Effect of Neurocognitive Training for Children With ADHD at Improving Academic Engagement in Two Learning Settings

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Abstract

OBJECTIVE:
This preliminary study investigated effectiveness of neurocognitive training on academic engagement (AET) for children with ADHD. The training approach targeted working memory, inhibitory control, and attention/relaxation (via brain electrical activity).

METHOD:
A reversal design with a 2-week follow-up was used to assess the effectiveness of the treatment on two children with diagnosed ADHD in two learning settings. Direct observation was used to collect academic-related behavior.

RESULTS:
Improvements in on-task expected behavior (ONT-EX) and general AET, as well as reductions in off-task motor activity (OFF-MA) and off-task passive behavior (OFF-PB) were observed for both students over baselines and across the settings. Moreover, differences in behavioral change were found between participants and settings.

CONCLUSION:
These findings support using the treatment for improving academic performance of children with ADHD. Future studies may investigate influences of contextual differences, nontreatment variables, or adult's feedback during the training session on treatment effectiveness.