



Nervous System Regulation Key Terms and Definitions

Autonomic Nervous System (ANS): The part of the nervous system that controls involuntary bodily functions such as heart rate, breathing, digestion, and blood pressure. It operates largely outside of our conscious awareness and is primarily responsible for regulating our body's response to stress and relaxation. The ANS has two main branches: the sympathetic and parasympathetic nervous systems.

Co-regulation: The process by which two or more nervous systems interact and influence each other, often leading to a shared state of calm or regulation. This frequently occurs in relationships where one person's regulated nervous system helps to soothe and regulate another's, especially important in early childhood development and therapeutic contexts.

Cortisol: A primary stress hormone released by the adrenal glands in response to stress. While essential for short-term "fight or flight" responses, chronically elevated cortisol levels due to prolonged stress can have detrimental effects on physical and mental health.

Dissociation: A mental process that causes a lack of connection in a person's thoughts, memories, feelings, actions, or sense of identity. It's a common coping mechanism when the nervous system is overwhelmed, serving to create distance from painful or overwhelming experiences.

Dysregulation: A state where the nervous system is out of balance, unable to effectively shift between states of arousal and calm. This can manifest as chronic anxiety, panic attacks, emotional reactivity, persistent fatigue, or a sense of being "stuck" in hyperarousal or hypoarousal.

Fight/Flight Response: The body's automatic, physiological response to perceived threat. Triggered by the sympathetic nervous system, it prepares the body to either confront the danger (fight) or escape from it (flight) through increased heart rate, rapid breathing, muscle tension, and heightened alertness.

Freeze Response: A survival response to overwhelming threat, often occurring when fight or flight is not possible or effective. It's characterized by a sudden immobilization, a sense of numbness, dissociation, or a feeling of "playing dead." This response is also mediated by aspects of the parasympathetic nervous system (specifically the dorsal vagal branch).



Grounding: A set of techniques used to help an individual feel more present, connected to their body, and rooted in the current moment. It helps to counteract feelings of dissociation, overwhelm, or anxiety by bringing awareness to physical sensations and the immediate environment. Examples include feeling your feet on the floor or focusing on your breath.

Hyperarousal: A state of chronic activation of the sympathetic nervous system, characterized by symptoms such as anxiety, panic, irritability, restlessness, racing thoughts, insomnia, and hypervigilance (an exaggerated state of alertness).

Hypervigilance: An enhanced state of sensory sensitivity accompanied by an exaggerated intensity of behaviors whose purpose is to detect threats. It's a common symptom of trauma and chronic stress, where the nervous system is constantly scanning the environment for potential danger.

Hypoarousal: A state of diminished nervous system activation, often associated with the freeze response. Symptoms include fatigue, low energy, numbness, feeling flat or disconnected, difficulty concentrating, and a sense of detachment or dissociation.

Neuroception: Stephen Porges' term (from Polyvagal Theory) for the unconscious process by which the nervous system evaluates risk and safety in the environment, even before conscious awareness. It's how our body decides, "Am I safe? Am I in danger? Am I in life threat?" based on sensory cues.

Parasympathetic Nervous System (PNS): The branch of the ANS responsible for the "rest and digest" state. It promotes relaxation, slows heart rate, aids digestion, and conserves energy, helping the body return to a calm and balanced state after a stress response.

Pendulation: An SE technique involving the gentle, rhythmic shifting of attention between a difficult or activated sensation in the body and a resource or neutral sensation. This allows the nervous system to process small "chunks" of difficult material without becoming overwhelmed, gradually expanding its capacity for regulation.

Polyvagal Theory: Developed by Stephen Porges, this theory expands our understanding of the vagus nerve and the ANS. It proposes three main states of the nervous system: the ventral vagal state (social engagement, safety, connection), the sympathetic state (mobilization, fight/flight), and the dorsal vagal state (immobilization, freeze, shutdown).

Regulation: The nervous system's ability to maintain a balanced and flexible state, effectively shifting between activation (e.g., for daily tasks, healthy stress responses) and relaxation (e.g., for rest, digestion, social connection) as needed. A regulated nervous system can recover from stress efficiently.



Resourcing: The process of identifying and strengthening internal and external anchors that evoke a sense of safety, calm, strength, or well-being. These resources can be memories, people, places, objects, or internal qualities like resilience, used to help the nervous system feel more grounded and supported.

Somatic Experiencing (SE): A body-oriented therapeutic approach developed by Peter Levine that helps individuals heal from trauma and stress by addressing the physiological symptoms stored in the body. It focuses on tracking sensations, discharging trapped energy, and completing thwarted survival responses to restore nervous system balance.

Titration: An SE principle that refers to introducing small, manageable doses of difficult or activating material. Instead of diving directly into overwhelming experiences, titration involves "taking small sips" to ensure the nervous system can process without becoming re-traumatized or overwhelmed.

Trauma: Not just a difficult event, but the physiological and psychological impact that results when an individual's nervous system is overwhelmed by an experience (or series of experiences) and unable to fully process or integrate it. This unprocessed energy can remain "stuck" in the body, leading to dysregulation.

Vagus Nerve: A major nerve extending from the brainstem to various organs in the body (heart, lungs, gut). It plays a crucial role in regulating the parasympathetic nervous system and is central to our capacity for self-regulation, social engagement, and emotional processing. Toning the vagus nerve can promote relaxation and well-being.