The Science of Safety

Connection of Mind, Body and Heart

Polyvagal theory, Mindful Movement and conscious breathing

mind
body

and soul

By

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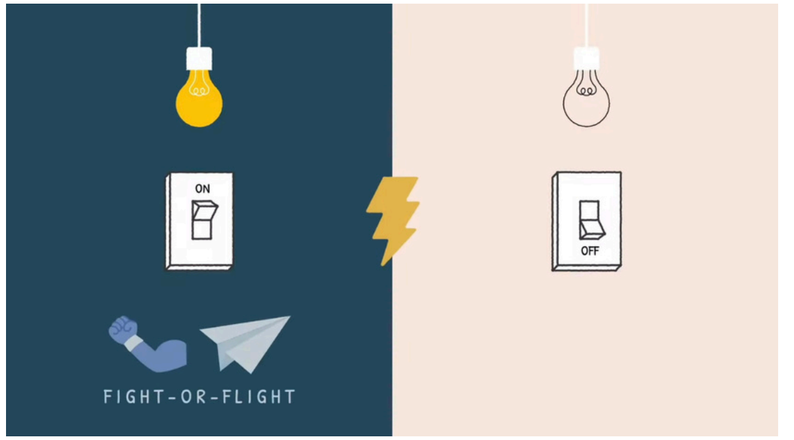
Connection

Humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to ourselves. All things are bound. All things connect.”

~ Chief Seattle ~



What is Polyvagal Theory?

(Poly - “many + vagal “nerve”)

Polyvagal Theory developed by Stephen Porges reshaped our understanding of the human nervous system and the body's reponse to threat and social interactions.

Before this theory, the nervous system was thought to be like a light switch with the body’s stress response being in an on or off state.

According to this perspective, threat causes the autonomic nervous system to activate a fight or flight response and once the threat is gone, we return to feeling safe and calm.

Three States of the Polyvagal System

Ventral Vagal Social Engagement

- According to Dr Porges, human responses to stress are too varied to be explained by a binary model. Instead, he proposed a three part hierarchy like a ladder.
- Evolved 200 million years ago.

- At the top of the ladder is Ventral Vagal social engagement. This is a state of safety in which we can emotionally relate and connect to others. In this state we can feel more open, peaceful and curious.

Sympathetic Fight or Flight

Moving down one rung and we get to sympathetic activation. This is a defensive state in which the body mobilises us for fight or flight in order to quickly dispatch threat.

Evolved around 400 million years ago

- How does this look and feel?
- heart beats faster
- Digestion slows
- breathing gets fast and shallow
- muscles tense
- stress hormones flood the body

Dorsal Vagal Shutdown/Freeze

At the bottom of the ladder is dorsal vagal shutdown. When our nervous system is intensely activated and we still can't dispatch the threat, a protective part of the nervous system shuts down or freezes like a turtle withdrawing into it's shell.

Evolved 500 million years ago. (Oldest pathway)

- How does this look and feel?
- flop to the floor
- curl up in a ball
- heart rate, blood pressure and facial expressions decrease
- difficulty thinking and speaking clearly
- Feel numb, dizzy or disconnected

The Vagus Nerve

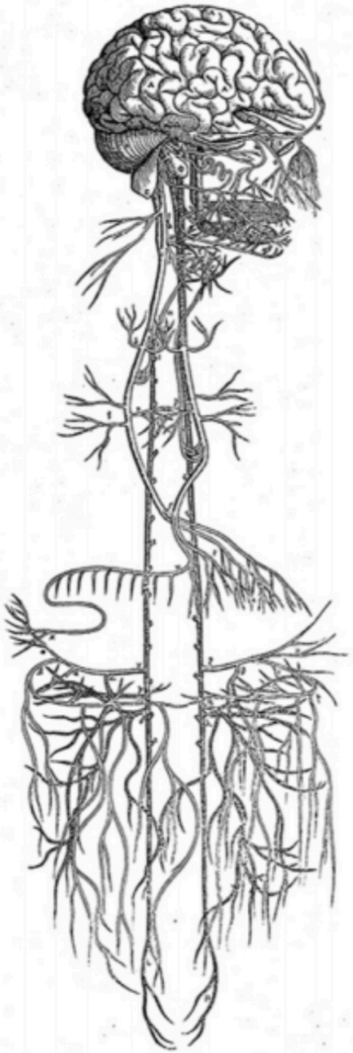
In Latin, vagus means wandering. It wanders from the brainstem throughout the body regulating many bodily functions including heart rate, breathing, digestion and immune function.

It travels all throughout the body in two directions.

It moves downward from the brain through the lungs, heart stomach and diaphragm and upwards from the diaphragm to connect with the nerve fibres in the neck, throat, ears and eyes.

This is the central component of our parasympathetic nervous system divided into dorsal vagus and ventral vagus.

The gut has been called our “second brain”.



Fascia and the Vagus Nerve

Fascia is the connective tissue that extends into every structure and system of your body.

It literally joins every single part of the physical inner world together and when stressed it tightens up.

Everything that happens to us from the time we are conceived is recorded within our fascial network.

The vagus nerve plays a key role in communicating changes in fascia to your brain.

Neuroception

Neuroception is best thought of as a kind of “listening” that the nervous system engages in beneath the level of conscious awareness.

Depending on how our nervous system interprets a situation determines which pathway comes online.

According to Stephen Porges, “Neuroception explains why a baby coos at a caregiver but cries at a stranger, or why a toddler enjoys a parent’s embrace but views a hug from a stranger as an assault”

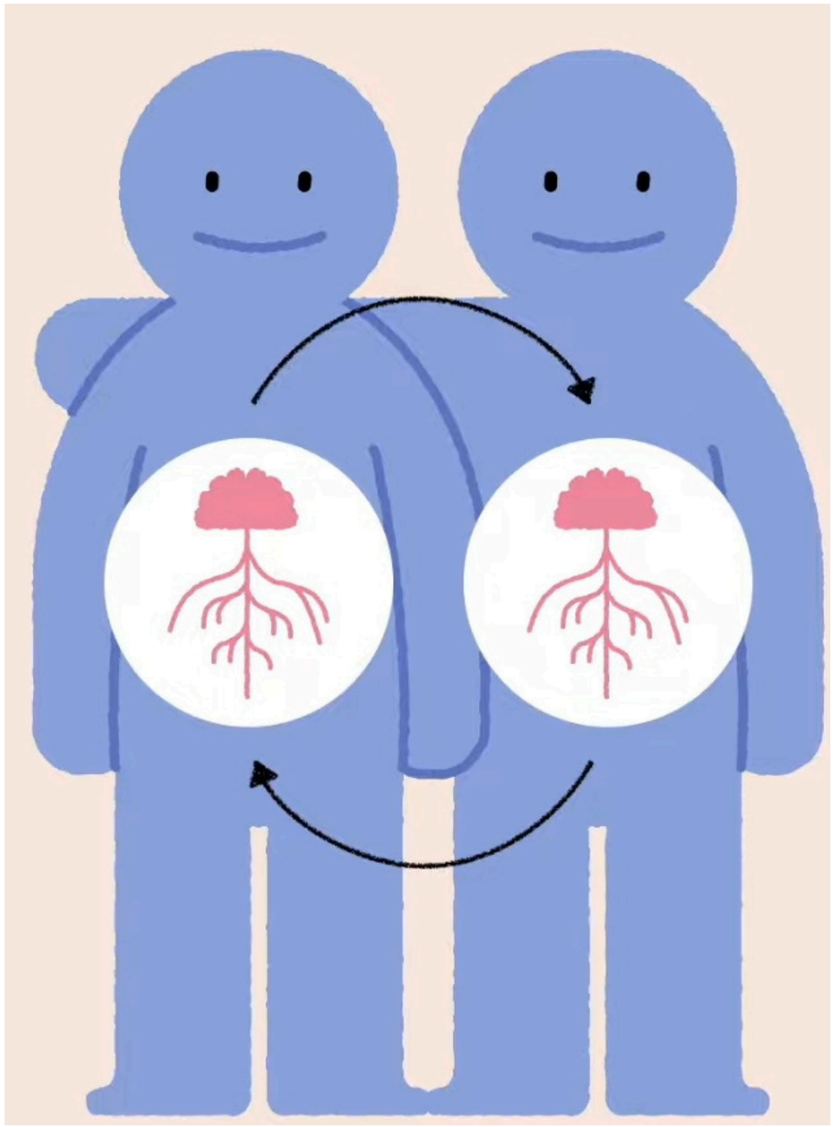
Co-regulation

The autonomic nervous system doesn't work in isolation and is regulated through connection with other nervous systems.

These nervous systems influence and support each other through the mutual sending and receiving of signals for safety.

Through co-regulation emotional and physiological states such as heart rate and breathing become synchronised.

When we feel safe and supported by others, our autonomic nervous systems can manage stress and emotional responses better.



Co-regulation

Co-regulation begins in the womb when the unborn baby hears it’s mother’s voice which becomes a comforting sound.

As an infant they associate this voice with other comforting cues such as a parent’s smile and as a toddler they learn to seek co-regulation from their parent when they feel distressed.

Even when we learn to self-regulate, we continue to seek co-regulation so that we can feel safe, calm and connected to others.

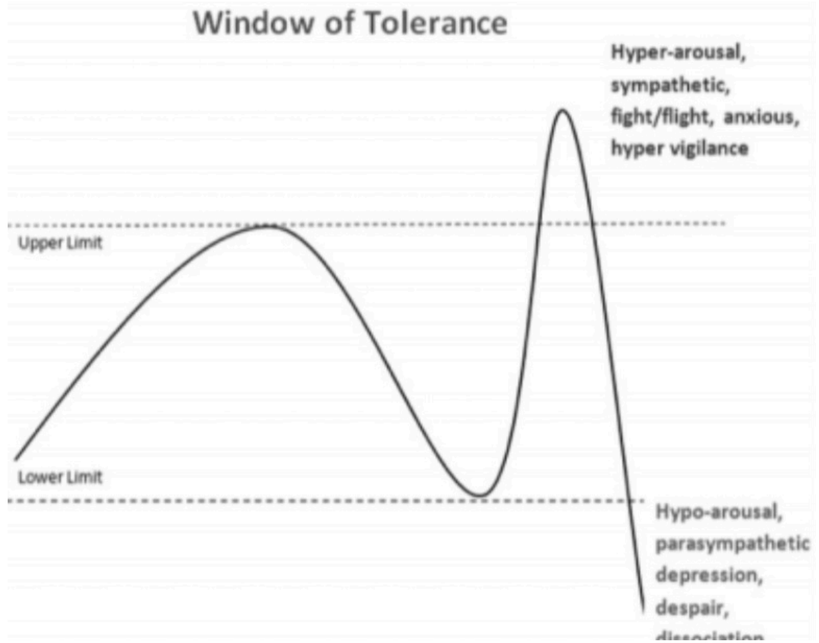
Co-regulation and Trauma

Co-regulation can be difficult for those who have experienced chronic stress or trauma as they will find it harder to establish a sense of safety.

Faulty neuroception, that is the inability to accurately assess whether a situation is safe or dangerous can cause us to become hardwired to experience stress, threat and anxiety even when we’re safe.

We can become locked in a protective fight or flight or shutdown state unable to connect with others.

Widen your window!



There is no wrong or bad nervous system state.

Each state of your nervous system provides access to a set of emotions and sensations.

Feeling our “difficult” emotions such as shame, sadness and fear increases access to joy and happiness.

Learn to play in the whole range of self. Explore all the octaves. Embrace all of the keys, tones, and rhythms of who you truly are.

Triggers vs Glimmers?!

We know about triggers but what about Glimmers?

Deb Dana, a clinician and author specialising in Polyvagal theory coined this term.

Glimmers are small micro-moments of peace or joy.

Comforting words from a friend, stroking a pet, the sun on your face, listening to a song, laughter of a child, seeing a rainbow, smell of cut grass, perfect cup of coffee, gazing at the stars.

Let’s get moving and tone that Vagus nerve!

We can do exercises that activate the vagus nerve.

It’s possible to tone the vagus nerve so we can cope better with stress and return to a ventral vagal state faster.

Resources:
www.drarielleschwartz.com
Stephenporges.com
Deb Dana rhythmofregulation.com