the combined mindfulness intervention did not demonstrate better outcomes compared to the single interventions or the active control group across all outcomes. Further, no significant difference was found between all interventions and the active control groups on any of the measures. However, all intervention groups and the active control group showed improvement in mindfulness, emotion regulation, body awareness, stress, and attentional abilities over the short-, medium-, and long-term. Further, higher app usage in the app groups was associated with increased body awareness. However, greater app use was also associated with higher stress.

Keywords: active control; long-term effects; RCT; university students; 7Mind