Polyvagal Mapping for Complex Posttraumatic Stress Disorder

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Polyvagal Theory and Psychotherapy

Polyvagal Theory was developed by Dr Stephen Porges PhD in 1994 as a method of understanding the relationship between individual heart rate variability and the Autonomic Nervous System. In recent years, the field of psychotherapy has had great interest in Polyvagal Theory as Polyvagal Theory has been able to provide neurophysiological explanations for several of the experiences described by individuals who have experienced trauma. This is particularity true with individuals who have a history of repeated abuse or repeated traumatic incidences causing Complex Posttraumatic Disorder. This interest has led to numerous psychotherapeutic exercises assisting people with self-regulation, relational management and an articulation of the subjective experiences of danger and safety. One of those exercises is called Polyvagal Mapping which is a process of describing or "mapping" one's individual experience while in various states of the autonomic nervous system.

Polyvagal Theory and the Perception of Safety and Danger

Polyvagal Theory assumes, of course, that there are both dangerous and safe situations, but that people will have emotional, physical, cognitive and relational hardship if their perception of those safe or dangerous situations is inaccurate. It is important that people approach relationships and daily tasks with an accurate assessment of both the safety and the danger involved in those settings. In some cases, people who have a history of abuse, neglect or trauma will misread situations and inaccurately see a situation either as more dangerous than it is or safer than it is. Exaggerating danger might be shown by being easily offended, having difficulty accepting criticism or having irrational fears like phobias, generalized anxiety or panic. Also, people might misread situations as being safer than what they are. This happens when people stay in abusive relationships, voluntarily frequent threatening environments or allow verbal, physical or emotional boundary violations. The exercise of Polyvagal Mapping will assist individuals to better recognize how life experiences of safety and danger impact them physically, cognitively, emotionally and relationally and create workable solutions for change and decrease unhealthy reactivity.

Before beginning the exercise of "Polyvagal Profile Maps" it is important to understand the three states of the Autonomic Nervous System.

The Three States of the Autonomic Nervous System

Polyvagal Theory argues that people are regularly moving through three different autonomic states throughout their daily lives. This movement is caused by reactions to life events and the attempt to survive emotionally or physically, to restore oneself, or connect with others. These three states are the ventral vagal state (safe and social), the sympathetic state (mobilized for fight or flight) and the dorsal vagal state (immobilized and collapsed). Each state is managed by a specific set of nerves and each state serves a specific set of biological and social needs.

1.Ventral Vagal State – The ventral vagal state is a physical, emotional and cognitive experience facilitated by a set of nerves in the upper part of the body connecting the brain to the heart, neck, face, mouth, eyes and ears. The ventral vagal state, also known as the "safe and social state", is responsible for detecting, accepting, evaluating and reciprocating states of social safety. Also, it regulates the other two defensive autonomic states listed below. Being in a safe situation and then actively looking for and seeing safety will activate the ventral vagal state. The activation of the ventral vagal state facilitates self-regulation and eliminates unnecessary defensive thoughts, feelings and behaviors. In a relational sense, people in the ventral vagal state feel safe which leads to a sense of connection, trust, comfort, restoration and happiness. It is best that individuals solve relational problem(s) in the ventral vagal state. If they do not, they will switch involuntarily to the sympathetic state and attempt to solve their problem(s).

2.The Sympathetic State – The sympathetic state is a physical, emotional and cognitive experience facilitated by a set of nerves coming from the center of the spine and connecting to various organs. This set of nerves alerts and activates people when they detect danger and prepares the body to act. The sympathetic state, also known as "mobilized for fight or flight state", moves through various levels of intensity measured by both the level of fear experienced and the related amount of physical and mental energy that is given to deal with the event. When someone is in this state, they are pulled out of the ventral vagal state, lose the benefits of feeling safe and begin to disconnect from people. Relationally it is a state of conflict and fear. Clinically the sympathetic state parallels anxiety, anger, posttraumatic stress, relational discord, obsessions and cognitive distortions leading to self-questioning. Physical symptoms include headaches, high blood pressure, heart disease and joint pain. If the problem or event is not solved in the sympathetic state, the person will then involuntarily activate the next state which is the dorsal vagal state.

3.The Dorsal Vagal State – The dorsal vagal state is a physical, emotional and cognitive experience facilitated by a set of nerves that extend from the Vegas Nerve to the organs located below the diaphragm. When the dorsal vagal state, also known as "the immobilized and collapsed state", is activated an individual will shut down. Often this will follow the overwhelm of energy and fear caused by the sympathetic state. This overwhelm can be physical, emotional, or cognitive. The body will grow cold, weak, slow and lacking in energy. Socially the individual feels disconnected from others. Clinically this state triggers symptoms of depression, dissociation, performance anxiety, paranoia and cognitive distortions leading to challenged self-concept. Physical symptoms consist of low blood pressure, immune system disorders, stomach problems, obesity, fibromyalgia and irritable bowel syndrome.

Directions for Completing Polyvagal Profile Maps

The Polyvagal Profile Maps consist of three different maps. These are The Personal Profile Map, The Triggers and Glimmers Map and The Regulating Resources Map. The personal profile map and the triggers and glimmers map are exercises to increase self-awareness while the regulating resource map is used to create solutions for managing situations and relationships that are threatening or dangerous.

Personal Profile Map

The purpose of the Personal Profile Map is to increase the awareness of both the time, intensity, triggers and control of the ventral vagal (safe and social), sympathetic (mobilized for fight or flight) and dorsal vagal (immobilized and collapsed). To do this, divide a piece of paper into three sections (one for each state) and for each state complete the following questions.

1. When I am in this state, I think the world is…?
2. When I am in this state, I think I am…?
3. What emotions do I feel in this state?
4. What physical sensations do I feel in this state?
5. How does this state impact how I hear, smell and see things or people?
6. How does this state impact my relationship to sleep, substances, food and others?
7. How does this state impact my needs?
8. What does this state cause me to do or want to do?

The completed map should assist you in understanding what it is like to experience each state. At times it will be difficult to describe how each state feels since movement from one state to the next is automatic and not always recognizable. However, the more often you do the exercise the better you will be at recognizing when you shift states as well as their level of intensity.

Triggers and Glimmers Map

The purpose of The Triggers and Glimmers Map is to assist you in recognizing what event and what types of events cause you to change from one state to the next.

Triggers are cues of danger that bring someone into sympathetic and dorsal vagal states. A trigger can happen at any time and can be significant or seemingly insignificant. All triggers have the quality of being a threat that creates a survival response. Triggers cause harm when they overwhelm someone's internal resources

making someone release too much energy to resolve the event. This trigger then takes one out of social connection.

Glimmers are cues of safety and bring someone into a ventral vagal state. Glimmers can be spontaneous but are generally purposeful. Glimmers have the quality of allowing one to safely connect with others in a way that is relaxing, regulating and diminishes the survival mode or desire to disconnect. Glimmers can come when alone or when with others. It is important to keep in mind that a glimmer can be very brief such as "A smile from my favorite store clerk" and that recognizing these brief moments can allow one to build on something that is significant and helpful.

Each trigger or glimmer is a recognizable event. Again, divide a piece of paper into three sections (one for each state) and list the triggers for sympathetic and dorsal vagal as well as the glimmers for the ventral vagal.

Regulating Resources Map

The purpose of the Regulating Resources Map is to assist you in indentifying and using individual strengths, creativity and the information from the previous two maps to move out of negative states and maintain a positive state.

The Regulating Resources Map illustrates that this improvement can be done alone or with others. Additionally, it illustrates the power of one's own resources and highlights what additional skills might be needed.

Again, divide a piece of paper into three sections. For the ventral vagal state answer the question "What can I do by myself and with others to stay in this state?" For the sympathetic and dorsal vagal state answer the question "What can I do by myself and with others to get out of this state?" For each state list 3-5 ideas.

This exercise will assist in increasing the understanding of the level of reactivity to situations that are or appear to be safe or dangerous. Also, it will then assist in creating reasonable reactions to those situations. This exercise will require some repetition before it becomes automatic. However, in time, and with some effort, one should be able to do the exercise in real life events naturally.

Resources

The Pocket Guide to Polyvagal Theory: The Transformative Power of Feeling Safe by Stephen Porges (2017)

The Polyvagal Theory in Therapy by Deb Dana (2018)

The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment Communication and Self-Regulation by Stephen Porges PhD (2011)

Traumatic Stress: The Effects of Overwhelming Experience on The Mind, Body and Society by Bessel Vander Klok, Alexander Mc Farlane, and Lars Weisaeth (2007)

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