

50 WAYS TO LOSE ATTENTION

September 10, 2017
Anita Hamilton, PhD, ABPP-CN
Children's Orthopaedic Center
Division of Neurology
Children's Hospital, Los Angeles



Attention & Frontal Lobe

ATTENTION

- Focus or Sustained Attention
- Selective Attention
- Divided Attention
- Dual Task
- Inhibition
- Cognitive Control

MOOD

- Regulation
- Coping

INSIGHT

- Empathy
- Delayed Gratification

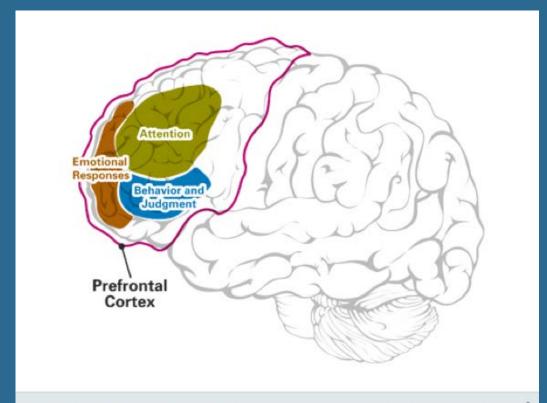


Figure: The 3 Subregions of the Prefrontal Cortex Thought to be Related to the 3 Core Symptoms of ADHD



Attention & Neurochemistry

Execution:

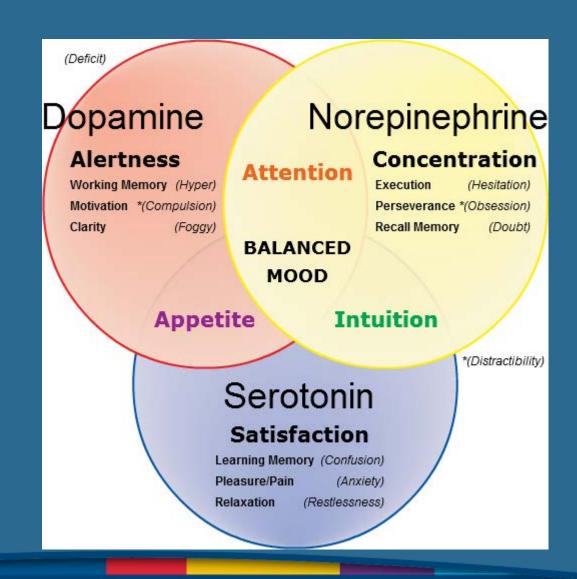
- Task Approach
- Perseverance:
- Task Persistence
- Recall:
- Anticipate Difficulty Working Memory
- Flexibility
- **Motivation:**
- Effort

Clarity:

- Distractibility
- Pain:
- Anxiety

Relaxation:

Distractible





Attention Factors

- Physiology
 - frontal lobe functioning (delay and/or deficit)
 - Neurochemical imbalance
 - Other neurocognitive deficits undermining attention
 - Mental fatigue
- Environmental/external factors
 - Setting
 - Events in and outside of the classroom
 - Sensory factors: language, hearing & vision
- Internal Factors
 - Mood—combination of both
 - Motivation & effort
 - Pain



Primary vs. Secondary Inattention

Physiology

- ADHD
- Executive Dysfunction
- Other neurocognitive deficits
 - Language processing
 - Processing speed
 - Reading/writing
 - Learning & memory

Environment

Setting

- Conditions
- Interactions

Perception

- Supportive or Threatening
- Contro
- Motivation
- Belonging or Alienation

Circumstances

- Family
- Social
- Medical Dx



Preschool & Kinder

Working memory, inhibitory control, processing information

- Behavioral problems
 - Difficulty sitting, interruptions
- Off task behavior
 - contributing to reading/writing problems and academic underachievement;
- Difficulty with instructional language,
- Bumping into things/people, climbing/jumping



Preschool Interventions

- Use praise, recognition. "Catch a child being good."
- Structured tasks: engage, teaching opportunity, describe what is expected, praise, then give them a few seconds, re-enforce
- Sing during a task to maintain focus
- Teach organization: show more than once
- Use photos, visual and auditory cues
- Limit words: too many words, kids "zone out."
- Use timers, so the child can track time to the next transition
- Emphasize gross motor skills: tear instead of scissor; trace with box light to provide sensory feedback
- Fidget toy during carpet time



School Age

Focus, selective attention, task persistence, divided attention

smart but having problems in school; homework drama; injury; school reluctance and school refusal; social skills difficulty

- Low task persistence for non-preferred tasks
- Low task frustration
- Go on "auto-pilot" yet look like paying attention
- Bargaining
- Anticipatory failure triggers distractible, ANXIETY
- Low self-competence, low self-esteem
- Diminished love for learning
- Entrenched conflict with teachers
- Misunderstood as oppositional rather than inattentive
- School reluctance; school refusal



School-age, middle school interventions

- Make learning emotional & sensory
- Direct/interactive (teacher or group) instruction
- Core curriculum in the morning
- Use novelty, multi-sensory, multi-modal
- Visual rule reminders (e.g., timers)
- Auditory cues (e.g., self-monitoring productivity)
- Allow movement
- Teach test-taking skills to manage test anxiety
- Quality over quantity (e.g., homework)
- Close communication with teachers



Adolescents

Organization, delayed gratification, consequences of actions, insight, judgment, empathy

- Entertainment over achievement,
- Unprepared/poor organization,
- Poor note-taking skills;
- Lower academic achievement
- Negative moods,
- Lower rates of happiness, alert and well-being
- Mental fatigue
- More time with friends instead of family
- Risk for alcohol and substance use



Adolescent Interventions

- Organization: re-enforce and reward with using a smart phone as organizer
- Immediate feedback, reward, praise and consequences to enhance performance consistency
- Dictate written assignments first
- Be strategic with workload and homework
- Assistive Technology (e.g., iPad; Live scribe)
- Decrease stress and anxiety; frustration management
- Self-monitoring, cognitive re-structuring
- Self-advocacy
- Physical Activity



School Advocacy

- Medical context, not generic ADHD
 - Not due to characterological factors or parenting style
- IEP under the criteria of "Other Health Impaired"
- Academic Placement—flexibility, strengths-based, collaborative
- Behavioral Intervention Plan & Functional Behavioral Analysis
- General Accommodations
- Homework Hygiene
- Assistive Technology
- Outside psychotherapeutic support for family



Thank You.



Questions/Comments?!?!?!

Feel free to contact me at: AHamilton@chla.usc.edu