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EEG BIOFEEDBACK/NEUROFEEDBACK TRAINING ACCORDED HIGHEST STANDARD OF EFFICACY FOR ADD/ADHD TREATMENT

EEG Biofeedback, or Neurofeedback (NFB) training has sufficient research behind it that it is now considered by various institutional bodies and scientific publications to be as effective as any other treatment and superior to most for ADD/ADHD. This support is listed below:

Arns et al. (2009) conducted a meta-analysis of ten well-controlled studies combined with an additional five prospective pre/post design studies published in **Clinical EEG and Neuroscience**. This meta-analysis concluded that “*neurofeedback treatment for ADHD can be considered “Efficacious and Specific” (the highest possible ranking) with a large effect size for inattention and impulsivity and a medium effective size for hyperactivity*” [p. 180].

In October 2012, the company that maintains the **American Academy of Pediatrics’** ranking of research support for psychosocial treatments awarded NFB the highest level of evidence-based support for the treatment of ADHD [PracticeWise, 2012].

A 2012 meta-analysis published in **Journal of Attention Disorders** found Neurofeedback training to be twice as effective in treating core symptoms of ADHD as six other non-pharmacological treatments: working memory training, behavioral modification, school based behavioral therapy, behaviorally-based parent training, and behavioral self-monitoring treatments.

The **International Society for Neurofeedback and Research (ISNR)** recently commissioned a comprehensive review of NFB’s evidence-base for the treatment of ADHD. This review documents that NFB is superior to a variety of experimental control group conditions. It is equivalent to stimulant medication in treating the core symptoms of ADHD [Pigott et al., 2013]. Furthermore, the review found in five studies that assessed whether NFB resulted in sustained benefits after treatment ended, found that this was the case in all studies and in one study that assessed after two years, NFB gains had increased further during the two-year follow-up such that half of the children no longer met the diagnostic criteria for ADHD, and only 22% were still taking medications.

This contrasts sharply with the findings from the MTA Cooperative Study, a multi-centered **NIMH-funded study**. It tested the effectiveness for commonly reimbursed treatments for ADHD, stimulant medication and behavior therapy, finding that these treatments fail to result in sustained benefit for the vast majority of ADHD children who receive them [Jensen et al., 2007; Molina et al., 2009]. These researchers conclude by stating that “*Innovative treatment approaches targeting specific areas of adolescent impairment are needed*” [Molina et al., 2009, p. 484].

As outlined above, documented research demonstrates that Neurofeedback therapy is exactly this “*innovative*” and “*more effective*” treatment for ADHD with proven effectiveness targeting the specific areas of impairment that are essential to its diagnosis: 1) inattention, 2) impulsivity, and 3) hyperactivity.

The following is from Vincent Monastra’s book (2008), ***Unlocking the Potential of Patients with ADHD*** in which he reviews the then current efficacy status of NFB for ADD/ADHD.

“On the basis of the publication of several randomized clinical trials (RCTs), as well as multiple controlled studies using comparison with a bona fide treatment, NFT (neurofeedback training) meets the initial requirement to be considered an effective treatment for ADHD using criteria published by the **American Psychological Association** (Chambless & Hollon, 1998) and the **Association for Applied Psychophysiology & Biofeedback** (LaVaque et al., 2002). In addition, Hirshberg et al. (2005) applied the guidelines for recommending evidence-based treatments developed by **The American Academy of Child & Adolescent Psychiatry** (AACAP; Greenhill et al., 2002) and concluded that NFT “meets AACAP criteria for ‘Clinical Guidelines’ for treatment of ADHD” (p.12). Treatments meeting the requirement for Clinical Guidelines are those that apply approximately 75% of the time. Such practices “should always be considered by the clinician, but there are exceptions to their applications” (Hirshberg et al., 2005, p. 13).”

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