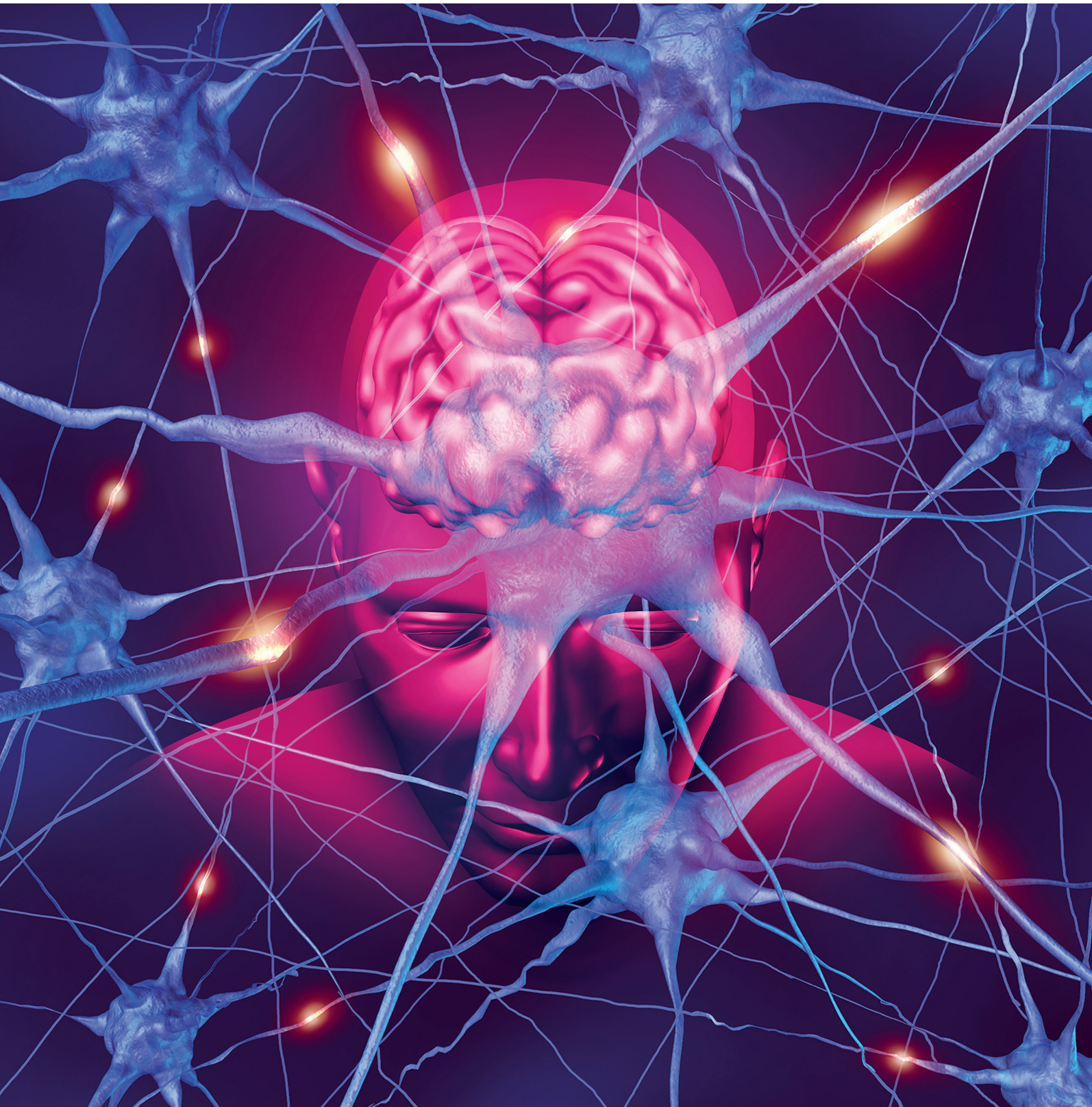
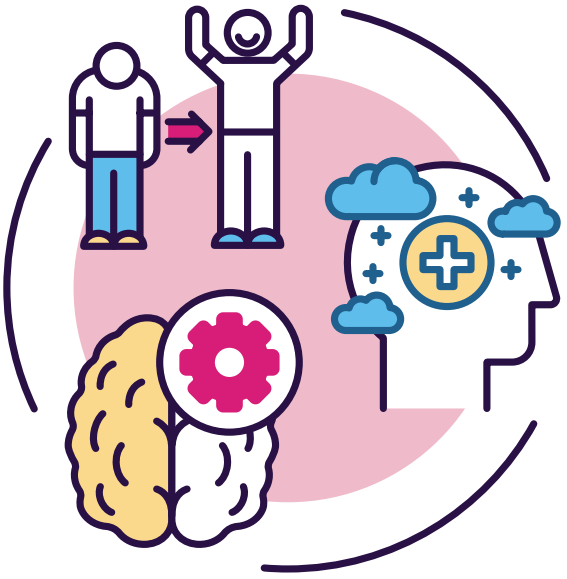
HSC Health and Social Care

Making Our Nervous System Work for Us

USING THE POLYVAGAL THEORY TO IMPROVE OUR WELLBEING





This book is for anyone:

Service users, parents, staff in the HSC and voluntary sector

This booklet is based on the work by Stephen Porges and Deb Dana. Their work opens up a new way of viewing our nervous system, allowing for new ways of working, giving us hope and possibility.

Our wellbeing is dependent on a functional and adaptive nervous system, which has as much to do with our body as our mind.

This booklet will help us understand our nervous system better using the Polyvagal Theory to improve our wellbeing. It is aimed at adults as applying this work to younger children would take a different approach.

This book is in 4 parts

Part 1: Understanding our nervous system better and introducing the Polyvagal Theory.

Part 2: Calming our nervous system: Breathing, self-calming and self-compassion.

Part 3: Befriending and attending: Getting to know our nervous system better through a Polyvagal lens - exercises to help us do this.

Part 4: Owning and guiding our nervous system: Being adaptive and flexible with exercises to help us do this.

The booklet finishes with making sense of the learning with an overview, take home messages, evaluation, references and further resources.

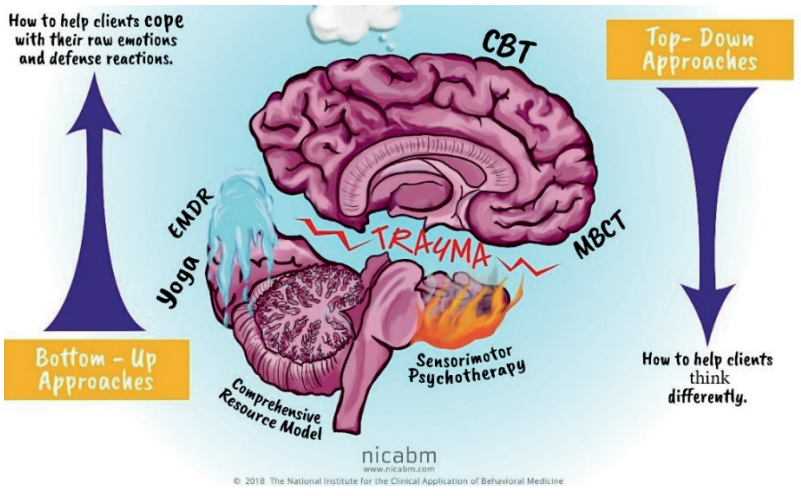
A Typical Day - can you relate to this?

- I woke up at 7:00 am to a harsh, blarring alarm
- I flicked the radio on to the news filled with doom and gloom
- I looked at the window to grey sky and rain (it is Northern Ireland)
- As I get the kids ready for school, they are fighting over which socks to wear
- I get everyone in the car, drive off, only to get caught up in roadworks
- I drop the kids off at school with a reminder about masks and hand sanitiser as there are germs everywhere and I tell them to be careful
- I get to work and my manager greets me with, “I need to see you”
- I feel stressed, want to go home and back under the duvet and it’s only the start of my day.

Is this all down to my thinking?

When I think about my nervous system, I would always think about my brain and how it controls everything. I have been using work from Cognitive Behaviour Therapy (CBT) which sees how situations, thinking, emotions, our body and behaviour are all linked.

I would have thought my stress is down to my unhelpful, negative thinking. Thinking in a more rationally and balanced way can be helpful. Yes, it can. But what about what is going on in my body? Is there something I am missing?



From the National Institute for the Clinical Application of Behavioural Medicine 2018

What if my body is a source of a lot of that stress?

When reading about the work of Stephen Porges and Deb Dana and the **Polyvagal Theory**, it gave me a different way of looking at my nervous system. The word might throw you a bit - **Poly…. what?**

Our nervous system and responses to stress is guided by how our body responds to triggers we experience so many times a day. When people have had harsh past experiences, they can be stuck in repetitive reactions and… this pandemic has brought a whole new set of challenges for us all.

Learning about and getting to know our nervous system can point us in a direction of better wellbeing. That is what the Polyvagal Theory is all about.

It is our hope the tools in this booklet will be helpful.

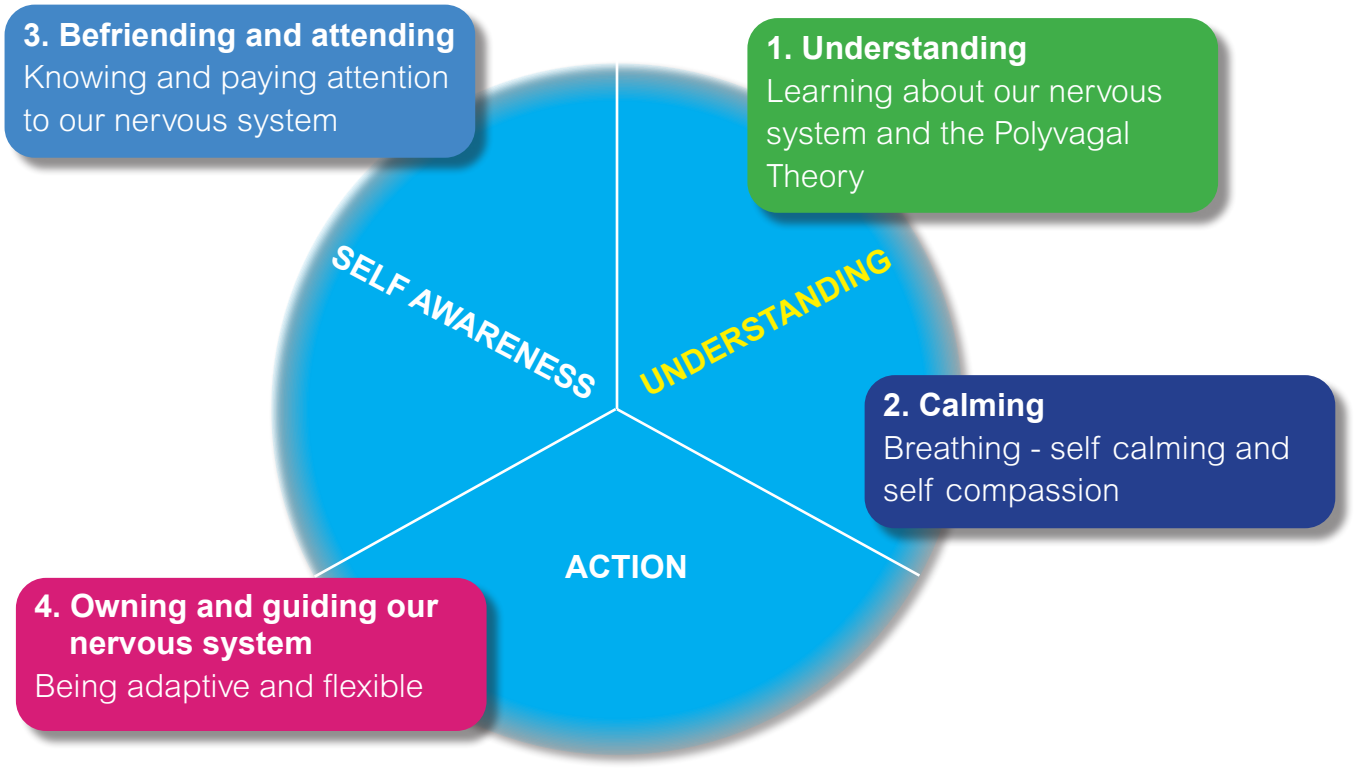
Using this booklet

This is by no means a complete work on the Polyvagal Theory. It was written to help introduce it with a group of service users and workers in the summer of 2021.

The challenge is explaining the Polyvagal Theory, so we have a common language, understanding and exercises to help this work make a difference.

By developing an understanding of the workings of your Vagus Nerve, you may find it possible to work with your nervous system rather than feeling trapped when it works against you.

Dr. Arielle Schwartz, Clinical Psychologist



Getting the most from this booklet

- It is up to you how you use it. Use what you find helpful
- It is a "workbook." It will involve some work from you to get the most out of it
- Don't rush it. Spread the exercises over a number of weeks if you can
- Do not let unfamiliar words throw you. Read it over a few times if you need to
- Talk about your learning. Ask questions or look stuff up
- Go slowly through the exercises that follow and carefully monitor your responses
- Stop if you feel you have opened up a part of you that is difficult to manage. If you experience an increase in any symptoms or distress, stop, and discuss it with a professional
- This work is not a quick fix for stress. It will take effort on your part. It takes time and repetition to build positive habits. ***We hope you find it helpful.***

Part 1: Understanding

Learning about our nervous system and the Polyvagal theory

Life certainly has its challenges. The goal is for flexibility and regulation, which strengthens resilience.

This part of the booklet may seem a bit scientific, so read it over a few times if you need to. There is a glossary of terms at the end of this section that may help.

Your nervous system's goal is to keep you safe and alive. That is its job. Our nervous system has evolved from our cave dweller days when the world was full of danger. While the world is not as dangerous, our nervous system is still working like that.

Your brain and body are constantly taking in and processing information. Our brain uses thinking and memory but there is more.

It is like our body has an internal smoke detector that will scan for safety and danger, 95% of this you don't consciously notice.
It is not our brain, it's our body.

Information picked up gets our nervous system into gear:

- Mobilising the body for action to threat and danger (fight or flight)
- The calming system acts much more slowly.

These systems work together to manage the body's responses. If you are facing a threat, the flight or fight response will quickly mobilize your body to act. Once the threat has passed, the calming system will start to dampen these responses, returning your body to its normal state. This happens with every day stresses, even when our lives are not in danger.

Here is an example: You enter a crowded party full of strangers. You unconsciously pick up cues of not fitting in and your nervous system leaps into action: heart beating faster, breathing shallower. You turn around to leave or head straight to the buffet and fill a plate.

Then, suddenly someone you know walks toward you, their face open and welcoming. Instantly, your breathing slows, your heart rate goes down, and your body relaxes into the experience of *Ah, I'm safe now.* Your smoke detector has picked up cues of safety that has just guided you from a fight or flight reaction to a more calming, connecting state.

That internal smoke detector can respond in 3 ways. This is what the Polyvagal Theory adds to understanding how our nervous system works.

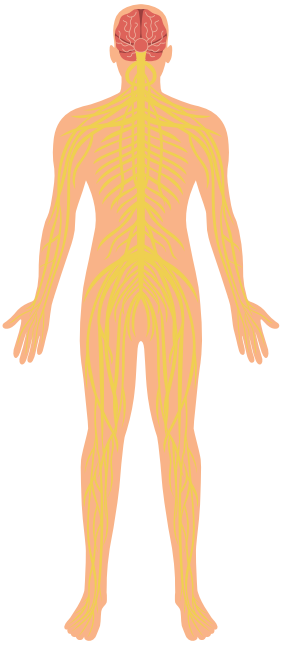
1. **Connected and safe:** If we are not picking up signals of threat or danger, we feel safe and connected. How does this look and feel?
   - We can feel openness, peace and curious
   - We are sleeping well and eating normally
   - Our face is expressive
   - We emotionally relate, understand and listen to others
   - Our body feels calm and grounded.

2. **Fight or flight:** If your internal smoke detector senses threat or danger, stress response revs up, preparing you for fight or run (flight). Connection to the thinking part of your brain stops.
   As your brain and body responds, feeling threatened may feel….
   - Heart beats faster
   - Breath is fast and shallow
   - Pupils dilate (expanding your ability to scan for cues of danger, but triggers sensitivity to light)
   - Gut becomes inactive (to conserve energy affecting digestion)
   - Stress hormones rush through your body bringing blood to your muscle to react quickly to threatening situations, without thinking about it.

3. **Shut down:** This is part of the calming system. It helps us survive, while preparing to fight or flight again. When our nervous system has kicked into overdrive, and we still cannot escape, a protective part of the nervous system shuts down or freezes, as a form of self-preservation. It's like a turtle with its head in its shell.
   How does this look and feel?
   - We can feel numb, dizzy, hopeless, trapped, disconnected from the world
   - Our eyes may look fixed and spaced out
   - It decreases our heart rate, blood pressure, facial expressions
   - We may feel sick or throw up
   - We may feel low or no pain
   - We may have difficulty getting words out or feel constriction around our throat
   - Our brain's activity decreases. We have trouble thinking clearly.
   - Our body posture may flop or curl up in a ball.

While your nervous system is constantly working hard to protect you, it can be shaped by the past. Your nervous system may see danger even if it is not actually there. This is common for people who have had trauma or extreme stress in their lives.

As said earlier, 95% of all this you don't consciously notice.
It is happening in the body. What connects it all: the Vagus Nerve.



What is the Vagus Nerve and what does it do?

The Vagus Nerve is the sensory highway that tells your brain what is going on in your organs and muscles. It is the longest nerve in the body running from the brainstem at the base of the skull to the colon. It is an essential part of the calming nervous system, which helps calm our organs and deal with the aftermath of fight-or-flight.

"Vagus" means "wanderer" in Latin. The Vagus Nerve wanders all over the body to your organs. It is our internal control centre, allowing the brain to receive information about things like heart rate, blood pressure, sweating, digestion, even speaking. It picks up signals from the body (lungs, liver, stomach and heart) and sends it to the brain. The brain then sends messages back down to the organs.

The Vagus Nerve is a busy highway:

You can think of the Vagus Nerve like a busy highway with four lanes going north and one lane going south.

The four lanes going north are carrying messages from the body to the brain. The one going south is the brain communicating to your body.
That is your Vagus Nerve at work.

Introducing the Polyvagal Theory

What is the Polyvagal Theory?

POLY – many and VAGAL (based on the role of our Vagus Nerve). The Polyvagal Theory is based on the work of Stephen Porges and developed further by Deb Danna.

A major theme of the Polyvagal Theory is that we respond to threat in a specific order, from most sophisticated to most primitive based on how the human brain has evolved.

- When we feel connected and safe, we are using what is called the ventral vagal pathway. When we feel too challenged and overwhelmed, our pathway for safety and connection goes off line and into the background
- The next pathway that comes on-line is the sympathetic mobilsation of fight and flight. This mobilised energy can make us either argue with someone or get out of there
- If taking action does not resolve the issue of the moment, we drop into dorsal vagal, immobilisation, disconnect/disappear mode.

Neuroception is the name for that internal smoke detector. It is the way our nervous system scans for cues of safety, or danger and threat without involving the thinking part of our brain. It is listening to what is going on through:

- Our body - in our muscles and organs
- From what our senses are taking in
- Between us and other people. Your nervous system is picking up cues from another person's nervous system through tone of voice, body language, and facial expressions.

This information can be liberating. It is my body doing this, not my brain. I am not making a conscious choice here. My biology has felt a threat and is taking an action to protect me. So how can I use this information?

How our nervous system responds: our Autonomic Ladder

Deb Dana uses a useful image of a ladder for how the autonomic nervous system responds and calls it our Autonomic Ladder.

The ventral vagal state - (Connection mode): A neuroception of safety brings us to the top of the "ladder." This is a state of social engagement, connection and feeling safe.

The sympathetic nervous system state of mobilisation - (Fight or flight): Fuelled with stress hormones we are ready for action. You may feel you need to protect yourself or go into overdrive.

The dorsal vagal state – (Shut down mode): Going down the ladder, if we sense signs of extreme danger, we go into a state of immobilisation. You might feel unsafe, frozen, numb, not here, alone, or hopeless.

These are unfamiliar words for us, even the Autonomic Nervous System. The autonomic nervous system is like the cruise control of your nervous system. It handles all of the automatic functions that your body must do minute to minute, without conscious thought.

It arouses the body in a crisis and calms it down when danger has passed. It has two parts:

- The sympathetic nervous system is the 'fight or flight' response
- The parasympathetic nervous system is the calming system including the Vagus Nerve.

Improving our vagal tone - how well the Vagus Nerve is working

Increasing your vagal tone means your body can relax faster after stress. Vagal tone can be measured by tracking your heart rate and breathing. There is a positive link between higher vagal tone and better physical and mental health. Increasing vagal tone has been shown to help treat conditions like: depression, anxiety, Alzheimer's, migraines, Fibromyalgia, autism, addiction, Bulimia nervosa, personality disorders, multiple sclerosis, obsessive compulsive disorder, chronic fatigue syndrome. That is some list!

So how can this work help you?

So much happens to us that is outside our conscious awareness. Every day we shift and work our way up and down the ladder without being aware of it. Some of us live mostly in the connected zone, but others, due to adverse life experiences, tend to spend more time further down the ladder and have a harder time "climbing" up.

No one is at the top of the ladder all the time. Our nervous system responds to any cue of danger. These triggers can move us into a fight-flight or shut down mode (collapse and disconnect) many times a day. Knowing where we are on our autonomic ladder is a protective factor for well-being. Knowing where we are and being flexible how we respond, is the purpose of this work.

What might an example of moving up and down the autonomic ladder look like?

- I pick up my grandkids for school. They are not ready. They are fighting over a top to wear. I move into fight or flight and shout at them to hurry up
- After I drop them off, I'm driving to work enjoying a CD playing (top of the ladder). A siren comes behind me (quickly move down the ladder). I feel my heart race and breathing speeds up (Staying down the ladder)
- I pull over and an ambulance goes past me. I resume driving to work and feel my heart begin to return to its normal speed (moving back up the ladder)
- With two tractors on the road, I am worried I will be late for work and speed up. Is that flight or fight response working with my foot on the gas pedal?
- I am late to work. A co-worker comments on my lateness and I have a tough time holding in an angry response. I feel drained of energy, move to my desk and slump in my chair (Does conflict bring me to a hideaway, dorsal state?)
- I turn on my computer to see a deluge of emails and I get in a mobilised state. My fight or flight mode has me in an overdrive mode typing away.

In the next section we will look at calming, soothing tools we can have and use anytime, anywhere. They would have been helpful in the example above.

I heard a useful description using a car to illustrate the nervous system.

The gas pedal is our sympathetic nervous system that speeds the body into mobilisation.

Our brakes are the parasympathetic nervous system that slows it all down.

What the Polyvagal Theory teaches us is how to use our gears to slow the engine down as we go round corners or speed it up when we need to. Let's learn how to use our gears to our advantage.

Notes from Part 1: Understanding our nervous system.

What key learning did you take from this section?

- ✔ _____
- ✔ _____
- ✔ _____

What questions did it leave you with?

_____

_____

Given how easy it is to get stuck in a fight or flight or shut down state these days, how does all this sound to you? For a useful podcast by Deb Dana listen to:
https://resources.soundstrue.com/podcast/deb-dana-befriending-your-nervous-system/

Words used in this section

Language is important.
Call or describe the parts of the nervous system in ways that make sense to you.

Word used in the Polyvagal Theory	Function	Descriptive words used in this booklet	Words that will makes sense to you
Autonomic Nervous System	Functions in the body that does not involve thinking - happens automatically	Cruise control of the body	
The sympathetic nervous system	Survival response to threat or danger	The 'fight or flight' or mobilisation response	
The parasympathetic nervous system	Brings the body back to its normal state	The calming system including the Vagus Nerve	
Neuroception	The way our nervous system scans for cues of safety, or danger and threat without thinking	Internal smoke detector – our body scanning for cues of safety, or danger and threat	
Autonomic Ladder	The way the body responds to signals it picks up	Deb Danna's ladder of the nervous system's response	
The ventral vagal state The sympatric nervous system state The dorsal vagal state	At the top of the Autonomic ladder Stress hormones get us ready for action to protect yourself or go into overdrive A state of protective immobilisation	Feeling safe and connected Fight or flight Shut down mode of freeze like a deer in the headlights	
Vagal tone	How well the Vagus Nerve is working		

Part 2: Calming our nervous system:
Breathing, self-containment techniques and self-compassion

To get us started on a journey of using this work, we think these tools can help us at any time to create calm when feeling overwhelmed:

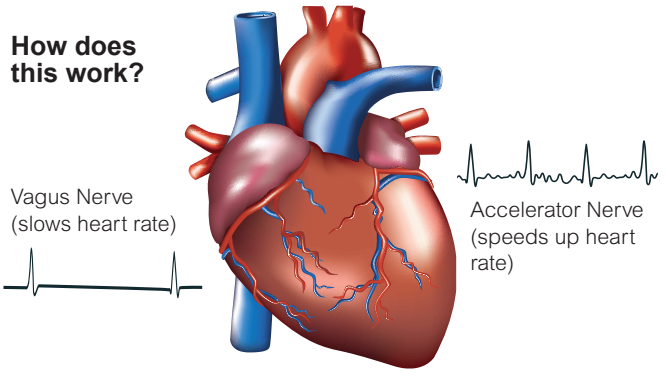
- Breathing techniques
- Self-calming - self containment
- Self-compassion.

Breathing: one of our strongest tools for our nervous system

When we experience stress, we tend to breathe more shallow and rapid. This type of breathing is part of the fight/flight/freeze response. Slow, belly breathing is really effective to counter that.

What makes slow, belly breathing so calming?

Our Vagus Nerve runs past our ears, throat and into our lungs and heart. When you breathe out longer than you inhale, the Vagus Nerve sends a signal to turn up your calming, parasympathetic nervous system and to turn down your flight or fight, sympathetic nervous system.



Sounds simple? Yes, it is. When we practice this regularly, it can become more automatic. There are different forms of relaxed breathing. Here we are going to try 2-4-1. Look on YouTube for other forms of relaxed breathing and find one you like.

1. To begin, sit still and tall somewhere comfortably. Close your eyes and begin breathing through your nose. Draw air from your stomach, not your chest.
2. Inhale for a count of 2. Pause at the top of your inhale for a count of 1.
3. Exhale gently, for a count of 4. Pause at the bottom of your exhale for a count of 1.
4. Keep your breathing even and smooth. If the 2-4 count feels too short, try increasing the breath lengths to 4 in and 6 out. If longer breaths create any anxiety; there is no need to push yourself. The most important thing is that the exhale is longer than the inhale.

Exhaling through the mouth with a soft “haaa” sound like you are misting your glasses to clean them can also be useful. Creating sound stimulates the Vagal Nerve.

Set a timer and breathe this way to see a difference. Just 5 minutes a day can have influence on your mood. 11 minutes a day balances hormones in your body. 25 minutes a day can balance blood pressure.

Calming through self-containment

When stress gets too much, we may feel out of control, chaotic or overwhelmed.

Here are two exercises from Peter Levine that may help. (See references for more information).

Self-Hug

Being out of control is unsettling, even if it is unconscious.

This exercise helps us become aware of our body as the container of all of our sensations and feelings.

When we can feel the container, then the emotions and sensations do not feel as overwhelming.

Place one hand under the opposite arm, and then place the other hand over the upper part of the other arm. You are giving yourself a hug.

Pay attention to your body.

Let yourself settle into the position. Allow yourself to feel supported by it. Allow yourself to feel contained.

See if you can sit with it for a while. Let it shift your perceptions of yourself and the world before coming out of it.

You have just taken a step to soothing and nurturing yourself. Well done!

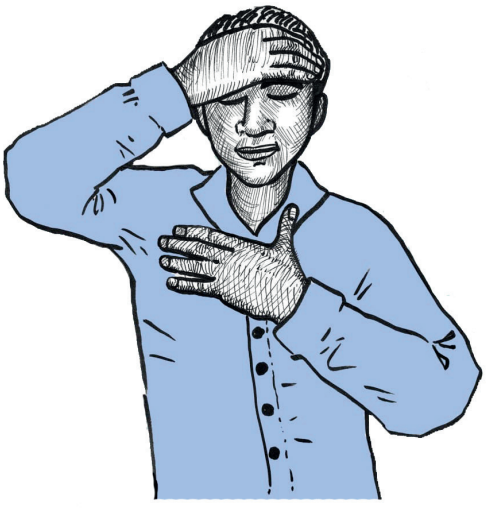
2 Steps Self-Soothing Hand Positions Exercise

People with anxiety or extreme stress can struggle with feelings of hyperarousal, nervousness and internal chaos.

The goal of this exercise is to train our nervous system to develop more body awareness.

As with the above exercise, this also helps us feel the body as a container, and more empowered to change the physical and emotional states we are in.

STEP 1



Get into a comfortable position with your eyes either open or closed. You may lie down or sit. Whatever is comfortable for you.

Place one hand on your forehead. If you are lying down, you may place pillows to one side so you can relax your arm onto the pillows as you rest your hand on your forehead.

Place the other hand on your heart:

- Pay attention to what is going on inside your body
- Gently, pay attention to where your hands and body meet

- Pay attention to the areas you are touching. How does it feel now that there is a hand touching it?
- Then pay attention to the hand. How does it feel now that it is touching your body?

Do the same for the other hand. Focus on whichever hand you feel drawn to, at your own pace, for as long as needed.

Remain that way until you feel a shift. You may have to wait a while. Be patient.

Peter Levine says, *"Just feel what goes on between the hands and the body. Sometimes you will feel an energy flow or a change in temperature. Keep your hands there. It could be a few moments, or 5 or 10 minutes, until you feel some kind of shift."*

STEP 2

Take the hand that is on your forehead and place it onto your belly.

Repeat as in STEP 1 paying attention to any feelings going on inside your hands.

Then put your attention inside your body. Focus on the sensations in your body where your hands are laying.

You may go back and forth slowly if you like, focusing on one hand area and then the other. Focus on whichever hand you feel drawn to, at your own pace, for as long as needed. Wait until there is a shift.

Additional Self-Holding Exercise:

Mental Container / Mental Calm Exercise. Place your hands on each side of your head, so they are holding and soothing each side of your brain. Then place one hand on your forehead and one hand on the back of your head. Feel how your hands create a container for your thoughts.

Why do these kinds of exercises work?

1. The human nervous system responds to touch and has been used since ancient times. Think of how we are held and calmed as babies.
2. This is one of many exercises that help you to focus on the body. This change of attention and awareness can be therapeutic.
3. To do this, you need to be gentle towards yourself rather than harsh or critical.

Self-Compassion

In the exercises in this booklet, you will be asked to notice the state your nervous system is in non-judgementally.

Shaping your nervous system helps the more you use self-compassion.

Practising self-compassion has shown an increased flexibility of response to stressful experiences (Friis, Consedine, & Johnson, 2015).

Self-compassion is not the same as self-esteem or self-confidence. It is a way of thinking and treating yourself. For many people self-compassion is challenging. Their default response is one of self-criticism which triggers the fight / flight or freeze response.

3 Elements of Self-Compassion

Dr. Kristin Neff, researcher in the area of self-compassion, talks about the three parts of self-compassion.

Self-kindness: You are kind to yourself when things go wrong instead of being critical. It involves treating yourself like you would treat a good friend, despite their flaws. When you think like that, it changes the way you view life's challenges and difficulties. It opens the door for you to grow from experience.

Imperfection and Common Humanity: You recognize that every single human being on this planet makes mistakes. It is unrealistic to expect perfection. Making mistakes is part of learning and being human. This can be a weight lifted off your shoulders. Self-compassion is about realizing that all human beings make mistakes, including you.

Mindfulness: Another part of self-compassion is mindfulness. Many people usually want to avoid uncomfortable emotions. Practicing self-compassion involves being able to observe our uncomfortable emotions without exaggerating them or ignoring them. Acknowledging our feelings helps us to not become over reactive. Just by naming what we are feeling can help start to turn on the calming part of our brain.

How to Practice Self-Compassion

There are exercises that Dr. Neff suggests strengthening self-compassion:

- Imagine how you would talk to a friend. We often extend kind words, hope and encouragement to friends when they are struggling. When going through a tough time, take a moment to consider how you might respond to a close friend if they were going through a similar situation
- Become an observer. During times you are struggling, slow down. Get curious. By slowing down, we can take a step back to observe what is happening, keeping things in perspective. This helps us see what is important, which otherwise might have been missed
- Change your self-talk. Notice how you talk to yourself when you are having strong emotions like anger, worry or sadness. Work to rethink your critical self-statements in a nurturing way like a mentor or coach, rather than a critic or judge

- Change your self-talk. Notice how you talk to yourself when you are having strong emotions like anger, worry or sadness. Work to rethink your critical self-statements in a nurturing way like a mentor or coach, rather than a critic or judge.
- Keep a journal and write it down. Take time each day to write down the challenges you are experiencing. Write down moments your mind makes critical statements. Intentionally, rethink those critical statements with a softer, more understanding tone to see how it might feel different
- Care for yourself. Sometimes we take care of others and ignore our own needs. When practicing self-compassion, you are recognising that you have needs and are worthy of looking after yourself.

The practice of self-compassion can be quite different than anything you have done before. Be patient with yourself. Changing the habit of being self-critical into more compassionate self-talk takes time and repetition.

To start being more self-compassionate, here is one exercise to start with:

How would you treat a friend? Please take out a sheet of paper and answer the following questions:

1. First, think about times when a close friend feels really bad about themselves or is really struggling. How would you talk to them? Please write down what you typically do, what you say, and note the tone in which you typically talk to your friend.
2. Now think about times when you feel bad about yourself or are struggling. How do you typically respond to yourself in these situations? Please write down what you typically do, what you say, and note the tone in which you talk to yourself.
3. Did you notice a difference? If so, ask yourself why? What factors or fears come into play that led you to treat yourself and others so differently?
4. Please write down how you think things might change if you responded to yourself in the same way you would respond to a close friend when you are struggling.

Why not try treating yourself like a good friend and see what happens.

Using breathing, self-containment techniques and self-compassion, what difference did these make for you?

- ✔ Breathing techniques
- ✔ Self-containment
- ✔ Self-compassion

Part 3: Befriending and attending

Getting to know our autonomic ladder

Listen to the wind, it talks. Listen to the silence, it speaks. Listen to your heart, it knows - Native American Proverb

Let's recap what we have been talking about so far.

Our nervous system is shaped by early experiences and reshaped by ongoing experiences. We can change the way it responds, *and that takes intentional work.*

Most of what our smoke detector (neuroception) is taking in is outside our conscious awareness but is open to influence.

This is your nervous system listening inside to what is happening in your organs and muscles. It is the way the nervous system takes in information without involving the brain.

Even before the brain makes meaning of something, your autonomic nervous system has picked up cues of safety or danger and begun an adaptive response outside conscious awareness.

Cues of safety - activates the social engagement system helping you feel safe and connected (ventral vagal)

Cues of danger - steps you into mobilisation - fight and flight (Sympathetic)

Cues of life threat - bring a shift into immobilisation or collapse (dorsal vagal)

The size and temperature of a room, the feel of a chair, a face with a smile or a frown are types of things that are taken in by neuroception and bring an autonomic response.

Each day we climb up or down that ladder without being aware of it. (Autonomic ladder). We can get stuck in certain states.

Looking through the lens of Polyvagal Theory, a regulated nervous system is a nervous system that is not always at the top of the ladder (Ventral Vagal).

It is about noticing that need for safety and connection and knowing how to find your way back there when needed. The goal for regulation is flexibility.

To get started – getting familiar with the autonomic ladder

Adding language to the three autonomic states is a way to get to know them better.

Smoke detector picking up feeling safe, connected Ventral Vagal: Neuroception of safety	Smoke detector picking up danger - Fight or flight Sympathetic State: Neuroception of danger.	Smoke detector picking up life-threat: Immobilized, freeze, shut down Dorsal Vagal: Neuroception of threat.
		

What difficulties or situations tend to overwhelm you?

- _____
- _____
- _____

Are there times of feeling safe and connected (ventral vagal) that comes to mind? By yourself? With others?	
What does fight or flight look like for you? (mobilisation) Where does that mobilisation take you?	
Is the experience of disappearance, shutdown familiar to you? (Dorsal vagal) What happens to you when you shut down?	

Let's recap what we have been talking about so far

Having the ability to name your states and recognise shifts between them, you can see how you move up and down the Autonomic ladder.

You can choose other names for the 3 states:

Safe, connected (ventral vagal) - _____

Fight or flight (sympathetic) - _____

Shut down (dorsal vagal) - _____

What colour would you give them?

Safe, connected (ventral vagal) - _____

Fight or flight (sympathetic) - _____

Shut down (dorsal vagal) - _____

What animals would you use for each?

Safe, connected (ventral vagal) - _____

Fight or flight (sympathetic) - _____

Shut down (dorsal vagal) - _____

What places or scenes (like nature) describe them?

Safe, connected (ventral vagal) - _____

Fight or flight (Sympathetic) - _____

Shut down (Dorsal vagal) - _____

Now complete this with two sentences for each state: "I am..." and "The world is.

You	I am...	The world is...
Safe, connected (Ventral vagal)		
Flight or fight (Sympathetic state)		
Shut down (Dorsal Sate)		

Connected and safe anchors (Ventral Vagal Anchors)

An exercise you can do regularly

An anchor holds you safe. While it holds a boat steady, it still gives room to move at the top. You are not just held in one spot.

Anchoring in a safe and connected place (ventral vagal) allows you to stay there but also allows you to experience what is happening when in other states.

Our anchor reminds us, the world is OK, and I am going to be OK in it. This exercise helps you name and own what are anchors for you.

Who?

Think of the people in your life and make a list of the ones who bring you a feeling of being safe. You might also have a pet that does that. Your list can include people who are no longer living, and spiritual figures.

What?

Think about what you do that brings your sense of safety and connection alive.

Look for small actions that feel nourishing, relaxing and soothing.

Keep track of the things that bring moments of safety and connection.

Where?

Take a mental tour of your world. Name the physical places that bring you cues of safety.

Look around your home, your community, your workplace, a place you feel a spiritual connection. Nature does that for a lot of people.

When?

Identify the moments when you feel anchored in safety (your ventral vagal).

Take a moment and be aware of them. Write them down.

When you do this, take notice of what it does for you.

If you have anchors, good. If you struggle a bit with this, start small and build on them.

And …….Don't forget your breathing work.

Paying attention to your autonomic states:

You can't heal what you can't see

> Wellbeing is not simply the absence of problems, but also the presence of strengths

In any given day, how many "triggers" or signals of danger do we experience? As we have talked about, our nervous system continually scans for signs of risk and safety.

Triggers move us into fight-flight or shut down, collapse, and disconnect. With the pandemic, there are added triggers about: germs, infection risk, along with other pressures of modern living.

The aim is not to get rid of triggers entirely but to move out of a place of judgment to flexibility.

As we make use of the Polyvagal Theory, we started with getting to know the 3 states of the autonomic ladder.

- Ventral Vagal state: safety and connection
- Sympathetic state: danger, fight or flight
- Dorsal Vagal state: immobilised, shut down.

Remember, it is not your thinking; it is our body's internal smoke detector scanning for signs of safety or danger. This happens without any conscious awareness (neuroception).

The next step is attending (knowing) where we are.

The more skilful we are at knowing where we are, the more flexible we can be in how we respond.

It is important to note there is no right or wrong place to be, good or bad. Fight or flight, shut down may be protective. They are the way we adapt. The question is - is where we are working for us?

Exercises to help you see the states you are in.

Daily Tracker

Reflecting at the end of a day to the small autonomic changes is an effective way to see the moves up and down the ladder you had that day.

This brings a deeper awareness and understanding of the ways your autonomic nervous system shapes any given day.

Remember that your autonomic response is an adaptive one. Don't look for what is good or bad. Look for what was present with no self-judgement. Regular tracking practice helps you see the small shifts in patterns of your system going up and down the ladder.

Daily Pie Charts

We tend to give days a label: a good day, a tough day, a quiet day, a busy day based on one or two particularly intense moments or on a string of related things.

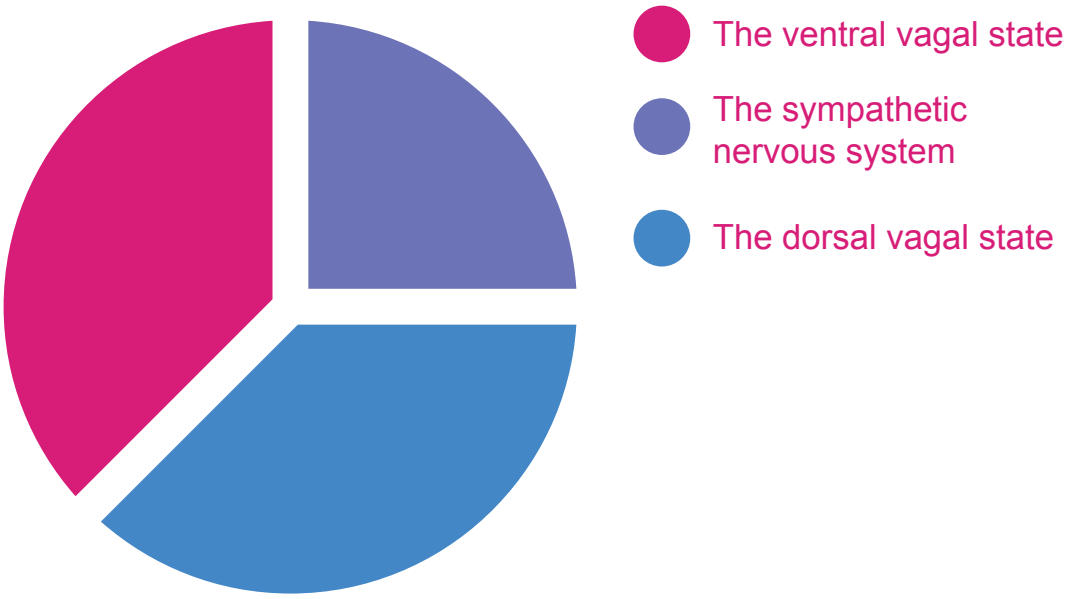
When you name your days in this way, you often miss things. You can miss ***"Glimmers"***, those micro-moments of safety and connection that we will talk about later.

When considering a day through a Polyvagal lens, look at the amount of time spent in each state. This gives a more complete picture of your experience that day.

With a pie chart, you can see the level of safety/connection (ventral vagal), flight or fight (sympathetic), and shutdown (dorsal vagal experiences).

What was the global flavour of your day? A pie chart offers an image of the overall picture of a day.

1. Use a blank circle each evening to review your day. Blank charts are in the back of this booklet.
2. Choose the colours you want to represent each state and divide your pie into ventral vagal, sympathetic and dorsal vagal pieces.
3. Make a collection of your daily charts. Use that collection to get a sense of your autonomic experience over a period of time.
4. Is there a day of the week that repeatedly brings the same autonomic responses?
5. Is there an overall tone of a week? Is there a pattern to your weekend?
6. Is this a time of transition or big changes in your life. Use your pie charts to see how your autonomic nervous system is responding to those changes.



Part 4: Owning and guiding your nervous system:

Finding glimmers to connections and safety

Human beings are built with a negativity bias. We are biologically wired to pay more attention to the negative and can often miss the positive. This is a survival instinct.

Sometimes due to trauma or negative experiences, certain sounds, smells, people, and places can be triggering and can affect us. As Deb Dana explains, “Trauma and danger reshape our system so that we are more prone to pathways of protection than pathways of connection. This keeps us in a survival state instead of a thriving state.”

We have loads of “triggers” at home, work and when out and about. With those cues of danger, we need to tap into our “glimmers.”

What are glimmers?

Glimmers are the micro-moments of safety and connection (ventral vagal experiences) that happen every day yet often go unnoticed.

Glimmers help us feel safe, connected to ourselves and other people.

It is not enough to prevent cues of danger. A fundamental step in shaping your nervous system is seeing glimmers: a friendly face, a certain smell, a soothing sound or noticing something enjoyable. Pause to take it in, then look for more. These cues of safety bring us back to calmness. Revisiting these things can act as an antidote to the triggers all around us.

Steps for developing and using your glimmers

Looking through the lens of Polyvagal Theory, a regulated nervous system is a nervous system that is not always at the top of the ladder (Ventral Vagal).

It is about noticing that need for safety and connection and knowing how to find your way back there when needed. The goal for regulation is flexibility.

1. Make a menu of glimmers so you have plenty to choose from that work for you.
2. Set a goal to look for a certain number of glimmers each day. Choose a number that feels doable. If glimmers are hard for you to see, look for just one. As finding glimmers becomes easier, set a new goal.
3. Look for glimmers during your day. Glimmers happen regularly, but because they can be small micro-moments, you need to be on the lookout for them. Notice when you feel that spark of feeling safe and connected (ventral vagal).

4. When you notice a glimmer, stop, and appreciate it. Acknowledge a glimmer when it happens. You might bring attention to the moment by simply saying “glimmer” or with a small movement like your hand on your heart.
5. Write them down. Create a daily glimmers notebook.
6. Look for glimmers in specific places, with particular people, at certain times.
7. Share your glimmers. You might text your glimmers to a friend, make talking about daily glimmers a family ritual, share your glimmers with others. This may also help you get new ideas from others.

What are some common glimmers? A playlist of music that call up feelings of calmness, scents like candles, oils that bring a sense of peace. Nature holds an abundance of glimmers for some people: the forest, the sea, the sky.

We are all different and glimmers are very personal to each of us.

From Glimmer to Glow

When you recognise a glimmer, you feel the spark of feeling of safe and connected. (Ventral vagal).

Just as sparks can ignite a fire, glimmers can be turned deeper into a glow.

Pause just long enough to acknowledge that a safety and connection moment is happening.

Stop and celebrate the glimmer. Take time to soak it in and give it deeper meaning.

1. Notice a glimmer, stop, and let the experience fill you. Move beyond a few seconds and stay with the experience for half a minute or more. Give the glimmer time to become a glow.
2. Feel what happens as you move from connecting from a micro moment to a longer experience of taking it in.
3. Describe your experience of the glimmer and the glow.
   A glimmer moment might be a quick hit of happiness that brings a smile. When you turn a glimmer into a glow, the experience feels like basking in the warmth of the sun while breathing a sigh of contentment.
4. Listen to the story that comes with the glow.

Using your body and senses for regulation and flexibility

As we get to know how our nervous system responds to the signals our smoke detector is taking in, we can use our body and senses to override many of these responses.

Here are some of useful words and what they mean:

Arousal: Arousal is the level of alertness in the body. It ranges from low to high. Different activities and environments need a different level of arousal or change our level of arousal.

Regulation: Regulation is the ability to match arousal to the environment and the activity. It's the ability to adjust to the right level of arousal.

Optimal arousal: Optimal arousal is having a level of arousal that matches the environment or activity. It is called 'Just Right' as it is more helpful. At night time, lower arousal help us fall asleep. At school, work or home, higher arousal helps us focus. High arousal, fight or flight gets us mobilised to act. Sometimes shut down or freeze is protective.

Dysregulated: Dysregulated is the opposite of being regulated. Being deregulated is having difficulty managing emotions or reactions.

How does regulation develop?

Regulation develops over time and with experience. As children, when we experience dysregulation and are able to regulate, we learn what works for us.

This starts with co-regulation.

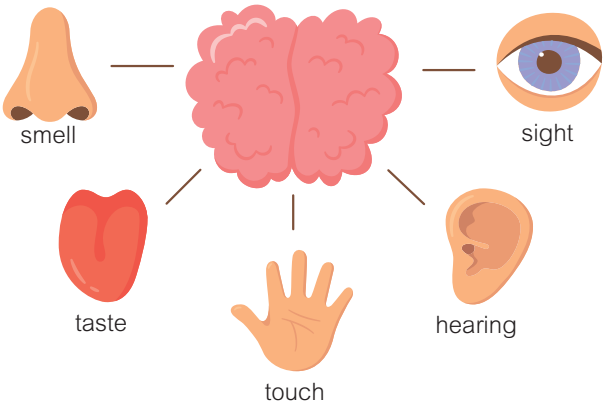
Co-regulation is when someone else helps another regulate. We can do this as much with our bodies as well as our voice. One unique feature of mammals is that we co-regulate all the time. We will describe this more in the section on connections. Co-regulation with carers is what teaches children to self-regulate. They learn what they experience. Co-regulation helps them to develop the brain networks and strategies they need to self-regulate.

Using our senses

Strategies using our senses with regulation can be helpful for everyone.

Sometimes you may need to increase your arousal level that would make you more alert.

Sometimes you may need to decrease that arousal level, needing a strategy to help calm down.



Sensory regulation strategies to help to increase arousal (or being alert)

- Movement
- Crunchy food like carrots and popcorn
- Cold food like frozen fruit, ice cubes or cold water.

Sensory regulation strategies to help to increase arousal (or being alert)

- Heavy work that creates resistance like pushing, pulling, or carrying something
- Yoga, meditation, mindfulness
- Wrapping yourself in a blanket
- Somewhere which cuts out sensory input like a contained, quiet space
- Music
- Visual displays help some people with regulation like lava lamps
- Chewy foods like dried fruit or chewing gum
- Linear (forward and backward) swinging can help some people
- Using bilateral movement, both sides of the body like when knitting or walking
- Breathing exercises can really help to calm as we have discussed.

Other strategies to help regulate

Talking helps some people calm down. Crying or laughing can help. Breathing, as we have said is one our most powerful calming tools. There are strategies that can be used that relies more on thinking rather than moving or the senses including reading, puzzles, colouring or mindful colouring books.

What strategies works best?

Everyone is different. Explore what works for you. Try things and monitor the effect they have. Keep these skills in mind as we explore owning and guiding our nervous system. Remember the guidance at the beginning. If doing something seems to make it worse, stop and talk to someone.

There is no one size fits for sensory regulation. We are all different. Different strategies help different people.

Using Your Vagal Brake: Meeting demands of the day

The vagal brake is responsible for speeding up and slowing down your heart rate. It allows you to feel more fight or flight (sympathetic) energy while keeping your safe and connected system on line and in charge (ventral vagal system).

It is called the vagal brake because it describes actions to slow down or speed up the heart, supporting a flexible response to challenges.

Think about the vagal brake working like the brakes on a bicycle.

Imagine you are riding a bike down a hill, and you want to go a little faster. Release the brakes a bit and feel the wheels spin faster. Gently squeeze the brakes to slow down.

When your vagal brake relaxes but doesn't fully release, you have access to a range of responses, including feeling calm, engaged, joyful, excited, playful, attentive, alert, or watchful, while still safely anchored in feeling safe and connected (ventral vagal system).

You can bring the energy necessary to respond to what is needed in the moment. With practice, the vagal brake supports flexibility in your responses. Examples of where this is useful is in sports or play.

1. Find an image of your vagal brake that works for you which gives you a feeling of control. We mentioned images such as bicycle brakes. Other images include:
   - a bridge that opens and closes to let ships pass
   - a faucet: how fast do we want the water to run
   - a volume control knob: we control the level of sound
   - a dimmer switch: how much light is needed.

   Use the image and/or movement to intentionally engage, relax and reengage the brake. See yourself as an active operator of your vagal brake, shaping the rise and fall of energy. yourself adjusting it.

2. Write a simple story about your vagal brake using the image. Describe your image and how you use it to increase energy and return to calm.

3. Use movement or your senses. Not everyone uses imagery. For some people movement or your senses works better.

4. Connect your vagal brake image and/or movement to your breath cycle. A subtle pattern of relaxation and re-engagement happens with every breath cycle.
   With each inhalation, the brake relaxes then re-engages on the out breath to bring a slower heartbeat. Try this. Feel your vagal brake relax, then re-engage with each breath. Move through several breath cycles until it begins to feel natural.

5. Intentionally exercise your vagal brake. Start with a small challenge, something that is commonly experienced in your day-to-day life. On a scale of intensity from 1–10, choose something in the 1–3 range.

Experiment with a variety of challenges. Build confidence in using your vagal brake to meet everyday challenges. You can practice using your vagal brake with things in your environment, play or with relationships.

Once you feel confident in successfully meeting small challenges, choose a slightly stronger challenge.

Feel the influence using your vagal brake has in managing the challenges in your life. Without the vagal brake, we lose our anchor in the ventral vagal state of safety and connection and move into the sympathetic nervous system's protective states of fight and flight more easily.

Establishing new autonomic rhythms

READY TO TRY SOMETHING NEW

When we notice our automatic states, (connected/safe, fight or flight; shut down) we can engage with it, not to be engaged by it.

Notice and name: Naming what is happening does take practice and can move you forward with shaping your responses.

It is important to name it non-judgementally. That is why, earlier we looked at self-compassion. A state is not right or wrong but your nervous system responding to connection or danger. When we name something, we are in a better position to own it and change it if needed.

This exercise aims to build new autonomic patterns by creating the habit of knowing what autonomic state is active at any given time.

This work has 4 steps: **Recognise, Reflect , Regulate, Create "If-Then" Statements.**

Recognise: Autonomic awareness is a protective factor. Without the ability to recognise states and state changes, you risk being stuck in dysregulation. The question, "Where am I on my autonomic ladder?

Notice: As we have talked about, be aware of your autonomic state.

Name it: Don't get bogged down in a story. Just put a name on it. Where are you on your autonomic ladder?

Do this often: With practice you can quickly and accurately place yourself on your autonomic ladder.

Reflect: Once notice-and-name becomes easier and automatic, add the next step of listening to what it is telling you. Don't spend a long time hearing the full story. Just take long enough to get the general idea of what is happening.

1. Be curious about what just prompted a mobilisation of your flight or fight state (sympathetic system), a descent into shut down (dorsal vagal) or an experience of safety and connection (ventral vagal).
2. Listen to what your state wants you to know.
   - My flight or fight (sympathetic mobilisation) is telling me . . .
   - My shut down (dorsal vagal state) is letting me know . . .
   - My connected/ safe state (ventral vagal system) is inviting me to . . .
3. Listen with curiosity and without judgment. Don't spend more than a minute or so listening. This practice is a quick experience of listening to the outlines of your story and not diving into the details.

Regulate: Setting goals helps you achieve something.

1. Consider goals you want to set. Ask yourself:
   - Where do I want my autonomic patterns to take me?
   - What do I want to change?
   - What do I want to deepen (glimmers, glow)?

2. Write down your goals. Begin each statement with the words “I intend to.” For example:
   - I intend to not get stuck in shut down (dorsal vagal collapse)
   - I intend to manage my flight or fight response (sympathetic response) with … (you decide what you will use: breathing, self-containment, your senses)
   - I intend to find moments of safety and connection goals with glimmers (ventral vagal).

Create “If-Then” Statements: Once you identify your autonomic goals, translate your intention into action by adding what is called an if-then statement.

An if-then statement identifies when, where, and how you plan to respond to a situation.
Writing if-then statements creates a link between triggers and responses, making it easier for you to recognise situations and do something.

1. Set goals for responding to cues of safety and danger in new ways. Set goals for all three states. Make sure your goals are not too big or unrealistic and hard to put into action.

   Set goals with small steps that are well defined, and you can see what happens when you follow them through.

2. Add the “If then statement”. “If this happens then I will…” for each of your identified goals.

3. Add what you will use to help you achieve that goal: breathing, using my senses or other tools we have talked about in this booklet

4. Track what happens. As your responses shift you may want to add new goals and write new if-then statements.

Connections

We come into the world wired for connection with others. Connections are essential to survival. (Baumeister & Leary, 1995).

When we feel safe, we can engage with others. We can relax and be expressive with our facial expressions. We can pick up and focus on sounds of the human voice. Our own voice is also calm. In this state of safety, the Vagus Nerve controls our heart rate.

When we feel unsafe, our face may become expressionless and still. Our middle ear muscles lose their tone. We can become sensitive to low frequency (predator sounds). This loss in tone in the middle ear muscles makes it difficult to hear human voices. Background noise can become overwhelming.

If you get overwhelmed in shopping places or crowds, the loss of tone in the middle ear muscles and an increased hypersensitivity to sound, may be contributing to that.

Connection and Co-Regulation

Our nervous system requires connection with others, with an exchange of messages of safety and connection, to feel safe. This feedback loop, will impact on what state we are in.

According to Polyvagal theory, co-regulation, the mutual sending and receiving of signals happens all the time. It is the connection between two nervous systems, each impacting and regulating the other.

That happens with parents and children and also between adults. When we self-regulate and work on co-regulation, we put welcoming cues out into the world which can be a glimmer for others. “We’re linked, nervous system to nervous system,” says Deb Dana. “Glimmers radiate and in turn, they can help when others are in flight or shut-down mode.”

The Whole Brain Child by Dr. Daniel Siegel and Dr. Tina Payne Bryson, shares skills to help different parts of our children’s brain work together.

Two skills, engage, don’t enrage, and connect before you redirect are examples of how parents can use co-regulation dealing with children’s big feelings.

Building our Children’s Developing Brain has been developed to help share these skills with parents. For a copy of the booklet see [Parent/Teacher Zone–ChildrenandYoungPeople’s StrategicPartnership(CYPSP)(hscni.net)]

Clusters of Connection

So, if our connection with others is beneficial, how do we strengthen them?

This exercise looks at who and how you are connected in your world.

Don't think of connections as right or wrong. Instead, stay curious. Look at the connections that are helpful to you and your nervous system. People (and pets) that help you feel safe.

1. Look at people in your life. Make a list of the people (or pets) you feel connected with. Listen to your autonomic response as you think about them.

   Identify how close you feel to these people.
   Use a scale of 1–3, loosely connected; 4–7, pretty connected; 8–10, very connected.

   It is not the number of connections that matters; but how helpful they are to you.

2. Look at how often you connect with people in your world.

3. Look at the ways you connect during:
   - quiet moments
   - going out or stay in
   - favourite activities
   - trying new things
   - other.

The Sound of Your Voice to strengthen co-regulation

Our nervous system hears the tone of voice as well as the words said.

You respond to the tone of a voice before you take in any information. The way you speak changes the way you feel, the story you tell and changes the way people around you hear what you are saying.

- Experiment with the ways your voice impacts the way you feel. Tell, or record, a short story in different tones of voice. Notice where the different tones of your voice take you
- Track the way the same word spoken in different tones of voice brings a different state and feeling. Choose a word, speak it in different ways and follow the ways your states and feelings shift. Try out a variety of words and notice the specific ways of speaking that elicit certain states and feelings
- Talk about a difficult experience using different tones of voice. Track what happens to your autonomic state. Find the way of speaking that brings you into a sense of safety and connection (ventral vagal state)
- Find a friend and experiment. Talk in different tones of voice and give feedback.

Additional ideas to strengthen our Vagus Nerve and vagal tone

Here we are going to look at ways to build your vagal tone; how well the Vagus Nerve is working.

These are not meant to be a "quick fix" but building healthy habits

Building anything into a habit takes repetition. It can take up to 2 months. (66 days). Don't worry if you slip a day or two, but get back on track.

Why put the effort into this? Imagine feeling calmer and more grounded? Stronger vagal tone is associated with better physical and mental wellbeing.

Why did we start with breathing?

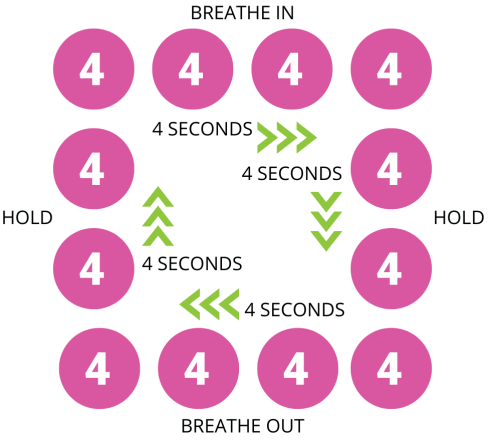
In 1921, Otto Loewi, a German psychologist discovered that when you stimulate the Vagus Nerve it triggers the release of acetylcholine. Why is that important? Acetylcholine is the parasympathetic nervous system's chief neurotransmitter. Acetylcholine is like a tranquiliser that we have the power to tap into through slow, long, deep breaths.

So how did breathing techniques work for you?

When we take deep, slow belly breaths, we activate the Vagus Nerve to lower fight or flight and activate our rest and digest system. Belly breathing lowers heart rate, blood pressure and feeling of anxiety.

On average, we take 10 to 14 breaths per minute – but to stimulate the Vagus Nerve, try to take fewer breaths per minute. Breathe in deeply, allowing your stomach to expand, then breathe out slowly.

BOX BREATHING



Here are other ways that have been shown to help stimulate the Vagus Nerve and parasympathetic Nerve activity:

Loving kindness meditation: We know that meditation and mindfulness can be helpful. Loving kindness meditation goes a step further through feelings of compassion and gratitude.

Laughter: Laughter stimulates the Vagus Nerve too. Laughter increases endorphins, a healthy chemical in the body.

Yoga: Both the parasympathetic nervous system and the Vagus Nerve are stimulated by yoga. A study that compared a group of people who walked daily to those doing yoga daily found a significant reduction in anxiety and perceived stress in the yoga group, as well as increased mood-improving, anti-anxiety brain chemical GABA.

Expose yourself to cold water or air: The Vagus Nerve is stimulated when the body is exposed to cold (Jungmann et al 2018) like cold water swimming, cold showers or even splashing your face with cold water every morning and evening. In the winter, open a window to get a blast of cold air for a few seconds.

Tapping the Healing Rhythms of the Vagal Nerve - Self-regulation is found through the sound of your internal beat. Adapted from an article by Cathy Malchiodi PHD.

Rhythm plays an essential role in our lives. The most fundamental rhythm of life is our heartbeat. Babies hear their first rhythm in the womb listening to their mothers' heartbeats. The natural way to calm infants is to sway, rock or pat them to the rhythm of a heart rate.

Our heart rate increases when in fight or flight. Regulating heart rate during stress and controlling stress hormones are two critical tasks. The regulation of the body's internal rhythms can be best understood through the lens of Polyvagal Theory (Porges, 2011).

This is a brief list of rhythm activities based in sound, tone and vibration that can impact heart rate and can be practiced any time.

Music: The core of all singing or listening to music is rhythm. It is one of the most effective ways into the safe and connected mode (ventral vagal).

These experiences can bring about a healing internal rhythm and may help people shift away from stressful memories.

If you think you are not very musical, and singing is just not your thing find other ways to make various sounds. Vigorous gargling stimulates the Vagus Nerve.

Humming: Because the Vagus Nerve passes through the vocal chords and the inner ear, humming creates the necessary rhythmic vibrations to generate a calming influence on the nervous system. Notice the sensations in your head, throat and chest. Try changing the volume and location.

Sighing: We often sigh though not aware of it. A deliberate sigh is a form of vocal toning.

Toning with the Alphabet: Inhale as deeply as is comfortable, hold briefly, and on the exhale, tone A-E-I-O-U. Repeat this sequence at least five times. You can also simply play with the letters in the alphabet, both vowels and consonants. Try the letter "M" which is most closely related to humming.

Tapping: Emotional freedom technique (EFT) is an alternative treatment for physical pain and emotional distress. Tapping has been shown to lower cortisol, a stress hormone and can be used to slow heartbeat. See EFT, Polyvagal Theory and the Mind Body Connection - YouTube

Taking in the good: The power of positive emotions

By creating and absorbing positive emotion produces, it produces Dopamine, the chemical in our brains related to pleasure. This can really help in times of stress. (Broaden, Build Theory by Barbara Fredrickson 2001, 2013) Experiencing positive emotions, deliberately, purposely, consistently, and staying with it for a minute or so, improves Dopamine receptors and pathways in the brain. This is similar to what Rick Hanson calls ***taking in the good***. (Hanson 2009)

Here are some things that you can do to experience positive emotions

These may be from your inventory of Glimmers – what helps you move to a safe, connected state.

Would any of these work for you?

- Apply cold compresses to your face and the back of your neck
- Compliment others
- Connect with nature
- Expose your skin to sunlight
- Keep a gratitude list daily
- Listen to calming instrumental music or music with uplifting, happy, grateful lyrics versus complaining, bitter spiteful lyrics
- Say “thank you”
- Smile as much as possible
- Visit with people who lift your spirit not make you feel bad.

Bringing active awareness to these positive emotions, glimmers or glow is important to interrupt the negativity bias and honour the “small and often” practices that bring change.

Make new habits simple so you will integrate them with ease.

To start, choose 2-3 things that work for you and make them daily habits by tying them to things you do anyway. If you brush your teeth daily, good time for breathing exercises. If you heat water for coffee or tea daily, hum or sing to yourself while you do it. You might want to consider the 1% marginal gain rule. What is the theory of marginal gains? Marginal gains is all about small incremental improvements in any process adding up to a significant improvement when they are all added together.

Try to add some of these new habits into your daily life.

Strengthening our Vagal Tone Worksheet

We discussed different ways to stimulate your Vagus Nerve. The beneficial effects of increased Vagal Nerve function are so far-reaching.

It is worthwhile for us all to add some of these new habits into our daily lives.

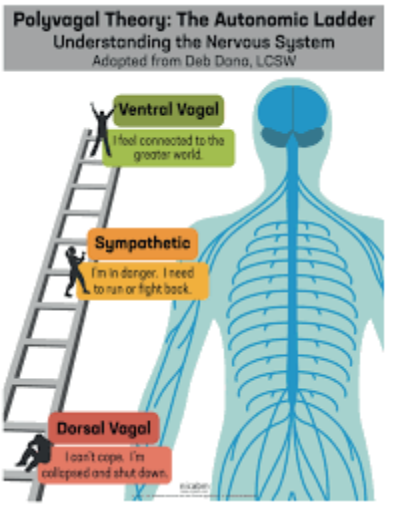
In the space below, write down what you tried and how it worked for you.

Rate how helpful they were in creating thinking time using the following scale: 1=Not helpful at all; 7=Very helpful.

What did you do?	Day tried	Success Rating (1-7)	What were the benefits of doing it?

Going back to getting a general flavour of the time you were doing these things you can do a pie chart we looked at on page 20.

Regulating Resource Map



This activity is here to help you think of what keeps you stuck in a certain state (survival) and what helps you climb the ladder to where you would like to be.

Use the work from triggers and glimmers to help to complete this.

Things I do on my own or with others

Safe, Connected **Ventral Vagal**	What helps me stay here?	What helps me stay here?
Fight or Flight **Sympathetic State**	What keeps me stuck here?	What helps me move out of here?
Shut down / Immobilised **Dorsal State**	What keeps me stuck here?	What helps me move out of here?

The Quest for Safety and Connection: an Overview

Autonomic Nervous System

Part of the peripheral nervous system, outside of the brain and 95% outside our conscious awareness.

Neuroception - that internal smoke detector - the way our nervous system scans for cues of safety or danger and threat.

SAFETY

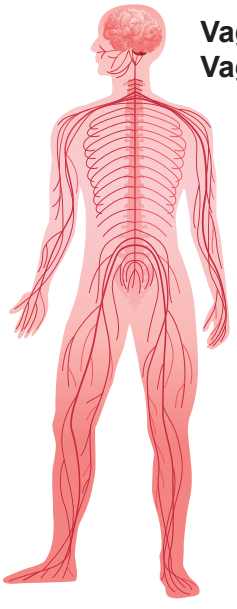
Connected, safe eye contact, facial expressions, support (Ventral Vagal)

DANGER THREAT

Sympathetic Nervous System - Fight or flight Mobilisation

LIFE THREAT

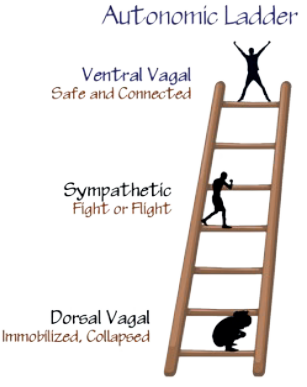
Shut down- immobilisation (Dorsal Vagal)



Vagus Nerve - Connecting brain and body
Vagal tone - How well your Vagus Nerve is working

Take Home Messages

- Polyvagal Theory – autonomic scanning for safety and danger
- Our nervous system responds in a hierarchical way
- The importance of connection as part of safety
- A regulated nervous system notices that need for safety and connection and how it can find its way back
- The goal for regulation is flexibility.



Making sense of what you have learned

If you have reached this part of the booklet, well done!

Did you? (please circle one)

Glanced at it	Read bits of it	Read all of	Read all of it and worked through the exercises

What are the most important things you learned from this booklet?

What difference has it made for you?

If you could tell one of your friends something about this booklet to help them, what would it be?

What are some things you want to do more of?

Who is in a position to help you?

Now that you have completed this work, on a scale of 1 -10, how confident would you say you are now at continuing to put this into practice?

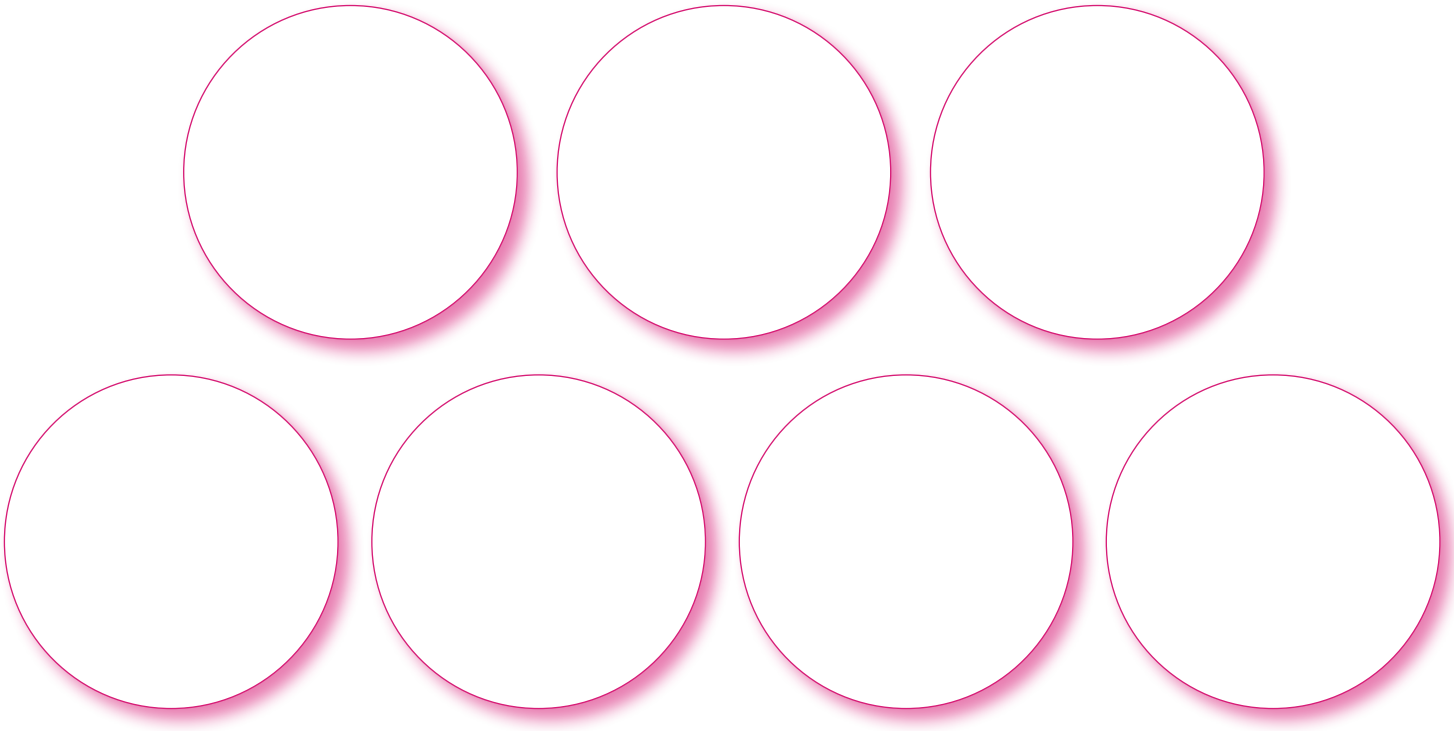
Low									High
1	2	3	4	5	6	7	8	9	10

NOTES

Blank pie charts to track your states over a week

What colour would you give?

- **Ventral Vagal state:** safety and connection _____
- **Sympathetic state:** danger, fight or flight _____
- **Dorsal Vagal state:** immobilised, shut down _____



Is there an overall tone for the week?

Is there a day of the week that repeatedly brings the same autonomic responses?

Is there a pattern to your weekend?

References and further resources

As stated at the start of this booklet, this is an introduction to our nervous system and the Polyvagal Theory. It is only the beginning.

This work was developed from two books by Deb Dana.

The Polyvagal Theory in Therapy: Engaging the Rhythm of Regulation W. W. Norton & Company; 1 2018.

Polyvagal Exercises for safety and Connection: 50 Client Centered Practices - W. W. Norton & Company 2020.

Helpful links

The website of Dr. Stephen Porges, author of the Polyvagal Theory: Home of Dr. Stephen Porges
https://www.stephenporges.com

Deb Dana's website: Polyvagal Guided Living | Rhythm of Regulation
https://www.rhythmofregulation.com

Self-compassion website: Self-Compassion
https://self-compassion.org

Peter Levine, Home - Somatic Experiencing® International
https://traumahealing.org

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- How positive emotions build physical health: perceived positive social connections account for the upward spiral between positive emotions and vagal tone., Kok BE, Coffey KA, Cohn MA, Catalino LI, Vacharkulksemsuk T, Algoe pSB, Brantley M, Fredrickson BL. Psychol Sci. 2013
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- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117(3)
- Drawings on Page 11 and 12 by Heidi Hanson who is an artist and writer in Asheville, North Carolina currently working on an illustrated book chronicling her journey healing from Post-Traumatic Stress Disorder
- Rick Hason 2009 Discover the practical Neuroscience of Happiness, Love and Wisdom New Harbinger
- Jungmann M, Vencatachellum S, Van Ryckeghem D, Vögele C Effects of Cold Stimulation on Cardiac-Vagal Activation

Thank you for using this booklet
We hope you found it helpful

HSC Health and Social Care

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