Neurofeedback Training Intervention for Enhancing Working Memory Function in Attention Deficit and Hyperactivity Disorder (ADHD) Chinese Students

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ABSTRACT

Our study aimed to develop a neurofeedback training program for enhancing the EEG-based alpha band and executive working memory. The study design is pre-test/post-test Control Group (CG), and analyses were limited to those randomized to the neurofeedback intervention. The sample was ADHD students below 15 years of age (7-14 years), of whom 10 completed the 5-week training assessment in the experimental group (EG), whereas 9 completed the assessment in the CG, students from elementary and secondary schools referred to a Chinese psychiatry clinic. The average age of the sample was 13.48 years in the EG. The findings showed the beneficial effects of neurofeedback training, which improved in ADHD students. These findings revealed that most of the working memory function measurements exhibited significant differences between the EG and CG. A neurofeedback training program enhances the working memory function in ADHD students.