

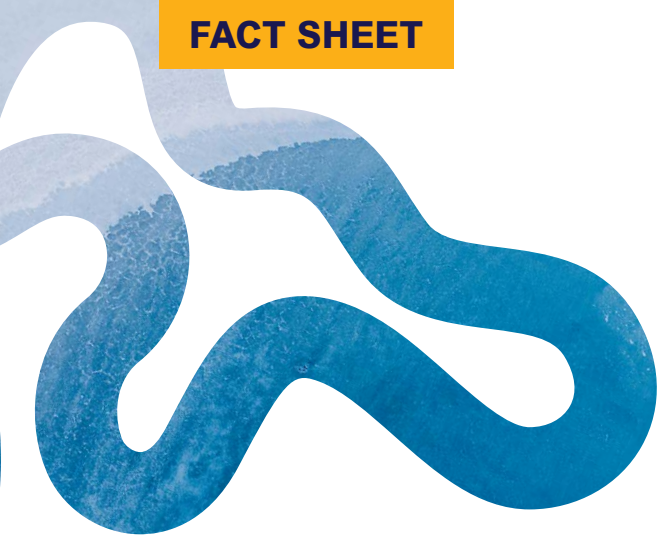
Trauma and Body Memories

Blue Knot Foundation fact sheet about trauma and how memories are stored in the body

Memory is a psychological process. Our understanding of memory has changed considerably in the last 100 years. We now think that memory works in the following way:

- 1 Observation**
We engage with the world with our senses of sight, hearing, taste, smell, and touch.
- 2 Encoding**
We register parts of what we see, hear, taste, smell, and touch in our brains. We may also register our associated thoughts and feelings.
- 3 Storage**
This content is encoded. The encoded content may then be stored in our short-term memory and (later) our long-term memory.
- 4 Retrieval**
We retrieve memories both actively and passively, consciously and subconsciously.
- 5 Reaction**
When memories are retrieved, we can experience physiological, cognitive (thinking), and/or emotional reactions. Again, these processes can be conscious or subconscious.





There is more than one type of memory. In fact, there are two main types. Different kinds of memory are stored in different parts of the brain.

Explicit Memories

- What people normally mean when referring to memory.
- Are conscious – we know about something and we can talk about it.
- We are using explicit memory when we recount a story, or when we relay knowledge and facts.

Implicit Memories

- Are mainly unconscious and can't be put into words.
- Implicit memory helps us ride a bike or drive a car, without actively thinking about what we need to do.
- Are often experienced in the body, and triggered by something, such as a smell, sight or sound, or an anniversary date.

Current neuroscientific research confirms 'the century old finding' that trauma is experienced in the body and is often remembered by *behavioural re-enactment*. (van der Kolk, 2015; xiii)

Traumatic events are often stored as implicit memories. They are stored differently in our brain to memories that we can recall at will. In fact, the brain often does not encode traumatic memories in a narrative fashion (we cannot recount them) and may not encode them at all. Traumatised people are often unable to put their experiences into words. Rather they are '*compelled to re-enact them, often remaining unaware of what their behaviour is saying*' (Howell, 2005: 56-57). This is because the content is too traumatic and would cause considerable distress. Instead, the brain may encode sensory "warning signs" of the memory which are associated with the perceived threat.

When these "warning signs" are activated, we may experience flashbacks. This can result in memories coming back from the past which are intrusive and unexpected. It can often feel as though the experience is being 'relived'. These memories can come back with strong emotions such as fear, pain and distress. This can also reactivate a biological fight-flight-or-freeze reaction (a normal physiological response) with the flashback to the perceived threat. It can feel as though the traumatic event is happening in the present even though it is a reactivation of past events.

Remembering '*in the form of physical sensations, automatic responses, and involuntary movements*' (Ogden et al, 2006: 165) is characteristic of trauma.