

Pediatric Mental Health Care Access Grant

# Attention-Deficit/Hyperactivity Disorder: Presentation and Best-Practice Treatment

Dr. Justin J. Boseck, Ph.D., L.P., ABPdN, CBIS, NCSP  
Licensed Psychologist (ND 490),  
Board-Certified Pediatric Neuropsychologist,  
Fellow of the American Board of Pediatric Neuropsychology,  
Certified Brain Injury Specialist, and  
Nationally Certified School Psychologist

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## OBJECTIVES

1. Outline the signs and symptoms of Attention-Deficit/Hyperactivity Disorder (ADHD) and executive functioning deficits
2. Identify the consequences of having ADHD and executive functioning deficits
3. Explain best-practice treatments for ADHD and executive functioning deficits



## **ATTENTION-DEFICIT/HYPERACTIVITY DISORDER**

- ADHD is exhibited as persistent signs/symptoms of:
  - Inattention
  - Hyperactivity
  - Impulsivity
    - More significant than aged-peers
    - Sufficient enough to cause impairment in activities of daily living (ADLs) in multiple settings
- Largely considered a deficit in the ability to regulate executive functions



## **EXECUTIVE FUNCTIONS**

- Frontal lobe dysregulation
- Frontal lobes regulate and organize cognitive activity from other areas of the brain
- Orchestrator of the band

## EXECUTIVE FUNCTIONS

- **Executive Functions initiate:**
  - **Purposeful**
  - **Organized**
  - **Self-regulated**
  - **Goal-directed processing of:**
    - **Cognition**
    - **Behavior**
    - **Emotion**

## EXECUTIVE FUNCTIONS

Impaired Executive Function	Resulting Difficulty
1. Deficits in attention Focusing Sustaining Shifting	Losing focus quickly Difficulty attending for long periods of time Difficulty working on more than one task at a time
2. Monitoring and regulating behavior and emotion	Impulsivity
3. Regulating alertness, effort, and processing speed	Difficulty completing tasks on time Slowed processing speed (i.e., "Sluggish Cognitive Tempo")

## EXECUTIVE FUNCTIONS

Impaired Executive Function	Resulting Difficulty
4. Behavioral/emotional dysregulation	“Rejection Sensitive Dysphoria” Being overly sensitive to criticism Becoming easily irritated
5. Working memory and accessing recall	Deficit in focused attention Difficulty following sequential directions Difficulty recalling information due to deficits in attention
6. Organizing, prioritizing, and activating	Difficulty initiating tasks Becoming overwhelmed with multiple tasks Difficulty organizing work (multi-step directions)

## “TREATMENT”

- **First Things First**
  - Sleep
  - Nutrition
  - Activity/Exercise
  - Screen Time



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Medication**
  - **Behavior training**
  - **Parent management training**
  - **Educational accommodations**
  - **Individual/family counseling**



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Medication**
    - **“Band-Aid”**
    - **Does not fix cognitive difficulties**
    - **Can help an individual learn skills**



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Behavior training**
    - **Positive Reinforcement**
    - **Parent-child relationships**
    - **Problem-solving**
    - **Task initiation and completion strategies**



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Parent Management Training**
    - **Taught to understand biological basis of ADHD**
    - **Taught behavior management principles and techniques**
    - **Taught how to manage their own reactivity**
    - **Help keep their child's difficulties from adversely affecting other family members**



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational accommodations**
    - Seating close to, and in direct view, of the teacher
    - Reducing extraneous stimuli in the environment
    - Providing cues and prompts
    - Receiving breaks during longer instructional periods
    - Taking tests and completing assignments in a separate room
    - Noise-canceling headphones/earplugs



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational accommodations**
    - Reduce time delays and externalize time
      - Use timers, clocks, counters, etc.
    - Externalize important information
      - Post reminders, cues, calendars, organizers, etc.
    - Externalize motivation
      - Token systems, reward programs, privileges
    - Use immediate feedback
      - Act quickly after desirable behavior occurs



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational accommodations**
    - Use more positive reinforcement
      - Use material rewards to improve motivation
    - Use rewards before punishment
      - Identify the behavior you want to improve and strongly reward
    - Change rewards periodically
      - Find new ways to reward when old rewards become less desirable
    - Use physical proximity
      - Closeness improves compliance



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational accommodations**
    - Keep a sense of priorities for behavior change
      - “Don’t sweat the small stuff”
    - Be mindful that ADHD is a disability
      - ADHD is a neurological disorder, not a choice
    - Practice forgiveness
      - Behavior will not always be perfect, forgive mistakes





## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational accommodations**
    - **Decrease total workload**
    - **Present material in smaller portions**
    - **Provide relatively frequent breaks**
    - **Target accuracy, NOT amount of work completed**
    - **Reduce/eliminate homework**
    - **Allow time for rest**
    - **Allow time for restlessness**



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational accommodations**
    - **Use organizers**
    - **Check organizers at least once per day**
      - **Before school and/or at the end of the day**
    - **Use color-coded systems or other organizing strategies**
    - **Keep students busy**
      - **Give them work to do to help teachers (i.e., “erasing the chalkboard”)**
    - **Make use of peer tutoring**



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational Accommodations**
    - **Functional Behavioral Assessment**
    - **Modified Task Presentation**
    - **Contingency Management**
    - **Self-Management**
    - **Daily Behavior Report Cards**



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational Accommodations**
    - **Functional Behavioral Assessment (FBA)**
      - **Identify antecedents and consequences of behavior**
      - **Provide Positive Behavioral Supports**



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational Accommodations**
    - **Modified Task Presentation**
      - Increase the interest in an activity
      - Based on information gained from an FBA
        - Offer choices
        - Modify in-class assignments and homework
        - Use high-interest activities for motivation



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational Accommodations**
    - **Contingency Management**
      - Define behavioral objectives clearly in operationally defined terms.
      - Identify routines for earning and losing reinforcers.
      - Provide appropriate types of reinforcers to shape behavior.
      - Deliver contingencies consistently at fixed or random intervals.
      - Implement response-cost contingencies as needed.



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational Accommodations**
    - **Self-Management**
      - **Teach the child to:**
        - **Monitor and their behavior**
        - **Compare behavior with self-determined goals**
        - **Reinforce themselves**



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - **Educational Accommodations**
    - **Daily Behavior Report Cards**
      - **Define the target behavior**
      - **Monitor and record behavior daily**
      - **Provide reinforcement for exhibiting the target behavior**
      - **Communicate results to parents and children (in a developmentally appropriate manner)**



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - Individual/family counseling
    - Helps children with ADHD understand their difficulties
    - Helps children with ADHD learn coping strategies
  - Monitor and treat potential comorbidities
    - Anxiety
    - Depression



## TREATMENT

- **Best-Practice treatment for ADHD combines:**
  - Managing ADHD during a pandemic
    - Create a single learning space
    - Create a daily and weekly checklist
    - Schedule check-ins (preferably before and after school)
    - Try to find learning options that do not emphasize screens
    - Provide directions in as few different formats as possible
    - Text-to-speech
    - Request extended time to complete assignments

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