

# Research Library Publication

## The Effects of a Stress Management Intervention in Elementary School Children

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### Abstract

#### **Objective:**

This preliminary study tests the effectiveness of an elementary school-based stress management technique on anxiety symptoms and heart rate variability (HRV) in children.

#### **Methods:**

In this controlled prospective longitudinal study, children in third-grade classroom participated in a teacher-led daily 10-minute stress management intervention for 4 months. The control class teacher read from a children's book for 10 minutes daily. A standardized anxiety scale and HRV (using computer biofeedback program) were measured before the 4-month intervention, immediately after, and 1 year later.

#### **Results:**

The intervention class showed significant improvement from baseline to the immediate postintervention period in total anxiety ( $N = 14$ ,  $F = 12.95$ ,  $p = .002$ ), with 1-year follow-up scores maintaining improvement ( $N = 13$ ,  $F = 5.88$ ,  $p$

= .025). The intervention class had small improvement in HRV using the biofeedback program in the immediate postintervention period, with significant improvement at 1-year follow-up ( $N = 13$ ,  $F = 10.61$ ,  $p = .005$ ). The control class showed no improvements. Qualitatively, children reported that the intervention was helpful during stressful times at school and at home, even after the study period.

### **Conclusion:**

An elementary school-based short daily stress management intervention can decrease symptoms of anxiety, and improve HRV, a measure of relaxation. Ultimately, these children found this skill continued to help them cope better with everyday stressors.