

# Diagnostic Revolution: Reviewing Trauma

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**A** young mother in the US was able to care for her baby daughter physically but had no ability to attach to her. At the age of four the child still weighed only twenty six pounds. For four years hospitals had overlooked the possibility of failure to thrive because of the mother's obvious concern and conscientiousness in caring for her baby's physical needs. This mother had been a foster child in the US care system at a time when babies were moved every six months to avoid attachment relationships forming (Perry, 2007). The hospital did not diagnose the impact of her trauma on her child.

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Recent research findings, particularly in the field of neuroscience in relation to the impacts of trauma upon the brain and its development, may significantly change our understanding of much mental illness. Our current understanding of trauma needs to be broadened to encompass many more of the events which disrupt a person's development and functioning.

As early as the late 1980's John Briere and Bessel Van Der Kolk, both recognised clinicians and researchers in the forefront in the field of trauma, identified links between trauma and severe mental illness diagnoses. Briere found seventy percent of female psychiatric emergency room intake patients had histories of child sexual abuse which linked with suicidality, multiple psychiatric diagnoses and personality disorders (Whitman, 1994).

In a study of 528 trauma patients, Van Der Kolk concluded that the implications are that real world childhood sexual trauma may be responsible for many psychopathologies usually considered to have endogenous origins, including various kinds of phobic, depressive, anxiety and eating disorders, not to mention BPD, antisocial personality and MPD. 46% of psychiatric patients studied by Van

Der Kolk had every element of DESNOS (Disorders of Extreme Stress Not Otherwise Specified) suggesting the possibility that at least half of all emotionally disturbed patients, whatever their formal diagnoses are in fact survivors of childhood abuse --- an astonishing thought (Whitman, 1994).

In the 1990's Judith Herman (1992) and others argued that the DSM IV needed to include a diagnostic category for the impacts of chronic childhood abuse or trauma: "complex PTSD." She noted the similarities between these impacts and BPD. This is now widely accepted by those working in the field of trauma.

In 2001, Jon Allen in *Traumatic Relationships and Serious Mental Disorders*, writing from years of experience in mental hospitals, examined links between attachment trauma and mental illness. He found that attachment trauma "has a potentially profound impact on the self, relationships and personality" and could be a major contributing factor to many serious mental disorders. He reviewed the research related to determinants of the severity of impact of trauma and argued convincingly that attachment trauma is the trauma of greatest impact.

***Attachment trauma is the most extreme example of the failure of good-enough care-giving, because it not only constitutes a failure of protection but also places the child in danger....attachment trauma creates a dual liability by creating extreme distress and undermining the development of capacities to regulate that distress.***

Recent findings in neuroscience strongly support all these contentions. It has become clear that early life experiences, particularly those which are relational, profoundly impact upon both brain structure and brain chemistry. The brain doesn't grow like the body, primarily in response to predetermined genetic factors. It grows primarily in response to the environment and most importantly the relational environment (Cozolino, 2006).



The brain develops sequentially, from least to most complex areas. The brainstem, the least complex, is essential for regulating all survival systems (i.e. cardiovascular, respiratory, heat and energy regulation) and is not fully developed until 9 months of age (Perry, 2004). Simultaneously with and following brainstem development the limbic system, which is foundational to social, relational and emotional functioning, develops. Lastly the neocortex, which enables rational thought, continues growing throughout life (Levine, 2002).

The brain also functions hierarchically, with survival as priority. When triggered for survival the brainstem and survival areas of the limbic system have priority over all other brain areas. Significant trauma at any time of life sensitizes the brainstem/limbic system to danger and causes the fight/flight/freeze response to be more easily triggered. When this happens the cortex does not function effectively until the level of arousal has decreased. Individuals who are exposed to long term stress or who have had attachment trauma have inadequate cortisol levels to reduce arousal. This means that high arousal levels are maintained for extended periods of time, if not continuously. When people do not feel safe and their levels of arousal are high, learning and thinking capacities are impaired (Ogden, Minton, & Pain, 2006).

Neurons, the basic building cells of the brain, change in response to **patterned repetitive stimulation**. There are **critical or sensitive** periods during which different areas of the central nervous system are forming and are **receptive to specifically required stimulation**. **Experiences appropriate to each stage of development are essential to provide the organizing framework for the developing brain of a child** (Perry 2004).

The brain is forming most rapidly during early childhood and various influences including neglect and maltreatment have the most impact at that time. Any **early deficits caused by neglect and trauma cause an ongoing, cascading effect upon all later development of all areas** involved in more complex functions. Severe neglect in the first three years results in a significantly smaller brain with fewer cells and less connections between cells. The earlier that appropriate reparative intervention occurs, the more effective it is, although some remaining effects are inevitable in cases of significant neglect or chronic trauma in early childhood (Perry 2004).

It is known that trauma at any age impairs the integration of the networks of the brain. This disintegration limits the capacity for all the resources of the brain to function together. Lateral integration between left and right hemispheres is compromised (See Table 1) (Cozolino,

2006). Vertical integration between brainstem, limbic system and neocortex is compromised. Memory is also compromised. The storage of verbal, narrative and autobiographical memory is inhibited, leaving memories unprocessed and remaining as sensory, somatic and behavioural fragments. One aspect of healing of trauma involves integration of these memory fragments into a coherent narrative (Rothschild, 2000).

## LATERALITY

Left Hemisphere	Right Hemisphere
Cognition	Emotion
Semantics	Prosody/gestures
Abstract Abilities	Somatic regulation
Detail Analysis	Global analysis
Humor mania	Sadness/depression
Moderate arousal	High levels arousal
Approach	Avoidance
Other Awareness	Self awareness
Social Emotions	Personal emotions
Positive Affect	Negative affect

Table 1: Adapted from Cozolino 2006.

A critical period for developing strong vertical integration of the brain is during the first two years of life. Throughout this time, attachment experiences are linking the limbic system with the earliest developing parts of the cortex, referred to as the orbitofrontal cortex (Ogden et al. 2006) or the middle prefrontal regions (Badenoch, 2008). During the first two years secure attachment relationship experiences are foundational to capacities for regulation of the body, attuned communication, regulation of emotion, response flexibility, empathy, insight and fear extinction (Seigel, 2007, cited in Badenoch, 2008).

Lack of secure attachment compromises the development of all these capacities, compromising the vertical integration and functioning of the brain. This compromises an individual's sense of self, resilience and capacity for relationship. Even an absence of attachment in the presence of otherwise adequate care can have severe consequences.

Badenoch (2008) argues that the brain changes in response to a long-term attuned therapeutic relationship, and brain research by Marco Iacoboni (2007, cited Badenoch, 2008) seems to support this. Research has shown that in the absence of reparative relationships, people's attachment styles tend to remain stable throughout life (Cozolino, 2006). Eighty-five percent of the time a child's attachment style will parallel the working attachment

model of their principal carer. Badenoch (2008) quotes a research study which found a decrease of about ten percent of securely attached American children in the ten years prior to 2005. Only fifty-five percent of the children studied in 2005 were securely attached (Sroufe, Egland, Carlson & Collins, 2005).

Research findings in the fields of neuroscience, attachment and trauma over the past twenty years necessitate a radical revision of how counsellors think about both the assessment of clients and the process of therapy. It is clear that trauma, and attachment trauma, have many more far-reaching consequences than had been previously realised. It is essential for everyone working in the counselling professions to become aware of this research and to integrate these findings into their work.

I have intentionally written this article using the references which I have found most helpful in learning about trauma. Hopefully these will resource any people wishing to read further.

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