ADHD 101
Part One

What is ADHD?



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Welcome!

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Isn't That NORMAL?

- Actually, Yes… BUT
  - The child with ADHD is experiencing symptoms more frequently than other children of the same age and gender.
  - ADHD-related symptoms are causing an impairment in their academic progress and/or social functioning.
  - Symptoms will likely persist into early adulthood, or beyond.

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What is ADHD?

- Attention-deficit/hyperactivity disorder (ADHD) is a neurodevelopmental disorder marked by persistent symptoms of inattention and/or hyperactivity and impulsivity that interfere with functioning or development
- Prevalence
  - 6 million children diagnosed
  - Worldwide prevalence = 5%
  - Boys > Girls (2-3:1 in childhood)
  - Male/Female ratio 1:1 in adults



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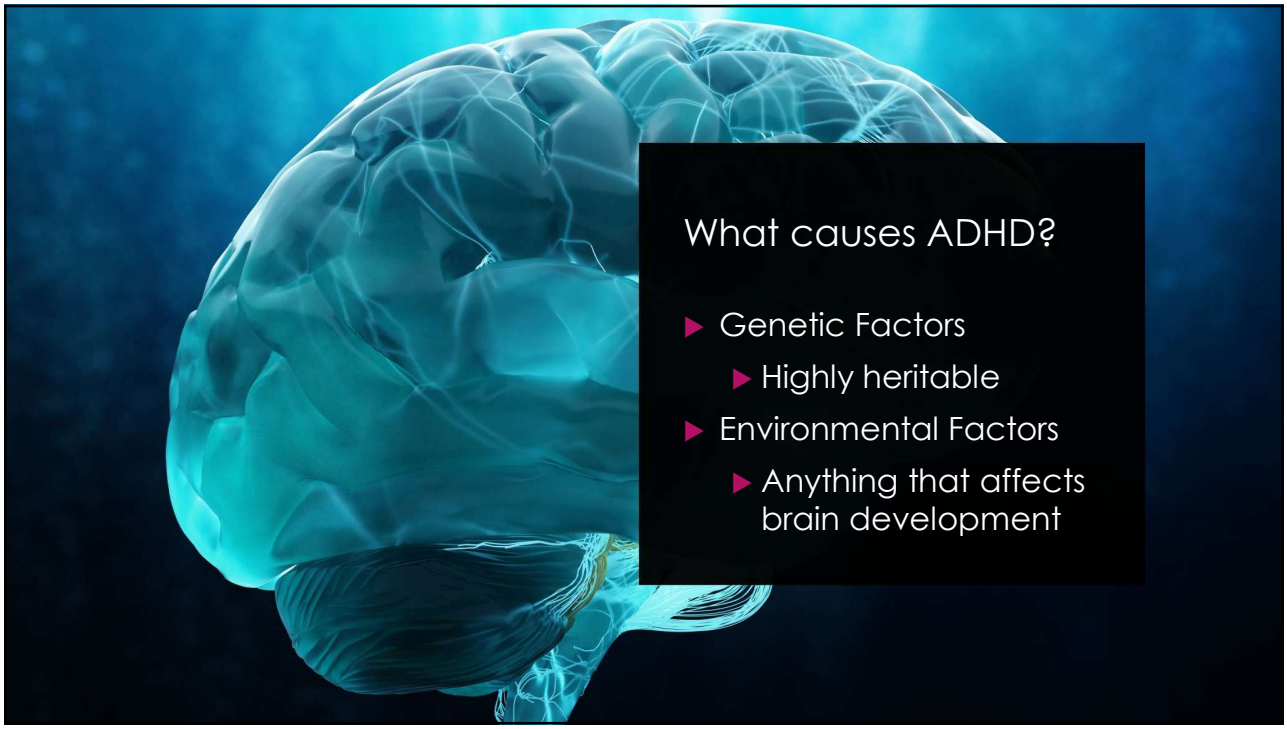

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What Does NOT Cause ADHD?

Bad Parenting

ADHD is a neurological issue, not a compliance issue

Food Dyes, Sugar, Processed Foods

Children who have increased impulsivity are more likely to seek out these types of foods

Video Games

Likely sought out for the stimulation and highly reinforcing properties, can contribute to poor development of self-regulation skills

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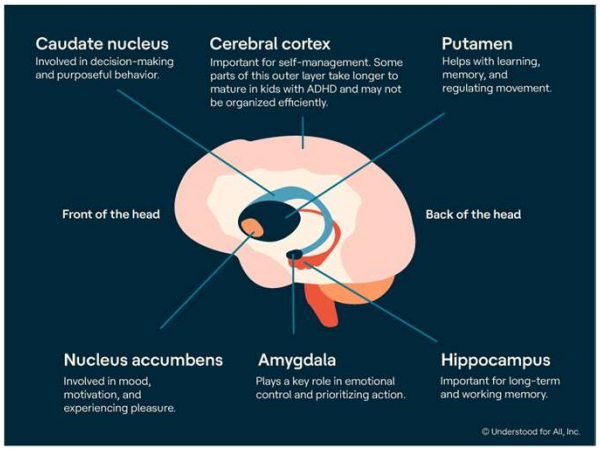
Brain Development and ADHD

- Structures
  - Prefrontal cortex develops more slowly in ADHD children
  - Cerebellum, amygdala, hippocampus smaller in volume
    - Cerebellum = motor response inhibition
    - Amygdala = emotion regulation difficulties
    - Hippocampus = memory difficulties



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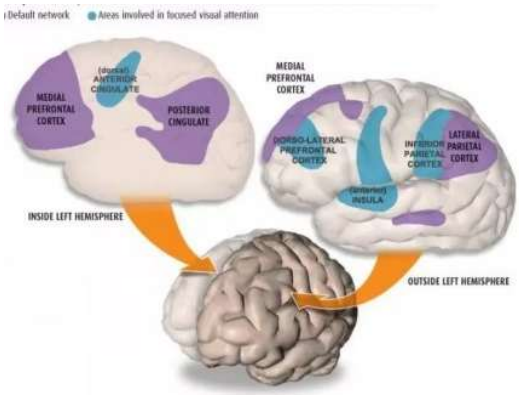
Brain Development and ADHD

- Default Mode Network
  - Highly active when resting or daydreaming and lower activity when engaged in tasks requiring focus
  - May show reduced suppression during tasks



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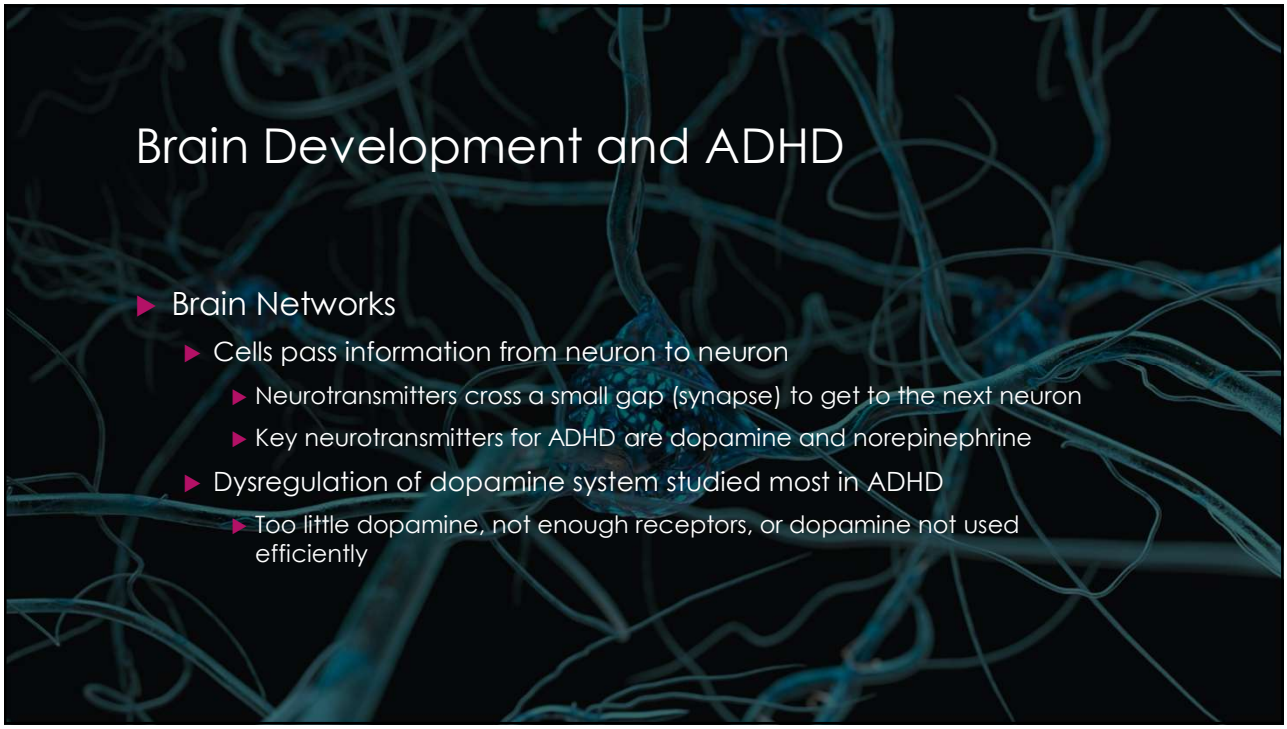

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How is ADHD Diagnosed?

Professional Diagnosis:

- **Comprehensive** evaluation by a licensed psychologist or psychiatrist
- Clinical diagnostic interview
- Standardized assessment
- Review of medical and school records
- Some general practitioners will also make diagnosis

School-based Evaluation:

- Professionals may identify ADHD while determining eligibility for special education accommodations

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Diagnostic Criteria

- Diagnosis of ADHD is guided by criteria outlined by the American Psychiatric Association in the **Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition – Text Revision (DSM-5-TR)**
- The number of symptoms required for an ADHD diagnosis (by age group) are as follows:
  - **Six or more symptoms** of inattention and/or hyperactivity-impulsivity for children up to age 16 years, OR
  - **Five or more symptoms** of inattention and/or hyperactivity-impulsivity for adolescents ages 17 years and older and adults.

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Diagnostic Criteria for ADHD

Significant impairment in functioning or development

Symptoms not better explained by another condition or disorder

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Three Types of ADHD

PREDOMINANTLY INATTENTIVE PRESENTATION

PREDOMINANTLY HYPERACTIVE-IMPULSIVE PRESENTATION

COMBINED PRESENTATION

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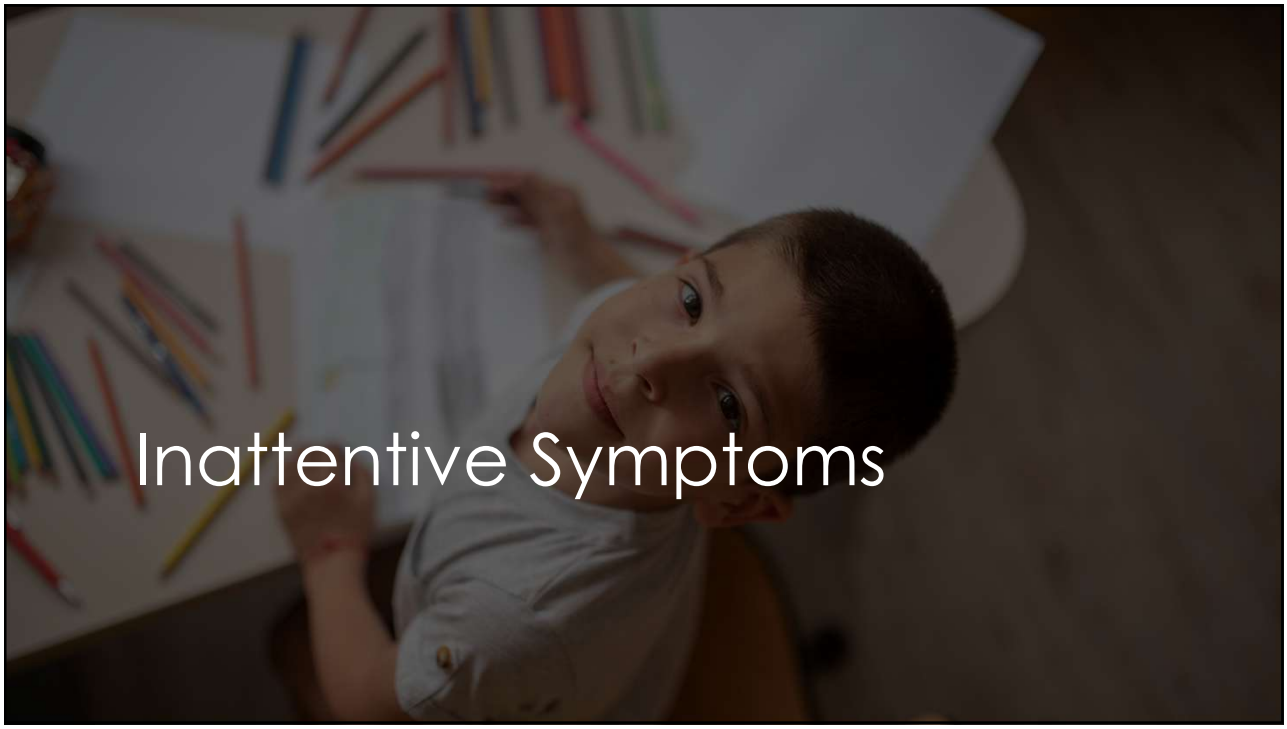

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Inattentive Symptoms

- Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or with other activities.
- Often has trouble holding attention on tasks or play activities.
- Often does not seem to listen when spoken to directly.
- Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., loses focus, side-tracked).

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Inattentive Symptoms

- Often has trouble organizing tasks and activities.
- Often avoids, dislikes, or is reluctant to do tasks that require mental effort over a long period of time.
- Often loses things necessary for tasks and activities.
- Is often easily distracted.
- Is often forgetful in daily activities.

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Other Signs of Inattention

- Slow-moving, Lollygagging
- Takes a long time to complete everyday tasks
- Submitting incomplete assignments
- Messy handwriting or work
- Playing with things at desk; Doodling
- Difficulty following multi-step directions or multi-tasking
- Indecisiveness
- Poor time management, time awareness
- Difficulty with task initiation

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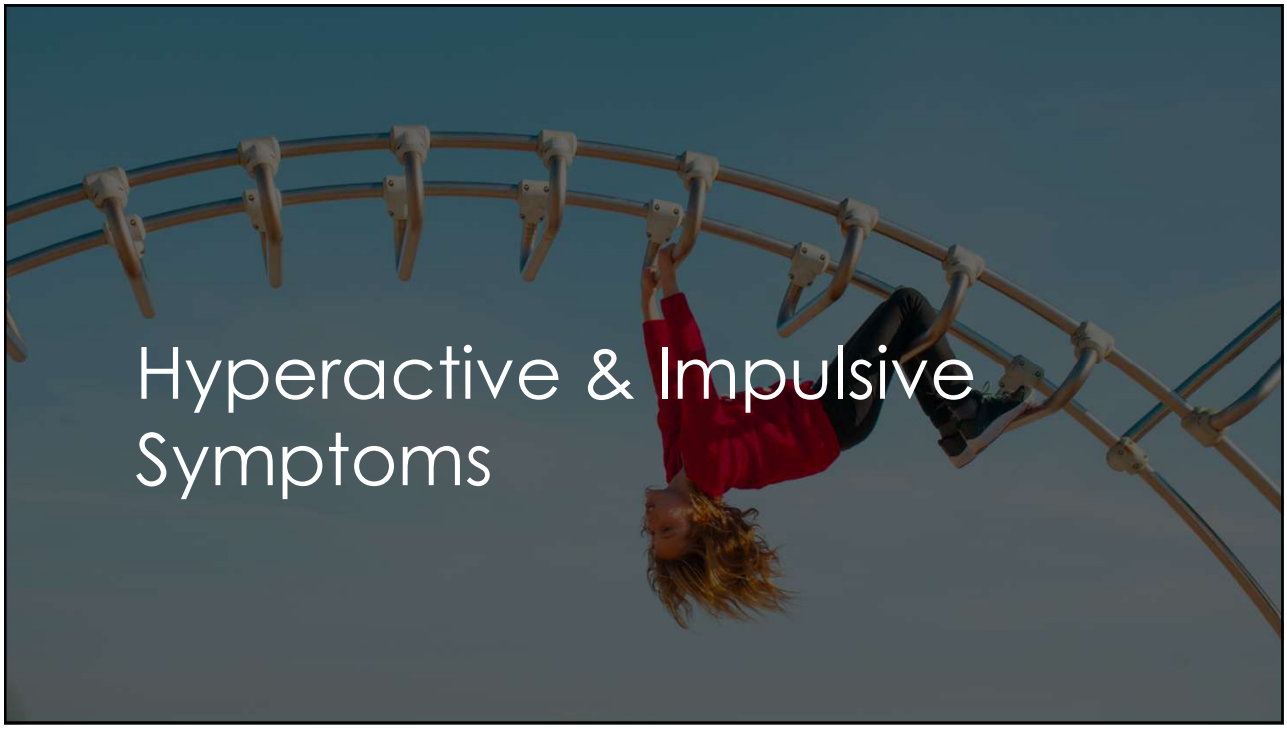

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Hyperactive & Impulsive Symptoms

- Often fidgets with or taps hands or feet, or squirms in seat.
- Often leaves seat in situations when remaining seated is expected.
- Often runs about or climbs in situations where it is not appropriate (adolescents or adults may be limited to feeling restless).
- Often unable to play or take part in leisure activities quietly.

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Hyperactive & Impulsive Symptoms

- Is often "on the go" acting as if "driven by a motor."
- Often talks excessively.
- Often blurts out an answer before a question has been completed.
- Often has trouble waiting their turn.
- Often interrupts or intrudes on others (e.g., butts into conversations or games).

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Other Signs of Hyperactivity/Impulsivity

- Distracting other students
- Difficulty sitting through a family meal
- Doing things without considering consequences
- Overly loud, no inside voice
- Rushing through work too quickly
- Overly persistent when told to wait

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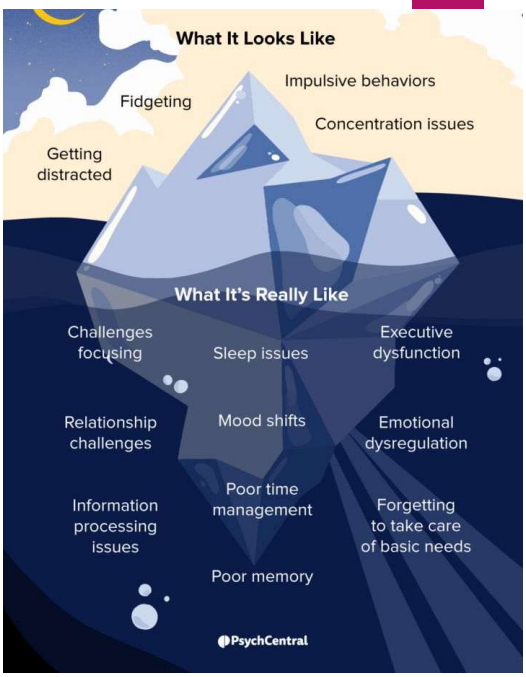
The ADHD Iceberg



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Emotional Impulsivity and ADHD

DIFFICULTY WITH SELF-REGULATION AND FAILURE TO INHIBIT EMOTIONAL RESPONSES

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Self-Regulation

Self-awareness	Tuning into your cognitive energy
Self-restraint	Inhibition of emotions and behavior
Self-talk	Thinking or talking through a task or situation
Self-analysis	Identifying triggers for emotional reactivity

All of these may develop later in children with ADHD

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Hyperactivity or Hyperreactivity

- Do hyperactive children move more frequently than non-hyperactive children?
  - Of course.
  - They talk more, wiggle more, stand more, shift in their seat more, tap more, etc.
- But are they also hyper*reactive*?
  - Yes. They react too much to the things/people/sounds around them.
  - They are not inhibiting their reactions as much as other children.

This is why **hyperactivity** and **impulsivity** are grouped together when describing ADHD

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Emotional Impulsivity



Not always clearly observable



Emotions often precede behavioral expression



One cannot self-regulate their overall behavior unless they can initially inhibit their behavioral responses to emotion

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Indicators Of Emotional Impulsivity

The three main indicators of emotional impulsivity are:

- Getting emotional too quickly
- Showing more emotion than appropriate for the situation
- Difficulty with self-soothing

This may make people with ADHD appear socially immature

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Sensory Sensitivity and ADHD



Touch Smell Sight Sound Taste

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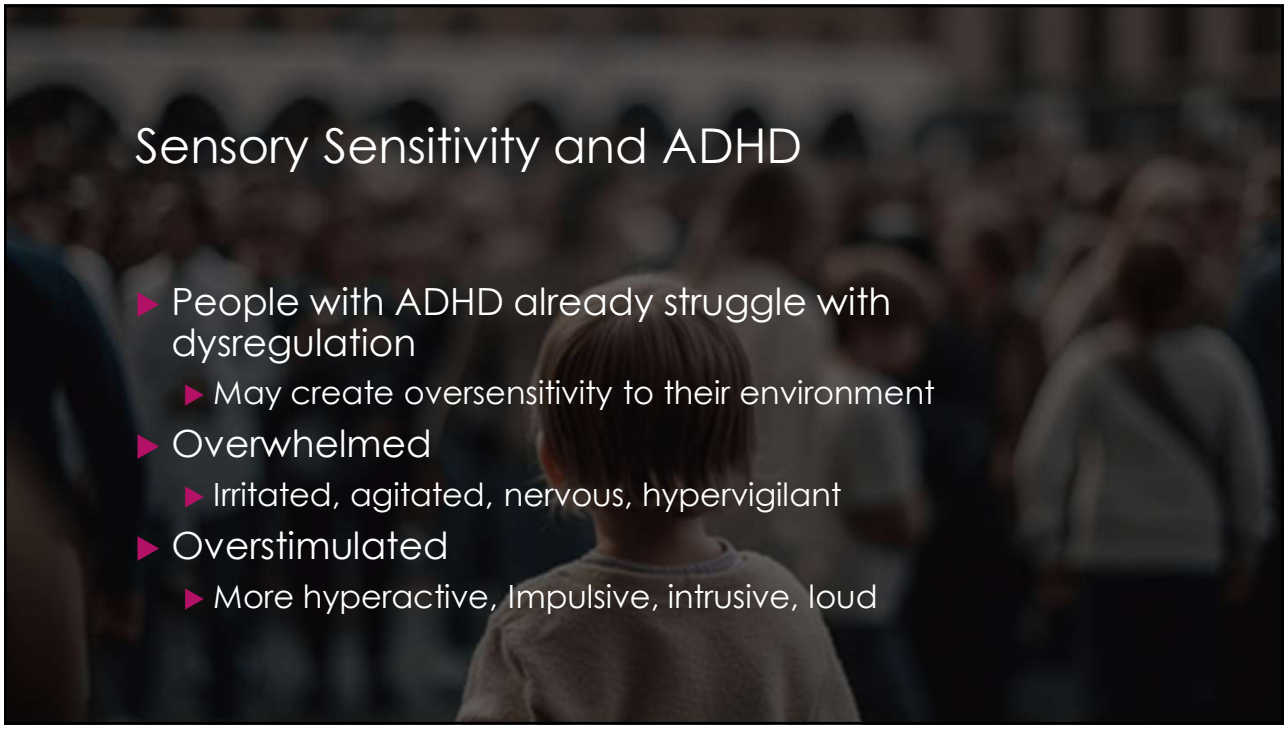
Sensory Sensitivity and ADHD
People with ADHD already struggle with dysregulation
May create oversensitivity to their environment
Overwhelmed
Irritated, agitated, nervous, hypervigilant
Overstimulated
More hyperactive, Impulsive, intrusive, loud

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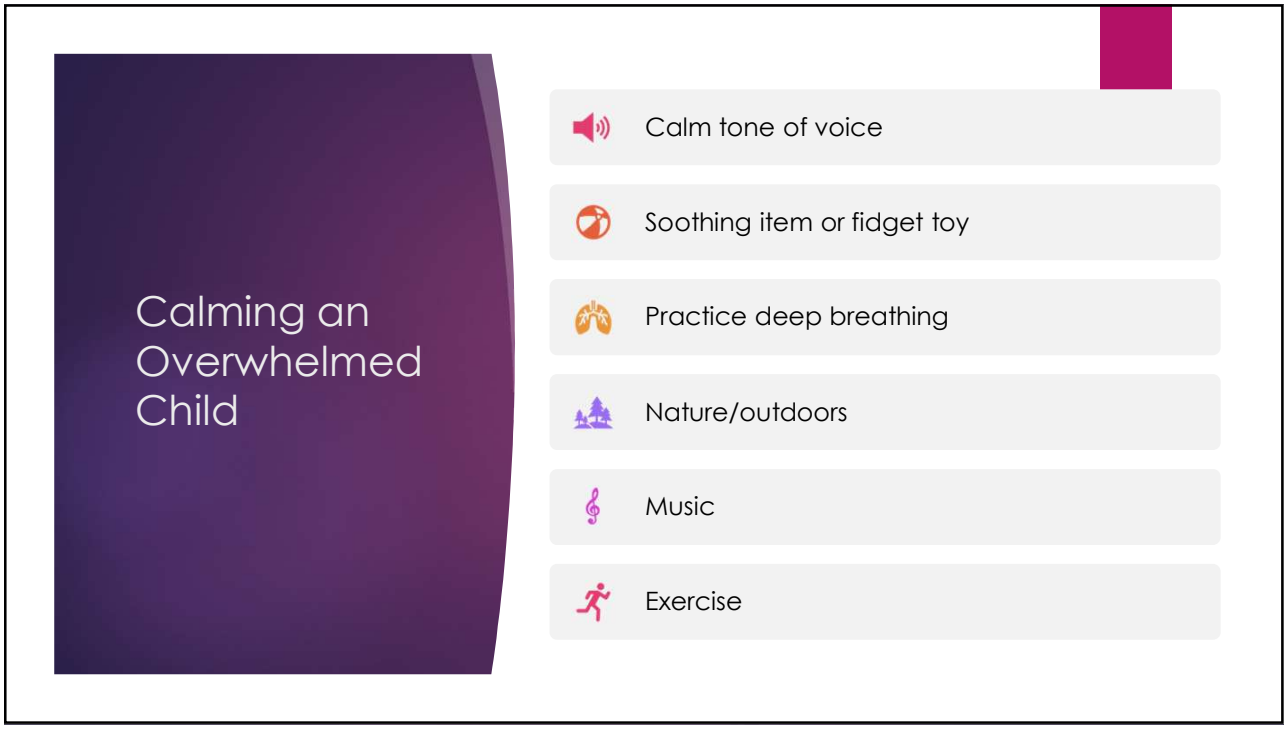
Calming an Overwhelmed Child
Calm tone of voice
Soothing item or fidget toy
Practice deep breathing
Nature/outdoors
Music
Exercise

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Potential Strengths

- High energy levels
- Hyperfocus
- Creativity
- Spontaneity
- Resilience
- Risk tolerance



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Talking to Parents About ADHD – Tips for Teachers

- Validate the parent's belief that their child has wonderful potential and point out the positive things the child does
- Be specific when discussing strengths and describe weaknesses from the child's perspective
- Let the parent know that although many adults are intolerant of children with ADHD because they do not understand them, YOU have taken the time to familiarize yourself with the struggles they are experiencing within the classroom
- Ask their opinion regarding the best approach for avoiding an emotional outburst – what works at home?

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Treatment for ADHD

SEE "PART TWO"

WITH MELISSA SMITH, FNP!

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References

- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). https://doi.org/10.1176/appi.books.9780890425787 Psychiatry Online
- Barkley, R. A. (1997). Behavioral inhibition, sustained attention, and executive functions: Constructing a unifying theory of ADHD. *Psychological Bulletin, 121*(1), 65–94. https://doi.org/10.1037/0033-2909.121.1.65 PubMed
- Castellanos, F. X., & Proal, E. (2012). Large-scale brain systems in ADHD: Beyond the prefrontal-striatal model. *Trends in Cognitive Sciences, 16*(1), 17–26. https://doi.org/10.1016/j.tics.2011.11.007 PubMed
- Centers for Disease Control and Prevention. (2026, July 8). *Data on ADHD in children*. https://www.cdc.gov/adhd/data/ CDC
- Faraone, S. V., Bellgrove, M. A., Brikell, I., Cortese, S., Hartman, C. A., Hollis, C., Newcorn, J. H., Philipsen, A., Polanczyk, G. V., Rubia, K., Sibley, M. H., & Buitelaar, J. K. (2024). Attention-deficit/hyperactivity disorder. *Nature Reviews Disease Primers, 10*, Article 11. https://doi.org/10.1038/s41572-024-00495-0 Nature Reviews Disease Primers
- Hoogman, M., Stolte, M., Baas, M., & Kroesbergen, E. (2020). Creativity and ADHD: A review of behavioral studies, the effect of psychostimulants and neural underpinnings. *Neuroscience & Biobehavioral Reviews, 119*, 66–85. https://doi.org/10.1016/j.neubiorev.2020.09.029 PubMed
- Hupfeld, K. E., Abagis, T. R., & Shah, P. (2019). Living "in the zone": Hyperfocus in adult ADHD. *ADHD Attention Deficit and Hyperactivity Disorders, 11*(2), 191–208. https://doi.org/10.1007/s12402-018-0272-y PubMed
- Jurek, L., Duchier, A., Gauld, C., Hénault, L., Giroudon, C., Fourneret, P., Cortese, S., & Nourredine, M. (2025). Sensory processing in individuals with attention-deficit/hyperactivity disorder compared with control populations: A systematic review and meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry, 64*(10), 1132–1147. https://doi.org/10.1016/j.jaac.2025.02.019 doi.org
- Shaw, P., Eckstrand, K., Sharp, W., Blumenthal, J., Lerch, J. P., Greenstein, D., Clasen, L., Evans, A., Giedd, J., & Rapoport, J. L. (2007). Attention-deficit/hyperactivity disorder is characterized by a delay in cortical maturation. *Proceedings of the National Academy of Sciences, 104*(49), 19649–19654. https://doi.org/10.1073/pnas.0707741104 PubMed
- Shaw, P., Stringaris, A., Nigg, J., & Leibenluft, E. (2014). Emotion dysregulation in attention deficit hyperactivity disorder. *American Journal of Psychiatry, 171*(3), 276–293. https://doi.org/10.1176/appi.ajp.2013.13070966 American Journal of Psychiatry
- Wolraich, M. L., Hagan, J. F., Jr., Allan, C., Chan, E., Davison, D., Earls, M., Evans, S. W., Flinn, S. K., Froehlich, T., Frost, J., Holbrook, J. R., Lehmann, C. U., Lessin, H. R., Okechukwu, K., Pierce, K. L., Winner, J. D., Zurhellen, W., & Subcommittee on Children and Adolescents With Attention-Deficit/Hyperactive Disorder. (2019). Clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents. *Pediatrics, 144*(4), Article e20192528. https://doi.org/10.1542/peds.2019-2528

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