# Nervous System Regulating Activities

Supporting Awareness, Embodiment and Resilience



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# **Recommended Use**

Use the activities in this guide to engage and support your clients through mindfulness, vocalization, breathing and movement. It is best to introduce and practice the activities with your client before starting new therapies, so the activities are safe and familiar.



## Become a Polyvagal Practitioner with the Safe and Sound Protocol

The Safe and Sound Protocol (SSP) is an evidencebased therapeutic program designed to reset the nervous system and return it to safety.

Visit <u>integratedlistening.com</u> to learn more about the SSP and how you can integrate it into your unique practice.





# **Sensory Orientation**

Bring attention to your body and your environment, and away from disruptive thoughts.

- Bring attention to your body.
- $\bigvee$  Feel your feet on the ground or your seat on the chair.
- Promote body awareness through all the senses. What can you see? Take in sounds from around the room and inside your body. Can you feel the fabric of your clothing touching your body? What smells and tastes do you perceive?

Notice and orient your awareness, alternating between inside and outside the body.

#### Rationale

Practicing orientation (connecting to your environment using the senses) helps to shift attention to the present moment, away from disruptive or repressed thoughts to more pleasant sensations in body and sensory experience.

Hanscom, D. A. (2021). Plan A - Thrive and Survive Covid-19 (2nd ed.). Vertus Press, Inc.



# Visualization

Close your eyes and picture yourself somewhere safe to reduce symptoms of anxiety.

- Find yourself in a comfortable position and allow your body to feel grounded in your space.
- Take a deep breath in, and as you exhale, start to visualize yourself in nature. What do you see? Perhaps you see the fall leaves rustling in the wind. Perhaps you see the waves slowly rolling onto the shore. Maybe it's the next mountain peak off in the distance. What else do you see in this safe place?
- Know that this is a place just for you. It is a safe, warm and peaceful setting that brings you comfort. Using your breath, you can return here anytime.

#### Rationale

Spending time in nature is one approach that has demonstrated anxiolytic effects. However, spending time in nature may not always be possible, as may be the case in indoor therapeutic settings. Alternatively, nature-based guided imagery has been found to be effective for reducing anxiety symptoms.

Nguyen, J., & Brymer, E. (2018). Nature-Based Guided Imagery as an Intervention for State Anxiety. Frontiers in psychology, 9, 1858. https://doi.org/10.3389/fpsyg.2018.01858



"If you want to improve the world, start by making people feel safe." - Dr. Stephen Porges

Get in touch with us to discover how our multisensory programs can create lasting change for your clients.

VOCALIZATION

#### VOCALIZATION



# Singing and Chanting

Sing a song that's been stuck in your head or a simple chant while taking notice of changes in your mood or focus.

- Take a deep breath in and feel your lungs fill with air.
- In unison or independently, exhale as you chant Ōm (aum), or sing your favorite phrase of music.
- Continue for one to three minutes.



# Humming

Stimulate the vagus nerve to help calm your nervous system with this simple exercise.

- In unison or independently, hum a familiar tune (don't worry if you're off-key).
- Notice the sensations in your head, throat and chest.
- Experiment with different volumes and physical qualities.

#### Rationale

Singing or chanting increases blood flow to the brain, and supports regulation of the heart and nervous system, particularly when performed at a rate of five to six breaths per minute. Group synchronization increases social cohesion leading to increased positive mood and focused attention and thus decreasing ruminating thoughts. Chanting stimulates glossopharyngeal cranial nerve and auditory feedback that cross-activates the ventral vagal complex.

Perry, G., Polito, V., & Thompson, W. F. (2016). Chanting meditation improves mood and social cohesion. International Conference on Music Perception and Cognition; The Society for Music Perception and Cognition (SMPC), 324-327.

Nester, J. (2020). Breathe: The new science of a lost art. (1st ed.). Riverhead Books, New York.

#### Rationale

The vagus nerve passes through the vocal cords. Rhythmic vibrations from humming stimulate the vagus nerve and influence heart rate variability.

Malchiodi, C. A. (2020). Trauma and expressive arts therapy: Brain, body, and imagination in the healing process. NY: Guilford Publications.



# **4-Part Box Breath**

Activate the vagus nerve by breathing with rhythm, pause and intention.

- Slowly exhale, emptying your lungs.
- Inhale slowly and deeply through your nose for the count of four until your lungs are full.
- Hold your breath for a count of four (lungs full).
- Exhale for a count of four.
- Hold your breath for a count of four (lungs empty).
- Repeat three to four times.

\*Do not hold your breath if you are pregnant or feel lightheaded.

#### Rationale

Voluntary rhythmic breathing activates the vagus and its medullary nucleus, regulating autonomic stress-reactivity.

Loizzo, J. J. (2018). Can embodied contemplative practices accelerate resilience training and trauma recovery?. Frontiers in human neuroscience, 12, 134.



### **Resonance Breathing**

Use this breathing technique to reduce stress.

- Find a comfortable position.
- Inhale and exhale slowly for several rounds of breath.
- Breathe in for five seconds and out for five seconds (six breaths per minute).
- Continue this pattern for several minutes.

#### Rationale

Resonance breathing has been found to increase heart rate variability (HRV) and resilience to stress.

Steffen, P. R., Austin, T., DeBarros, A., & Brown, T. (2017). The Impact of Resonance Frequency Breathing on Measures of Heart Rate Variability, Blood Pressure, and Mood. Frontiers in public health, 5, 222. https://doi.org/10.3389/fpubh.2017.00222



# 1/L

# **Releasing the Neck**

Feeling tightness in your neck? Relieve the muscles in this area to decompress the vagus nerve.

Roll your shoulders up, back and down, and direct your gaze forward.

Slowly begin tipping your right ear toward your right shoulder without turning your head.

Shift your attention to the left side of your neck. When you feel it fully lengthened, bring your eye gaze to the right and take four to six deep breaths while noticing the sensation in the left side of your neck.

Return your head and gaze to the starting position, and repeat on the left side.



"If we are not safe, we are chronically in a state of evaluation and defensiveness. It is a ventral vagal state and a neuroception of safety that bring the possibility for *connection, curiosity,* and *change.*"

Deb Dana, The Polyvagal Theory in Therapy: Engaging the Rhythm of Regulation

#### Rationale

The vagus nerve runs behind the sternocleidomastoid muscle and in front of the scalenes, which tend to be two of the tightest muscles in the neck, and can cause irritation to the vagus nerve. Stretching out these muscles relieves pressure that may compromise vagus nerve function.

Ozel Asliyuce, Y., Berberoglu, U., & Ulger, O. (2020). Is cervical region tightness related to vagal function and stomach symptoms?. Medical hypotheses, 142, 109819. https://doi.org/10.1016/j.mehy.2020.109819 Get in touch with us to discover how our multisensory programs can create lasting change for your clients.





# Ear Massage

Stimulate the vagus nerve and feel more relaxed with just your fingers.

- Begin by bringing awareness to the ears. One at a time, assess the tension in them by gently pulling the ear away from the head at different points. Notice if one side feels more elastic or stiff compared to the other.
- Place the index finger in the hollow above the ridge that is above the ear canal and gently massage the area in little circles, and visualize the skin sliding over the bone.
- Bring your finger to the ear canal and softly press toward the back of the head while making small circles with your finger.
- Repeat on the other ear, and then reassess the ears by gently pulling them and noting any changes in stiffness.





#### Rationale

The auricular branch of the vagus nerve supplies sensory innervation to the skin of the outer ear. By providing sensory input to these parts of the ear, the vagus is stimulated to increase vagal tone and initiate a relaxation response through parasympathetic activity.

Rong, P. et al., (2020). Auricular vagus nerve acupressure for patients with emotional distress under the COVID-19 pandemic: a smartphone-based, randomized controlled trial. https://doi.org/10.2196/preprints.25001



# A Polyvagal Practice

Our evidence-based therapeutic tools empower therapists, clinicians and educators to help their clients become more aware, regulated and resilient. **Visit integratedlistening.com to learn more.** 



#### SAFE AND SOUND PROTOCOL (SSP)

Five-hour listening protocol that activates the neural network associated with listening to regulate the autonomic nervous system, designed to reduce auditory sensitivity while enhancing social engagement and resilience. Delivered in-person and/or remotely and includes three unique pathways, allowing for treatment customization.



#### FOCUS SYSTEM

Music and movement program to increase neural pathway development. Filtered and gated classical music with six programs are included with every system.

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