

The Impact of Child Abuse – Part 1

Survivors of child abuse and their advocates know only too well the reality, extent and effects of child abuse. So often survivors find their reality of ongoing suffering invalidated, minimized or even contradicted by social attitudes *'It happened so long ago, how can it still affect you?'*

Throughout the 1990's many research findings on memory, relating to the debate about 'repressed memories', also brought into question the experiences of survivors who had not always remembered their abuse.

In this article I will summarize the findings of more recent research which affirms the reality of survivors of child abuse. These findings fall into two main areas:

- A. Memory
- B. Trauma and Attachment.

Memory involves various parts of the brain.

1. Sensory organs – (eyes, ears, nose, tongue and skin) receive information from the environment and transmit it to brain receptor sites.
2. Thalamus - collects and begins to correlate sensory data into a single unit.
3. Amygdala – emotionally assesses incoming data, determines the body's physiological response ie: relax, slight arousal, arousal, intense arousal or hyperarousal, and then regulates the response of the hippocampus in recording the memory.
4. Hippocampus – when arousal is within a normal range the hippocampus processes the sensory data into narrative form and sorts, files and stores the data for future retrieval.
5. Pre-frontal Cortex – consciously recalls, assesses and utilizes the data.

This is the process by which *explicit memories* are stored and recalled. Explicit memories are narrative, verbal, autobiographical, and voluntarily retrievable. This sort of memory is reconstructive and **can** be distorted, influenced, manipulated by suggestion and in some situations even implanted. It was explicit memory that was researched by cognitive psychologists in the 1990's in regard to the "repressed memories" debate. Understandably, their findings led to concerns about the validity and accuracy of 'repressed memories'.

However newer technology which enables researchers to examine the workings of the various parts of the brain more closely has led researchers to conclude that there are other types of memory stored in different ways and in different parts of the brain and body.

When the *amygdala*, assesses the incoming data as **intensely arousing** the hippocampus records events *with great accuracy*. Traumatic events occurring to older children or adults can be recalled in extremely vivid and comprehensive detail and remain consciously accessible. These memories are stored with far more detail and accuracy than is normal.

When the incoming data is **excessively arousing**: a terrifying, overwhelming, traumatic event, *the neural pathways to the hippocampus are impaired and the information is stored as emotions and physical sensations*. These memories are not stored as normal, conscious, verbal data or integrated with other memories, but as raw physical data (image, smell, sound, taste, touch). These memories cannot be consciously recalled but will be triggered by association. This overwhelm mechanism **can** happen with adults but because of the greater vulnerability of children to being overwhelmed by an event, happens more frequently in children.

Because the hippocampus is not fully functional until children are from 3-5 years old all memories before this time are stored non-verbally and unconsciously. Early memories include body memories, traumatic memories, and implicit memories.

Implicit memories are 'the automatic integration of information with little conscious attention to what is happening' They are the ongoing effects of events in a person's life in the absence of any cognitive memory of their cause. These memories can affect *emotions, behaviour, perceptions, body functions and sleep patterns*.

Implicit memories are non-verbal, emotional, and/or sensory. They cannot be voluntarily recalled but are triggered by association. They are not autobiographical in that the person is not aware of themselves as an entity in a past situation which is being recalled. Instead they re-experience the sensations, which is like re-living the original experience.

Researchers have also discovered that there is memory capacity in virtually every cell of the body. This has become amazingly clear in transplant recipients manifesting the attributes of their organ donor. Body memories include the reappearance in the body of physical symptoms of the original abuse and physical reactions which occur in response to a trigger associated with the original abuse in some way. Research has shown that body memories are not susceptible to suggestion or distortion. The body does not lie. The way in which we interpret the memories can be subject to distortion, modification, or suggestion but what the body remembers is reliable.

Clearly the mechanisms of memory are far more complex and varied than was originally thought. The newer findings support the reality of survivors of child abuse who have not always remembered the abuse consciously. It is still important to be aware that the way we interpret body and implicit memory may not always be accurate. Recovered memories without other supporting evidence would not be enough evidence for a court case. Hope that this information is helpful to all of you on your healing journey. Next newsletter I will cover the information on trauma and attachment.

– Meryl Lee