# Understanding Attention and Focus: Strategies for Student Success

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# Learning Objectives



**01** Describe the etiology and presentation of Attention Deficit Hyperactivity Disorder (ADHD) and related executive functioning challenges.

**02** Learn strategies to support students in improving focus and managing distractions to improve academic functioning.

# Caveat

- Research indicates that younger children are much more responsive to behavioral interventions than adolescents (Dishion & Patterson, 1992).

- Most commonly misdiagnosed disorder due to developmentally normative maturity and behavioral issues (MSU, 2010).

# Attention-Deficit/Hyperactivity Disorder (ADHD)

- Neurodevelopmental – emerges during the developmental period; usually related to lifelong functional impairments (but can be masked via compensatory mechanisms)
- Predominantly Inattentive presentation, Hyperactive/Impulsive presentation, Combined presentation
- One of the most common childhood disorders that continues through adolescence and into adulthood
- Behavioral symptoms include difficulty controlling behavior, excessive motor activity, limited focus, and intrusiveness
- Risk factors: Low birth weight (2-3x more likely to develop ADHD; most children with low birth weight do not develop ADHD) and first degree biological relative

(NIMH, 2017; APA, 2013)

# ADHD – Predominantly Inattentive Presentation

**Diagnostic Criteria**

A. A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development, as characterized by (1) and/or (2):

1. **Inattention:** Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:

   **Note:** The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required.

   a. Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).

   b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).

   c. Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).

   d. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked).

   e. Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).

   f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).

   g. Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile

   h. Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).

   i. Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).

(APA, 2022)

# ADHD – Predominantly Hyperactive Presentation

2. **Hyperactivity and impulsivity:** Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:

**Note:** The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or a failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required.

a. Often fidgets with or taps hands or feet or squirms in seat.
b. Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).
c. Often runs about or climbs in situations where it is inappropriate. (**Note:** In adolescents or adults, may be limited to feeling restless.)
d. Often unable to play or engage in leisure activities quietly.
e. Is often "on the go," acting as if "driven by a motor" (e.g., is unable to be or uncomfortable being still for extended time, as in restaurants, meetings; may be experienced by others as being restless or difficult to keep up with).
f. Often talks excessively.
g. Often blurts out an answer before a question has been completed (e.g., completes people's sentences; cannot wait for turn in conversation).
h. Often has difficulty waiting his or her turn (e.g., while waiting in line).
i. Often interrupts or intrudes on others (e.g., butts into conversations, games, or activities; may start using other people's things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).

(APA, 2022)

# ADHD and the Brain



Greater than 2 years' delay

0 to 2 years delay
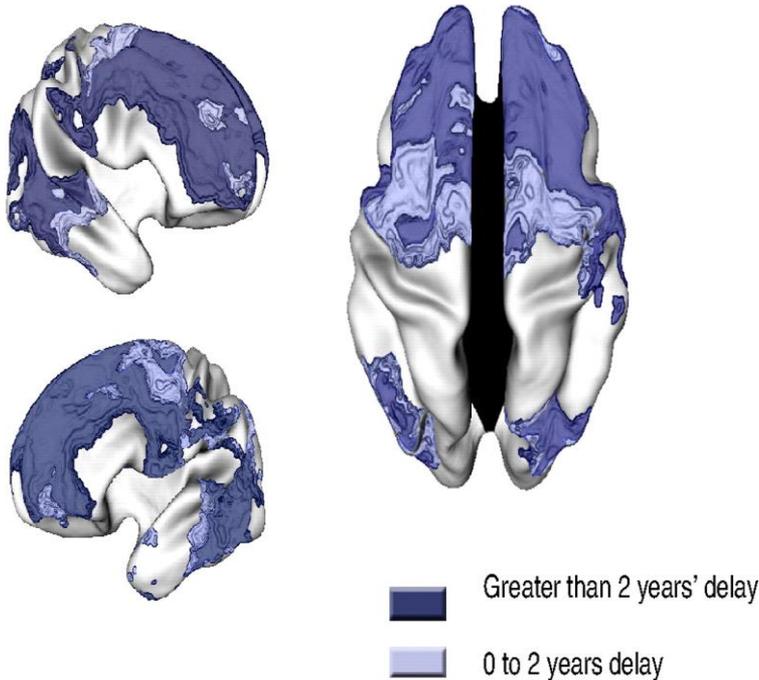
- In youth with ADHD, the brain matures typically but is delayed three years in some regions when compared to youth without ADHD.
- The delay in ADHD was most prominent in frontal cortex.
- "Finding a normal pattern of cortex maturation, albeit delayed, in children with ADHD should be reassuring to families and could help to explain why many youth eventually seem to grow out of the disorder" in adulthood.
- The motor cortex emerged as the only area that matured faster than normal in the youth with ADHD.

(Shaw et al., 2007)

# Delayed Brain Growth in ADHD

(Shaw et al., 2007)
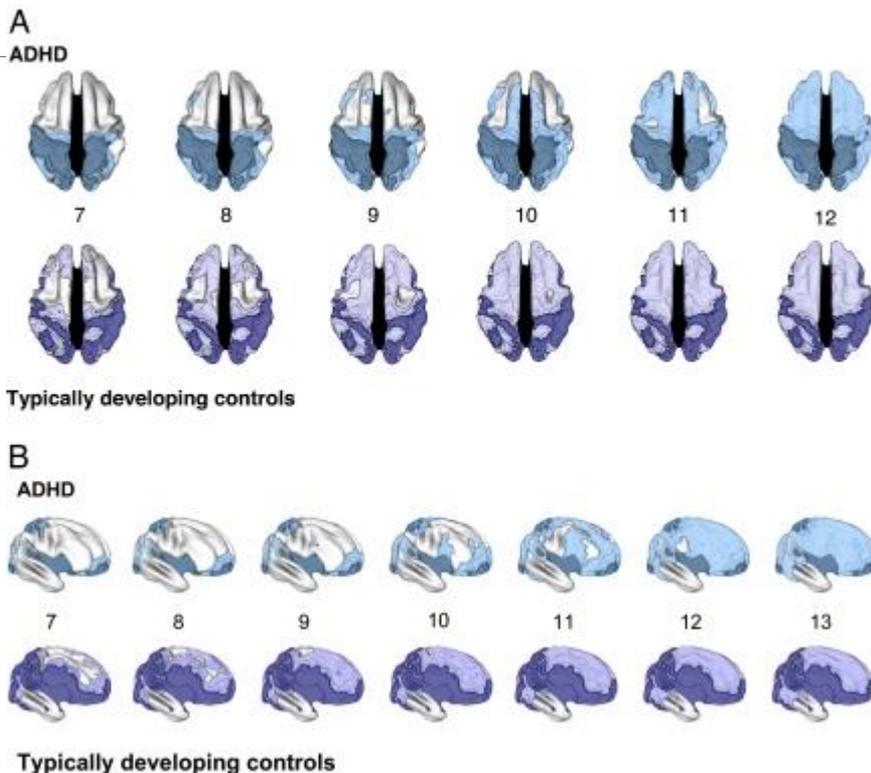
# The Executive Functions

1. Inhibit
2. Focus/Sustain attention
3. Shift
4. Emotional Control
5. Initiate
6. Working Memory
7. Plan/Organize
8. Task-Monitor
9. Organization of Materials

# Strategies to Support Students

# Inhibition Interventions

- A student with inhibitory control difficulties often requires additional structure in the environment at the outset in order to maintain more appropriately controlled behavior.  This can include more explicit, extensive, and/or clear set of rules and expectations, that are regularly reviewed.

- Environmental structure can be an important consideration.  Avoid settings that have too many distractions and too many opportunities for impulsive behaviors.

- Disinhibited children often require more frequent redirection and more frequent limit-setting from parents.  Placement in close proximity of learning can help.

- Often a child with impulse control difficulties finds typical homework loads daunting.  Students may need homework requirements reduced within capabilities at the outset, with stepwise increases in expectations.

- Response delay techniques can be helpful for some students.  Students might be taught strategies such as counting to 5 or 10 before responding verbally or physically.

- Asking student to verbalize a plan of approach before starting work can help.  This places a short time period between the impulse and the action and can allow for better planning and a more strategic approach. The parent can ask the student to explain how they will approach a task, including goals for accuracy and time.

# Shift and Initiating Interventions

- Displaying a daily schedule and reviewing it at the outset of the day can help a students anticipate the sequence of events and can serve as a useful reminder of any changes in his daily routine.

- A student with difficulties shifting attention and cognitive set often needs to focus on only one task at a time. Presenting one task at a time and limiting choices to only one or two may be helpful.

- One of the most effective strategies for a child with difficulty adjusting to change in routine is the use of the "2-minute warning." Parent can alert the student that one activity is about to end and another will begin.

- External prompting may be necessary to help students get started. Parents can prompt their child to start their work, or perhaps demonstrate the first problem of a worksheet.

- Some children benefit from having time limits set for completing a task. Use of a timer may facilitate increased initiation and speed of task completion.

- Problems with initiating may be exacerbated by the child's sense of being overwhelmed with a given task. Tasks or assignments that seem too large can interfere with the ability to get started. Breaking tasks into smaller, more structured steps may reduce the sense of being overwhelmed and increase initiation.

# Working Memory Interventions

- A child with difficulties sustaining working memory often needs frequent short breaks.  Breaks typically need only be 1 or 2 minutes in duration.  Observing when the student's ability to focus begins to wane will help determine the optimal time for a break.

- Attentional breaks" are best taken with a motor activity or a relaxing activity. Students might walk to the pencil sharpener, run a short errand, get a drink, or simply bring their work to show the teacher.

- Mnemonic devices (i.e., memory strategies) are important tools to help children learn, and later recall, basic skills and facts.

- Rehearsal is often a helpful method of increasing the amount of information encoded into memory.

- Students might need to practice a series of steps for solving a problem, memorizing a list of key facts, or completing an everyday activity in order to accommodate their more limited working memory at the outset. Spaced practice is more effective than massed practice.

# Anticipating Behaviors

- Change known antecedents to behaviors – preventive strategies
- Anticipate behavior and remove access or alter the environment rather than wait for the behavior and then deliver consequences
  - Cleaning fluids are placed in locked cabinet around toddlers
  - A distracted student is sat at the front of the classroom
- Preventive strategies can include structuring the physical environment, setting clear expectations, maintaining routines, preparing individuals for change, eliminating provocation

(Barkley & Robin, 2014)

# Positive vs. Negative Consequences

- Positive consequences make it more likely a behavior will happen and negative consequences make it less likely.
- Many parents try some sort of reward system and feel discouraged because it only works temporarily or never works at all.
- For youth with behavior problems (especially those with ADHD) the connection between their actions and the consequence is easily lost.
- For this reason, a more sophisticated approach is not preferable to start.
- First the connection between behaviors and consequence must become clear to the youth, then a system can be developed.

(Barkley & Robin, 2014)

# The Best Consequences are Specific, Immediate, Frequent, and Consistent

- Make a directive specific
  - "Finish your work" is vague while "complete these 10 problems" is specific
- The more time that passes between behavior and the consequence, the weaker the connection and the less powerful the consequence
  - Youth live in the now
- Youth still have some difficulty internalizing rules
  - The more variability in rules, the more likely the teen with fail
- Consequences must be meaningful to the youth
  - "Sense of pride" may not be meaningful but something fun and stimulating will be
- Constant feedback and more positive consequences than negative ones to maintain motivation
  - "Finish your work or you will be in trouble" is less effective than "If you complete these ten problems before 8pm, you can have free time on the computer; if you do not finish the problems, you cannot have free time and will have to finish the assignment."

(Barkley & Robin, 2014)

# Verbal Praise



- Parents providing verbal praise or positive attention aims to interrupt the seemingly endless cycle of negativity between oppositional youth and authority.

- As interactions with youth become more negative, there is usually a reduction in effective praise.

- Increasing the frequency of verbal praise and positive attention while ignoring minor misbehavior can have a substantial influence in improving externalizing behaviors and classroom functioning.

(Barkley & Robin, 2014)

# Label Prasie Target Behaviors

• Labeled Praise tells the child exact what behavior they should continue exhibiting in order to receive positive attention.

- "Thank you for communicating that with me."
- "Good job quieting down."
- "I like that you got started on that assignment."



(Eyberg & Funderbunk, 2011)

# Identifying Positive Opposite Behaviors

The best way to reduce an undesirable behavior is actually by increasing a desirable, replacement behavior.

| Problem Behavior | Positive Opposite Behavior | Labeled Praise |
|---|---|---|
| Noncompliance | Following directions | "Thanks for doing what I asked you to do so quickly." |
| Explosiveness/Dysregulation | Staying calm | "I'm impressed at how you kept your cool even though that was challenging." |
| Using Profanity | | |
| Interrupting | | |
| Poor task completion | | |
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Adapted from Eyberg, S. M., & Funderburk, B. (2010). Parent–child interaction therapy protocol (2010, Version 1.0). Gainesville, FL: PCIT International.

# THANK YOU

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