Polyvagal Theory

Most importantly, the polyvagal theory teaches you to engage your social nervous system to consciously inhibit your defensive system. This allows you to finally find freedom from trauma symptoms and experience a deeply nourishing sense of safety here and now."

- Dr. Arielle Schwartz

# The Principles of Polyvagal Theory







HIERARCHY

NEUROCEPTION

**CO-REGULATION** 

Polyvagal Theory looks at the Autonomic Nervous System, or ANS, as the foundation of our lived experience.

Originally, we viewed the body's reaction to stress as binary: either we are in a sympathetic or parasympathetic state. Polyvagal Theory shows that there are multiple states of the nervous system in response to real or perceived stress.

Simply put, Polyvagal Theory helps us understand how we move through and cope with the world.

# **Autonomic Nervous System**

# Parasympathetic System (Rest/Digest)

# Ventral Vagal System (Social Engagement System)

- Travels from brain to nerves in the neck, throat, eyes and ears
- Feelings associated: calm, connected, safe, present, joy, curiosity, mindful, compassion

## **Dorsal Vagal System**

## (Immobilisation)

- Travels from brain to heart, diaphragm, stomach
- Feelings associated: dissociation, numbness, depression, helplessness, shame, shut-down, hopelessness, trapped

# Sympathetic Nervous System (Fight/Flight or Mobilisation)

 Feelings associated: panic, fear, worry, anxiety, rage, anger, irritation, <sup>c</sup>rustration

# Principle #1: Hierarchy

erarchy, or the Polyvagal Theory ladder, is the first organizing principle. Hierarch explains the different physiological states the vagus nerve can lead us to, depending on our feelings of safety, or danger.



people, experienced through regulation of the nervous system. This is when we're in the now, feeling safe and secure, in "the happy place".

#### SYMPATHETIC OR MOBILIZATION

This is the need to take action or rid yourself of the perceived threat, best known as fight or flight response. *Chaos, tension, anxiety, and other hyperactive states are common to SA.* 

#### **DORSAL VAGAL OR DISCONNECTION & COLLAPSE**

A very primal part of the human experience, DVS is a place of immobilization. Feelings of terror take over. State of collapse Freeze response. Lethargy, despondency, hopelessness. Heavy, sedated emotions.

# Principle #2: Neuroception

Neural circuits are a group of neurons interconnected by synapses. The groups' main role is to execute specific functions, but only when activated.

Neuroception is how neural circuits decide in the moment if a person or situation is safe, dangerous or a major threat. Neuroception listens to three streams of information: Inside (the body), Outside (the environment), Between (nervous systems).





BETWEEN (NERVOUS SYSTEMS)

# Principle #3: Co-regulation

Our nervous systems long to be connected to other nervous systems. Polyvagal Theory helps us work with the nervous system in order to develop safe connections with other people. Essentially, co-regulation is the sending and receiving of safety signals.

Co-regulation means the connected nervous systems support and nourish each other, continuing the ongoing feeling of safety. This is why Polyvagal Theory is also known as the science of feeling safe.



Co-regulation begins before we are even born. Co-regulation happens as a newborn relaxes when it hears its mothers voice or sees her smiling face. A toddler is looking for co-regulation when they fall and looks to their parent to know how to react. Head Position

Softness of Gaze **Co-Regulation** 

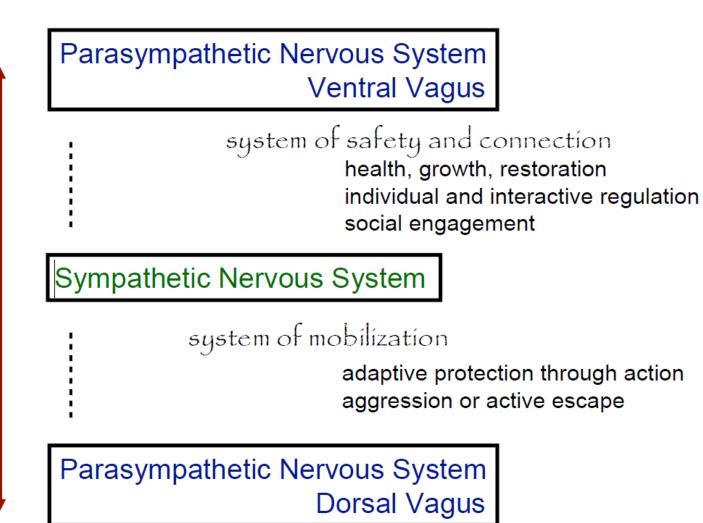
Tone of Voice

Body

Position

Promoting Social Engagement through social cues and active skills

Gentle Touch\* Not for everyone Facial Expressivity



system of immobilization

adaptive protection through "disappearing" conservation of energy and resources

and the Polyvagal Ladder

# Principle #1: Hierarchy

Hierarchy, or the Polyvagal Theory ladder, is the first organizing principle. Hierarchy explains the different physiological states the vagus nerve can lead us to, depending on our feelings of safety, or danger.

VENTRAL VAGAL OR SOCIAL CONNECTION

The state in which we can connect and relate to other people, experienced through regulation of the nervous system. This is when we're in the now, feeling safe and secure, in "the happy place".

#### SYMPATHETIC OR MOBILIZATION

This is the need to take action or rid yourself of the perceived threat, best known as fight or flight response. Chaos, tension, anxiety, and other hyperactive states are common to SA.

#### DORSAL VAGAL OR DISCONNECTION & COLLAPSE

A very primal part of the human experience, DVS is a place of immobilization. Feelings of terror take over. State of collapse. Freeze response. Lethargy, despondency, hopelessness. Heavy, sedated emotions.

#### Hyperarousal: Fight/Flight/Freeze/Attach

Mobilization and activation Sympathetic nervous system response

- Racing thoughts
- Intrusive memories
- Nightmares

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- Anger/irritability
- Obsessive thinking
- Panic attacks

- Emotional overwhelm
- Impulsivity
- Hypervigilance
- Reactive
- Racing and/or obsessive thoughts

#### Window of Tolerance

#### **Rest and Digest** Ventral Vagal/Social Engagement System

- Calm
- Grounded

Feel safe and connected

- Can tolerate thoughts and feelings
- At ease
- Can think and feel simultaneously

#### Hypoarousal: Submit/Collapse

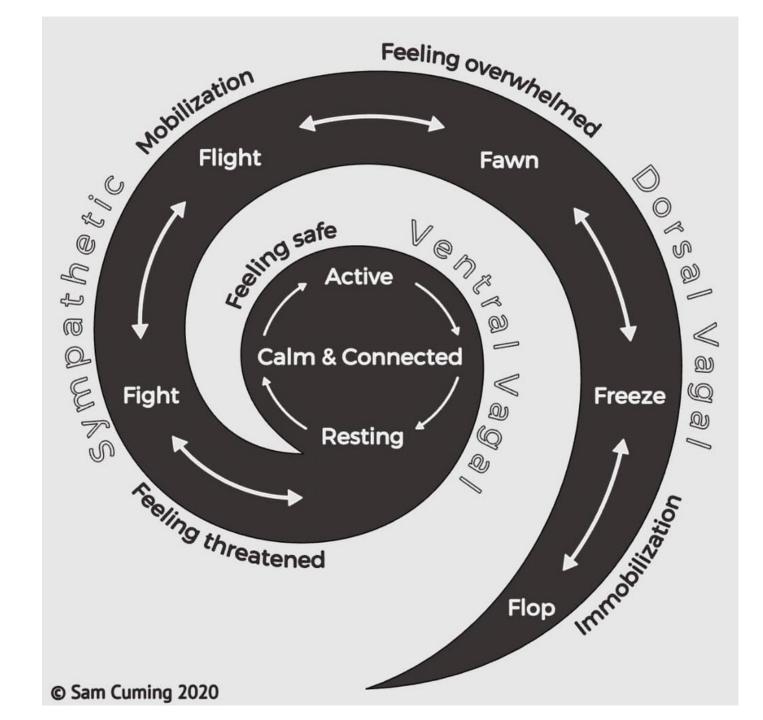
System of immobilization

#### **Dorsal** Vagal

- depression/wanting Chronic to be dead
- Numb
- Flat
- Disconnected
- Dissociated/fuzzy/not present
- Wanting to disappear

- No feelings
- No energy
- Disconnected

- Shut down Ashamed
- Unable to say "no"



You can use the polyvagal theory to help you heal from C-PTSD using the following important steps:

**Self-Compassion:** Develop self-compassion for your symptoms. Recognize the physiological, somatic basis of symptoms and why you cannot simply think your way out of your trauma reactions.

**Develop Somatic Awareness:** Learn to mindfully track subtle changes in your body sensations and heart rate. Identify your own personal signs of stress. This will help you respond right away before the stress starts to feel overwhelming or out of your control. We call this staying in the window of tolerance.

**Practice Attentional Control:** Practice focusing your attention on specific cues in your environment that remind you that you are safe now. Look around your room. Notice the light filtering through a window, a piece of art on the wall, or how it feels to be reading this article. You can also listen to a favorite piece of music, hold an object in your hand, or notice the calming scent of an essential oil.

Remember, you are myelinating the neural pathways of your social nervous system every time you feel safe, connected to another person, or compassionate toward yourself. Each time you practice strengthening your social nervous system it will become stronger. You can change your physiology one day at a time. And overtime it will become easier to connect to positive states and override defensive symptoms associated with post traumatic stress.

## -Dr. Arielle Schwartz

• https://drarielleschwartz.com/the-polyvagal-theory-and-healing-complex-ptsd-dr-arielle-schwartz/#.Ys3BPHbMJaQ

### TURNING ON YOUR OFF SWITCH

Introduction to polyvagal

The vagus nerve is the longest cranial nerve in the body. Vagus means wandering and it touches most of the organs in the body. It affects digestion, heart rate, mood, and the immune system.

When we are in a ventral vagal state of regulation, our body communicates safety and connection with others. It facilitates a calm state and one in which we can engage with the world around us. 80% of information flows from our body to our brain, only 20% of information flows from the brain to the body!

## The 5 P's: Crucial keys to engaging the parasympathetic nervous system.

- Perspective. See if you can be willing to allow yourself to be a host of your experience. Welcome your experience, in a nonjudgmental, nonreactive way. Try saying gently to yourself "this body welcomes relaxation;" or "this body is receptive to relaxation."
- 2. <u>Place</u>: Your environment matters! Set yourself up well so that you are in a place where there are minimal distractions, and you will not be triggered into having a physical response. Look for an opportunity to practice in a place that is away from distractions. It may also feel good to have somewhat dim lighting so that the optic nerve is not supercharged. If it is triggering for you to be in dim light, this is not crucial.

- 3. <u>Position</u>. Practice on the ground in a slightly inverted position. We want our hearts to be higher than our heads, even if just slightly. This can often be achieved by resting in a position where your legs are up to the wall, or lying down with your feet slightly elevated, or bending the knees resting your feet on the floor with your pelvis on a pillow. Inversions trigger the baroreceptor reflex. Our bodies are highly sensitive to blood traveling to our brain. When we are in an inverted position, our body senses this this in order to regulate how much blood is allowed to the brain; in order to maintain homeostasis our heart rate and our breathing rate are slowed.
- 4. <u>Pace of breath</u>: We can continue to facilitate this relaxation response by extending our exhalations at a rate that is slightly longer than our inhalations. You might even try sighing or humming on your exhalation. One way to induce a sighing response is to inhale, pause, inhale, pause and then allow yourself to have a long soft exhalation.
- 5. <u>Pressure</u>: Pressure helps facilitate relaxation. Consider using a weighted blanket, a sandbag, a bag of rice, a pillow, an eye pillow-- anything that feels good. You could try placing this across your upper thighs, your chest, an eye pillow over your eyes, or giving yourself a hug. Experiment with what feels right to your nervous system and in your body.

# The following simple activities can encourage limbic calming:

- Take 5 minutes in the morning and evening to rock back and forth, or side to side, just noticing and relaxing the body.
- Find music or tones of music, with or without words, that bring you into a state of calmness.
- Practice deep breathing in sequences of three. For example, breathe, breathe, breathe. Rest. Breathe, breathe, breathe.
  Rest....
- Participate in some form of exercise for 12-15 minutes per day to increase serotonin and dopamine.
- Participate in 5-10 minutes per day of prayer or meditation, as the spiritual center of the brain is an area that is able to influence and calm the deeper regions of the brain.

Sources:

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

• Farrell, Tracey. https://www.facebook.com/hiddentreasurewithtraceyfarrell/

• Miller, Jill. <u>www.tuneupfitness.com</u>

• Porges, S. W. (2009) The Polyvagal Theory: New insights into adaptive reactions of the autonomic nervous system. Cleveland Clinic Journal of Medicine , 76 (4), 86 89. https://doi.org/10.3949/ccjm.76.s2.17

• Porges, S. W., & Dana, D. (2018). Clinical Applications of the Polyvagal Theory: The Emergence of Polyvagal Informed Therapies . W.W. Norton & Company Ltd.

Unyte/ILS Integrated Listening System. www.integratedlistening.com