

“Connecting Attention, Memory and Academic Performance”

Attention + Memory= LEARNING

Attention

Strengths

- Starts work and maintains effort level
- Appears to have sufficient energy
- Maintains focus
- Notices key details
- Resists impulses
- Plans before starting task
- Self corrects

Challenges

- Difficulty initiating and staying on task
- Appears excessively tired
- Loses focus and easily distracted
- Misses key details
- Impulsive
- Rushes through work/no plan
- Misses mistakes

“Healing ADD” Dr. Daniel Amen
www.amenclinics.com

Classic ADD: Marked inattentiveness at work, home, social occasions, easily distracted from routine tasks; an extremely disorganized life style; and restlessness hyperactivity or impulsivity at work, home, social occasions,

Inattentive ADD: On going sluggish or apathetic behavior at home, work, social occasions, inattentiveness, distractibility and disorganization, but without the restlessness, hyperactivity and impulsivity in Classic ADD.

Over-Focused ADD: Excessive worrying and a tendency to be argumentative, erratic or compulsive with frequent negative or oppositional thinking. Often confused with Obsessive Compulsive Disorder (OCD).

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Temporal Lobe ADD: A tendency toward quick temper, rage, generalized anxiety, panic and paranoia. Sometimes confused with Organic Mental Disorders and Paranoid Personality

Disorder.Limbic ADD: Moodiness, low energy, emotional isolation and feelings of hopelessness. Includes many of the symptoms of moderate to severe depression.

Ring of Fire ADD: Angry, mean, unpredictable behavior; sensitivity to noise, light, clothing, touch and grandiose thinking. Often confused with Manic Depressive or Bi-Polar Disorder.

Types of Attention

- Visual and auditory sustained attention is the ability to stay on task for a sustained period of time.
- Visual and auditory selected attention is the ability to attend to one input while not being distracted by other inputs.
- Divided attention is the ability to attend to 2 activities at the same time- taking notes and listening to the teacher.
- Flexible attention is the ability to shift focus quickly when necessary.

Attention

Steps

- Alert or Arousal Network
“Security Officer” set off alarm
- Orientating Network- gain more information about the stimulus
- Executive Network- setting priorities, planning in the moment, controlling impulses, weighing consequences, or shifting attention

Strategies

- Information must be interesting
- 10 minute segments
- Emotions increase interest
- Meaning before Detail
- One task at a time: brain cannot multitask
- Take a break
- “What if Games” to think ahead

Types of Memory

- Short-term/working memory is the brains workspace/ top of the desk. We are temporarily holding information in the mind while performing a mental operation or manipulating the information. Processing visual and auditory information.
- Long-term memory is the ability to store and recall information for later use/filing cabinet. This may be recalling sequences, math facts, rules, reproduce a design, and several pieces of information in an organized manner.

“The brain can only receive information from our senses, and it is a multisensory organ.”

Pat Lindamood www.lindamoodbell.com

- Know your student, begin with common language, and relate to something known
- Preview information 1-2 weeks before formal instruction
- Practice makes permanent/ put into a different form
- Reflection time
- Stop and discuss passages from various points of view
- Group into categories and compare with past information
- Limit lecturing to a few minutes
- Sensory instruction and use of emotions
- Music/rhyme/ hand motions
- Have students paraphrase in writing and aloud to a friend
- We remember best through pictures. Vision is our dominant sense.
- Add new information gradually in small chunks and repeat in timed intervals

Memory

Strengths

- Holds on to the beginning of reading passage until the end
- Completes multistep task such as math procedures
- Performs mental math
- Recalls spelling, grammar, and ideas when writing
- Easily learns new vocabulary
- Makes “movies” in head when reading
- Recognizes patterns
- Recalls procedures
- Can get the whole picture

Challenges

- Forgets information when reading
- Loses track of multi-steps
- Struggles with mental math
- Difficulty writing
- Slow to recall facts
- Does not visualize/image concepts
- Difficulty with cumulative subjects
- Struggles to recall information like multiple choice
- Uses incorrect procedures
- Gets stuck on parts
- Difficulty getting main idea, inferences, predictions, and conclusions

Memory

Steps in Memory

- The original encoding
- The maintenance of that memory
- The retrieval of the learning

“Man cannot think without mental images...”Aristotle

Parts of Comprehension

- Auditory Processing:Phonemic Awareness- perceive the number, identity, and sequence of sounds within words- word attack/reading
- Symbol Imagery is the ability to recognize words, read fluently, and spelling
- Concept Imagery is the ability to visualize what you read and understand concepts leading to logical and abstract thinking. Strong vocabulary

General Strategies for Parents

- Physical activity is “cognitive candy”- 2-3 x’s a week for 20-30 minutes increasing visual processing, staying on task, and self-esteem while decreasing anxiety and depression.
- Sleeping 8-12 hours + a nap.! Sleep lose = brain drain hurting attention, working memory, mood, logic and reasoning, executive functioning, and motor dexterity. The brain does NOT sleep but perhaps replaying what you learned during the day. Sleeping 8-12 hours + a nap.
- Manage Stress: Stress can disconnect neural networks, effect memory, lower immune system, and performance. Conflict in the home is the primary cause of stress in children.
- Nutrition

Identify

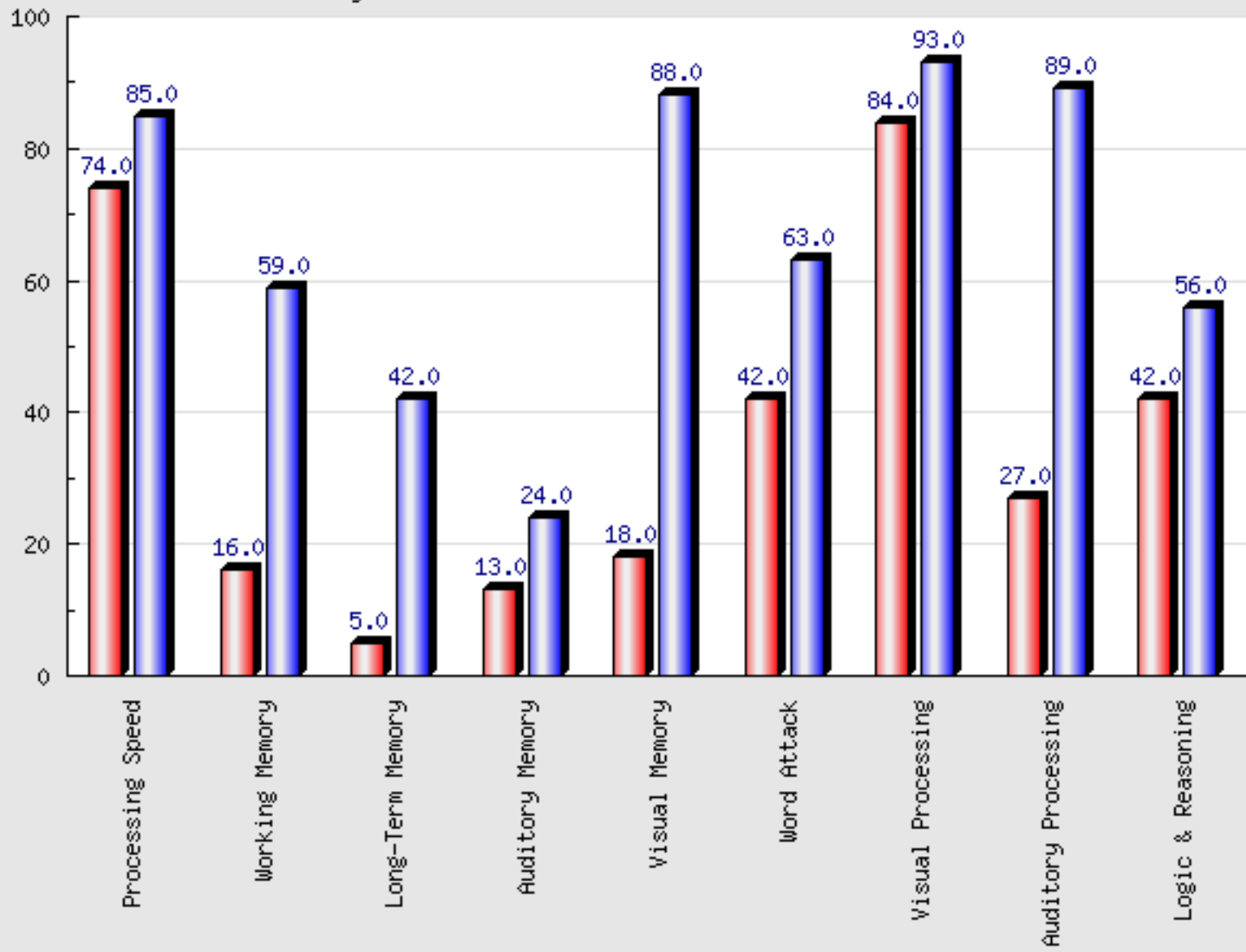
- Cog1st.org The Gibson test is a 35 minute cognitive skill assessment- Option 2-free
- You can take it at home or with me.
- On line ADD assessment @ amenclinics.com
- Talk to your students teacher, parents, and doctor
- Independent students can use Brainware Safari or BrainSkills at home 3-5 times a week for 30-45 minutes for 12 weeks

Strengthen

- Short-term intensive cognitive/brain training.
- Optimal results are seen with 60 hours of therapy : one hour a day, five days a week for 12 weeks or 1.5 to 2 hours a day for 6-8 weeks.
- Additional time may be beneficial for some students
- Intensity and frequency are the key to developing the neural pathways .
- Students received focused attention and immediate feedback in one-on-one sessions
- The underlying process of memory, attention, processing, and logic and reasoning are developed
- The exercises are challenging and fun!

Cognitive Skills Profile

Scores by Percentile (where an individual rates out of 100)



Transform

- Improved attention span, focus
- Fewer careless errors
- Completion of tasks faster
- Completion of tasks more accurately
- Less frustration with difficult tasks
- Better ability to follow instructions
- Better ability to grasp concepts
- Increased motivation & effort
- Greater ability to handle challenges
- Enhanced thinking
- Increased attention to detail
- Better reading comprehension
- Self-correct and become independent learners!