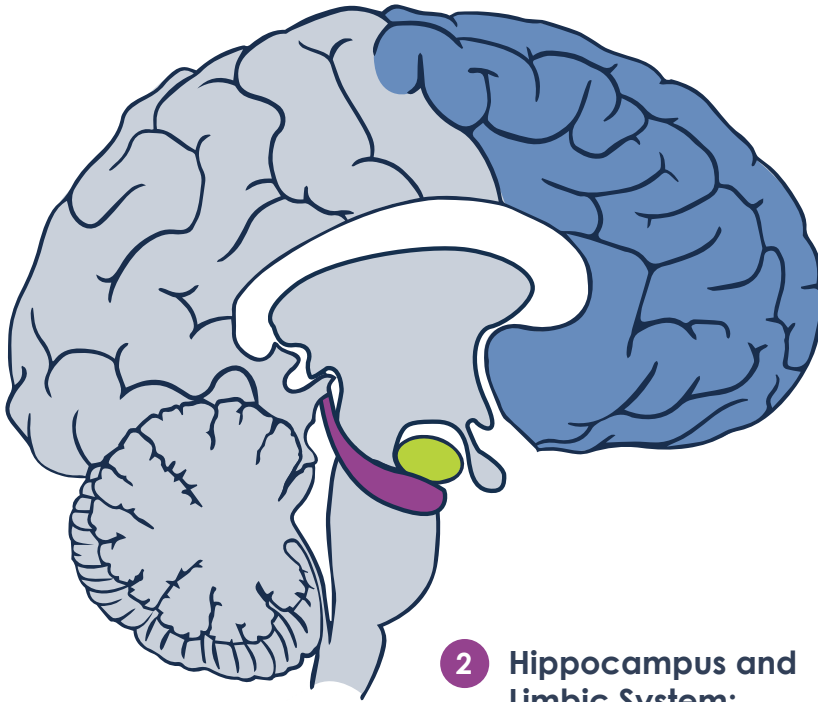


How Trauma Can Impact the Brain



1 Amygdala: Alarm System

The amygdala is helpful and protective in dangerous situations because it turns on before we even know it, putting us on alert to keep ourselves safe. Sometimes, though, the amygdala can have a tough time turning off, when our brain continues to think we may be in danger. When this happens, our bodies can experience things like anxiety, hypervigilance (feeling on edge all the time), avoidance of things that remind us of the trauma, or becoming easily startled or scared. When we are constantly on guard, it can be hard to do things like let our guard down even when we are safe or need to sleep.

2 Hippocampus and Limbic System: Emotional Brain

The hippocampus is responsible for memory and learning in the brain; it works like a librarian, marking memories with context by recording when and where things happened. When we have a traumatic experience, the hippocampus may be impacted. The time, location, or order of events may not be marked correctly, leaving us with “fuzzy” memories, things that don’t make sense, or missing memories. When we experience triggers that remind us of the traumatic event, it can feel like the event is happening again (flashbacks, or nightmares if we are sleeping). The hippocampus can have trouble calming down the amygdala because the danger feels real during a flashback.

Trauma can impact us in various ways, including physically, emotionally, psychologically, and spiritually. The following outlines how it affects three crucial parts of our brain and the resulting impacts.

3 Pre-Frontal Cortex: Thinking Brain

The Pre-Frontal Cortex is responsible for controlling behaviour, emotions, impulses, decision-making, empathy, and awareness of others and ourselves. Usually this part of our brain lets us think clearly, make rational decisions, and have awareness in our day-to-day life. After something traumatic happens, this part of the brain is underactivated. This may leave someone who has experienced trauma feeling irritable, numb, with less control over anger, struggling to concentrate or pay attention, and making more impulsive decisions.

It is important to remember that these impacts on the brain are not permanent. It is possible to move forward and heal from the trauma over time. In counselling, you will learn about strategies to work toward this, including skills to calm down (called grounding), such as breathing, relaxation, distraction, mindfulness, and meditation.

Healing is not linear.



● Trauma

● Acute Phase

● Adjustment and
Return to "Normal"

● Long Term
Reorganization

Sometimes flashbacks or other trauma symptoms come back or worsen, weeks or even years after a traumatic experience. This can feel defeating or frustrating, like we haven't progressed or healed at all. It's important to understand that this is normal, and the brain's way of reprocessing or reorganizing old memories. While this can present a short-term setback, the mind is

reorganizing the memories from a different perspective, with more distance from the event and informed by the current situation or growth that may have happened since. If trauma memories or symptoms come up for someone again, it can be a sign that we need more self-care or supports, or additional counselling to support the work the subconscious is doing.