

# The Curious Case of ADHD and ASD

**Developmental Differences & ADHD** 

Russell Barkley, a leading ADHD researcher, states that a 10-year-old with ADHD has a developmental delay of about 3 years in impulse control and self-regulation.

Symptoms do not disappear overnight; they persist into adulthood but may become less obvious with learned coping mechanisms.

ADHD is considered neurological, with symptoms tied to dopamine and noradrenaline transmission issues.

Core Symptoms of ADHD

1. Impulsivity

Acting without self-control in situations where others can regulate behavior.

2. Hyperactivity

More obvious in children, but in adults, it can present subtly (e.g., impatience in queues, fidgeting).

Hyperactivity tends to decrease with age, but traits often persist in different forms.

3. Inattention

Affects ability to maintain focus unless highly stimulated by a task.

"Hypoactivity" (mental drifting) occurs in inattentive-type ADHD.

Boys are diagnosed with ADHD at a 3:1 or 4:1 ratio compared to girls in childhood.

Genetic & Environmental Influences



Strong genetic component:

ADHD heritability is around 70-80%.

Dyslexia and autism spectrum conditions (ASC) have similar genetic links.

Other genetic conditions: schizophrenia (~70%), asthma (~40%), breast cancer (~25%).

Environmental factors, such as parental ADHD, can make structure and routine difficult in affected families.

ADHD Across Lifespan

ADHD affects 3-5% of children, with 6% continuing to experience full symptoms into adulthood.

The assumption that ADHD "goes away" with age is incorrect. Instead, symptoms may shift or become more manageable.

ADHD diagnosis in adults is more gender-balanced (1:1), suggesting underdiagnosis in girls during childhood.

Expanding the Understanding of ADHD in Adults

William Dodson's model expands ADHD symptoms beyond the DSM-5:

1. Hyperfocus – An intense ability to focus on engaging tasks.

2. Emotional Hyperarousal – Increased sensitivity to emotions, including joy and frustration.

3. Rejection Sensitive Dysphoria (RSD) – Extreme emotional pain from perceived rejection or criticism, possibly due to lifelong negative experiences.

Gender & ADHD Diagnosis



Women with ADHD may "mask" their symptoms similarly to those with autism, leading to underdiagnosis.

Social pressures on girls can result in exclusion, stress, and mental health issues.

Many women only seek an ADHD diagnosis in adulthood after years of struggling without understanding their symptoms.

#### **Final Notes**

ADHD symptoms manifest differently across different age groups and genders.

Awareness is growing around overlooked traits such as hyperfocus, emotional intensity, and rejection sensitivity.

Girls and women with ADHD often experience unique social challenges compared to boys and men.

Notes on ADHD Seminar

1. Neurobiology of ADHD

Dopamine is a crucial chemical for focus and impulse control.

The prefrontal cortex is significantly affected in ADHD.

Cognitive and emotional dysregulation are linked to specific brain regions.

Four key areas in the prefrontal cortex are involved:

Orbital frontal cortex

Dorsolateral prefrontal cortex

Anterior cingulate cortex

Prefrontal motor cortex

2. Misconceptions in Schools



Many teachers struggle to accept that ADHD behaviors are not entirely within a child's control.

Scientific evidence helps change perceptions.

Teachers may be skeptical but become more open when presented with neurological data.

3. ADHD Assessment Process

Assessments vary widely in approach and duration.

Example: A comprehensive school assessment took 7 hours over 2 days.

Steps in the process:

- 1. Medical evaluation (hearing, vision, etc.)
- 2. Background and history analysis
- 3. Comparison with peer behaviors
- 4. Brain imaging (though not a definitive test)

#### 4. Neurological Findings

Brain imaging shows different neural activity in ADHD brains compared to neurotypical brains.

Dopamine transmission issues are believed to play a role in impulse control and attention regulation.

5. Executive Functioning & Learning Challenges

ADHD impacts how children learn, not just what they learn.

Executive functioning skills include:



Memory

Sustained attention

Planning & prioritization

Organization

Self-regulation

ADHD students often need constant stimulation.

A metaphor: "A child with ADHD is like a computer without a printer" (information is there, but they struggle to express it).

Teachers can act as the "cable" to help bridge this gap.

6. Emotional & Behavioral Impact

Struggles with executive function can lead to:

Mood issues

Low self-esteem

Opposition and resistance ("robot" phase)

Total disengagement ("I don't care" phase)

When disengaged, ADHD students may seek stimulation in unproductive ways.

7. Support Strategies: SF3R Approach

S = Structure (clear routines & expectations)

F = Flexibility (adapting to individual needs)

3R = Rapport, Relationships, and Resilience



## 8. Key Takeaway

There is no "magic fix" for ADHD, but consistent effort and supportive environments can make a difference.

Like practice in sports, helping ADHD students succeed requires ongoing effort and adaptation.

Key Themes: Mood, Motivation, and Movement

Instead of focusing on "helping behavior," it's more effective to focus on mood, motivation, and movement.

Mood: If mood isn't regulated, everything else becomes harder. ("Mood" spelled backwards is "doom" – an interesting insight into its importance).

Motivation: Children with ADHD don't just "check out" silently; they physically express disengagement.

Movement: Essential for all students but especially for those with ADHD. Movement provides stimulation and can improve focus.

Cultural Shift in Schools

Support for children with ADHD and ASD shouldn't be isolated efforts; it requires whole-school buy-in:

Teachers

Students and peers

Parents and families

Even school animals (a creative inclusion for emotional regulation).

Rapport is key before any behavioral strategies can work. Communication should extend across the school community.



Developing Resilience and Independence

The goal is to remove "stabilisers" (supports) over time so children can become independent.

This requires adjusting systems, which varies between home and school.

Teachers and parents must recognize their own styles and biases in approach.

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Three Teaching Styles:

1. The Controller

Too rigid, inflexible.

Pushes back against ADHD tendencies, creating power struggles.

Leads to conflict and resistance.

## 2. The Friend

Too democratic, lacks structure.

Students with ADHD might push boundaries and struggle with unpredictability.

Creates insecurity due to lack of clear guidance.

#### 3. The Benevolent Dictator (Best Approach)

Firm but fair: Clear boundaries with flexibility where needed.

Students test limits but feel safer with structure.

Caring doesn't mean giving everyone the same thing—it means giving each child what they need (e.g., fidget tools, visual schedules, movement breaks).



Teachers should hold students accountable for choices while creating a culture of praise.

The role is both teacher and coach—providing structure but also adapting to student needs.

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Understanding ADHD & ASD in School

ADHD students focus on the short term (getting through class, getting through the day).

They often lack long-term planning and need support in structuring their day.

Inflexibility leads to conflict:

**Routines and Habits** 

Over a period of time, structure and flexibility may appear contradictory. However, a Band 1, Band 2, and Band 3 system can help balance these elements. This system is not necessarily a perfect fit for every school, student, or age group, but it provides a useful framework for supporting students with ADHD.

Band 1: Non-Negotiables

These are the foundational structures that must be in place for consistency and predictability. For example:

Essential classroom rules

Key routines (start of class, transitions, expectations)

Core assignments that must be completed

Band 2: Flexible Structures

These are areas where students have some degree of flexibility, allowing for autonomy while still maintaining structure. For example:

Alternative ways of completing assignments (typed, spoken, drawn)



Flexible seating arrangements

Negotiable deadlines within reason

Band 3: Doodling and Movement-Based Engagement

Doodling is often dismissed as a distraction, but for many students with ADHD, it is a powerful cognitive tool that enhances focus, memory, and comprehension. It provides proactive stimulation, helping students stay engaged rather than tuning out.

Encouraging doodling during listening activities, discussions, or note-taking

Using sketching or visual storytelling as alternative ways to process information

Recognizing fidgeting, movement, and doodling as valid ways to sustain attention

The goal is to gradually move some Band 2 elements into Band 1 where possible, but some things will always remain flexible. It's not about forcing all students into rigid routines; rather, it's about figuring out what truly needs structure and what can adapt to individual needs.

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Key ADHD Considerations for Schools

1. Executive Function & Organization

Organization and homework should be Band 2 elements, as ADHD students often struggle with working memory and planning.

Russell Barkley suggests ADHD students take 3 times longer to complete the same piece of work at home as in school.

A structured system for homework support (checklists, reminders, clear expectations) helps bridge this gap.

2. Sensory Considerations & Environmental Triggers



60% of ADHD students have sensory processing challenges that impact behavior.

Field trips and unfamiliar settings should be risk-assessed for potential sensory triggers.

ADHD behavior is context-dependent—when engaged and stimulated, symptoms are less visible.

## 3. Boredom & Stimulation Balance

Boredom is not a failure of the teacher or the student—it's about mismatched stimulation levels.

Using varied instructional methods (visuals, hands-on activities, movement, music) helps maintain engagement.

Proactive distractions (such as background noise, doodling, or fidgeting) can help certain students sustain attention.

4. Screen Time & Attention Regulation

Strategic dual-screen use (e.g., allowing students to watch a muted video while working) can prevent disengagement.

ADHD students often benefit from "white noise" distractions to block out irrelevant stimuli and focus on tasks.

The key is differentiating between passive distraction and active engagement tools.

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Partnership with Parents & ADHD Management

Working in partnership with parents is crucial—ADHD does not stop when the student leaves school.

Medication, diet, sleep, and exercise all play a role in self-regulation and executive function.



Supporting students holistically means looking beyond behavior and considering their unique strengths and challenges.

Final Thought: Let's flip the narrative. ADHD isn't just about challenges—it comes with unique strengths that can be harnessed. When we structure support effectively (Band 1, Band 2, Band 3), we empower students to thrive.