Calm the Body and Grow the Heart: Stephen Porges on Polyvagal Theory

I recently interviewed Stephen Porges on <u>Talk Time</u>. He's a professor of psychiatry who runs a lab at UNC and formerly directed the Brain Body Center at the University of Illinois, Chicago. Porges is studying technologies clinicians will love, including measuring vagal regulation from a distance, or the heartbeat by video.

As Porges pointed out, we're often intuitively aware of the emotional states of our clients and our own body's response to threat. His research provides the physiological explanation.

## THE POLYVAGAL THEORY: SOCIAL SAFETY AND SHUTTING DOWN

The large vagus nerve, part of the parasympathetic nervous system, uses an old dorsal branch to regulate organs below the diaphragm. Its newer update, in evolutionary terms, is the ventral branch that controls the muscles of the heart, lungs, and face.

It's this newer feature that lets us interact socially to determine safety in our environment. We analyze vocal intonations, the muscles around the eyes, and reciprocity during listening. Our ears literally open up when we're in a heart-felt place and close when we're under stress (causing us to miss consonants on the ends of words), and the prosody in our voices conveys our emotional intentions.

When these newer fight or flee defense strategies don't keep us safe; when there's a history of severe trauma, the vagus nerve kicks back to our old system, one the body doesn't utilize easily or recover from easily: shutting down, immobilization, disassociation. Much like a mouse going limp in the jaws of a cat, numbing before certain death. This vegal kickback is considered a mis-regulation, and its repeated use can cause problems in the pelvic floor and gut, as well as contribute to IBS and fibromyalgia, says Porges.

## THE BODY HAS SOME BASIC EXPECTATIONS

"The two worst things for a mammal are isolation and restraint," says Porges.

Physiologically, our bodies evolved to expect co-regulation and reciprocity from others. The absence of danger in an environment doesn't make people feel safe. It's receiving cues from others that triggers our sense of safety. Having a strong social engagement system, that includes lots of safety cues, is how we grow and develop and acquire resilience.

That's why Porges says social interaction is a *neural exercise*. It's why he says educational institutions have it completely wrong when they stop children from playing and remove recesses to make time for cognitive skill building. To emotionally regulate and learn when we're challenged requires reciprocity, or co-regulation, and interaction. We need neural exercise for the vagus nerve to relax our vigilant states and let us sit still and process information.

When the nervous system feels safe, people have the ability to be more creative and bold.

## BEING WITNESSED AND HEARD CALMS THE BODY

Porges says there's a hierarchy of calming, and it starts with the ears during co-regulation with another person.

When we hear prosodic words (warm and melodic intonations), the muscles in the ears relax, then the muscles in the eyes and face. Our-breath deepens, the heart calms, and the sympathetic defense system down-regulates. It's totally predictable, Porges says.

Anyone under stress can return to a secure base, have engagement and reciprocity, be regulated, and develop the boldness required to take risks and learn and grow. Some of Porges' favorite techniques involve the out-breath and the ear, such as pranayama yoga, singing together, or playing a wind instrument.

## CLINICIANS CALM THE VAGAL SYSTEM WITH ATTACHMENT THEORY

As clinicians we see the development of well-being when we use attachment theory and a person's partner to bring someone out of the danger zone and into safety. We slow things down. *You're on your guard; it's okay—I see you. You're safe. You're important. I hear you.* 

Stephen Porges' work has been so important for clinicians to understand the origins of physiological responses. When we honor who we are and how our nervous systems are set up, it allows healing and resilience development. Warm social interaction--neural exercise—creates receptivity, resourcefulness, and resilience.

Let's change the way we interact as a society and make the world a safer place.