

DIFFERENT BRAINS – DIFFERENT LEARNERS

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ATTENTION DEFICIT DISORDER

ATTENTION DEFICIT HYPERACTIVE DISORDER

WHAT'S GOING ON?	OBSERVABLE SYMPTOMS	WHAT'S HAPPENING IN THE BRAIN?
<p>ADD/ADHD</p>	<p>Remember symptoms as “MIA”</p> <ul style="list-style-type: none"> • <u>Memory</u>: Poor short term memory especially on visual tasks. • <u>Impulsivity</u>: Doesn't learn from mistakes. Easily frustrated. • <u>Achronica</u>: From Greek meaning “out of sync with time.” Difficulty reflecting or projecting. Can't delay gratification. <p>Not so much a disability than a <i>mismatch</i> with traditional school. Many ADHD children do well in alternative environments. Important to distinguish mild, moderate, and severe as treatments are very different. (See page 93 in notebook.)</p> <p>Low levels of dopamine, glucose, and amines may result in self-medicating with food, drugs, alcohol.</p> <p>Correct diagnosis is important. Don't confuse ADHD with bipolar or unipolar manic since treatments are very different.</p>	<ul style="list-style-type: none"> • Dopamine transporter irregularities interfere with working memory and shorten delay gradient • Glial glucose metabolic defect interferes with working memory – need constant supply of sugar. Hippocampus uses a great deal of glucose and is important for memory formation. • Low PFC amine activity interferes with working memory and delay gradient. Uppers – like caffeine, Ritalin help this. • Striatal (reward pathways) lesions shorten delay gradient (Impulsivity) • EEG theta excess hippocampal gating interferes with temporal processing and working memory • Underactive thalamus does not organize incoming stimulus well <p>Highly comorbid with other brain dysfunctions (See page 90 in notebook): Hypoactive attention system, chemical imbalances and mood swings, miswiring that leads to dyslexia, DD, MR, FAS, etc, Sensory system breakdowns, overactive cingulate gyrus that results in oppositional issues.</p>

WHAT CAN BE DONE?	<u>HOPE</u>	<u>ENRICHMENT</u>	<u>SKILL BUILDING</u>	<u>ACCOMMODATIONS</u>
ADD/ADHD	<p>Balancing diet, exercise, self awareness and skill building can help individual learn about his or her own brain and effectively change it over time.</p> <p>Many ADD/ADHD individuals are highly gifted in particular areas and can be unusually successful with support as they are growing up.</p> <p>Many learners with ADD/ADHD are talented artists. Use this to help them learn to focus.</p>	<p>3.</p> <ul style="list-style-type: none"> • Complex, fun exercise (like triangle tag) bumps up amine activity in PFC and helps regulate system • Nibbling diet that keeps glucose level stable. Candy works fast but is expensive. Better = Fruit, carrots, whole wheat crackers, peanut butter. Gum provides constant supply of glucose. • Keep room cool 	<p>2.</p> <p>Give tools that learners can use to regulate their own emotions and behavior.</p> <p>Establish clear and consistent routines and rituals.</p> <p>Teach organizational skills and manage flow of information.</p> <p>Teach memory skills and activities that teach the brain to focus.</p>	<p>1.</p> <p>Mild ADD/ADHD may need little more than appropriate accommodations. Involve learner(s) in structuring time and space for success. Healthy brains perform better with <i>mild</i> stress; ADD/ADHD do worse.</p> <p>In more severe cases use a team approach and stick to a plan. Use medication as a last resort.</p> <p>When comorbid with other disorders, determine the most critical issues and develop a long term plan.</p>