

Why Should We Examine Our Stressors?

Complete this month's lead-o-meter.

Monthly Breakdown

Week 1

The 'Where': Lead-o-meter

Week 2

The 'What': Self-Assessment Exercise

Week 3

The 'Why': Research, Science and Information

Week 4

The 'How': Building up your skill

If you started your [stress journal](#), you may have realized that ***stress is not just a feeling***: it's a physiological response that causes a physical reaction in your body.

Stress is not all in your head, it affects your entire body and wellbeing. Stress can have a negative impact on nearly every part of your body. In fact, according to the American Institute of Stress (*who knew there was such a thing!*), there are 50 physical symptoms related to stress. The AIS explains, "it's hard to think of any disease in which stress cannot play an aggravating role or any part of the body that is not affected."¹

So, in an effort, to understand this brain-body connection better, let's revisit the **vagus nerve** and gain a deeper understanding of the Polyvagal Theory that we introduced in Week 1.

Suzanne Krowiak, in an article from the [Tune Up Fitness Blog](#) (2020), explains:

"Physicians as far back as the Roman Empire have been grappling with how the vagus nerve impacts bodily function.

The vagus is the tenth cranial nerve, originating in the brain stem and traveling through the face, neck, lungs, heart, diaphragm and abdomen, including the stomach, spleen, intestines, colon, liver, and kidneys. *Vagus* is Latin for "wanderer", an appropriate name for the longest cranial nerve in the body. The vagus nerve is intricately connected to mood, immune response, digestion, and heart rate.

The vagus nerve is a part of the Autonomic Nervous System (ANS), the body's unconscious control system that helps regulate our internal organs to optimize health, growth, and restoration, a concept known as homeostasis.

Much of our understanding of how the vagus functions and our ability to impact it through breath and movement, can be traced to Dr. Stephen Porges and his Polyvagal Theory, introduced in 1994. Dr. Porges describes how our ANS subconsciously evaluates and responds to cues of safety and danger in our environment; he calls it '**detection without awareness**'. The vagus nerve has more than 100,000 nerve fibers and communicates

bi-directionally between the brain and the body, with 80% of the fibres taking messages from the body to the brain, and the other 20% communicating from the brain to the body.”²

Dr. Porges identified two pathways of the vagus nerve:

1. **DORSAL VAGUS:** The oldest part of the vagal complex, left over from our pre-mammalian ancient vertebrate ancestors. A dominant dorsal vagus results in a **shutdown or freeze state** when we are in grave danger.
2. **VENTRAL VAGUS:** The newest part of the vagal complex, developed during our evolution from reptiles to mammals. A dominant ventral vagus presents as a feeling of safety and social engagement. It's what is commonly referred to as our **safe and social state**, and evolved to provide a social engagement system, which was necessary in order for mammals to coexist, work in community, and reproduce.

People in a ventral vagal state are generally engaged in the world, and open to connecting and cooperating with others.

Between the dorsal vagal and the ventral vagal is where the sympathetic branch of the nervous system exists – our fight-or-flight reaction.

REMINDER!

There are two branches of the **Autonomic Nervous System (ANS):**

1. **Sympathetic:** your body's *ON* switch
- supports mobilization for action
2. **Parasympathetic:** your body's *OFF* switch
- supports relaxation

As humans, we will naturally fluctuate between all three of these states. Ideally, we want to spend most of our time in the middle **window of tolerance** state (ventral path). This is the optimal state for our energy, cognitive function and overall physical health.

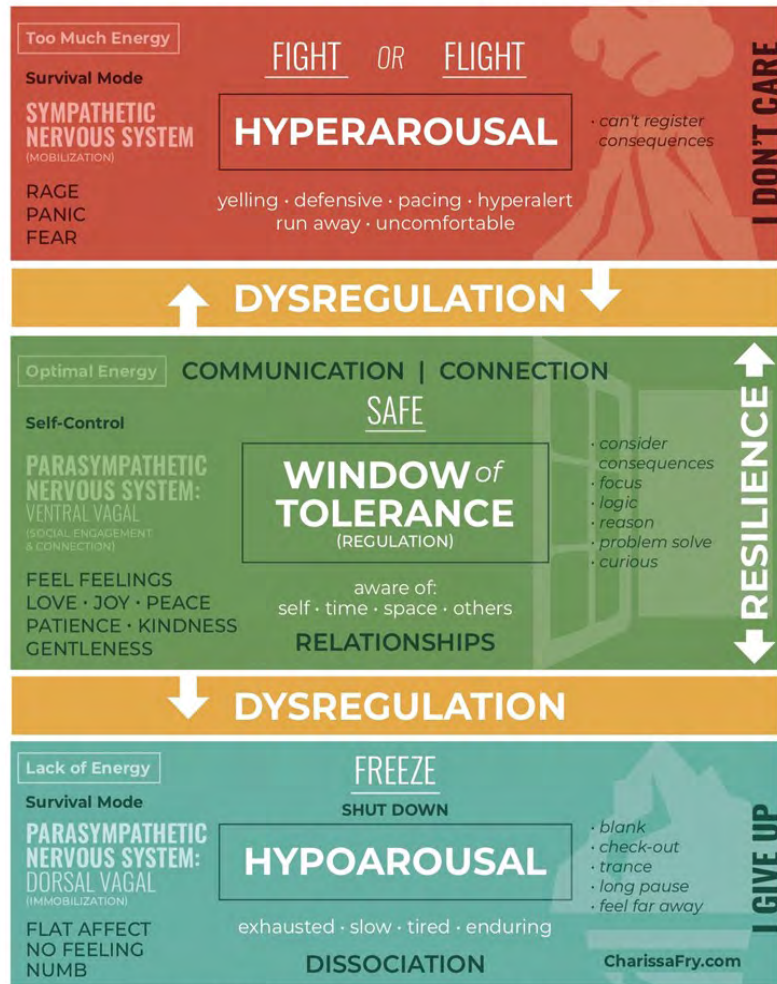
There will be times where we may be in a joyful, mindful state and then all of a sudden - due to a trigger - we rise up to a really frustrated, angry state, worried about what may happen. This is the **hyperarousal or anxiety state**. This results in too much energy and over-stimulation.

Alternatively, we may react to this trigger by completely shutting down. This is the **hypo-arousal or depressed state**. Here we experience low energy, dissociate from those around us, and may even become emotionally numb.

All three of these states can have a positive or negative effect on our overall health.

Refer to the Polyvagal Theory diagram on the next page

POLYVAGAL THEORY



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THE ANXIETY STATE

State of hyper-vigilance where poor judgement, chaotic and obsessive thinking reign. We are emotionally reactive and unable to learn.

THE SAFE STATE

The zone you want to be in! Ideally, we want to widen this zone through awareness and resilience. This is our optimal zone for learning.

THE DEPRESSION STATE

Slowed thinking processes, isolation and withdrawal, and a dissociation of awareness. No new learning can take place in this state.

Source³: Charissa Fry, 2019

When we stay in the fight-or-flight or the freeze states, we begin to have significant physiological and mental/emotional effects. In the fight-or-flight state, there is constant activation of our stress pathway - also known as the HPA axis - and this really impacts our stress hormones, sex hormones, our thyroid, etc. This stress will have significant inflammation effects on the body as well. For more on this response, [check out this article](#) from the *Leading: Back to School 2020* publication.

Ideally, we want to expand our *window of tolerance* - the safe, optimal state -

by building up our self-awareness and resilience. We want to 'widen the band' of our overall tolerance and minimize our triggers. However, keep in mind: expanding this band, and feeling better, can only happen when you are in your 'safe' state.

If you are finding yourself unable to spend any time in your window of tolerance section, then it is imperative that you reach out to your physician and/or counsellor. They can help you achieve a safe state so that you can begin to strengthen and grow in resilience.

Try this! Map Out Your Nervous System

1. Identify how you feel or behave in each state.

By identifying words that correlate with how you feel in each of those three states, you'll be able to better recognize which state you are in and identify it quicker. Being in tune with your body and understanding how you feel in those states, can help you get out of - or return to - that state.

Examples of words you could use:

- **Ventral vagal state** (the 'safe' zone): happy, content, or joyful
- **Fight-or-flight state** (hyperarousal): worried, stressed, or overwhelmed
- **Freeze state** (hypo-arousal): shut down, numb, or hopeless

2. Identify your triggers and glimmers.

We have talked about triggers in ReCharge for the past two weeks, and we'll be talking about glimmers in December. **Glimmers** are the actions you can take to move yourself back into the 'safe' zone.

Review the stress triggers you wrote down in your Stress Journal and describe how they made you feel. Did these events put you in a hyper- or hypo-arousal state?

■ **Next week:** *How can we thrive? Engaging Your Vagus Nerve*

Sources

¹ American Institute of Stress (n.d). "How is Stress Affecting You?", www.stress.org/stress-effects

² Krowiak, Suzanne (2020). "The Vagus Nerve: Your Superhighway to Physical, Mental and Emotional Health", [Tune Up Fitness Blog](#)

³ Fry, Charissa (2019). "Resources", www.charissafry.com/resources



How did you like this issue of ReCharge?

We welcome and appreciate your feedback and suggestions! [Fill out our feedback form](#) or contact [Rochelle Morandini](#).



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