Polyvagal Theory: Understanding Your Nervous System

Client Education & Self-Reflection | Encouraging Hand Trauma Counseling

What is Polyvagal Theory?

Developed by Stephen Porges, Polyvagal Theory is a framework for understanding how the autonomic nervous system may respond to cues of safety and threat. Therapists sometimes use its language to help clients recognize patterns of connection, activation, and withdrawal. It is a model—not a diagnosis or a complete explanation of trauma.

The autonomic nervous system

Your autonomic nervous system helps regulate heart rate, breathing, digestion, and other automatic functions. Its sympathetic and parasympathetic branches work together dynamically. Stress responses are often protective and can change with context, health, relationships, and past experiences.

Three states commonly described in polyvagal-informed therapy

1. Ventral vagal: Connection and engagement. Often described as feeling sufficiently safe to connect, think clearly, and respond flexibly. You might notice a steadier breath, curiosity, or ease with others. Being in this state does not mean feeling happy all the time.

2. Sympathetic: Mobilization. The body prepares for action when a challenge or threat is perceived. You might notice a racing heart, tense muscles, restlessness, anxiety, anger, or an urge to escape. Activation can also help us meet ordinary demands.

3. Dorsal vagal: Shutdown or withdrawal. The model uses this term for low-energy protective responses such as numbness, disconnection, heaviness, or collapse. These experiences are real, but attributing them specifically to one branch of the vagus nerve is not firmly established.

People may experience mixed states or move between them; these are not rigid categories or a required sequence.

Neuroception and co-regulation

Neuroception is the theory's term for rapid, often unconscious evaluation of safety or danger. A sound, facial expression, or body sensation can influence how we respond before we have fully thought it through. Co-regulation describes how supportive interactions—such as a calm, respectful voice and predictable responses—can help people feel more settled. Your own preferences and boundaries matter.

How this framework can support trauma therapy

The goal is not to force yourself into a "correct" state. It is to notice your responses with less judgment, identify what feels supportive, and build options for responding. Trauma therapy should be paced collaboratively, with attention to choice, consent, and safety.

Gentle ways to support regulation

Orient: Look around and name a few neutral or pleasant things you see. Connect: Reach out to a trusted person, if helpful. Move: Stretch, walk, or shift posture within your comfort. Settle: Try a comfortable, unforced exhale or feel your feet supported. If any strategy increases distress, stop and choose another.

What does the science say?

The autonomic nervous system's role in stress and the benefits of supportive relationships are well supported. However, several specific anatomical and evolutionary claims of Polyvagal Theory—including a strict hierarchy of

vagal states—are disputed and not established as scientific fact. The three-state language can be a useful metaphor, but it should not be treated as a precise measurement of nerve activity.

Self-reflection: Explore with curiosity

1. When I feel connected or grounded, what changes do I notice in my body?

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2. What are my early signs of activation (for example, tension or racing thoughts)?

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3. What do I notice when I feel withdrawn, numb, or low-energy?

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4. Which people, places, boundaries, or activities help me feel supported?

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5. What is one gentle option I can try when I notice my state shifting?

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Remember

Your nervous-system responses are not character flaws. You do not need to label every feeling or push through discomfort. Noticing what happens and choosing support are meaningful first steps.

For further reading

Porges, S. W. (2011). The Polyvagal Theory. Norton. For critical discussion of the theory's physiological claims, see Grossman, P. & Taylor, E. W. (2007), Biological Psychology, 74(2), 263–285.

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