



COMPREHENSIVE DIAGNOSIS  
AND EVALUATION  
OF CHILD & ADULT ATTENTION,  
LEARNING, AND MEMORY DISORDERS  
(ON-SITE EVALUATIONS AVAILABLE)

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# Learning Disability & ADHD Update

## Executive Functioning and Learning Challenges



For the last twenty years, discussion on learning difficulties have increasingly centered on the importance of executive functioning. Understanding the substance and contours of what is meant by executive functioning is often unclear, and its relationship to individuals with learning issues is often implied, but not well articulated or understood.

Simply put, executive functioning refers to the activities of the frontal lobe involving such tasks as decision making, planning on both a verbal and perceptual level, initiation and generation capacities, accessing information, inhibiting responses, and simultaneous processing of information. This, of course, is just a sampling of the kind of complex and difficult to describe activities that we all engage in on a daily basis. Individuals with ADHD and learning challenges often have difficulties with executive functioning, in that they struggle with organizing and planning activities,

*(Executive Functioning... cont'd. on pg. 2)*

## Adult ADHD Update

Adult symptoms of attentional difficulties often look and feel quite different from the manifestations of ADHD that typically surface in childhood and adolescence. The core symptoms of inattentiveness, difficulty with organization and prioritizing tasks, along with poor time management, procrastination, and difficulty with starting and finishing activities are often seen in adults with the symptoms of ADHD-Inattentive Type. These individuals may have

not been identified as having ADHD as children and adolescents, but it is now well known that adults with ADHD of this type likely have had significant symptoms of the disorder, despite not having received a prior diagnosis.

Deficits associated with the functioning of the right dorso-lateral aspects of the frontal lobe are often responsible for the difficulties with the adults who show problems with working

*(ADULT ADHD..... cont'd. on pg. 2)*

**Dr. Scott Howard is pleased to announce the opening of a new office at 150 Front Street, Marblehead, MA this summer (508-878-9004). Dr. Howard continues to provide supervision, in-service presentations, and consultation to schools, health-care facilities and clinics in both Massachusetts and New Hampshire. He appreciates the opportunity to perform neuropsychological evaluations for the educational and medical community in the Greater Boston area.**



*(EXECUTIVE FUNCTIONING... cont'd. from pg. 1)*



screening out distractions, prioritizing and finishing tasks, as well as being able to access and remember information related to a task they are intending to perform.

Evaluating children, adolescents and adults who suffer from executive functioning difficulties involves a thorough examination of a person's history, but also administering tests that focus on the ability to perform a wide variety of tasks involving these skills.

For example the Wisconsin Card Sorting Test is often used to evaluate the ability to switch cognitive sets and show mental flexibility, as this card matching task involves individuals' making choices in an ambiguous and unstructured situation.

*(ADULT ADHD... cont'd. from pg. 1)*



memory, screening out distractions, and planning and organizing behavior.

A smaller subset of adults do, however, show some of the adult symptoms of hyperactivity and impulsivity such as frequently changing jobs, difficulty with relationships, managing feelings of anger and addictive tendencies, and talking excessively.

Those individuals who show more of the hyperactive and impulsive profile have deficits in the right orbital prefrontal cortex, which is the area of the brain that regulates emotional and behavioral issues such as knowledge of appropriate interpersonal conduct, decision making regarding financial issues, social judgment, as well as the ability to manage frustrating and

In addition, the Controlled Oral Word Association Test (FAS test) is another executive functioning exercise in which the examinee is asked to generate as many words as they can in a one minute span of time for the letters F, A, and S. Individuals with learning and attentional impairments often show a significant difficulty in terms of generating words starting with these letters, while also exhibiting strong vocabulary abilities. This paradox can be explained by noting that accessing or searching for information is often impaired in ADHD/LD populations, while if the examinee is asked to define a particular word, this does not involve the employment of that search function to a comparable degree.

The Trail Making Test is another executive functioning task that involves the ability to connect a series of letters and numbers scattered throughout a page in an alternating and sequential order.

taxing situations of all kinds.

In terms of functional impairments, these adults often show diminished educational and occupational achievement, a higher rate of separation and divorce, reduced effectiveness in parenting and social activities, and difficulties with substance abuse and mood regulation. Legal difficulties, driving accidents, and a higher rate of injuries due to impulsivity and inattention are also commonly seen by those individuals who show symptoms of ADHD-Impulsive/Hyperactive type.

Many instruments are available to screen for symptoms of adult ADHD, but it is often essential to receive more information from a comprehensive neuropsychological evaluation in order to target the symptoms and formulate a treatment plan for the precise deficits an individual may exhibit. However, the Brown and Conners adult ADHD rating scales as well as

This involves the ability to process two sets of data simultaneously, as well as sequence that information. Again, children, adolescents and adults with ADHD and other learning issues often have trouble performing this task, as it requires the kind of multi-tasking higher level functioning that is often difficult for these individuals.

When the results of these executive functioning tests are discussed along with the findings from the intellectual functioning and academic achievement testing, it often is clear that executive functioning is impaired. However, being able to synthesize and glean useful information about an individual's strengths, and how to target and remediate weaknesses, is the sine qua non of valuable testing, as this actualizes learning potential.

Evaluations for those seeking extra time on the SAT, GRE, LSAT, etc. are also done on a regular basis.

the Barkley and Wender-Reimherr scales are available to begin the process of identifying individuals who present with ADHD symptoms.

Medications often given to adults are quite effective, and the side effect profile for virtually all of the medications that are used are minimal. Of course, enhancing treatment through a multimodal framework utilizing coaching, therapy, and other behavioral treatment approaches is recommended.

Dr. Howard is also available to assess other neuropsychological disorders, such as Alzheimer's Disease, Head Trauma, M.S., and Stroke. He also does testing to evaluate emotional and behavioral disorders, and career and vocational issues.