

## Cognitive Remediation for ADHD

Several alternatives to medication exist as treatments for Attention Deficit Hyperactivity Disorder (ADHD). One alternative treatment modality is Cognitive Remediation, or Neuropsychological Remediation, as it is sometimes called. Cognitive remediation is a therapeutic approach targeting specific cognitive functions, such as attention, organization, planning, or memory, that constitute an individual's weaknesses or impairments. A course of cognitive remediation begins with neuropsychological testing, which determines the individual's specific areas of weakness. Then a set of structured exercises is composed to develop the deficient areas, and additional methods are introduced to deal with compensating for these deficits. Such exercises may be delivered via a computer program, or by individual or group activities, with the exercises tailored to the person's needs. The length of the treatment depends on the nature and extent of the deficits, and on the participant's effort.

Several recent studies investigated various aspects of effectiveness of cognitive training in remediating symptoms of ADHD. An article in the *Neuropsychological Rehabilitation* journal reports findings that suggest that sustained attention in patients with ADHD can be normalized by employing certain exercises, as well as making modifications in the task. Findings from another study reported in an issue of the *Journal of Attention Disorders* demonstrate that improvements in performance on structured exercises that are practiced as part of a cognitive remediation program can generalize to other tasks involving similar cognitive functions. This results in improvement in functioning in daily activities. Thus, participating in a cognitive remediation program that focuses on training discrete aspects of attention, such as sustaining attention over a period of time, shifting attention between several tasks, focusing on a task while ignoring distractions, and so on, would generalize to improvements in daily activities such as reading for a long period of time, multi-tasking, and being able to ignore distractions while focusing on the activity at hand.

There is also evidence that gains made during cognitive training last after the training has been discontinued. A study investigating effectiveness of a cognitive remediation program for ADHD not only found improvements across all areas of training in individuals participating in treatment, but also demonstrated maintenance of these gains 2 and 12 months after the treatment was discontinued (White & Shaw, 2001).

Cognitive remediation is a valuable tool in the treatment of ADHD. It can be used in combination with or as an alternative to medication, and it offers a safe and effective means to improve symptoms associated with inattention and hyperactivity. In addition, this treatment can be tailored to each individual's needs and life style. Customized programs can be created using a combination of exercises to achieve optimal improvement in functioning.

### References:

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