

Achtergrond

Mindfulness Based Stress Reduction (MBSR) has been proven effective in reducing stress in clinical and healthy populations. This is beneficial, since prolonged stress exposure can increase the risk of developing stress-related symptomatology, such as depression and anxiety. However, stress-reduction mechanisms of MBSR remain largely unknown. We hypothesise that MBSR enhances the capacity to adaptively allocate neural resources across different large-scale neural systems. These include the systems responsible for experiencing emotion and interoceptive awareness of bodily signals, and those involved in executive control functions.

Doel

Our aim is to gain a better mechanistic understanding on how MBSR works, particularly at a neural level.

Methoden

We are running a randomized, wait-list controlled trial on stressed students including clinical measurements, neurocognitive tasks, and ecological momentary assessments. Neurocognitive tasks commonly used in pre-clinical stress research are selected specifically to assess different aspects of stress-regulation, including a fear conditioning and extinction paradigm, an emotional conflict resolution task, a resting state task under stress, and a self-regulation task using real-time fMRI neurofeedback. Measurements are taken before and after the MBSR training and clinical measurements are repeated in a 3-month follow-up meeting.

Resultaten

We will present some first results from this ongoing trial, focusing on the neurocognitive tasks and their ability to capture the neural processes that we believe are involved.

Conclusie

We expect that this multidisciplinary study will lead to insights on neural mechanisms of MBSR, allowing a more targeted approach in improving the program, and a better treatment allocation for the individual.

Literatuurverwijzing

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