Skin Conductance Feedback Meditation (SCFM)

ABSTRACT:

In ordinary mindfulness meditation (MM) the focus on the breathing should help meditators maintaining a state of mindful presence. A pure state of open monitoring should not have such a focus of attention. In order to bring meditators back to the state of presence in open monitoring an externally triggered reminder would be helpful. Feedback of skin conductance (SC) related to mental distractions with emotional content could serve as such a reminder. We provided SC in real-time during meditation sessions and evaluated the practicability of this novel approach.

Thirty participants, 15 meditators and 15 non-meditators, attended six sessions of meditation in three days. Four sessions were conducted as SC feedback meditation (SCFM) sessions and two sessions as ordinary MM. Each was evaluated with physiological measures and a feedback questionnaire assessing subjective changes in body sensation, emotional condition, and mental state.

The 14 feedback items could be merged into the dimensions expansiveness and contentedness. At average, 68.3% of the participants felt more expanded and over 80% were more contented after SCFM sessions while only 3.3% felt more limited and discontented after the sessions. This result was not significantly different from MM. SCFM sessions were tested to be non-inferior to mindfulness meditations. There were no significant differences in the number of SC reactions between meditators and non-meditators and also not between MM and SCFM.

Despite finding only few significant differences in psychological and physiological measures between MM and SCFM, both methods seem to be comparably good in their effects on meditators with the advantage of SCFM that no focus of attention is required during meditation.

Keywords

Mindfulness, Meditation, Skin Conductance, Biofeedback

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