ADHD Evaluation of a computer-based neuropsychological Training in Children with AttentionDeficit Hyperactivity Disorder

Background:

We report the effects of a computer- based neuropsychological training in children with Attention-Deficit Hyperactivity Disorder (ADHD). We hypothesized that a specific training focusing on attentional dysfunction would result in an improvement of inattention, observable in test performance, behavior and performance during experimental school lessons and in parent and teacher ratings of the related core symptom.

Method:

We chose a within-subject-control design with a 4-week baseline period and subsequent 12 to 15 weekly training-sessions. 30 children (6 to 13 years old) with a diagnosis of ADHD (ICD 10: F 90.0) and no other comorbidities participated in the study. Results: The training revealed significant improvement in training parameters of the neuropsychological training and in the symptoms of inattention and deportment as rated during experimental school lessons. However, generalization of training effects as measured by parent and teacher ratings was not detected.

Conclusions:

We conclude that neuropsychological training could be helpful as one adjunct module in the complex treatment of ADHD but to prove clinical value, similar training programs must focus more strongly on individually existing neuropsychological deficits. Training programs should be more intensive and should eventually be combined with home-based training access.