

Emotional Trauma & the Brain

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1. Traumatic memories stay stuck in the brain's neter regions--- the nonverbal, non conscious, subcortial regions (amyglada, thalamus, hippocampus, hypothalamus and brain stem) where they are not accessible to the frontal lobes--the understanding, thinking, reasoning parts of the brain.
2. Trauma forces the reality of evil into the human conscience.
3. Paradox at the heart of trauma: they see and feel only their trauma, or they see and feel nothing at all.
4. PTSD is marked by an inability to construct a coherent story of their past.
5. People with PTSD can't remember major events in their own life and become emotionally distraught while making the effort.
6. Disorganized attachment.
7. During brain scanning, the images show dissociation in the brains of PTSD patients. When they remembered traumatic event, the left frontal cortex shut down -- particularly Broca's area (the center for speech).
8. When people relive their traumatic experiences, the frontal lobes become impaired and as a result, they have trouble thinking and speaking.
9. Traumatized people are no longer capable of communicating to themselves or others what is going on emotionally.
10. Left side of the brain- logical thinking.
 - a. Controls language and reading
 - b. Gather and process information.
11. Right side of brain = picture album.
 - a. Stores memories as pictures.
 - b. Spontaneous, intuitive, and emotional.
12. Traumatic memories as snapshots.
13. Difficulty in creating coherent narrative.
 - a. Both sides of brain must be fully online to create a narrative
14. Corpus Callosum - the connector allowing two sides of brain to communicate
15. Hypothalamus - receives incoming information through our senses - sight, smell, hearing, touch, taste - then passes it along to other parts of the brain for processing.
16. Hippocampus - involves memory and encoding new information; controls emotional responses.
17. Frontal Cortex- acts as the supervisory system of the whole process on integration to other parts that control behavior.
18. Trauma can change brain chemistry and create PTSD.
19. Trauma causes an emotional as well as cognitive concussion.

20. Trauma in childhood hard-wires the experience.
21. Amygdala - small, almond-shaped portion of the brain.
 - a. Controls emotional reactions such as fear and anger.
 - b. Alarm portion of the brain.
22. Trauma freezes thinking- as if left and right sides of the brain are disconnected.
23. Dissociation - a separation from the elements of the traumatic experience which reduces the impact of the experience.
24. Traumatized people have alterations in their brain chemistry.
 - a. Intense stress or trauma is accompanied with the release of hormones.
 - b. Fight, flight or freeze.
25. Integrating brain function is key, especially for those with PTSD.
 - a. Therapy should stimulate right hemisphere of the brain.
26. Self regulation is the balanced and integrated flow of energy and information through the major systems of the brain.
27. Since trauma is situated in these sub-cortical areas of the brain, we need to do things that change the way people regulate these core functions- which cannot be done by words or language alone.
28. Prayer and meditation stimulate frontal cortex.
29. Treatment must help regulate affective states so people can face their own trauma.
30. Psychological trauma is very much about an action that was interrupted. You need to complete the trauma, transform it.
31. Rachel's Vineyard helps a person to focus on feelings rather than flee them.
32. Meditation and brain waves - all incorporated on retreat
 - a. BETA - awaking awareness, extroversion, concentration, logical thinking, active conversation.
 - b. ALPHA - relaxation states, non-arousal meditation, hypnosis.
 - c. THETA - day dreaming, dreaming, creativity, meditation, paranormal phenomena.
 - d. DELTA - sleep.
33. Process of Rachel's Vineyard reconnects, calms and soothes.