RESOURCING OURSELVES

THROUGH ART, GENTLE MOVEMENT, &

Vagus Nerve Connection

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Introduction

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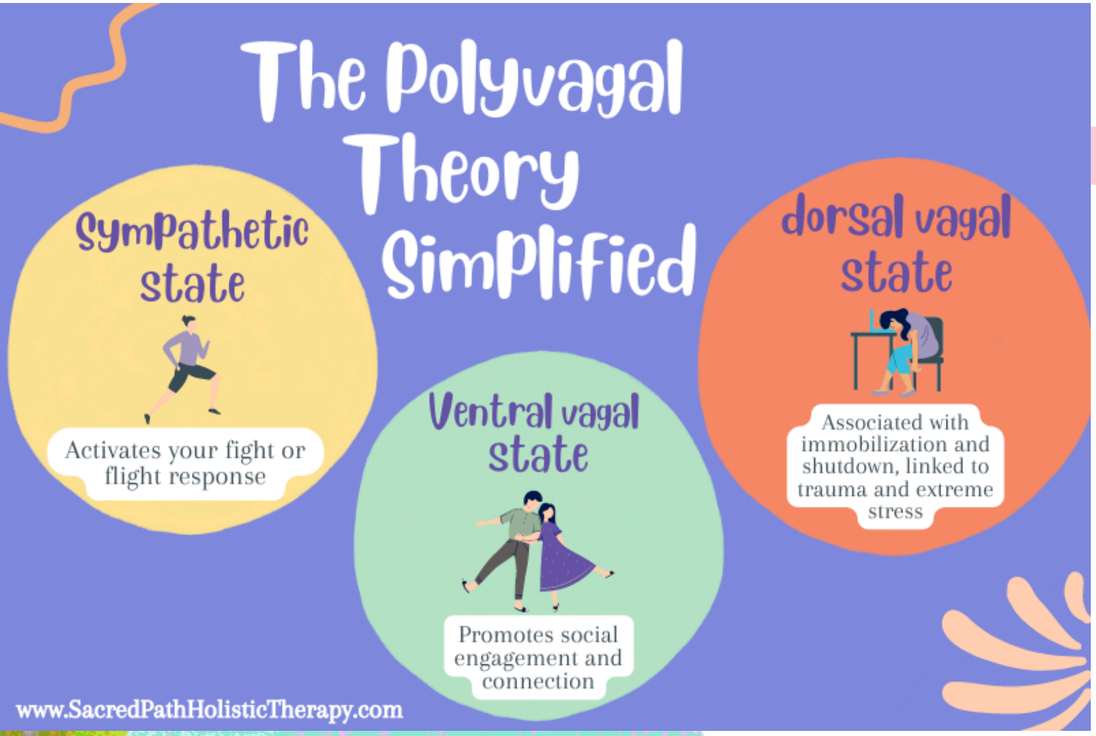
Why this work?

- The body keeps the score!
- We store an incredible amount of emotion and trauma in our bodies. Chronic pain, somatic symptoms.
- Our vagus nerve regulates all of your body's basic functions like breathing, your heartbeat, and the dilation of your eyes. It effects physical and mental health. Soul nerve.
- Movement is healing
- Small changes make the biggest changes!
- My children.



Vagus vs Vagal

Polyvagal Theory



A framework that explains the relationship between the autonomic nervous system and psychological experiences.

- Developed by Dr. Stephen Porges
- The science of safety and trauma.
- Based on the idea that the vagus nerve, which regulates bodily functions like heart rate and digestion, plays a key role in our health and behavior.
- The way our nervous system perceives threats impacts how our brain and body will respond to the situation.
- Autonomic nervous system :The autonomic nervous system has two divisions: the parasympathetic system, which is associated with calm, and the sympathetic-adrenal system, which is associated with high alert.
- Vagus nerve: The vagus nerve has 3 branches: the ventral vagal system, the sympathetic nervous system, and the dorsal vagal system. These branches are associated with different responses:

1. Sympathetic nervous system: Fight or flight
2. Ventral vagal system: Social engagement, safety, rest & digest
3. Dorsal vagal system: Freeze or immobilization

The Vagus Nerve

- The vagus nerve was appropriately named as its Latin meaning is "wanderer," as it is the longest cranial nerve, wandering from your brain to your large intestine.
- Reaches into most of your body, including your throat, lungs, heart, stomach, liver, spleen, pancreas, kidney, and gut (both your large and small intestines).
- Effects the immune response, digestion, respiratory rate, & heart rate,
- Connects the gut and brain and communicates between the gut and brain using serotonin, glutamate, and gut hormones. These hormones play vital roles in sleep, mood, pain, stress, and hunger.
- This "soul" nerve unifies the nervous system.
- The vagus nerve begins to develop at 3-4 weeks of gestation in the womb (Sachis PN..., 1982).



Somatic/Visceral

The vagal nerve has two sensory functions: Somatic and Visceral components. Somatic relates to sensations that are felt on the skin or in the muscles, while visceral means the sensations felt in the organs.

The Vagus

Main Function

To receive fight, flee, or freeze messages from your brainstem, (lizard brain), and help the rest of your body prepare to engage in a survival response. It is also responsible for communicating that you are safe and can relax.

Language

The connection of your vagus nerve to your brainstem is different from being connected to your thinking brain. There is only one language the brainstem speaks: Am I safe, or am I unsafe?

Constriction

A long spine creates freedom for the vagus nerve. A short, bent spine creates compression. Compression of nerve: headaches, dizziness, brain fog, severe pain in neck & shoulders. Damage: trauma, surgery, diabetes, an infection, or an auto-immune disorder

Eye Movement

THE VAGUS NERVE CONNECTS THE EYES TO THE HEART

Brainspotting:

Uses the Oculocardiac Reflex (OR), which activates the vagus nerve and the parasympathetic nervous system. The OR uses the extraocular muscles(control movement in eyes) of the eyes, which are involved in regulating the nervous system

EMDR:

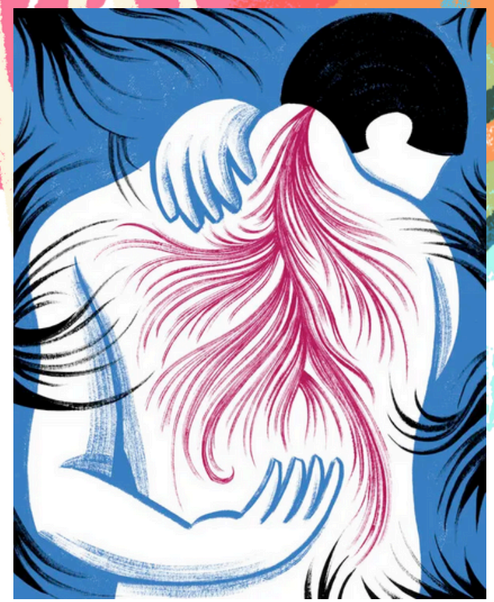
Activates the vagus nerve to stimulate the parasympathetic nervous system. The vagus nerve connects the eyes to the heart, and eye movements are integrated into EMDR.

Practice

Stanley Rosenberg Basic Exercise

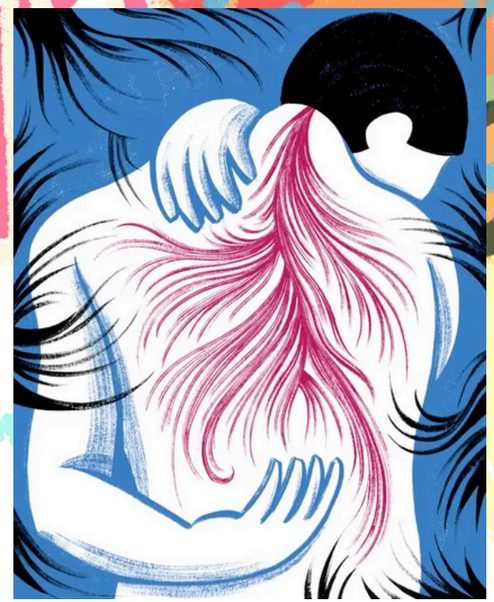
1. Lying comfortably on your back or sitting up, weave the fingers of one hand together with the fingers of the other hand.
2. Put your hands behind the back of your head, with the weight of your hand resting comfortably on your interwoven fingers, you should feel the bones of your fingers on the back of your head. If your shoulders are stiff, you can use one one hand on the back of head.
3. Keeping your head in place, look to the right, moving only your eyes, as far as you comfortably can. Do not turn your head, just move your eyes. 30-60 seconds.
4. You will swallow, sigh, or yawn. This is a sign of relaxation in your autonomic nervous system.
5. Bring your eyes back to looking straight ahead. Do the other eye looking to the left. Hold your eyes until you notice a sigh, yawn, or a swallow.

Relieving Physical Tension



- Your vagus nerve tells most of the muscles in your body when to constrict, release, move, & relax and settle.
- Special muscular function: VN supplies nerves to the neck and shoulder (trapezius and sternocleidomastoid) the only muscles below the face and head that are not innervated by spinal nerves.
- Turning your head to side requires these two muscles to have a complicated and coordinated dance of tension and relaxation. Think of babies moving their head from side to side.
- Gentle twisting movements helping in aligning body and optimizing vagus nerve.

Relieving Physical Tension



The Half-Salamander Exercise

1. Without turning your head, let your eyes look to the right.
2. Continuing to face forward, tilt your head to the right so that your right ear moves closer to your right shoulder without lifting your shoulder.
3. Hold your head in this position for 30-60 seconds.
4. Then let your head come back up to neutral and shift your eyes to look forward again.
5. Now do the same on the other side: Let your eyes look to the left, and then side-bend your head to the left for 30-60 seconds.

Twisting

Vagus Nerve Benefits



Spinal twists gently stimulate the vagus nerve, allowing it and the calming parasympathetic nervous system to work more efficiently.



Gently stretching and massaging the area where it travels through the neck and upper body, leads to a relaxation response and improved communication between the brain and organs like the gut, thereby enhancing digestion and reducing stress levels.

Twisting out Physical Tension

Simple Twisting Exercise

1. Sit comfortably on a firm surface, looking forward.
2. Fold and cross your arms, with your hands resting lightly on your elbows. You will be rotating your shoulder girdle briskly, first to one side & then to the other, without stopping and without shifting the hips.
3. Let your elbows drop and rest just in front of your body. Rotate your shoulders so that the elbows sway, first to one side and then back to the other side. Your arms can glide lightly over you stomach. This activates fibers of your upper trapezius.
4. Do this four times, Do not strain, and do not stop your movement. Move your shoulders without forcing or holding them; your movements should be easy and relaxed.
5. The second part, lift your elbows and hold them in front of your chest, at heart level. Repeat four times.
6. The third part, raise your elbows as high ad you comfortably can and repeat the same movement (as above) four times.

Vagal TONE

A measurement of the activity of the vagus nerve.



- Vagal tone plays a role in bodily functions such as:
  heart rate, digestion, respiration, liver function, and immune response.
- Vagal tone is measured indirectly through heart rate variability (HRV). It can also be measured invasively through vagus nerve stimulation.
- You can "exercise" or improve your vagal tone through practical activities that stimulate the vagus nerve.
- Stress & Anxiety: High vagal tone is associated with a better ability to cope and recover from stress, while low vagal tone is linked to higher stress reactivity and depression.
- Cognitive Function: High vagal tone has been connected to better cognitive performance--specifically with self-regulation and decision making.

Practical Ways

To stimulate the VN:

01

Ear massage

Slowly and gently pinch tragus between thumb and pointer finger, work up and down. Roll out cartilage to the earlobe. (Dr. Arielle Schwartz)

02

Cold water immersion

Splashing face with cold water, taking a cold shower, or switching between cold and warm water in shower. (also stimulates lymphatic system).

03

Eating fiber

Stimulates vagus impulses to the brain slowing the gut movements and making us feel fuller after meals (rest and digest).

04

Laughter

Stimulates the vagus nerve by triggering deep diaphragmatic breathing

05

Eating lemon or drinking lemon juice

Through its strong sour taste triggers a reflex response in the mouth and throat, causing increased salivation, which in turn signals the vagus nerve due to its connection to the digestive system .

06

Swallowing ice

Stimulates vagus nerve through temperature stimulus.

Connection

Work with a partner to come up with your own definition of connection. Think of specific examples in everyday life where you feel seen and connected.

- Regulating your nervous system does not mean becoming calm; it means becoming connected.
- The human brain and our entire being (whether in children or adults) are designed for connection with a deep desire to be felt by others. We all need to be seen, valued, and met within our relationships.
- How do you define regulated or connected? The ability to hold mindful awareness of whatever emotions you are experiencing while maintaining access to higher centers of the brain to remain grounded and connected in order to make decisions and respond.
- The foundational trinity for connection is grounding, orienting, and resourcing.

Connection Trinity

G.O.R.

Grounding

Coming down to earth, feeling our bodies in relationship to the ground beneath us.

Orienting

The process of becoming aware of our location in time and space.

Resourcing

Refers to accessing our resources. Resources could be sensations, emotions, colors, places, people, sounds, animals — anything that shifts your state in a positive direction toward a sense of well-being, safety, gratitude, grounding, compassion, empowerment, or inspiration.



G.O.R.



Guided Imagery, Breathing, & Meditation



Movement



Art Therapy



Humming & Singing

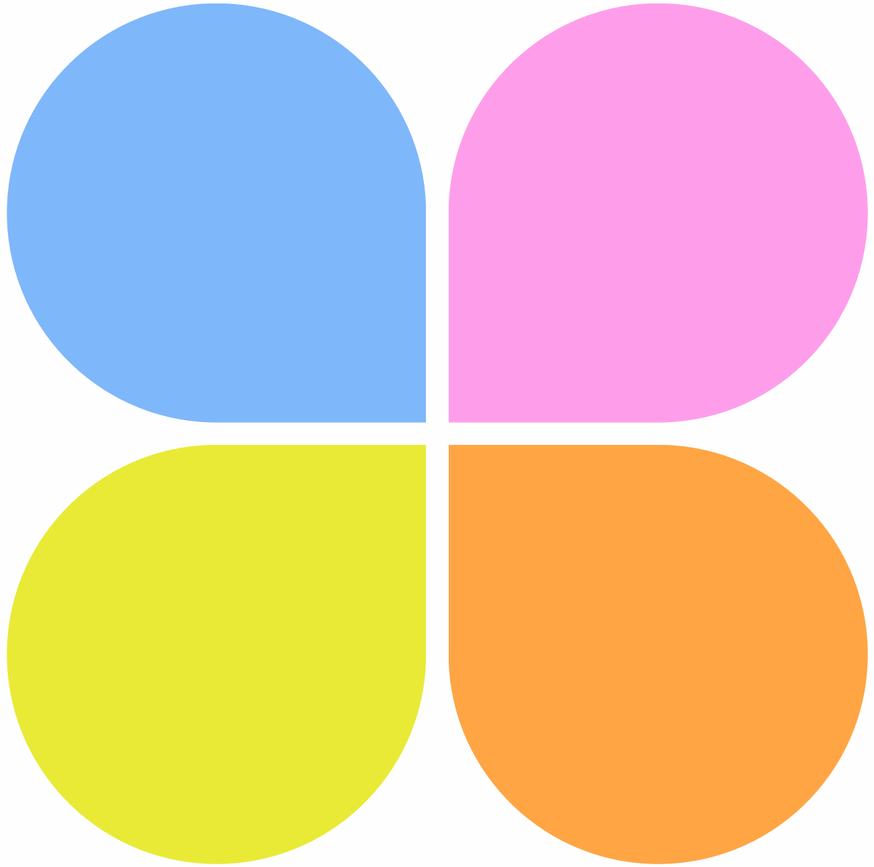
Vagal Nerve Stimulation

Implant

Used to treat epilepsy, depression, and stroke victims. The device works by sending stimulation to areas of the brain that lead to seizures and affect mood. Implanted in chest.

Benefits:

Designed to reduce seizures, improves mood & depression, treats headaches, and helps with recovery after seizure.



External

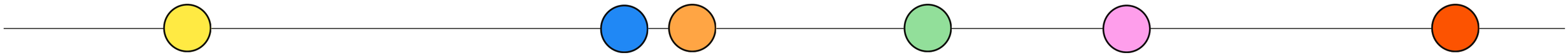
Attached to the ear or neck

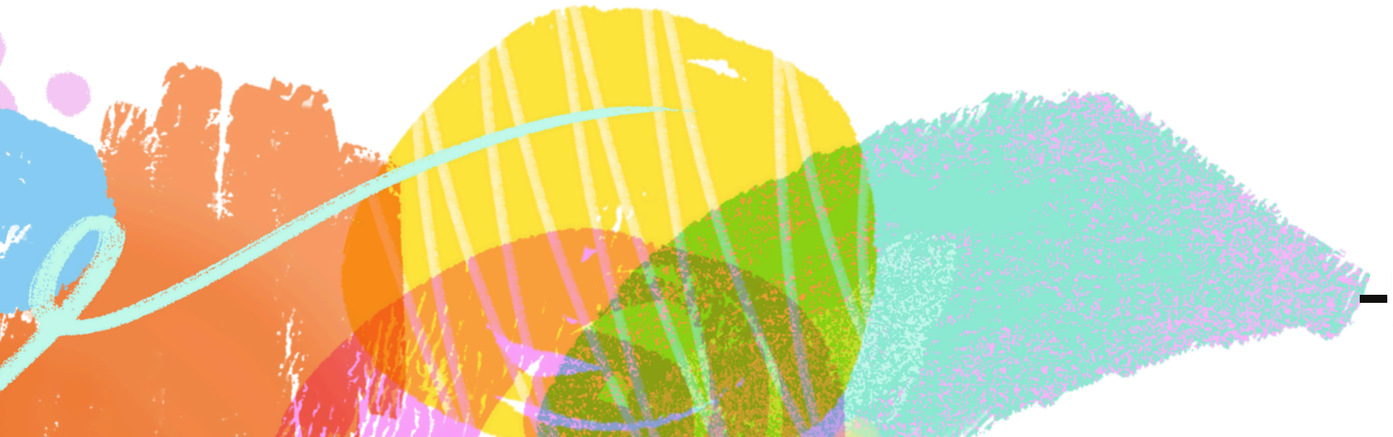
Xen is a electronic device that delivers gentle micropulses through headphones directly to the vagus nerve located in your ear.

Benefits:

Reduces stress, anxiety, and improved sleep are some of the benefits associated with vagus nerve stimulation.

"We can reinform the vagus nerve and befriend it."





–Holly Bridges' Anxiety Reframe Technique

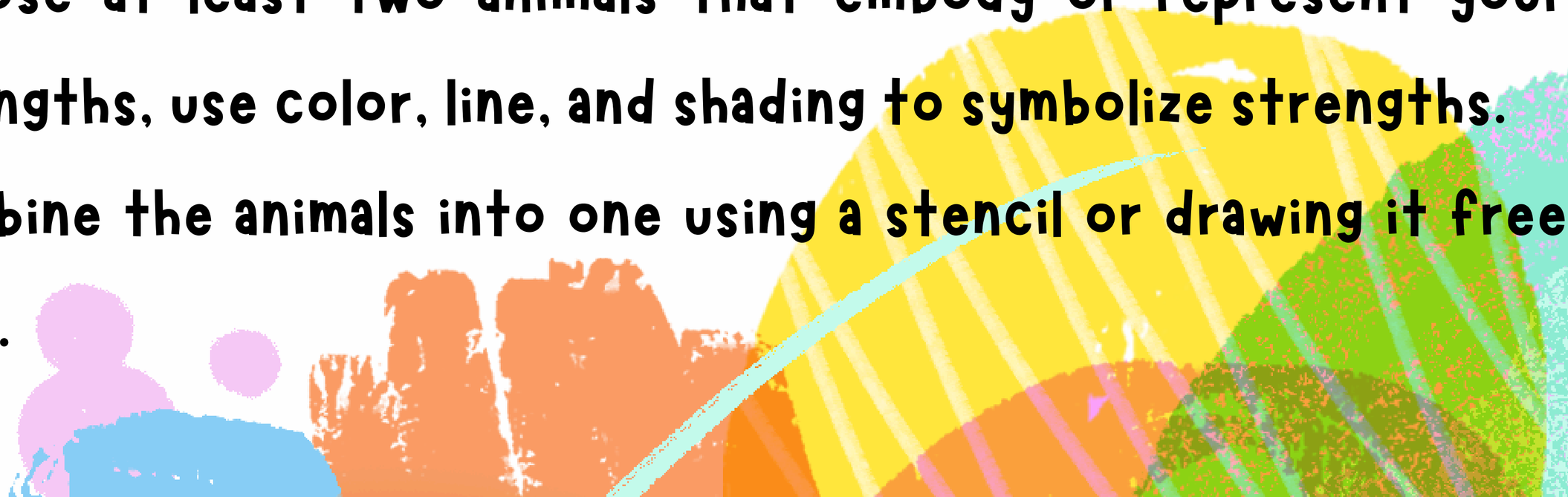
Art Therapy and the VN

Art therapy activates the Ventral Vagal nerve to regulate the nervous system and achieve a safe and social state.

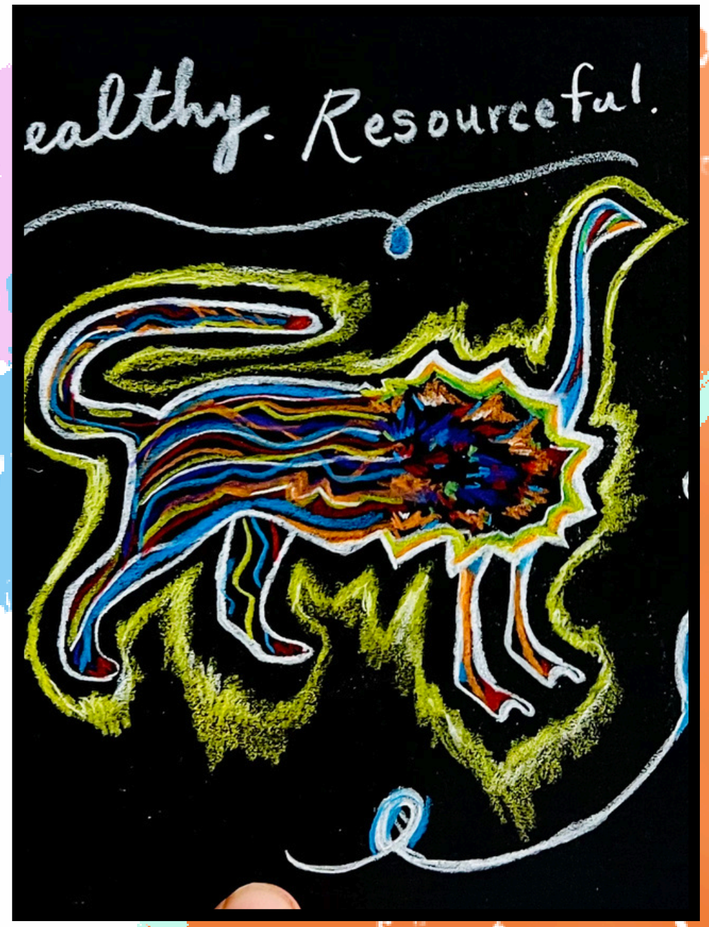
- Has shown to increase vagal tone and resilience
- Increases emotional regulation, mood, & stress response (Kaimal & Ray, 2017). Used Respiratory sinus arrhythmi (RSA, monitors breathing and heart rate) to determine vagal function.
- Mirror neurons in the therapeutic relationship and art product help calm the vagus nerve in sessions (Franklin, 2011). Witnessing the client and art process.
- Increases interoception (ability to sense and perceive what is happening inside the body, physically and emotionally) (Strang, 2024)

Strengths Animal

- Guided Imagery (Grounding & Orienting)
- Writing: Strengths
- Choose at least two animals that embody or represent your strengths, use color, line, and shading to symbolize strengths.
- Combine the animals into one using a stencil or drawing it free hand.



Strengths Animal

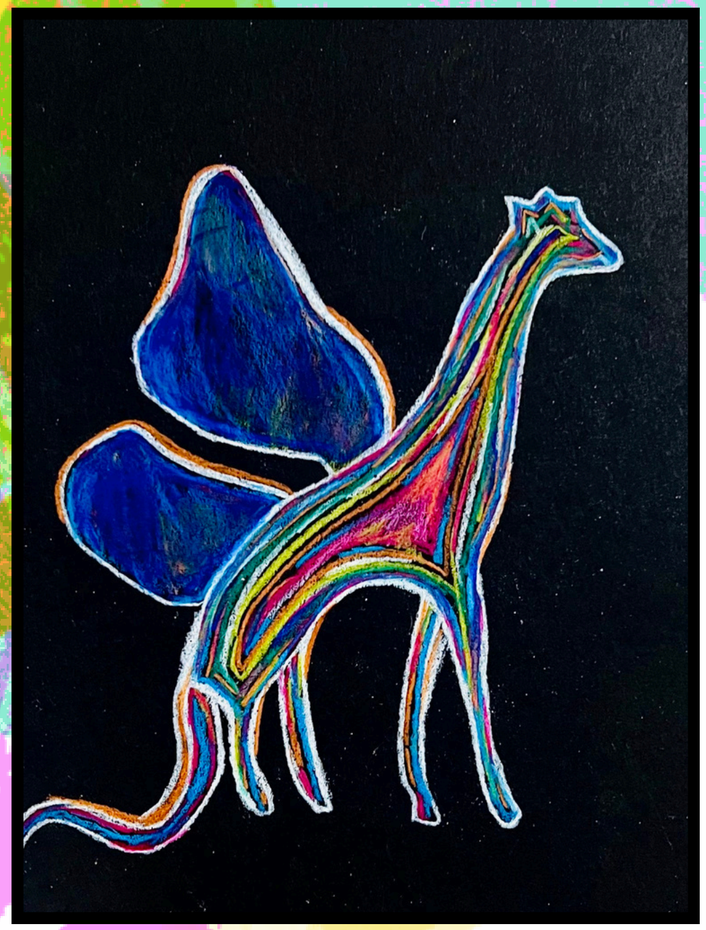












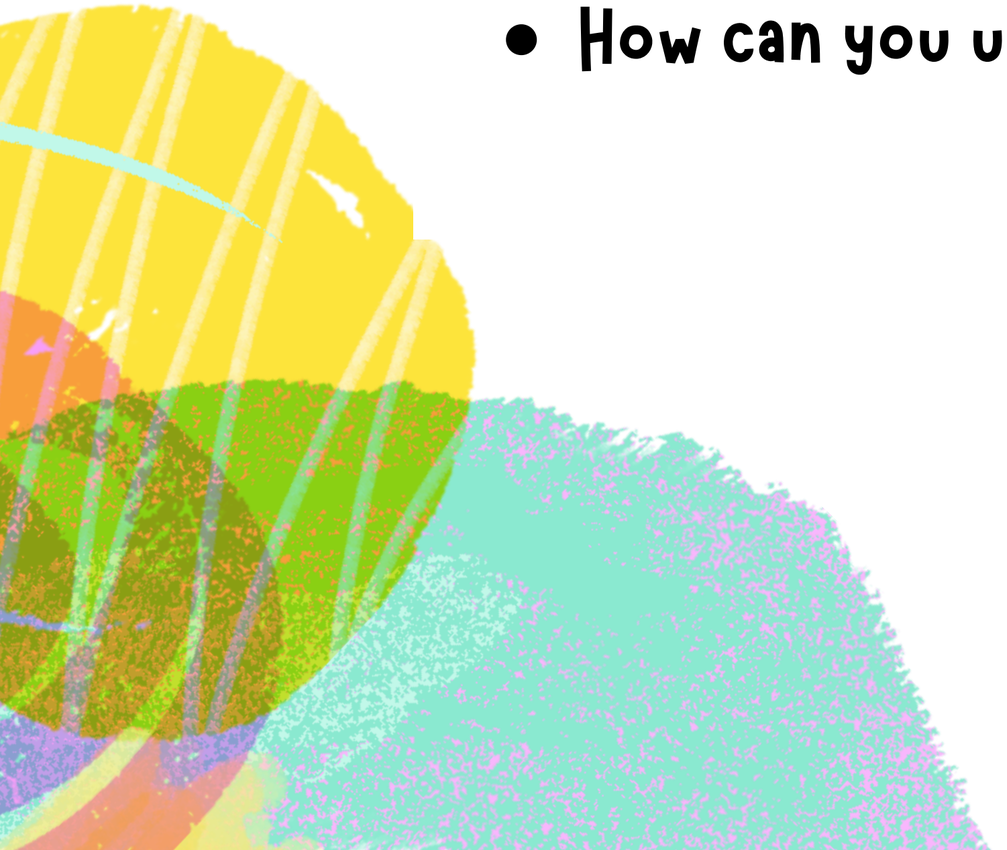
Strengths Animal

- Think of what kind of environment you thrive in.
- Create an environment around your Strengths animal to help it flourish. Think of people, places, things, environments... where you thrive. What does that look like? (Resourcing)



Reflections

- What did you learn about yourself through this process?
- How can you use this with clients?



References

Franklin, M. (2010). Affect Regulation, Mirror Neurons, and the Third Hand: Formulating Mindful Empathic Art Interventions. Art Therapy, 27(4), 160–167. https://doi.org/10.1080/07421656.2010.10129385

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