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JOHNS HOPKINS
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Section D

Executive Dysfunction

Executive Dysfunction

- Many possible ways to end up with dysfunction—no specific neurologic disorder, but many risk factors:
 - Prematurity and low birth weight
 - Family history/genetic
 - Brain injury (frontal lobe)

EF Associated Disorders

- ADHD
- Learning disabilities
- Psychological comorbidity
 - Autism
 - Depression

ADHD as an EF Disorder

- Barkley believes those who diagnose ADHD over focus on the behavioral outcomes of inattention, hyperactivity, and impulsivity
- Focus on the causes—a disorder of poor effortful control—the failure to inhibit thoughts and control other executive functions of solving problems

ADHD Is a Problem of the Arousal System (Barkley)

- If the level of arousal of emotion and attention is too low, the child cannot
 - Initiate problem solving keep focused on the target
 - Keep working long enough to reach the goal
- If the level of arousal is too high, the child cannot
 - Have enough impulse control to remain on task
 - Do the planning, organizing, and self-monitoring that must be done



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Executive Function and Learning Disabilities

Dyslexia and Executive Function

- There is an association between dyslexia and EF such that those with dyslexia have impaired inhibition, weaker working memory, and lower verbal and design fluency compared to controls

EF and Written Language

- The greatest nemesis of the child with EF problems
- Must develop a conclusion (what you're trying to say) and keep the eye on the conclusion while using correct sequential mechanics to reach the conclusion
- Kids with EF don't do the necessary pre-planning and often meander through the sequence of ideas without efficiently reaching the conclusion