Mindfulness-based training for primary school teacher – a longitudinal study on the effects of mindfulness training on stress and burnout parameters

Teresa Bichler¹,², Dennis Anheyer¹, Barbara Ebner¹,², Nils Altner¹, Daniela Körber³, Gustav Dobos³, Holger Cramer¹

¹Department of Internal and Integrative Medicine, Kliniken Essen-Mitte, Faculty of Medicine, University of Duisburg-Essen, Essen, Germany
²Department of Health, Faculty of Medicine, Witten-Herdecke University, Witten, Germany
³Educational authority of the city of Solingen, Solingen, Germany

Background
In recent years, the everyday educational life has been faced with many new challenges. Therefore more and more attention has been given to the use of mindfulness-based methods in pedagogy. Within the framework of this pilot project, an adapted mindfulness-based stress management training was established at the elementary schools of the German city of Solingen. The aim was to strengthen the teachers’ competence in dealing with stress and burnout.

Methods
Ninety-one teachers from a total of six elementary schools participated in a 20-hour adapted Mindfulness-Based Stress Reduction (MBSR) Program. In the beginning the teachers practiced for themselves, in the second half of the school year they were encouraged to practice in their everyday classes.

At 3 measuring points throughout the school year, they were asked to fill in standardized questionnaires. Burnout was defined as primary outcome measure, which was measured by the Burnout Screening Scales (BOSS). Secondary outcome measures included the Teacher Anxiety and Stress Inventory (LASI), as well as mindfulness on the Conscious Presence and Self Control Scale (CPSC).

Results
Changes from the beginning (n = 70) to the middle of the school year (n = 50) were evaluated by paired T-tests. There was only a significant improvement for the "family" scale of the BOSS (mean = 0.24, standard deviation = 0.64, p = 0.01). For all other scales of the BOSS, as well as for all secondary outcomes, no significant differences between both time points were found (p > 0.05).

Conclusion
Since there were some structural challenges at the beginning and the end of this pilot study, (e.g. a dropout rate of nearly 80% at the end of school year) the results showed limited evidence. However, the significant improvement in the "family" scale still leaves room for discussion as the other burnout parameters meet the average of the questionnaire’s reference sample. Structural changes (e.g. in the data collection and follow-up of participants) were made to improve the conditions for a subsequent randomized and controlled trial.