

Mindfulness-based stabilization of primary school children - a longitudinal study on the effects of mindfulness training on classroom climate

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Background and objectives:

Increasing demands on teachers and students lead to an increase of distress on both sides. Studies could show positive effects on executive functioning as well as on impulse control. The aim of this pilot study was gaining more insight in the efficacy and feasibility of a psychosocial, mindfulness-based training in primary schools in Germany.

Methods:

Six primary schools with 508 grade 3/4 students filled in standardised questionnaires and completed the d2 test of attention at the beginning, middle and end of one school year. During the first semester, their teachers participated in an adapted 20-hour mindfulness-based stress reduction (MBSR) program and practiced for themselves. During the second semester, teachers integrated mindfulness practices in their daily teaching.

The classroom climate was defined as primary outcome and evaluated with the Questionnaire for Capturing the Emotional and Social Experiences of Primary School Children in School (FEES 3-4). The objective concentration performance (d2-test) and health-related quality of life (Kidscreen-10) were defined as secondary outcomes.

Results:

In a repeated-measures analysis of variance, significant improvements in classroom climate ($p=0.002$) were observed. Further significant improvements occurred in all other FEES 3-4 scales, except for willingness to work. The score for concentration performance in the d2-Test showed significant improvements over the school year (beginning: 89.02 ± 33.95 ; middle: 112.89 ± 29.91 ; end: 129.45 ± 36.48 ; $p<0.001$). No significant differences for health-related quality of life were found ($p=0.069$).

Discussion and conclusion:

In this study, positive changes in classroom climate, social integration and the capability self-concept were observed. In the dimension of school and learning climate the aspect of learning showed no significant changes in one item (willingness to work) and a decrease in the other item (joy of learning). This suggests that the aspect of learning might not be affected by a one-year mindfulness-based training. However, an increase of concentration performance was observed. While these effects could be confounded by learning or developmental effects due to the uncontrolled study design, a comparative analysis suggested that specific interventional effects can be expected.