



TRAUMA AND MEMORY

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WHAT IS TRAUMA?

Trauma is defined as a deeply distressing or disturbing experience or event which overwhelms an individual's ability to cope. This then causes feelings of helplessness, diminishes sense of self and the ability to feel the full range of emotions and experiences.

There are two kinds of trauma, both which impact on individuals and memory in different ways.

Complex Trauma:

Complex trauma describes children's exposure to multiple traumatic events, often of an invasive, interpersonal nature, and the wide-ranging, long-term impact of this exposure.

Simple Trauma:

Simple trauma is overwhelming and painful. It involves experiences of events that are life threatening and/or have the potential to cause serious injury.

HOW TRAUMA IMPACTS MEMORY

Trauma can have a profound impact on a person's memory affecting the brain, the nervous system and the body. Memory loss is a natural survival skill; a defence mechanism humans have developed to protect themselves from the psychological damage of trauma.

Children who experience trauma may lose the ability to make sense of their experience or may even lose the ability to build a narrative about their own life that draws meaning and understanding. They may not remember events that have occurred during the week, like who they were with or what they have learned at school.

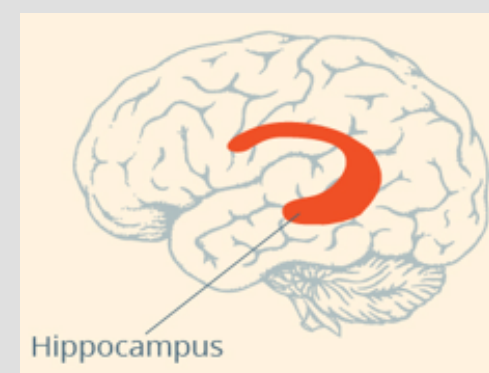
This impacts their ability to carry out complex cognitive tasks such as reasoning, remembering instructions, and comprehension.

WHAT IS MEMORY?

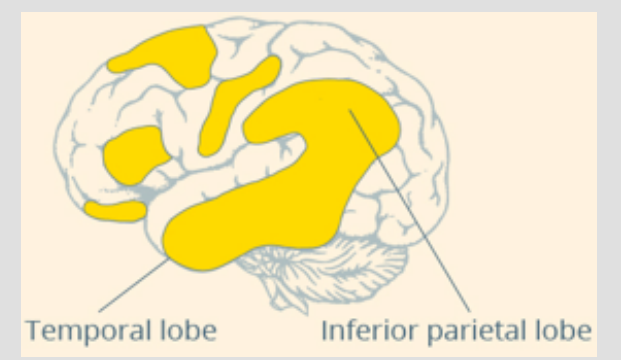
Memory can be broadly categorised into two types:

- **Explicit memory** is the conscious, intentional recollection of factual information, previous experiences, and concepts.
- **Implicit Memory** doesn't require conscious thought. It allows you to do things by rote. This memory isn't always easy to verbalise, since it flows effortlessly in our actions.

EXPLICIT MEMORY



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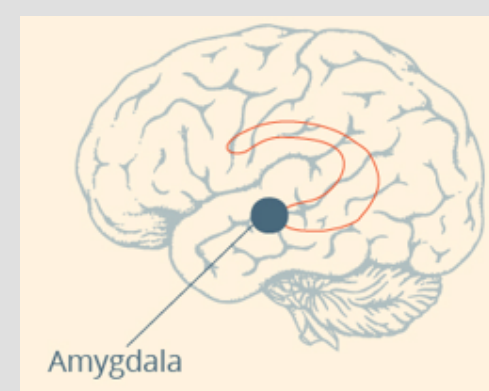


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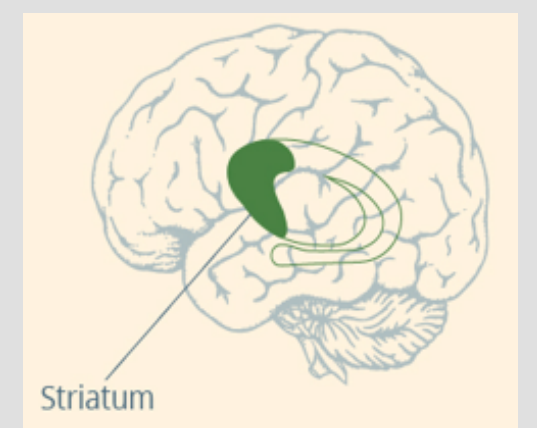
1. Episodic Memory: The autobiographical memory of an event, including who, what, when, and where. It impacts the hippocampus and is responsible for creating and recalling memory.

2. Semantic Memory: The memory of general knowledge and facts. It impacts the temporal lobe and inferior parietal cortex and is responsible for collecting information to create semantic memories.

IMPLICIT MEMORY



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1. Emotional Memory: The memory of the emotions felt during an experience. It impacts the amygdala and is responsible for supporting emotionally charged memory.

2. Procedural Memory: The memory of how to perform a common task without actively thinking. It impacts the striatum which is responsible for creating new habits and producing procedural memory.

Ref: NICABM (2019)

RECOVERING FROM TRAUMA-INDUCED MEMORY LOSS

EMDR therapy facilitates the accessing and processing of traumatic memories and other adverse life experiences to bring these to an adaptive resolution. EMDR therapy is an eight-phase treatment. Eye movements are used to assist the brain to reprocess neural networks and link them to factual based semantic memory. During EMDR, individuals process the memory safely leading to a peaceful resolution resulting in increased insight regarding both the previously disturbing event and the negative thoughts that have grown out of the original event.

WHAT IS DISSOCIATION AND ITS RELATION TO MEMORY?

Dissociation is a break in how a person's mind handles information.

Dissociation can happen during a trauma experience or later on when thinking about or being reminded of the trauma. Dissociation can make a person feel disconnected from their thoughts, feelings, memories, and surroundings. This can also affect memory, sense of identity, the way the world is perceived and connection to the physical body.

Violence, sexual abuse and other emotionally traumatic events can lead to dissociative amnesia. This helps a person cope by allowing them to temporarily forget details of the event.

WINDOW OF TOLERANCE

The Window of Tolerance is a term coined by Daniel Siegel to describe the zone of arousal in which a person is able to function most effectively. When people are within this zone, they are typically able to readily receive, process and integrate information and respond to demands of everyday life and tasks with no difficulty. The Window of Tolerance is now used broadly to understand 'normal' brain reaction responses and trauma treatment terminology.

Stress and trauma can shrink the Window of Tolerance, so we are 'outside' of our window.

In a state of hypo-arousal our brain will activate a 'freeze' response, and we can experience memory loss.

In a state of hyper-arousal our brain will activate a 'fight' or 'flight' response and memory loss can also occur.

WHAT IS EMDR?

EMDR stands for *EYE MOVEMENT DESENSITISATION REPROCESSING*. EMDR has been proven to decrease stress related to:

- Trauma and PTSD
- Addictions
- Depression
- Anxiety
- Phobias
- and more...

Desensitisation occurs by walking individuals through traumatic memories whilst focusing on external stimulus so the individual can process the traumatic memory in a way that minimizes distress.



1. **History:** Discussion of medical history and work to pinpoint traumatic memories.
2. **Preparation:** Briefed with the EMDR process, familiarisation with the technique.
3. **Assessment:** Identify specific components of the traumatic memory, choosing a negative cognition and identifying a positive.
4. **Desensitisation:** Patient is asked to focus on negative emotion whilst moving eyes back and forth.
5. **Installation:** Negative cognition is replaced with the positive.
6. **Body Scan:** Patient is asked to recall the traumatic memory and if recollection of memory causes negative response, desensitisation is repeated.
7. **Closure:** Effectively ends EMDR treatment.
8. **Re-Evaluation:** Therapist will re-evaluate distress levels and positive cognition.