

BLUE KNOT FOUNDATION

FACT SHEET ON MEMORY



DIFFERENT TYPES OF MEMORY

- Neuroscientific and other research confirm that memory is not a single entity and that different kinds of memory are stored in different parts of the brain.
- In broad terms there are two types of memory. *Explicit* ('declarative'; 'narrative') memory is *conscious* and can be expressed verbally, while *implicit* ('somatic', 'procedural') memory is largely *unconscious* and non-verbal.
- *Explicit* memory requires focussed attention to consolidate while *implicit* memory is encoded outside of awareness.
- *Implicit* memory includes subcategories: e.g. somatic expressed by the body and elicited by an environmental cue such as a fragrance, sight or sound and procedural which helps people carry out tasks automatically.
- Everyday use of the word 'memory' (but also in psychology textbooks; Brand & McEwen, 2014) generally refers only to conscious, *explicit* memory which ignores the ongoing importance of *implicit* memories (Levine, 2015).

MEMORY & BRAIN DEVELOPMENT

- *Implicit* memory develops before *explicit* memory, as conscious recall depends on development of the hippocampus in the second year of life.
- Conscious (*explicit*) memory, conscious thought and verbalisation are privileged both by health professions and by society in general (Levine, 2015).
- *Implicit*, pre-verbal memories do not 'disappear' when the hippocampus develops but are stored in different neural networks and can manifest across the life cycle.

BLUE KNOT FOUNDATION

FACT SHEET ON MEMORY



TRAUMATIC MEMORY

- Traumatic memory is *implicit*, stored as physical sensations rather than as narrative memory of the past, and *‘experienced as immediate life threats – right now’* (van der Kolk, 2015; xi-xii).
- *‘[T]raumatic memories tend to arise as fragmented splinters of inchoate and indigestible sensations, emotions, images, smells, tastes, thoughts...’* (Levine, 2015:7). Because they are *implicit*, they can be evoked (‘triggered’) by a range of situational cues including birthdays, anniversaries, developmental milestones, and so on.
- *‘Trauma can lead....to the profile of blocked explicit processing and enhanced implicit processing’* (Siegel, 2012: 30-4). Traumatic experience limits hippocampal function (due to increased cortisol production), impedes consolidation of *explicit* memory, and activates the amygdala (leading to release of adrenaline which intensifies *implicit* memory).
- *‘Flashbacks, intrusive bodily sensations... and images of traumatic events that ‘seem to come out of nowhere’ are all elements of this blocked explicit/enhanced implicit processing’* (Siegel, 2012: 30-5).

‘REMEMBERING BY RELIVING’: TRAUMA, REPETITION & BEHAVIOURAL REENACTMENT

- Current neuroscientific research confirms that trauma is often remembered through behavioural enactment (van der Kolk, *ibid*). Traumatized people are frequently unable to speak about their experiences and are *‘compelled to re-enact them, often remaining unaware of what their behaviour is saying’* (Howell, 2005: 56-57).
- Remembering *‘in the form of physical sensations, automatic responses, and involuntary movements’* (Ogden et al, 2006: 165) is characteristic of trauma: *‘Traumatic memories may also take the form of unconscious ‘acting-out’ behaviours’* (Levine, 2015: 8).

BLUE KNOT FOUNDATION

FACT SHEET ON MEMORY



- The need to resolve traumatic experience can fuel repetitive and compulsive actions and behaviours (*'Unresolved experiences tend to haunt us until they can be finished'*; van der Hart et al, 2006: 246).
- The relationship between repetitive, problematic behaviour and unresolved trauma needs to be recognised so that trauma survivors can be better supported towards recovery.

REMEMBERING & 'FORGETTING'

- While our brains are wired to remember experiences important to survival, under some circumstances survival may be assisted by 'forgetting' (i.e. in the explicit, conscious sense, because at an implicit level 'the body remembers', Rothschild, 2000, and 'keeps the score', van der Kolk, 2014).
- As children depend on adult caregivers, 'forgetting' traumatic experiences can have survival value in preserving the attachment bond: *'[F]orgetting abuse is a way to preserve the attachment relationship when the abuser is someone the victim is dependent on'* (Freyd & Birrell, 2013: 58); *'Disruptions in memory may be adaptive... if trauma and caregiving emanate from the same source'* (Silberg, 2013: 12).
- The impacts of stress on the brain, the different neural networks in which memory is stored, the differences between *conscious, explicit* and *unconscious, implicit* memory, and the capacity of the mind to compartmentalise and/or detach from experience ('dissociate') help explain the phenomenon of 'recovered' memory (i.e. delayed onset memory recall).
- Memories recovered in therapy represent a small proportion of the total recovered memory reports (Elliott, 1997; Wilsnack, Wonderlich, Kristjanson, Vogeltanz-Holm, & Wilsnack, 2002 cited in Dalenberg et al, 2012). Recovered memories tend to occur without warning and for this reason can certainly occur prior to or outside of therapy.

BLUE KNOT FOUNDATION

FACT SHEET ON MEMORY



'BETRAYAL BLINDNESS'

- 'Betrayal blindness', or 'unawareness and forgetting' has survival value; it stems from the concept of 'betrayal trauma', which assists understanding of the 'forgetting' of early life abuse (to preserve attachment bond to caregivers on which the child depends) (Freyd, 1991). It also has wide application to a range of contexts: *'Although there are various ways to remain blind to betrayal, perhaps the most effective way is to forget the event entirely'*; Freyd & Birrell, 2013: 58.
- The 'survival strategy' of betrayal blindness applies to relationships in which dependence of some kind fosters the need to preserve the relationship and can 'trump the need to take protective action' (Freyd & Birrell, 2013, p.56)
- 'Not seeing', 'not knowing' and 'not remembering' traumatic experience is not confined to children (*'Adults are also prone to a kind of magical thinking ...to gain a sense of control over overwhelming events'* (Chu, 2011: 34).
- While 'forgetting' the trauma of betrayal (i.e. conscious *explicit* absence of recall as distinct from *implicit* memory of traumatic experience) potentially assists survival it can also threaten health if the trauma is not resolved.

THE DYNAMICS OF DISCLOSURE

- The process of disclosing traumatic memory (i.e. when able to be spoken about which depends on a number of contingencies and which involves a different area of the brain) 'is highly dependent on the reactions of others' (Freyd & Birrell, 2013: 126).
- '[M]ost people who experience childhood sexual abuse do not disclose it until adulthood, and many may never tell at all' (Freyd & Birrell, 2013, p.123).
- Disclosure is *'often not a single event'*. It is a process affected by social context, issues of safety and the potential for adverse repercussions.



BLUE KNOT FOUNDATION

FACT SHEET ON MEMORY



THE RELIABILITY OF MEMORY AND THE ROLE OF SOCIAL CONTEXT

- Depending on the context and conditions, both remembering and 'forgetting' (i.e. in the explicit, conscious sense because 'the body remembers' [Rothschild, 2000] at an implicit level) can be healing and/or destructive.
- '*Both internal and external processes operate to keep us unaware*' (Freyd & Birrell, 2013: 95); '*To the extent that it is not safe to disclose externally, it is not safe to know, or disclose internally, to oneself*' (ibid: 116).
- Current research establishes that memory is not fixed and unchanging and that all memory - implicit *and* explicit - undergoes a degree of reconstruction. This does not mean that either is necessarily unreliable.
- Research has shown that recovered (implicit) memory can be as accurate as continuous i.e. (explicit, conscious) memory (Dalenberg et al. 2012). '*Memories that are recovered – those that were forgotten and subsequently recalled- can often be corroborated and are no more likely to be confabulated than are continuous memories*' Chu, 2011, p.80 citing '(Dalenberg, 1996; Kluft, 1995; Lewis, Yeager, Swiza, Pincus & Lewis, 1997).
- Numerous legal cases in various parts of the world have demonstrated that recovered memories have been verified and corroborated by independent evidence, admissions of guilt by perpetrators, or findings of guilt by courts.
<https://blogs.brown.edu/recoveredmemory/case-archive/legal-cases/>

