

Memory and Trauma

Memory is a psychological process. Our academic 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 using 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:** The encoded content may then become stored in our short-term memory and (later) our long-term memory.
4. **RETRIEVAL:** We then retrieve memories both actively and passively, consciously and subconsciously.
5. **REACTION:** When memories are retrieved we might experience physiological, cognitive, and/or emotional reactions. Again, these processes can be conscious or subconscious.

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Contrary to what many people think, there's 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.

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 and may not encode them at all. This is because the content is too traumatic and would cause considerable distress. Instead, the brain may encode sensory "warning signs" associated with the perceived threat.

Retrieval of these memories may occur when these "warning signs" are activated. This can result in memories that are intrusive and unexpected (known as flashbacks), and which reactivate a biological fight-flight-or-freeze reaction (a normal physiological response) to the perceived threat.

Memory as a basis of our identity

Therapeutically, we call some memories self-defining memories. There are many events that we could remember and retrieve, so what a person does remember may inform their core beliefs (how they view themselves, other people, and the world). For this reason, we say memory is a cornerstone of our identity. One of the deep impacts of trauma and abuse is that its effects on memory can affect our sense of identity.