PTSD is a feeling (experiencing) problem that masquerades as a thinking problem.
With trauma, the brain can become organized around offensive and defensive purposes. Your brain cares more about keeping you alive than happy.

Prolonged stress can damage the hippocampus, and make it more difficult for it to consolidate and contextualize new autobiographical information.

High levels of stress impair new learning—biological/hormonal changes impair memory encoding.

Trauma can also impair integration of learning.

Neuroception—a subconscious system that evaluates danger and safety in our environments.

3 options for engaging in our environment that are not voluntary. These are not cognitive choices, our neurosystem chooses:

- Social engagement
- Fight or flight (can allow for some resolution of trauma)
- Freeze or collapse (high likelihood to lead to development of PTSD)

Porge’s Polyvagal Theory & Neuroception

Broca’s area of the brain is the speech center. In significant trauma, blood supply to that area is cut off.

A similar pattern in seen during flashbacks.

When that area of the brain is offline, a person can not put thoughts to words.

It makes it difficult to organize our traumatic memories, coherently.

But, the brain remembers fragments of the trauma—images, physical sensations, etc.

The body replays the trauma somatically.

“All trauma is preverbal” (van der Kolk, 2014, p.43)

This also highlights how a reliance on language may be problematic in trauma treatment.
PTSD & Neural Network Dissociation (Cozolino, 2010).

- PTSD is caused by the loss of the ability to regulate the neurobiological responses to assessing and responding to threats. Essentially, the body continues to act as if the previous trauma is continuing.

PTSD (DSM 5)

The following criterion apply to adults, adolescents and children over the age of 6.

A. Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:
   - Directly experiencing the traumatic events.
   - Witnessing, in person the events as it occurred to others.
   - Learning that the traumatic events occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the events must have been violent or accidental.
   - Experiencing repeated or extreme exposure to aversive details of the traumatic events (e.g., first responders collecting human remains, police officers repeatedly exposed to details of child abuse). This does not include indirect non-professional exposure through electronic media, television, movies, or pictures, unless this exposure is work related.

PTSD (cont’d)

B. Presence of one (or more) of the following intrusive symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:
   - Recurrent, involuntary, and intrusive memories. Note: Children older than 6 may express this symptom in repetitive play.
   - Recurrent distressing dreams in which the content and/or effect of the dream are related to the traumatic event(s). Note: Children may have frightening dreams without content related to the trauma.
   - Dissociative reactions (e.g., flashback(s) in which the individual feels or acts as if the traumatic event(s) were recurring. Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings). Note: Children may enact the event in play.
   - Intense or prolonged distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
   - Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
C. Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following:

- Avoidance of cues that arouse memories of the event(s).
- Avoidance of activities, places, people, or things that are strongly associated with the traumatic event(s).

D. Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

- Inability to recall an important aspect of the traumatic event(s) typically due to do to dissociative amnesia, not due to head injury, alcohol or drugs.
- Persistent and exaggerated negative cognitions and mood about self, others, the world, or future.
- Anhedonia.
- Persistent inability to experience positive emotions.

E. Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

- Irritability or outbursts of anger.
- Hypervigilance.
- Exaggerated startle response.
- Problems in concentration.
- Sleep disturbance.

F. Duration of the disturbance (in Criteria B, C, D and E) is more than one month.

G. Significant symptom-related distress or functional impairment (e.g., social, occupational).

H. Disturbance is not due to medication, substance use, or other illness.

- Specify if: With dissociative symptoms. In addition to meeting criteria for diagnosis, the individual experiences persistent or recurrent symptoms of either of the following:
  - Depersonalization: Persistent or recurrent experiences of feeling detached from and as if one were an outsider observer of, one’s mental processes or body.
  - Derealization: Persistent or recurrent experiences of unreality of surroundings.
- Specify if: With delayed expression; Full diagnosis is not met until at least 6 months after the trauma(s), although onset of symptoms may occur immediately.
Core Elements of PTSD

- Intrusion
- Numbing
- Hyperarousal/Disregulation
- Avoidance

When combined, it creates an ongoing cycle of activation and numbing.

PTSD for Children 6 Years or Younger (DSM 5)

- Posttraumatic stress disorder is now developmentally sensitive in that diagnostic thresholds have been lowered for children and adolescents.
- Linguistic limitations
- Symptoms often expressed in repetitive play
- May not manifest overt distress (intrusive/unwanted thoughts)
- Drawings may not contain specific traumatic content
- "Learning" about a traumatic event does not have violent or accidental qualifier.
- Still a 3-factor model like DSM IV
  - Intrusion
  - Avoidance
  - Negative alterations in cognitions or mood

Traumatized people simultaneously remember too little and too much.

(van der Kolk, 2014, p. 183)
**Dissociation**

- Dissociation refers to a process, an intrapsychic structure, a psychological defense, a deficit, and a wide array of symptoms (van der Hart, Nijenhuis, & Steele, 2010, p. 2).
- Personality is a "structure comprised of various systems," and so structural dissociation of the personality is "characterized by a lack of cohesion and integration of the personality that manifest itself most clearly in the alternation between and coexistence of the traumatic experience of the traumatic events and avoidance of reminders of the traumatic experiences with a focus on functioning in daily life. It involves a division between action systems for defense, those which "help us in the moment," and also systems, in daily life that help us survive and feel well" (van der Hart, Nijenhuis, & Steele, 2011, p. 4).
- It is assumed that the dissociated parts have complex physically-based memory networks (Knipe, 2015).

- There is a heavy cost to the person in keeping these memories away.
- With dissociated memories, the person reenacts, but doesn't directly remember.
- The goal of treatment is to associate, so that the brain can recognize "that was then, and this is now" (van der Kolk, 2014, p. 183).

**Traumatic Stress**

- "In many regards, PTSD should be considered as an information-processing disorder that interferes with the processing and integration of current life experience. Individuals with this condition become overwhelmed by both the extraordinary overload of information associated with the traumatic memory, which they are then unable to integrate, as well as the lower demand characteristics of the day to day environment. The disruption of memory and concentration and the emotional numbing in PTSD are indicative of broader problems in managing and processing day-to-day stimuli. These findings would support the classification of PTSD as a dissociative disorder, rather than as an anxiety disorder" (p. 20).

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*Footnotes*

1. Dissociation "can denote a process, an intrapsychic structure, a psychological defense, a deficit, and a wide array of symptoms (van der Hart, Nijenhuis, & Steele, 2010, p. 2).
2. Personality is a "structure comprised of various systems," and so structural dissociation of the personality is "characterized by a lack of cohesion and integration of the personality that manifest itself most clearly in the alternation between and coexistence of the traumatic experience of the traumatic events and avoidance of reminders of the traumatic experiences with a focus on functioning in daily life. It involves a division between action systems for defense, those which "help us in the moment," and also systems, in daily life that help us survive and feel well" (van der Hart, Nijenhuis, & Steele, 2011, p. 4).
3. Alternation between Apparently Normal [part of] Personality (ANP) and Emotional [part of] Personality (EP)

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*References*

- van der Hart, Nijenhuis, & Steele, 2010
- van der Hart, Nijenhuis, & Steele, 2011
- van der Kolk, 2014
- van der Kolk, McFarlane & Weisaeth, 2007
Continued...

“Trauma inflicted by intimates, parents, and partners has the most profound long-term consequences. Traumatization within attachment relationships has profoundly different impacts on affect regulation, self-concept, and management of interpersonal relationships than do disasters or motor vehicle accidents” (p. x).

ACES Study


- Those with high levels of trauma and stress, are at statistically significant higher levels of physical illness.

“The body keeps the score: if the memory of trauma is stored in our viscera, in heartbreaking and gut-wrenching emotions, in autoimmune disorders and skeletal/muscular problems, and if mind/brain/visceral communication is the royal road to emotion regulation, this demands a radical shift in our therapeutic assumptions” (van der Kolk, 2014, p.68).
So when we focus on trauma treatment, it makes more sense to focus on experiencing than cognition, as clear thinking is impaired when experiencing the symptoms of trauma.

Basic Principles of Trauma Treatment
(van der Kolk, McFarlane & van der Hart, 2007)

- Stabilization: Overcoming the Fear of Trauma Related Emotions
- Deconditioning of Traumatic Memories and Responses
- Restructuring of Trauma Related Cognitive Schemes: Overcoming the Fear of Life itself
- Reestablishing of Secure Social/Connections and Interpersonal Emotional Experiences
- Accumulation of Restorative Emotional Experiences

Ultimately treatment must address:

- Deconditioning of anxiety
- Changing the ways that clients view themselves and the world by increasing feelings of “personal integrity and control.”

- The trauma can not be undone, but it steals a sense of control from a person. Recovery must focus on reestablishing ownership of self (van der Kolk, 2014).
- Our rational, cognitive brains are able to help us understand why we feel certain ways, but can not make those feelings go away. The more overwhelmed we are, the more likely that our rational brains will be overtaken by our emotions.
How do we deal with the emotion? (van der Kolk, 2014)

1. Deal with hyperarousal
   - Breath work, neurofeedback, yoga, centered movement
   - Areas typically damaged in trauma
2. Mindfulness
3. Relationships
4. Sensory Rhythms
5. Touch
6. Action
   - Stress hormones have a purpose to give us strength and endurance to respond to emergencies

How do we integrate traumatic memories?

- Clients can be helped by working through traumatic memories only if not overwhelmed by them.
- Eye Movement Desensitization and Reprocessing (EMDR)
- Trauma Focused Cognitive Behavioral Therapy (TF-CBT)
- Exposure
  - High drop out in those with history of childhood abuse

"Visiting the past in therapy should be done while people are biologically speaking, firmly rooted in the present and feeling as calm, safe and grounded as possible. Being anchored in the present while revisiting trauma opens the possibility of deeply knowing that the terrible events belong to the past" (van der Kolk, 2014, p. 70).
Therapeutic relationship is foundational to trauma treatment but not sufficient.

- Providing a relational environment of safety
- Relationships are co-regulating
- Ability to repair and earn autonomy
- Instillation of hope
- We can learn not to fear in future relationships.

*This is one of life’s little ironies: Though all emotional healing requires it, listening to pain is difficult—and the greater the pain, the more difficult it is to listen to... Because of the difficulty and power of listening to pain, millions of people spend millions of dollars seeking out the help of professional listeners. In listening closely, there is also a kind of suspension of thought. One listens with the limbic system, the third ear of intuition, as much with the cerebral cortex—emptying oneself to allow another’s store to enter, opening to the energetic movement of emotion, empathically joining with someone else’s experience. This is the secret of all successful therapy regardless of the training or theoretical orientation of the therapist: by a kind of grace, good listening transforms suffering... When a person’s suffering is well listened to in psychotherapy, an alchemical process is initiated. Something that starts out as a desperate but inarticulate anguish or a mysterious, painful sensation in the body begins to cohere as a story. (Greenspan, 2003, p.15).

Just as being listened to helps people heal, listening to oneself is the secret of self-healing... in listening to ourselves, we learn who we are, what our bodies know, the emotional wisdom of our cells... When we listen closely to what hurts, we learn what life is asking of us. We become fluent in the language of the heart. We get the counsel we need (Greenspan, 2003, p.16-15).
Trauma Approaches with an Experiencing Focus

EMDR – Francine Shapiro

- Bilateral stimulation while “noticing” traumatic memories
- Allows quick access to loosely associate memories and contextualizes traumatic memories
- Doesn’t rely on language to heal.
- While there are some similarities to exposure, EMDR focuses on integration.
- There may be some connections to REM/deep sleep and how the brain processes memory while sleeping.

  https://www.youtube.com/watch?v=nylajeG6uFY

Somatic Experiencing – Peter Levine

- Focused on the “freeze” response that frequently leads to stress disorders.
- Focused on completion of self-protecting motor responses.
- Releasing energy to address trauma intrusion
- Helps clients increase tolerance for difficult body sensations and suppressed emotions
- “Pendulation”
  https://traumahealing.org/
Internal Family Systems (Richard Schwartz)

- Based on the idea that all person's have "parts" that have value – subpersonalities – and they are key to our healing.
- Persons with MPO are not different than the general population except that trauma dramatically intensified the divide.
- Some parts of self can become damaging based on trauma.
- The burden of shame enters through trauma.
- Goal is to "unburden" the parts they can transform into their naturally valuable state.
- The part is not the burden.
- Very experiential focus.

https://ifs-institute.com/

Safe & Sound Protocol (Stephen Porges)

- Originator of Polyvagal Theory
- SSP is an auditory intervention to reduce stress and sensitivity and signal safety to the brain.
- Frequently used with children with neurodevelopmental disorders

National Institute for Trauma and Loss in Children/Starr Commonwealth

- https://starr.org/programs/certifications/ctrp-clinical/
- Certified Trauma and Resilience Practitioner (CTRP)
- Sensory focused trauma training for clinicians working with children.
- Focused on aiding children’s bodies respond differently to their traumas.
- Neuroscience of Human Relationships (Louis Cozolino)
- Interpersonal Neurobiology of Play (Theresa Kestly)
- The Haunted Self (Onno van der Hart, Ellert Nijenhuis, & Kathy Steele)
- The Emotional Brain (Joseph LeDoux)
- The Body Keeps the Score (Bessel van der Kolk)
- Getting Past Your Past (Francine Shapiro)
- Healing Through the Dark Emotions (Miriam Greenspan)