

Neurobiology of Affects: Disrupting the Cycle of Trauma

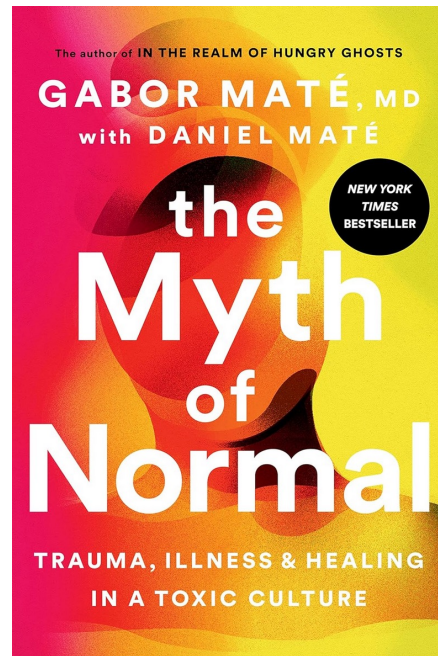
Joseph A. Izzo
Ellen McShane
Margaret Thorsborne



What is Trauma?

Trauma is not what happens to you but
what happens inside you.

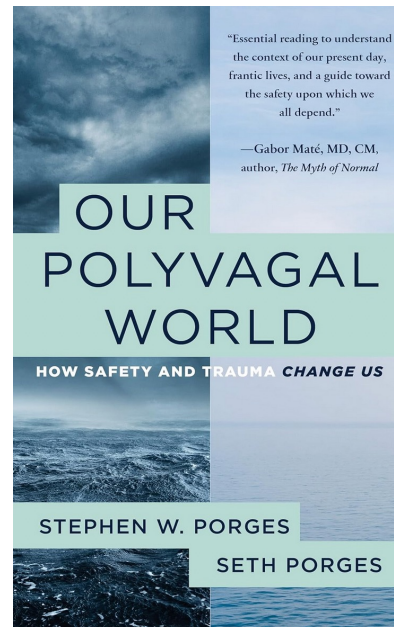
Gabor Maté & Daniel Maté The Myth of Normal: Trauma, Illness & Healing in a Toxic Climate



What is Trauma?

Trauma is a psychological phenomenon-
it is also a physiological one.

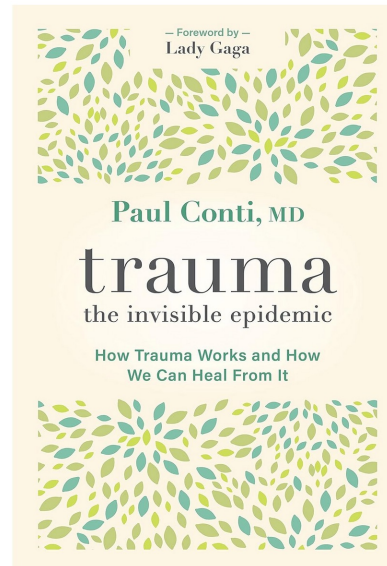
Stephen Porges & Seth Porges: Our Polyvagal World: How Safety and Trauma Change Us



What is Trauma?

Trauma is emotional or physical pain that often goes unseen but changes our brain biology and psychology.

Paul Conti: Trauma the Invisible Epidemic: How Trauma Works and How We Can Heal From it

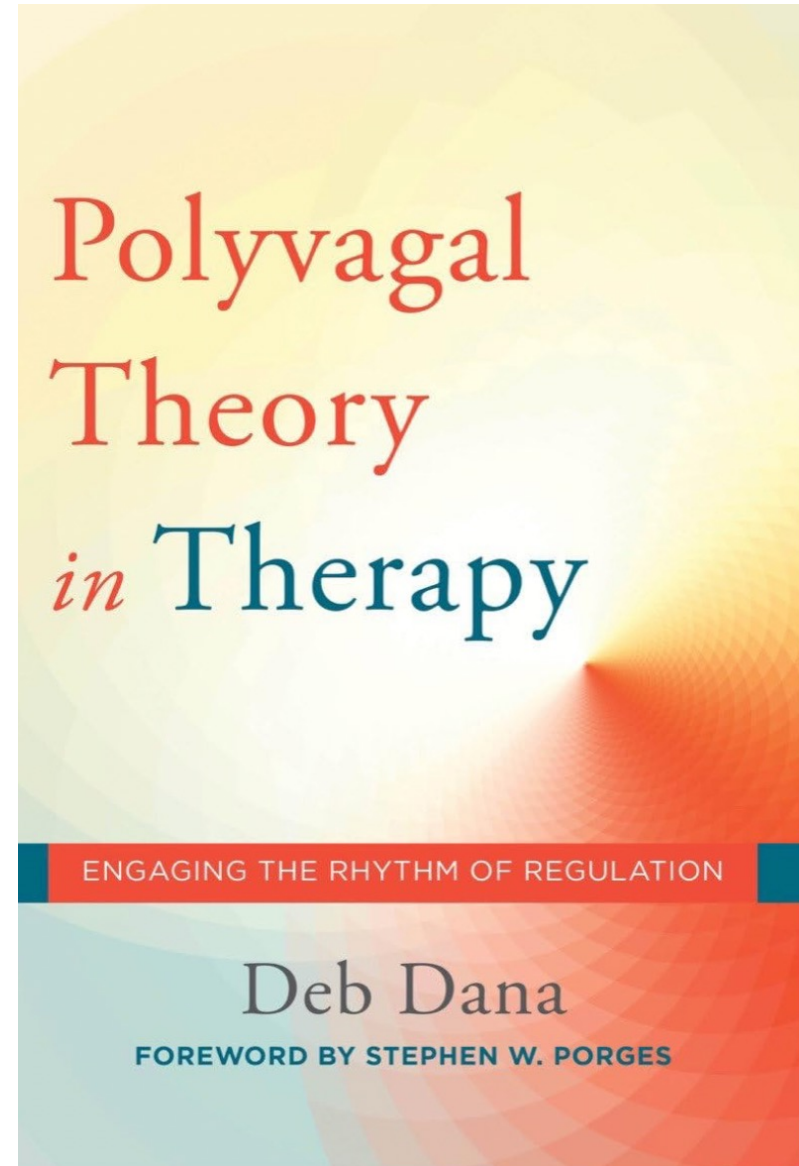


The Neurophysiology of Trauma

- Joe Izzo on

Deb Dana's

- **The Polyvagal Theory in Therapy: Engaging the Rhythm of Regulation**



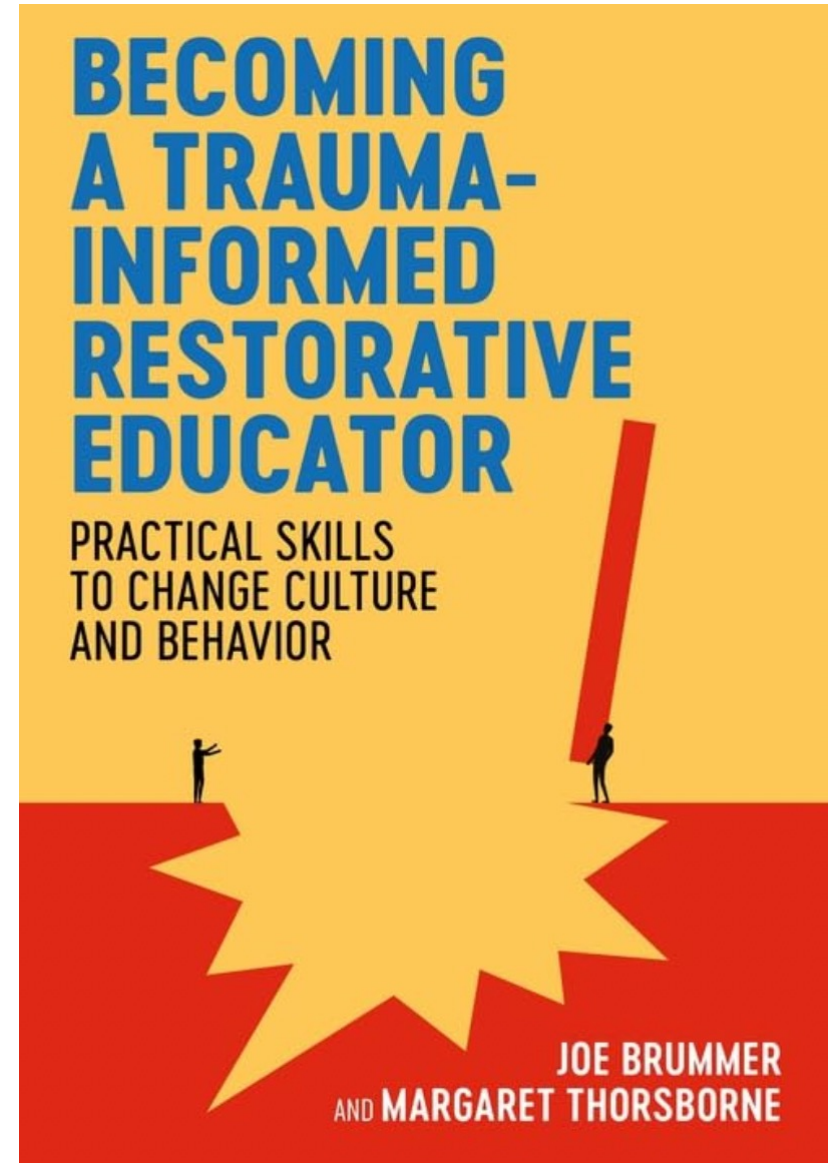
The Neurobiology of Trauma

- Marg Thorsborne on

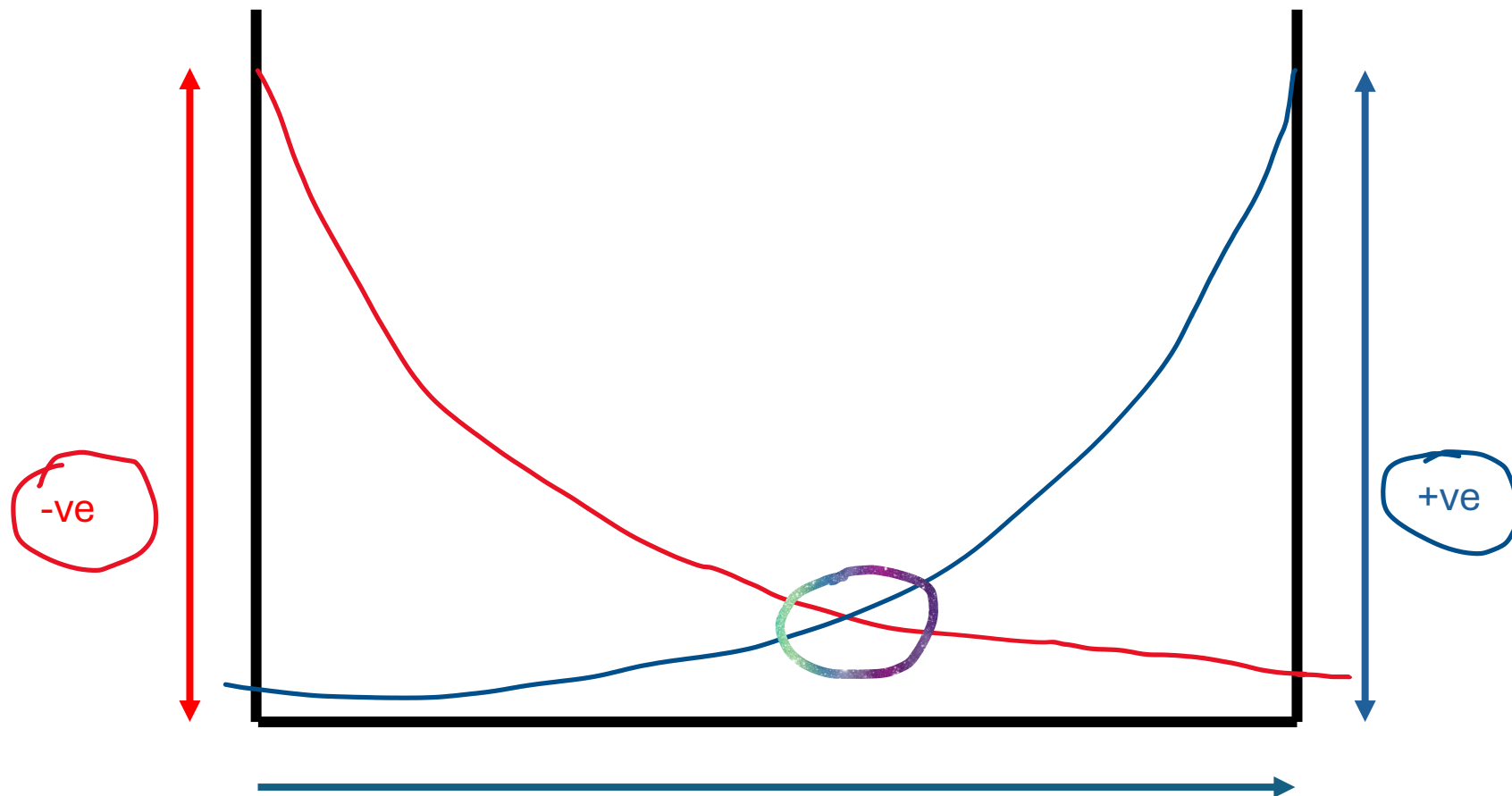
Her book with Joe Brummer

- **Becoming a Trauma-Informed Restorative Educator: Practical Skills to Change Culture and Behavior**

Release date 6/21/24



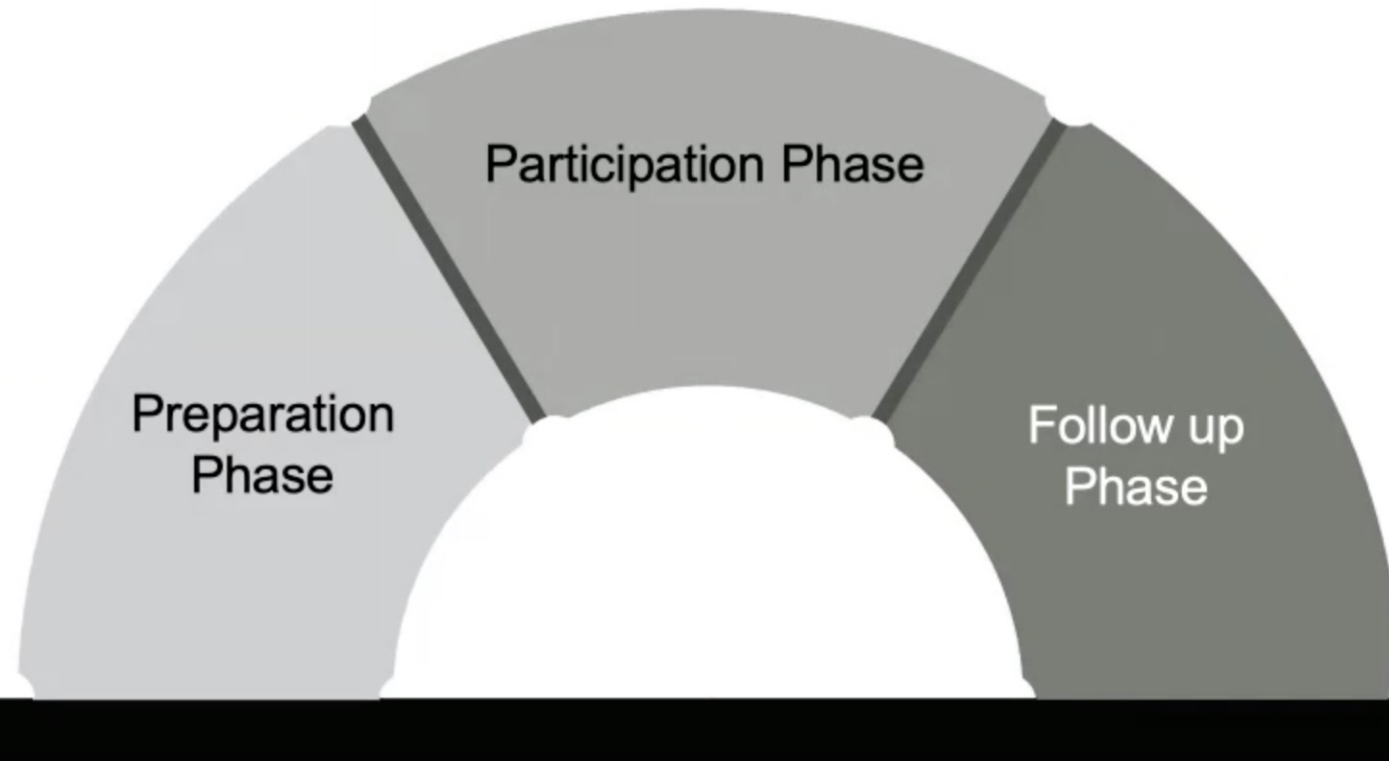
Restorative work
is
transformational



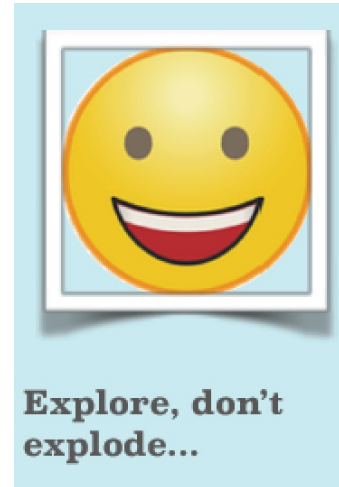
Brain state and social environments

AUTHORITARIAN Vigilance for threat Memory and executive functions hampered Brain state: fluctuating anxiety, distracted, reactive, defensive	AUTHORITATIVE Builds attunement, connections, cause and effect thinking, accountability, reflective, pro-social, trusting Brain state: relaxed alertness, attuned
NEGLECTFUL Negative impact on attention, memory, emotions and behaviour Brain state: distress, hyper-vigilance	PERMISSIVE Connects negative behaviours with positive feelings, reinforcing negative behaviours Brain state: passive, enabled

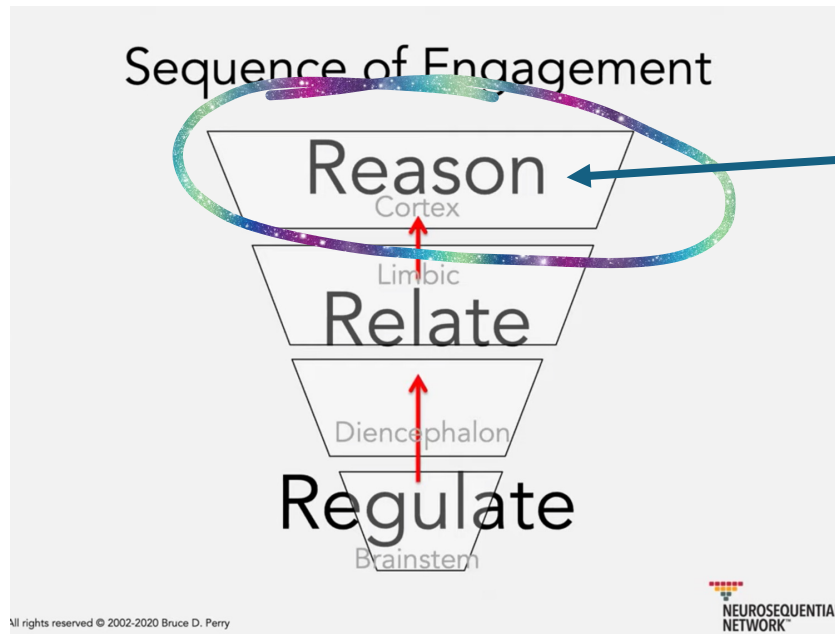
Restorative Archway



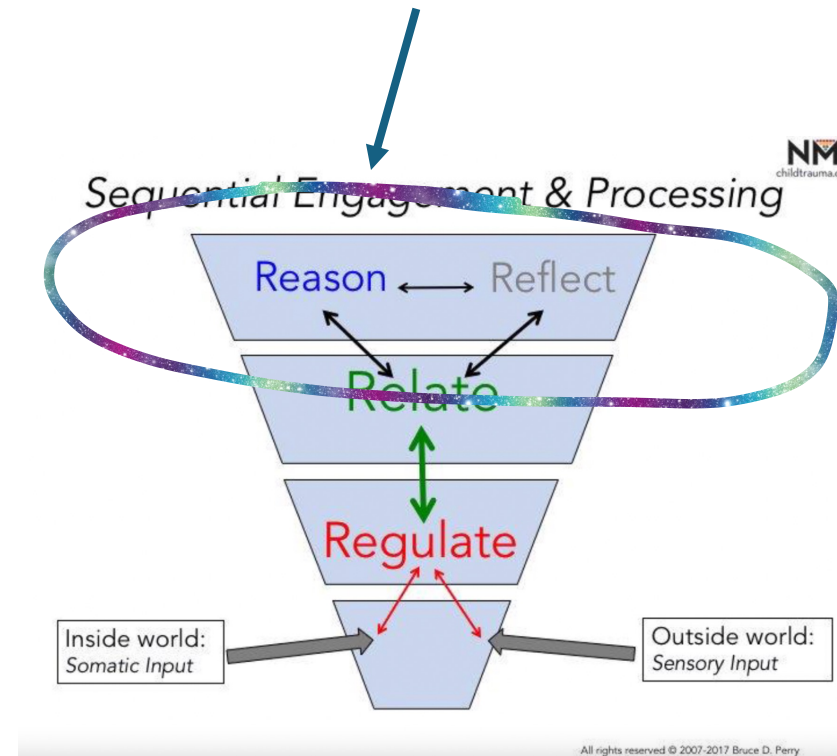
Malta / Jansen 2009



Justin Coulson, 2019



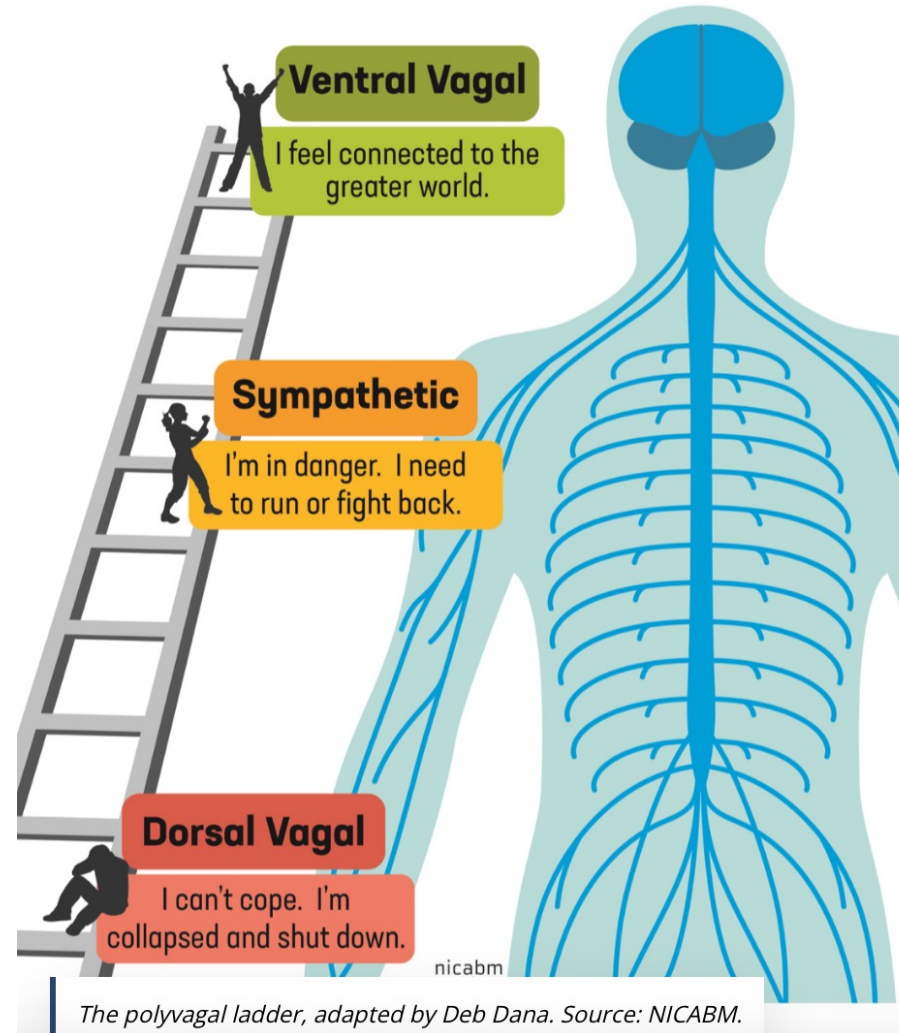
Restorative work



Polyvagal Theory: The Autonomic Ladder

Understanding the Nervous System

Adapted from Deb Dana, LCSW



The polyvagal ladder, adapted by Deb Dana. Source: NICABM.

Safe
Socially connected

Fight
Flight

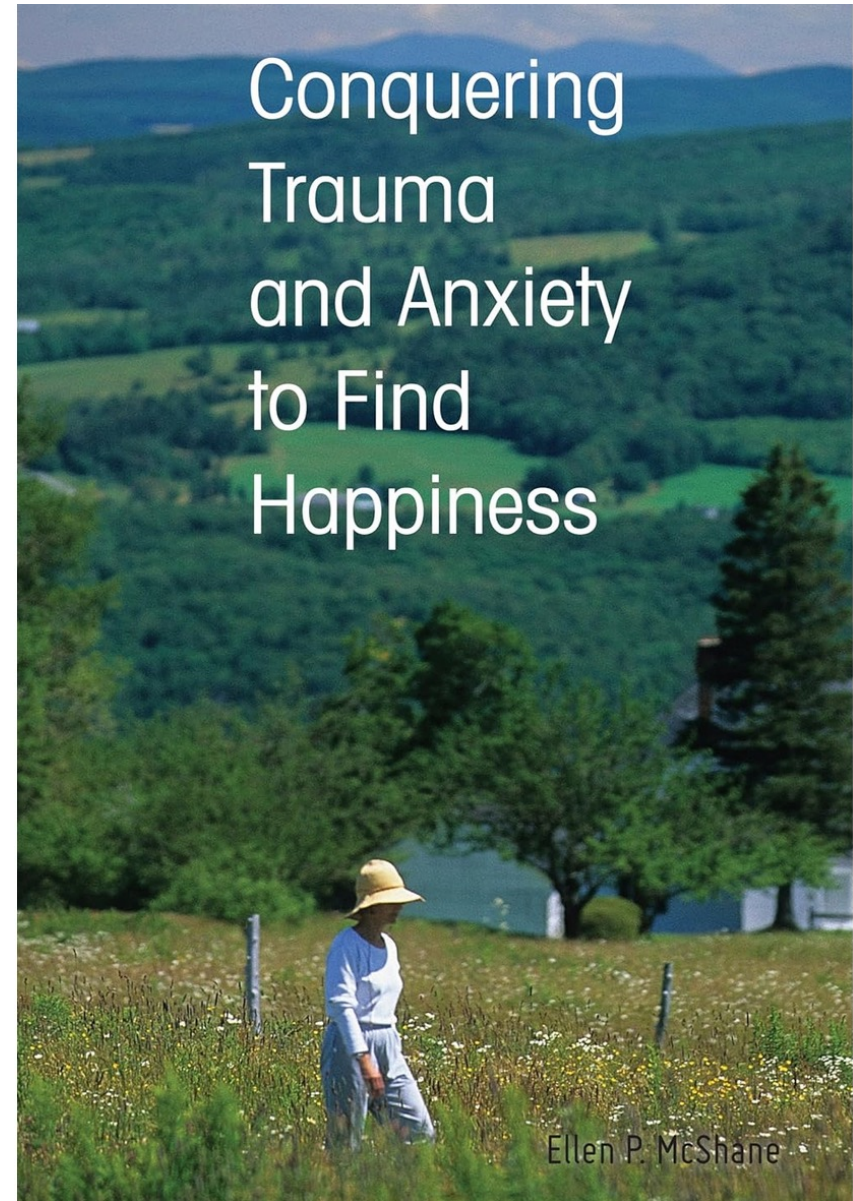
Freeze
Faint
Feign/fawn

Affect Labeling

- Ellen McShane on

Her book

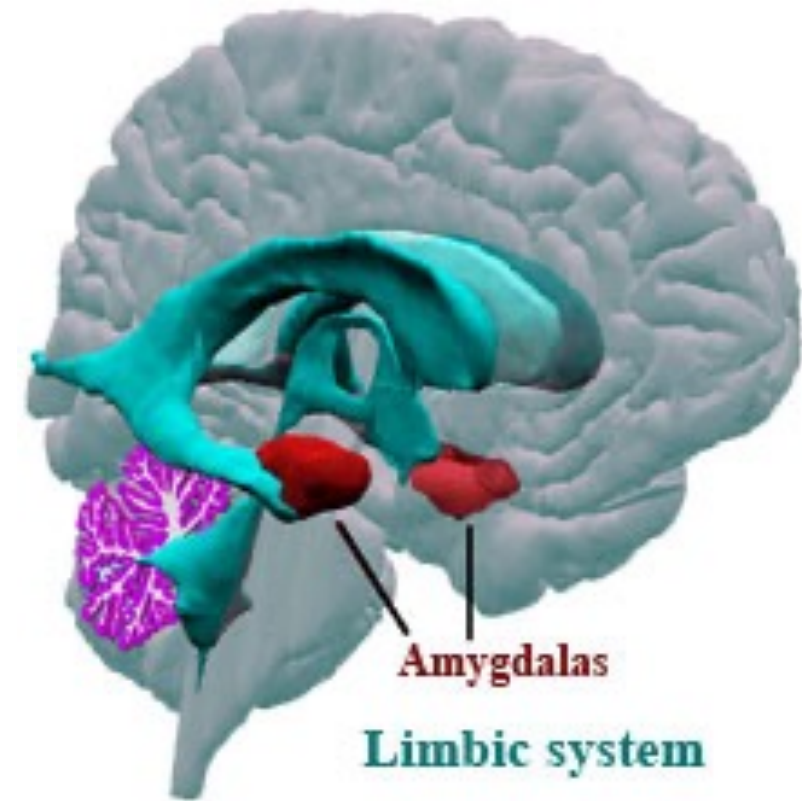
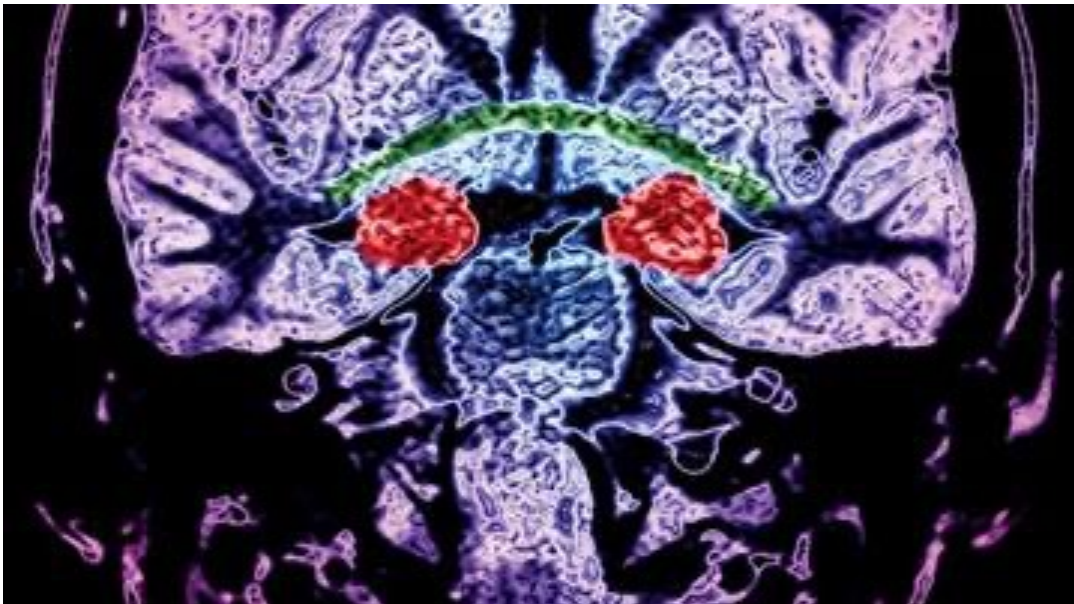
- **Conquering Trauma and Anxiety to Find Happiness**



Affect Labeling

Voicing your Affects Releases the Pressure on the Brain/Amygdala and
Increases the activity in the parts of the Prefrontal Cortex

Putting your Feelings Into Words



<http://www.rebalanceclinic.co.nz/meet-your-brain-the-amygdala>

http://thebrain.mcgill.ca/flash/d/d_04/d_04_cr/d_04_cr_peu/d_04_cr_peu.html/

<http://oglobo.globo.com/sociedade/saude/cerebro-humano-fica-mais-lento-partir-dos-24-anos-aponta-estudo-12213203>

The Power of the Words

“Language is the lens of thought through which affects can be brought to a magnifying, searing, white-heat focus.”

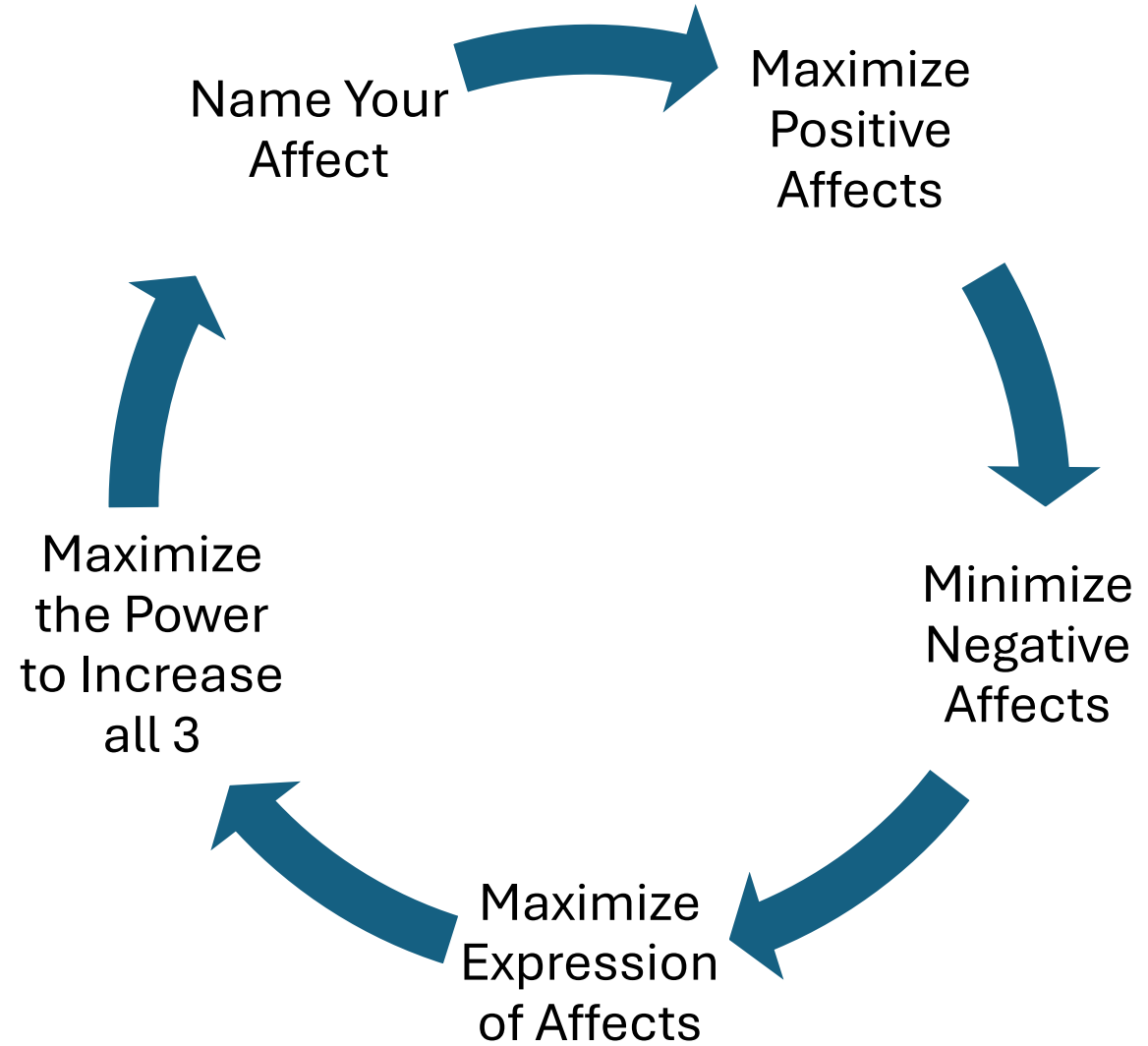
Affect Imagery Consciousness, S. Tomkins, p. 325



Affect Script Theory's Central Blueprint for Motivation

1. Maximize Positive Affects
2. Minimize Negative Affects
3. Maximize the expression of all affects (minimize affect inhibition)
4. Maximize the ability and power to achieve all 3 rules above

Central Blueprint for Motivation



Suggested Readings



Barrett, L. F. (2017). *How emotions are made: The secret life of the brain*. HarperCollins Publishers.

Brummer, J. & Thorsborne, M. (Release date: June 21, 2024) *Becoming a Trauma-informed Restorative Educator: Practical Skills to Change Culture and Behavior*. Jessica Kingsley Publisher

Conti, P. (2021). *Trauma: The invisible epidemic: How trauma works and how we can heal from it*. Sounds True.

Dana, Deb. (2018). *The Polyvagal Theory in Therapy: Engaging the Rhythm of Regulation*. W.W. Norton & Company.

Gibson, L. C. (2015). *Adult children of emotionally immature parents: How to heal from distant, rejecting, or self-involved parents*. New Harbinger Publications, Inc.

Suggested Readings



Kelly, V.C., & Thorsborne, M. (2014). *Psychology of Emotion in Restorative Practice: How Affect Script Psychology Explains How and Why Restorative Practice Works*. Jessica Kingsley Publishers.

Maté, G., & Maté, D. (2022). *The Myth of Normal: Trauma, Illness, and Healing in a Toxic Culture*. Penguin Random House LLC.

Lieberman, M.D., Eisenberger, N.I., Crockett, M.J., Tom, S.M., Pfeifer, J.H., and Way, B. M. (2007). Putting feelings into words: Affect labeling disrupts amygdala activity in response to affective stimuli. *Psychological Science*, 18, 421-428.

McShane, E. P. (2020). *Conquering trauma and anxiety to find happiness*. Peter Lang.

Perry, B. D., & Winfrey, O. (2021). *What happened to you?: Conversations on trauma, resilience, and healing*. Harpo, Inc.

Suggested Readings

Perry, B. D., & Szalavitz, M. (2017). *The boy who was raised as a dog*. Basic Books.

Proges, S.W. (2011). *The Polyvagal theory: Neurophysiological foundations of emotions, attachment, communication, and self-regulation*. W.W. Norton & Company.

Porges, S. W., & Porges, S. (2023). *Our polyvagal world: How safety and trauma change us*. W.W. Norton & Company.

Van Der Kolk, B. (2014). *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. Penguin Books.