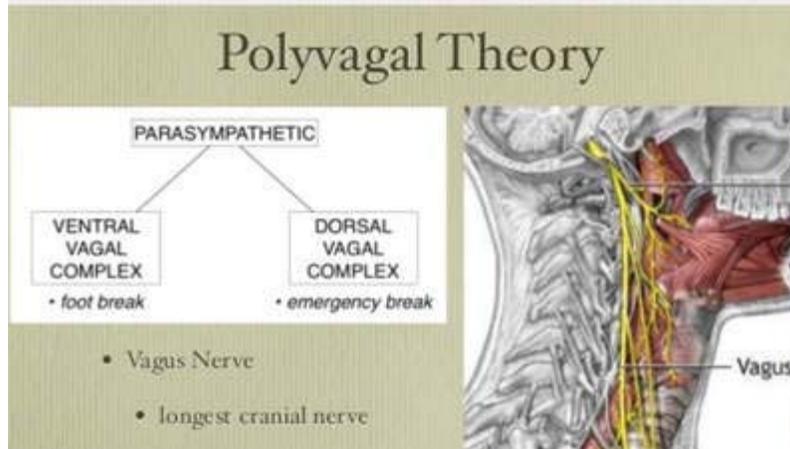


Ventral Vagus Healing & Craniosacral Therapy

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Our Autonomic Nervous System (ANS), is the conductor of the inner orchestra in our body, responsible for the control of our bodily functions not consciously directed, such as breathing, the heartbeat, blood pressure, sweating and digestive processes. The ANS is always humming at a certain beat and how well it operates, determines our physical, mental and emotional health.

In previous blogs I have written about the ANS. Our ANS was previously seen as having only 2 divisions: the Sympathetic Nervous System (SNS), fight or flight and the Parasympathetic Nervous System (PNS), relax and digest. Stephen Porges, Polyvagal Theory describes a new model of our nervous system. He describes how we respond to threats in 3 different biologically pre-programmed hierarchical ways. In this new model the PNS is divided into 2 branches, each with their own unique pathways and neural influences. Here, the PNS is divided into the Ventral Vagus Nerve (VNN) branch (also known as our Social Engagement System) and the Dorsal Vagus Nerve branch (DVN) which is characterised by immobilisation, freeze, shut down and withdrawal. This new model has great implications for the advancement of our health and well-being both practically and in therapy as each of these states, comes with their own set of physiological and emotional states, well-being and behaviours. (see also previous blog: Depression, Anxiety and Vagus Nerve).



In this blog we will delve into the VVN, our Social Engagement System, the implications on our health and well-being and how craniosacral therapy can successfully help.

The Social Engagement System.

The Ventral Vagus Nerve (VVN) is associated with increases in health and emotional wellbeing as it generates positive states of relaxation and social engagement. Our Social Engagement system is functioning optimally when we feel safe and connected to the world and other people. Throughout the day we constantly receive cues and triggers through our senses and fascia, which acts like a 2nd nervous system. We have an external environment -the outside world but we also have an internal environment-the physiology of our body, like diving into a deep sea, so much is happening underneath the surface, wave after wave. Our subconscious internal filtering system will immediately evaluate whether we are safe or need to take action. This happens without us even being aware of it or having to think about it. When we feel safe, we can relax, expand, go forward and

step out into the world. When there is stress or a perceived threat in our minds, we rely on our social engagement system to establish a sense of safety and connection. This can be achieved through a conversation, a call for help, making eye contact, or hearing a calming voice. This will send signals down to our heart and lungs, slowing down our heart rate and deepening our breathing. It very much functions as a foot brake - a Vagal Brake - and has a calming and soothing effect on our nervous system.

Picture the opposite: For example, a person says something to you that causes you to feel upset. What happens? We tend to change our facial expression signalling our upset, the tone of our voice changes often to an angrier, louder or higher pitch, we seek validation, we pick up the phone and talk to someone. If the social engagement system fails to resolve the stress and it remains active in our body, then we will automatically resort to the older biological response, one step down the ladder into fight/flight, with the Sympathetic Nervous system kicking in.

What are the areas innervated by the VVN?

The VVN innervates the areas above the diaphragm: face, throat, voice box, larynx, middle ear, heart, lungs and serves the social engagement system. This system is regulated by 5 cranial nerves and when these nerves function well, we can enjoy optimal physical and emotional health including great friendship, support, bonding and loving relationships. When we are socially engaged, we can be creative, positive, productive and happy. Socially engaged means we are free from threats, danger, unnecessary worries and in good physical health. The Social Engagement System guides us in orientation, communication and facial expression

and comprises the following cranial nerves, which all originate in the brainstem.

- **Cranial Nerve 5 – Trigeminal Nerve: face and jaw chewing muscles.**
- **Cranial Nerve 7 – Facial Nerve: controls hearing, middle ear and all facial muscles for communicative facial expressions and mimic. Neural regulation for the middle ear muscles.**
- **Cranial Nerve 9 – Glossopharyngeal Nerve: Tongue, Throat, Swallowing. Responsible for sounds produced by the Voice box, vocal tone and creating sounds.**
- **Cranial Nerve 10 - Ventral Vagus Nerve branch– innervates small muscles in the throat, saliva.**
- **Cranial Nerve 11 – Accessory Nerve: Innervates the Trapezius and Sternocleidomastoid (SCM) muscles in the neck for head and neck movement, orientation and being able to turn you head.**

Behaviours we display when Socially Engaged:

- **We feel safe**
- **We are connected to ourselves and to others,**
- **We can be intimate**
- **We reach out to connect with other people, we are able to bond**
- **We are calm, breathe easily and we can think clearly**
- **Muscles are relaxed**
- **We feel playful, we dance, sing and belly laugh**
- **We feel love and are able to truly love**
- **We can truly relax and relax into connection with others**
- **One with the world – feeling the world is open and full of opportunities**

Symptoms we can have when not socially engaged:

- **We feel anxious or are not able to relax around ourselves and others,**
- **We feel shut down or depressed.**
- **We are overwhelmed.**
- **We feel anger, disgust, shame.**
- **We compulsively have to Do things – as Eckhart Tolle describes so beautifully we are human doings rather than human beings.**
- **We are wired.**
- **We are loners – don't really engage and hide from the world.**
- **I What do you do? Please fill in your own unique thing you do when you are not socially engaged.**

Craniosacral

Therapy

When our ANS is in a state of stress or shutdown we often have problems with our physical health, emotional states and relationships. Therefore, it makes total sense to have an optimal working nervous system and Craniosacral Therapy is one of the best modalities to address the nervous system. Craniosacral therapy assists our clients to shift into their social nervous system, inhibiting the SNS, improving vagal tone, addressing the cranial nerves and has a great and positive effect on regulating the entire nervous system.

Clients typically report a significant reduction or disappearance of their physical symptoms but also an increased sense of happiness, connection, oneness and openness with the world and feeling safe. This is because clients have come out of Fight or Flight and gone into Ventral Vagus Healing, which is connected to

increases in health and emotional well-being.

Here, the **goal** of Craniosacral treatments is:

- to bring clients out of a state of stress, shutdown or withdrawal and up to the level of social engagement. To bring the body back into a safe state - you can only use your social nervous system when you feel safe. Many people think they may feel safe in their body and in relation to the world. However, we all know people that can only hold 2-minute fleeting conversations, they can't sit still for too long, they always have to be doing something for example, cleaning the kitchen or having excessive gym workouts to distract them from their discomfort. This is because they live in a perpetual fight and flight mode and are channelling their fight and flight anxiety into these activities. To sit down and do "nothing" or to be truly intimate would be too daunting.
- to address the cranial nerves associated with the Social Engagement System.
- to achieve optimal physical and psychological health so the body can start to self-regulate and bring positive changes to the ANS. We need to have a self-regulating ANS to maintain good health. With my clients I focus on resourcing, guided meditations and/or breathing exercises so they can become more flexible in their coping styles.
- to achieve a state of social engagement and well-being.
- to create an environment of safety. As biodynamic craniosacral therapist we ensure the tone of our voice is calm, soft facial expressions, creating a safe space. Clients often describe me as gentle, soft and calming but I can assure you there is Cold Chisel loving Jimmy Barnes rock chick underneath, in ventral vagus state of course:)

On the flip side what I have also experienced is that clients who are in excessive overwhelm or in a depressed, dissociated dorsal vagus state, may experience a sudden increase in anxiety or sleepless nights. This causes them to question if they are on the right track and why this would happen. One thing to consider is that it can actually be a good sign as it means the body is coming out of shut down Dorsal State, up the hierarchical ladder and is shifting into Fight and Flight, Sympathetic State, which may mean perhaps a temporarily increase in anxiousness or other aroused states. Here as Biodynamic Craniosacral Therapists we can assist them in finding a sense a safety through resourcing, grounding, embodiment, breathing, so they can start feeling safe and shift into their social engagement system. In biodynamic craniosacral therapy we can also guide clients through their internal emotions and enhancing their capacity for self-regulation, which is important to maintain a good nervous system.

Polyvagal Wrap up

The application of the polyvagal theory in craniosacral therapy makes total sense for physical symptoms and particularly for Trauma, Depression, Anxiety, Chronic and Complex Pain and illnesses. In past blogs I have written about my own personal trauma and the extensive Dr's rounds which brought no luck in addressing or alleviating my symptoms, as the primary innate biological forces that controlled my symptoms seemed to be overlooked, disregarded and not addressed. I was at the bottom of the hierarchical ladder and totally not socially engaged. For months I was in shut down, collapse, disassociation and hibernation, with little recollection. I was in Dorsal Vagus State and off-line. As for Ventral

State and the associated nerves: I could not bear any bright lights or flashes and my ears were high pitched ringing. To my embarrassment as I could not hide it, my voice had gone up a few notches higher due to my anxiety. As the physical part (but emotional part also played a role as brain stem implicated) of the trauma was to my neck and head, my SCM and Trigemini were in hyper tonus and over firing on a neural level in my face.

I did heal my myriad of symptoms not by chemical pills for every symptom I had but by addressing the ANS: the Dorsal State, the Sympathetic Chain and finally coming back into Ventral Vagus through weekly & to start, twice-weekly Craniosacral Therapy sessions, which I combined with Homeopathy & Naturopathy. I did not get fixed, I did not get cured but I healed, from the inside, out.

It took time and dedication—it is not a magic bullet – addressing physical symptoms, pain, the nervous system, uncoupling and processing strong emotions takes time but when you overcome your own health problems by the innate power of the body to heal, which we all have, the gratitude is infinite and it is a gift you want to keep on giving.

Psychiatrist Dr. Bessel van der Kolk – explains the polyvagal theory and the use of yoga, meditation and Craniosacral therapy so well in his brilliant book: The Body keeps the Score. “The polyvagal helps us understand and explain why seemingly unconventional techniques work so well. It activates the social engagement system, calming the physical tension in the body. It helps people shift

out of their fight/flight states, reorganising their perception of danger. If mind/brain/body is the royal road to emotion regulation this demands a radical shift in our therapeutic assumptions" and "Touch, is the most elementary tool we have to calm down. You can't fully recover if you don't feel safe in your skin. Therefore, I encourage all my patients to engage in some sort of body work like Craniosacral Therapy".

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