Using SB, A Computer-Assisted Program, To Treat Attention Deficit Disorders (AD/HD) and Learning Disabilities (LD): Review of 3 Case Studies

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Background

Many researchers have questioned whether or not attention deficit and learning disabilities, often co-morbid with AD/HD, can be repaired. Stimulant medication, usually Ritalin, has proven to be an effective treatment modality for many individuals diagnosed with attention deficit. The introduction of Neurofeedback has offered new hope for parents wanting to help their children resolve attentional difficulties without the use of medication. Neurofeedback research has shown that training brain wave patterns can help resolve the cognitive difficulties associated with attention deficits and learning disabilities. SB was developed to help improve cognitive function without the need to connect to EEG instrumentation. It has been demonstrated, in a clinical setting, that SB helps improve various cognitive skills associated with attention and working memory.

Abstract

The question whether or not attention deficit in AD/HD and learning disability populations can be remedied, received attention from many researchers. Treating children and adolescents with stimulant, usually Ritalin has proven to be an effective modality for individuals suffering from any form of attention deficit. The introduction of Neurofeedback, has offered new hope for parents wanting to help resolve the attentional problems of their children without the use of medication. Neurofeedback research has shown that training brain wave patterns can remedy attentional difficulties associated with the above-mentioned conditions. SB was developed to help those wanting to improve their cognitive function, without the need to connect to EEG instrumentation. It has proven, in a clinical setting, to help in enhancing various cognitive skills associated with attention and memory.

Key Words: ADD, ADHD, LD, Neurofeedback, frontal lobes, attention deficit, distractibility, SB computerized program

Introduction:

The use of computer-assisted programs in the treatment of cognitive deficits is not new.
Previous studies have shown the benefits of such cognitive training for treating attention deficit with or without hyperactive disorder (AD/HD) and learning disabilities (LD). The National Institutes of Health (NIH) Consensus Development Conference Statement (1998) confirmed that "Computer-assisted strategies have been used to improve specific neuropsychological processes, predominantly attention, memory, and executive skills. Both randomized controlled studies and case reports have documented the success of these interventions using intermediate outcome measures." I will be reviewing some of the studies done on the use of Neurofeedback to treat AD/HD and LD, explain the principles behind SB, compare it to traditional Neurofeedback modalities, and use three case studies to demonstrate the effectiveness of this computer-assisted program.