

A closer look at meditation: Challenging the attentional on different types of meditation: Challenging the attentional network on different types of meditative procedures

Results:

Meditation can be described as a special way to pay attention on a continuous moment to moment basis. Research has shown that meditation techniques are able to enhance attentional capacities. In this study we took a closer look at this relationship between meditation and attention. At first we developed three different assessment tools for the description of a meditation practice without referring to any esoteric or religious aspects. A scale assessing the motivation of meditators was developed by the psychometric assessment of 550 meditators. Here a psychometric valid, highly reliable scale with a stable four factor structure could be developed. Regarding meditation practice it was necessary to differentiate between different types of attention cultivated in different meditation styles. The main dimension here was the difference between a narrow focused attention and a wide and open form of attention. This difference was assessed with several visual analog scales.

Regarding the human attentional network three distinct systems of attention (alerting, orienting and executive control) are known. We recruited 25 long-term meditators and 25 sex and age matched controls. They were tested for their performance in each of the three networks by the attention network test (ANT) while EEG was measured to assess event related potentials (ERP) in relation to the ANT stimuli.

We could demonstrate that meditators had a significant better performance on the executive component of the ANT ($p < .05$). There was no difference for the two other networks. Meditators practicing meditation with a narrow focus of attention showed a better performance in the executive control function of the ANT ($r = .34$) but the correlation failed to reach significance.

Published works:

Book chapter (related to the project)

Schmidt, S. (2014). Opening up Meditation for Science: The Development of a Meditation Classification System. In S. Schmidt & H. Walach (Hrsg.), *Meditation- Neuroscientific Approaches and Philosophical Implications* (S. 137–152). Springer.

Area(s) of interest:

Meditation, Attention, Motivation, EEG

Os textos são da exclusiva responsabilidade dos autores
All texts are of the exclusive responsibility of the authors

Researchers' contact:

Dept. of Psychosomatic Medicine and Psychotherapy
Freiburg University Medical Center
Hauptstr. 8
D-79104 Freiburg

Telephone: +49-761-270-69280 Fax: +49-761-270-68813
E-mail: stefan.schmidt@uniklinik-freiburg.de