
THE EFFECT OF NEUROFEEDBACK IN SUBJECTS WITH ADHD

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Behavioral training in neurofeedback has proven to be an essential complement to generalize the effects of pharmacological support in subjects who have Attention Deficit with Hyperactivity Disorder (ADHD). The goal is to stimulate cortical activation, especially in disorders that require increasing intervals of attention and capacity of self-regulation and control. Therefore, this investigation attempts to verify the efficacy of neurofeedback compared with Pharmacological support and the combination of both. Participants were classified into four groups: Control group, students with ADHD who did not receive either pharmacological support or neurofeedback ($n = 33$, 11 girls and 22 boys); neurofeedback group ($n = 33$, 11 girls and 22 boys); pharmacological support group ($n = 34$, 15 girls and 19 boys), and combined group (neurofeedback + pharmacological support; $n = 31$, 11 girls and 20 boys). Participants were assessed at three levels (assessment of symptoms –EDAH- assessment of execution –TOVA- and assessment of cortical activation –QEEG-) at two different moments (before treatment initiation and after treatment). The EEG-Spectrum was used for the neurofeedback intervention. The design was an ex-post-facto descriptive with four treatment groups (pharmacological support, neurofeedback, combined) and a control group that did not receive intervention initially. Results indicate that the combined group obtained more benefits and that the neurofeedback group improved to a greater extent in executive control than the pharmacological support group. It is concluded that this kind of training is an excellent alternative to stimulate activation in subjects with ADHD.

Keywords. ADHD, neurofeedback, cortical activation, pharmacological support, intervention.