

DISCLAIMER 1

Today's talk will cover topics related to ADHD and trauma. These subjects can be deeply emotive and may evoke strong feelings or memories.

If at any point you find the content distressing, feel free to step away or seek support as needed. Your mental health and comfort are our top priority.

DISCLAIMER 2

Whilst the talk will cover the topic of trauma, I will avoid mentioning specific trauma-inducing events that may trigger an emotional response in some.

PLAN

1. The Science of ADHD.
2. Understanding Trauma and the Brain.
3. Break
4. The Intersection of ADHD and Trauma.
5. Moving Forward.

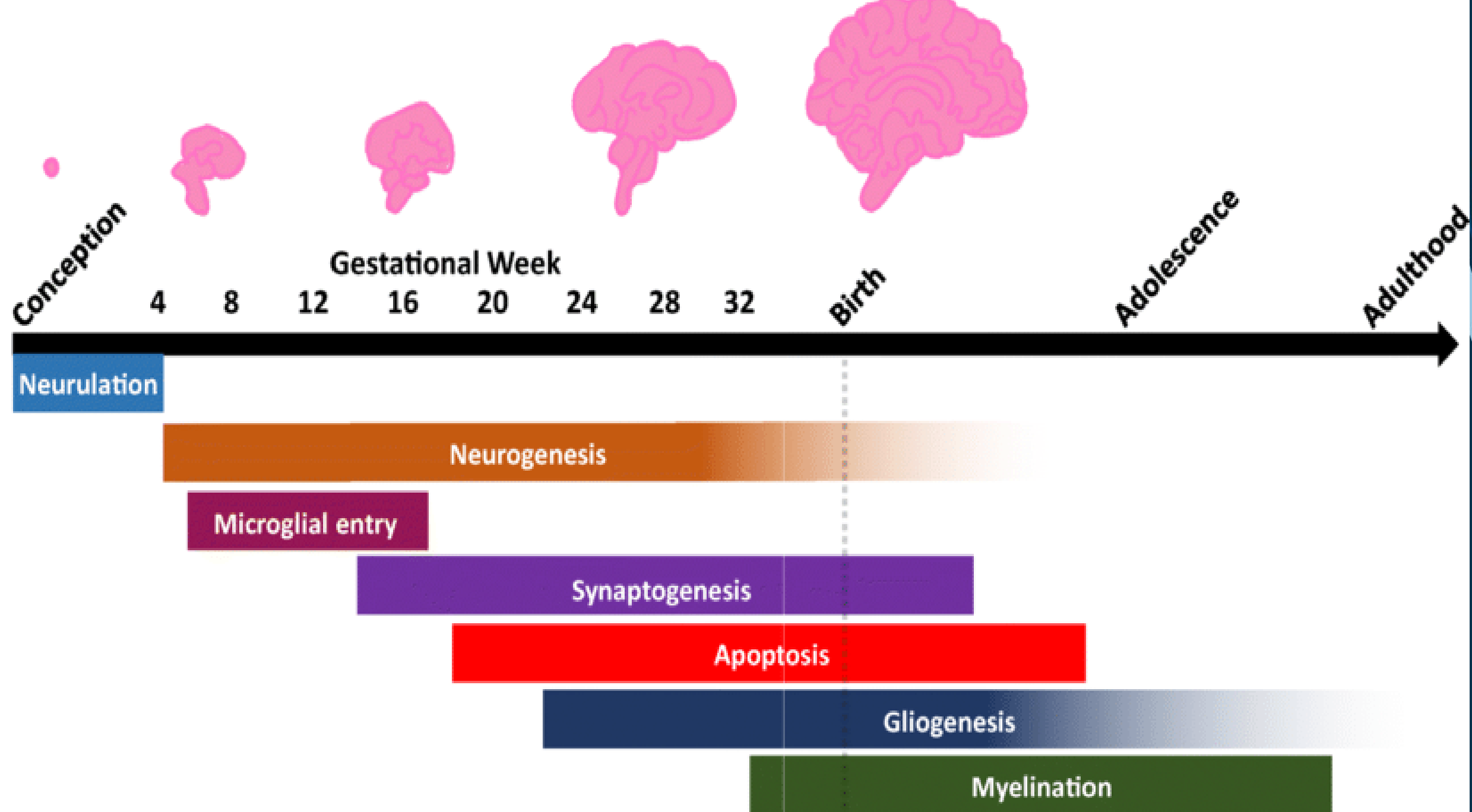
SLIDES AVAILABLE HERE.



The Science of ADHD



Human Brain Development





Brain Networks

WHAT IS ADHD?

- One of a group of 'neurodivergent conditions/disorders'.
- A lifelong, neurodevelopmental 'disorder'.
- Small changes in how the brain develops.
- Affects around 3% of all adults.

HOW THE 'ADHD BRAIN' DIFFERS



STRUCTURE

(LARGELY CONNECTIVITY)



FUNCTION

(LARGELY NEUROTRANSMITTERS)

BIOLOGICAL DIVERSITY = CLINICAL DIVERSITY

SO, WHAT CAUSES ADHD?



GENETICS

(CAUSAL)



ENVIRONMENT

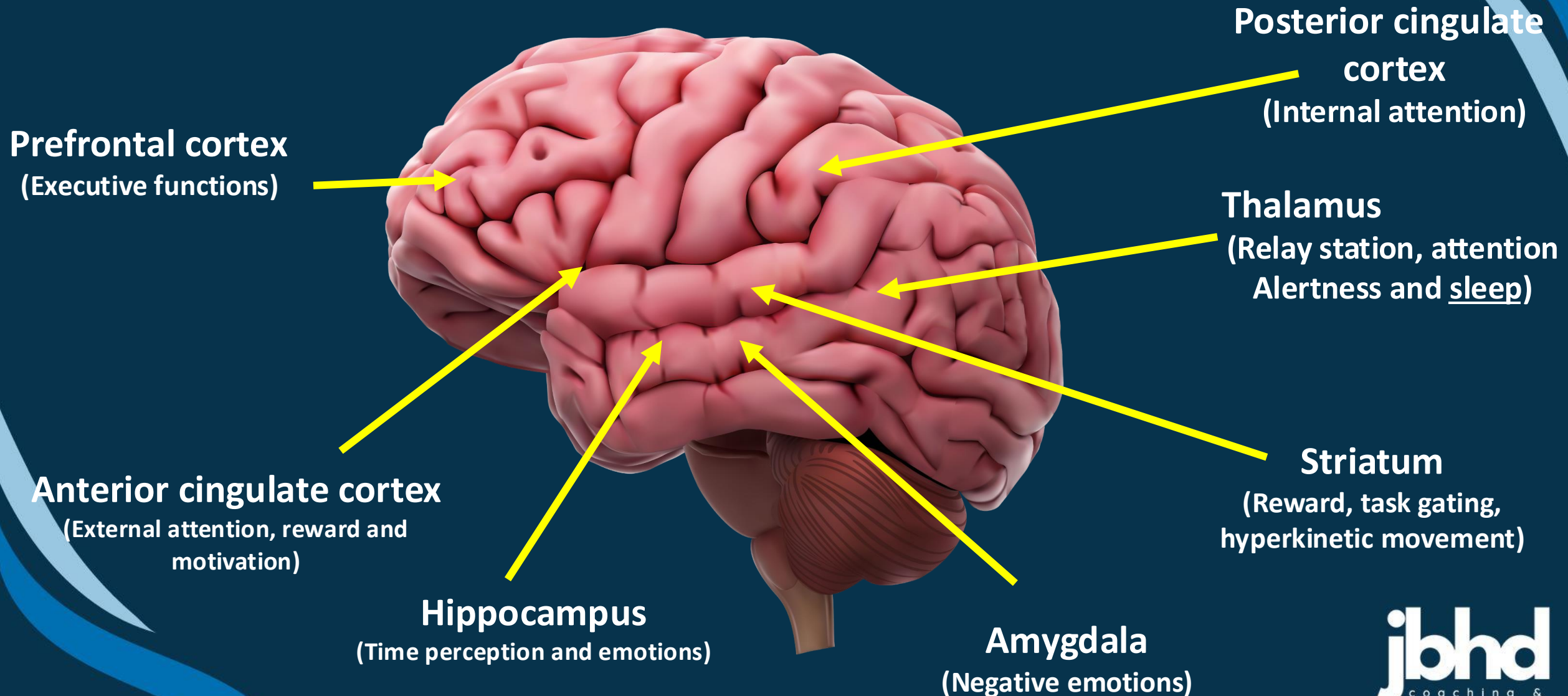
(CORRELATIVE)



SOCIAL

(NOT INVOLVED)

'DIVERGENT' BRAIN AREAS IN ADHD



SYMPTOMS OF ADHD - (INATTENTION)

1. Making careless mistakes/lacking attention to detail.
2. Difficulty sustaining attention.
3. Inability sometimes to listen when spoken to directly.
4. Failure to follow through on tasks and instructions.
5. Exhibiting poor organisation.
6. Avoiding/disliking tasks requiring sustained mental effort.
7. Losing things necessary for tasks/activities.
8. Being easily distracted (including unrelated thoughts).
9. Being forgetful in daily activities.

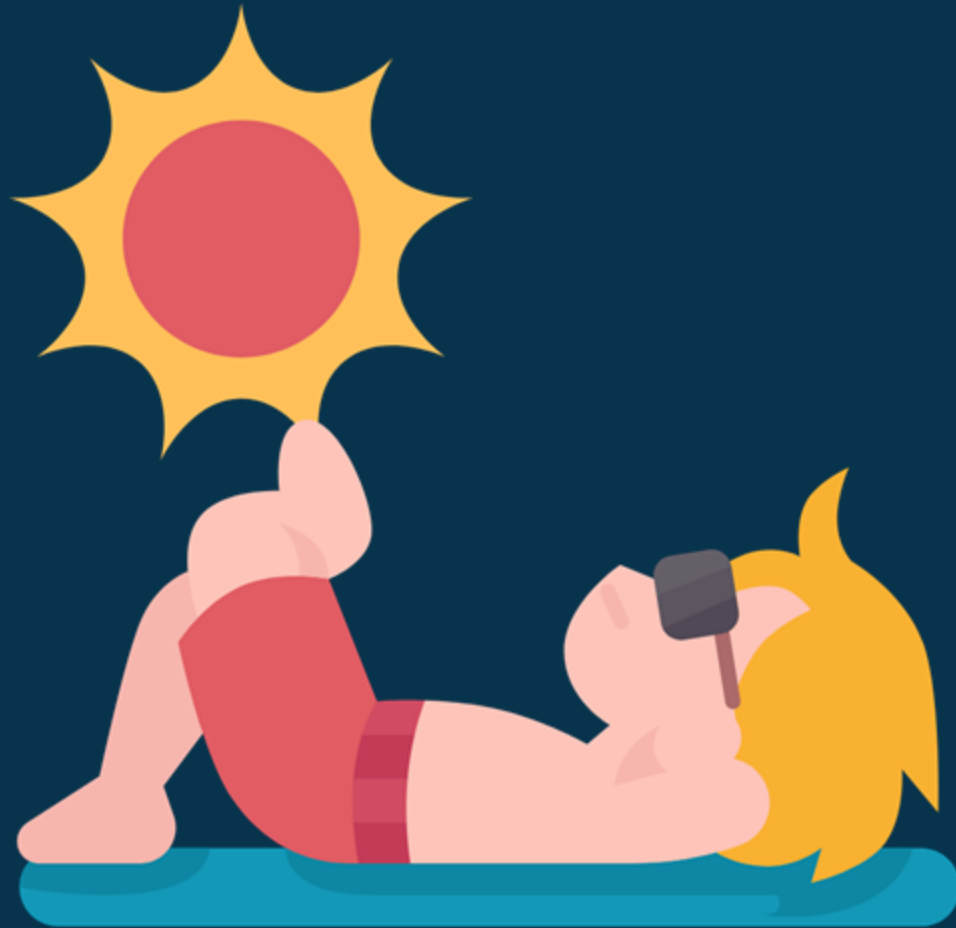
EVERYDAY INNATENTIVENESS



SYMPTOMS OF ADHD - HYPERACTIVITY/IMPULSIVITY

1. Fidgeting with or tapping hands or feet, squirming in seat.
2. Leaving seat in situations when remaining seated is expected.
3. Experiencing feelings of restlessness.
4. Having difficulty engaging in quiet, leisurely activities.
5. Being “on-the-go” or acting as if “driven by a motor”.
6. Talking excessively.
7. Blurting out answers.
8. Having difficulty waiting for your turn.
9. Interrupting or intruding on others.

EVERYDAY HYPERACTIVITY



COMMON 'NON-DIAGNOSTIC' ADHD SYMPTOMS

- Emotional dysregulation.
- Rejection-sensitive dysphoria (RSD).
- Time blindness.
- Executive Function Issues.

TREATMENT OF ADHD



Medication



Talking Therapy

WHAT ELSE MIGHT HELP?

1. Exercise – releases dopamine.
2. Education – helps emotional acceptance.
2. Improve sleep routine – reduces stress and improves function.
3. Mindfulness – reduces inattention and hyperactivity.
4. Caffeine – increases dopamine.
5. Assisted Relaxation (e.g. Moonbird) – can improve symptoms.

Understanding Trauma

WHAT IS TRAUMA?

- Psychological trauma refers to an “overwhelming emotional response to an intensely distressing or disturbing event”.
- People experience trauma in different ways, and it often triggers an intense emotional reaction, including feelings of shock, fear, sadness, helplessness, or anger.
- Effects can be immediate or delayed.

TYPES OF TRAUMA

1. **Acute Trauma:** Results from a single, significant event.
2. **Chronic Trauma:** Arises from repeated and prolonged exposure to highly stressful events.
3. **Complex Trauma:** Involves exposure to multiple, pervasive traumatic events, often of an interpersonal nature.
4. **Secondary or Vicarious Trauma:** Occurs when an individual is exposed indirectly to trauma, such as through close relationships/working with trauma survivors.

AREN'T WE TALKING PTSD HERE?

- **Trauma** is the emotional response to a distressing event, which can result in a range of reactions but does not always lead to long-term issues.
- **PTSD** is a mental health disorder that can develop after trauma, characterised by persistent and intrusive symptoms that disrupt a person's life.

Trauma and Stressor-Related Disorders - (DSM-V)

- Include disorders in which exposure to a traumatic or stressful event is listed explicitly as a diagnostic criterion.
 - Reactive attachment disorder.
 - Disinhibited social engagement disorder.
 - **Post-traumatic stress disorder (PTSD).**
 - Acute stress disorder.
 - Adjustment disorders.
 - Prolonged grief disorder.
 - Other specified trauma- and stressor-related disorders.

IMPACT OF TRAUMA



Mental Health



Physical Health



**Social & Behavioural
Impact**

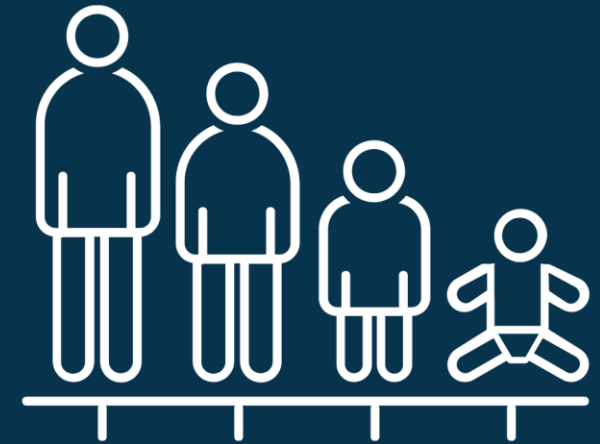
TRAUMA ACROSS THE LIFESPAN



Childhood



Adult



Intergenerational

NEUROBIOLOGY OF TRAUMA (1)

**Trauma can change the
brain...**

NEUROBIOLOGY OF TRAUMA (2)

- **CONNECTIVITY**

Brain regions that are altered in patients with trauma include the **hippocampus** and **amygdala**, as well as cortical regions, including the anterior cingulate, insula, and orbitofrontal region.

- **ACTIVITY**

Neuroimaging studies in PTSD patients have found hypoactivity in the **frontal lobe** and **anterior cingulate**... indicating the effects of trauma on executive function, attention and cognitive, memorial, mood and somatosensory integration.

THE BRAIN AND TRAUMA

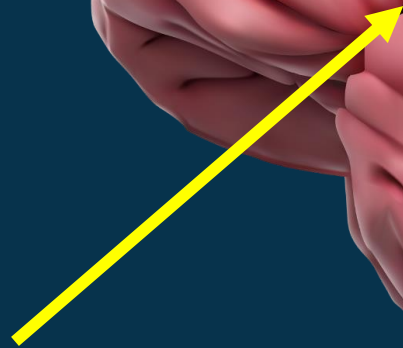
Prefrontal cortex
(Reduced ability to regulate emotions and impulses)



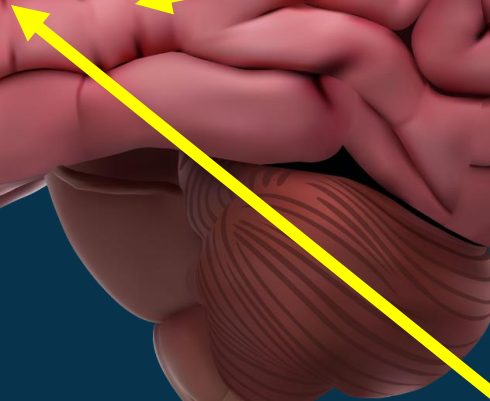
Amygdala
(Negative emotions: Heightened fear response, hypervigilance)



Anterior cingulate cortex
(Integrates emotional and cognitive information)



Hippocampus
(Impaired memory and difficulty distinguishing past from present)



TRAUMA AND MEMORY

- Trauma can fragment and distort memory.
- Explicit (conscious) and Implicit (unconscious) memory.

A MEMORY PRIMER

- The hippocampus and amygdala work together



Memory Consolidation



Contextual Fear Memory

A MEMORY PRIMER

Memory Consolidation

- The amygdala's signals to the hippocampus that the event is significant
- This enhances the consolidation of the memory.
- This interaction ensures that the memory is both contextually rich and emotionally intense.

Contextual Fear Memory

- The hippocampus provides the contextual details of the traumatic event.
- The amygdala processes the emotional response.
- Both contribute to the formation of a contextual fear memory, where context (such as places or situations) is associated with the trauma.

DYSREGULATION IN TRAUMA

- In trauma, the amygdala's heightened response can overpower the hippocampus, leading to persistent, intrusive memories that are not properly contextualized or integrated with other memories.

THE IMPACT OF CHILDHOOD TRAUMA

- **Adverse Childhood Events (ACEs) refer to potentially traumatic experiences during childhood.**
- **These events can have significant and long-lasting effects on physical, emotional, and mental health.**
- **The more ACEs a person experiences, the higher their risk of negative outcomes in adulthood.**

RECOVERY AND TREATMENT FOR TRAUMA

- Various approaches:

Talking therapies

Eye Movement Desensitisation and Reprocessing
(EMDR)

Somatic Experiencing.

THE NEUROBIOLOGY OF RESILIENCE

- Neuroplasticity and post-traumatic growth.



Mindfulness



Physical Activity



Social Connections

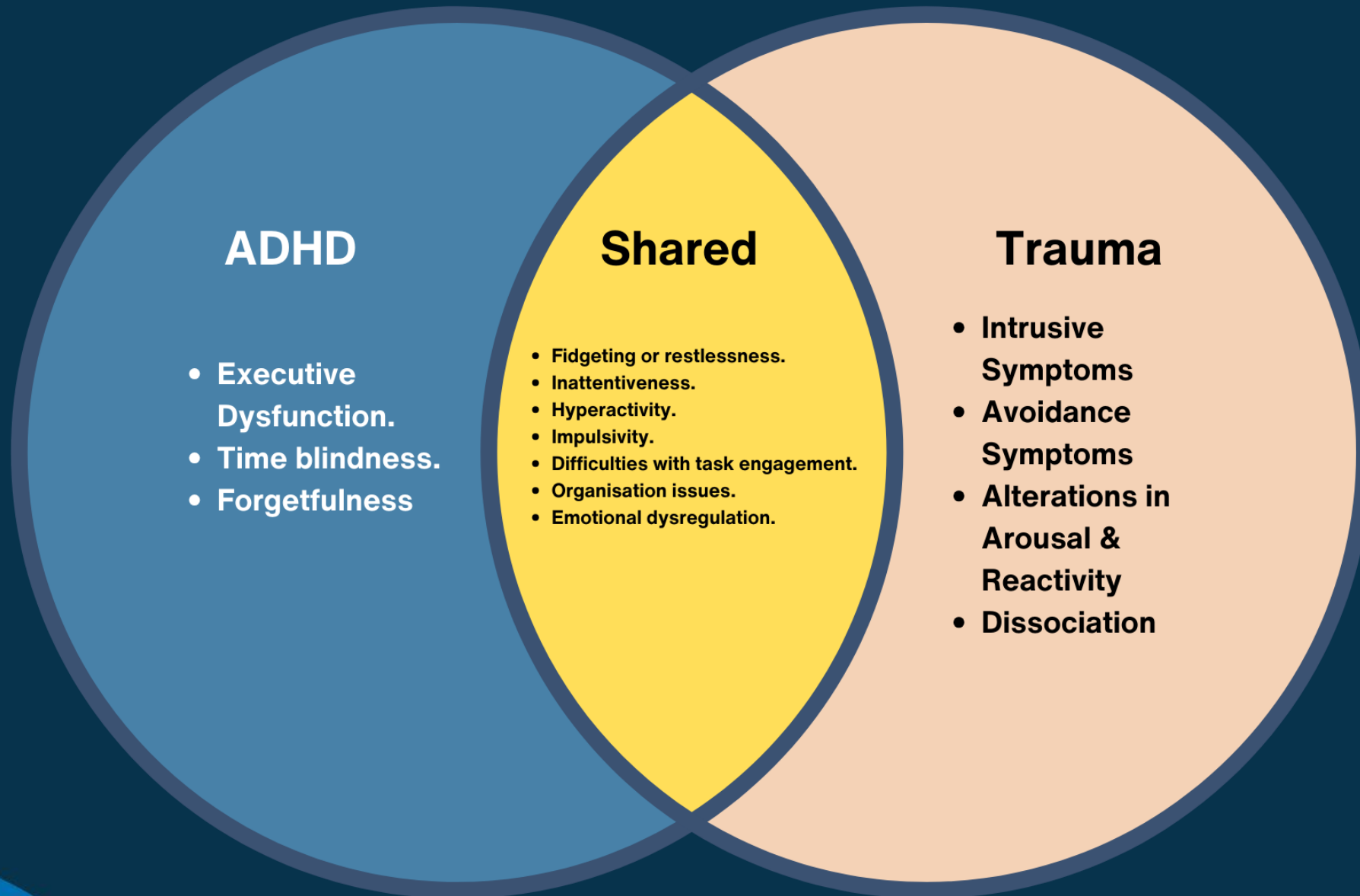
BREAK

The Intersection of ADHD and Trauma

INTERSECTION OF ADHD & TRAUMA

- **Having ADHD does not exclude early life trauma.**
- **Experiencing early life trauma does not exclude the presence of ADHD.**

ADHD & TRAUMA: OVERLAPPING SYMPTOMS



TRAUMA AND ADHD-LIKE SYMPTOMS

- ACE's can lead to lifelong, ADHD-like symptoms caused by neurological changes.

WHAT DOES THE EVIDENCE SHOW US?

- **A bi-directional relationship exists between trauma-related disorders and ADHD: each predisposes to the development of the other and worsens the severity of the other.**

WHAT DOES THE EVIDENCE SHOW US?

- The relative risk for PTSD in ADHD is 2.9.
- The relative risk for ADHD in PTSD is 1.7.

WHAT DOES THE EVIDENCE SHOW US?

- Some studies show that early exposure to maltreatment is a risk factor for ADHD symptoms later in development.
- However, this finding is not consistent.
- Early life trauma can and does contribute to the risk of developing ADHD (in some cases).

A WORD OF CAUTION

- Correlation \neq causation.
- As ADHD is a neurodevelopmental condition, trauma that occurs later in life is very unlikely to cause ADHD.

Moving Forward

JUST TO REITERATE...

- **Having ADHD does not exclude early life trauma.**
- **Experiencing early life trauma does not exclude the presence of ADHD.**

ADHD & TRAUMA

- Assessment for either should consider both.
- Diagnosis should not be refused on the basis of either being present.
- Treatment should be trauma-informed (if relevant).

TRAUMA-INFORMED CARE



Safety



Trust



Peer Support



Collaboration



Empowerment



Culture

RESOURCES

Personal



Website: JBHD.uk

Social media: [@adhdadult_james](https://twitter.com/adhdadult_james)

Charity



Website: ADHDadult.uk

Social media: [@adhdadultuk](https://twitter.com/adhdadultuk)

Online magazine: Focusmag.uk

Discord: [theadhdadults](https://discord.com/invite/theadhdadults)

Podcast



Website: TheADHDAdults.uk

Social media: [@theadhdadults](https://twitter.com/theadhdadults)