

Effects of Trauma on the Brain

Brain Centers/Biology	Effects of Trauma- leading to a PTSD response
Reptilian Brain	Over-developed , heightened defensive reflexes, startle response, very dys-regulated nervous system
Myelination	Neurons are not able to be myelinated as effectively; inadequate development of the frontal cortex as a result
Cortisol/Stress hormones	Cause cell damage to the hippocampus
Amygdala	Excess electrical activity and overly active fight, flight, freeze, fall asleep response
Hippocampus	Smaller. Memory retrieval challenged and more easily inclined towards dissociation
Cerebral Cortex	Decrease in left side. Reduced cognitive functioning. Perception of time and sequences impaired.

Research now shows that the neurons in the hippocampus are able to regenerate. By allowing the client an opportunity to integrate the trauma, the brain is given a chance to heal."