

STUDY: Brainwave Training with Elementary Students

THE EFFECTS OF EEG NEUROFEEDBACK AND NEURO-COGNITIVE PROCESSING IN THE EDUCATIONAL ENVIRONMENT OF AN ARTS-BASED PRIVATE ELEMENTARY/MIDDLE SCHOOL

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Introduction.

This is a randomized, controlled pilot study investigating the effectiveness of electroencephalogram (EEG) neurofeedback and neuro-cognitive processing (brainwave training) in an educational environment of a small unique private arts-based elementary / middle school.

Method.

The sample size of the study was twenty-four (N=24) divided into 12 control and 12 neurofeedback subject groups. The study divided the groups by first and second semester providing two 18-week sessions containing a total of 25 one-hour therapeutic periods, using EEG neurofeedback and neuro-cognitive coaching sessions.

Results.

Results indicated that the students using the EEG neurofeedback and neuro-cognitive therapy made improvement in overall academics and in the behavioral aspects of attention problems: hyperactivity, internalizing problems, and adaptive skills. The area of greatest statistical significance, was in auditory discrimination ($p < .001$).

Conclusions.

Neurofeedback and neurocognitive training show promise in improving auditory discrimination, concentration and focus skills, and nonverbal intelligence in both special needs and normal children.

Link:

<http://www.acure-group.com/research/article144.pdf>
