

Knowing **Me** Knowing **You** a-ha... The Polyvagal Way!



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Learning Outcomes

- An overview of Polyvagal Theory
- Knowing Me Knowing You
 - a journey through our Nervous Systems
- Precision Regulation

Jordan



- Is autistic & 13 years old
- Transitioned last year to a specialist school
- Settled in well and accessing interventions
- Building relationships with trusted adults
- Kind and caring particularly with younger children
- Struggles with transitions & unexpected change
- With support from co-regulating adults he is able to recognise this and is beginning to independently use strategies

Fictitious & pseudonym

Polly



Fictitious & pseudonym

- 10 years old and in Year 6
- Recently received an autism diagnosis
- Finds school difficult
- Falls out with peers
- Can be seen as demanding by others
- Feels like she is always right
- Class team feel like they are walking on egg shells around her when trying to engage her or correct her work
- When things don't go her way she becomes dysregulated
- Storms out of the classroom and shouts at others

Ramona



- 8 years old, has lived in a children's home since the age of 5
- Experienced neglect & physical abuse
- Inconsistent caregiver
- Frightening, chaotic & noisy early home life
- Can be withdrawn, does not engage in reciprocal conversation or body language
- Does not seek adults when worried, tends to take herself off to quiet place, rocks & cries
- In care home, eats with adults not the other children
- Reluctant to leave her room & join in activities

Fictitious & pseudonym

The Big Question?

As a clinician working with any of these young people what would you want them to know/feel about you?



Approachable

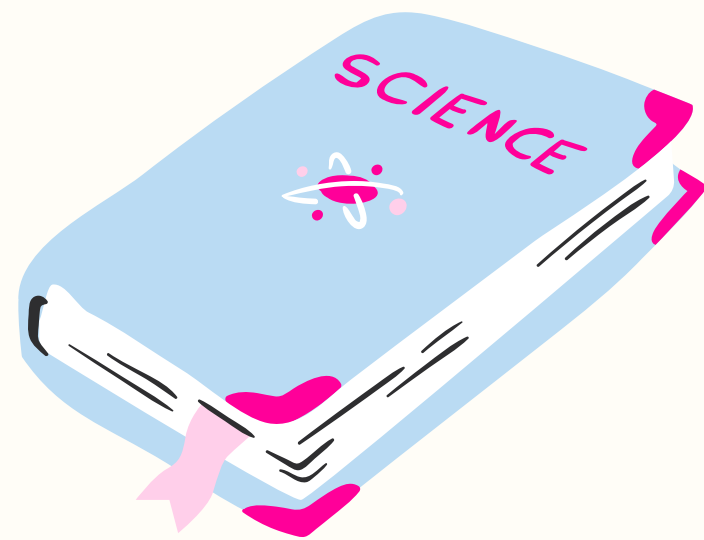
- You can come to me
- I want to help you
- I want you to feel safe
- I care about you
- You have support in me
- I am there for you
- You can feel OK moving towards me
- You do not need to 'go it alone'
- I am a resource for you
- I want to help you navigate the twists and turns of life

Something we all have in common





If we want to understand more about being approachable then the theory and research can really help guide us



Introducing Polyvagal Theory



What is it?

Asserts that as evolution has progressed, neural circuits in the ANS have developed to support two functions:

A Response to Threat or Challenge

Social Behaviour

These two things are mutually exclusive

Autonomic Nervous System



ANS

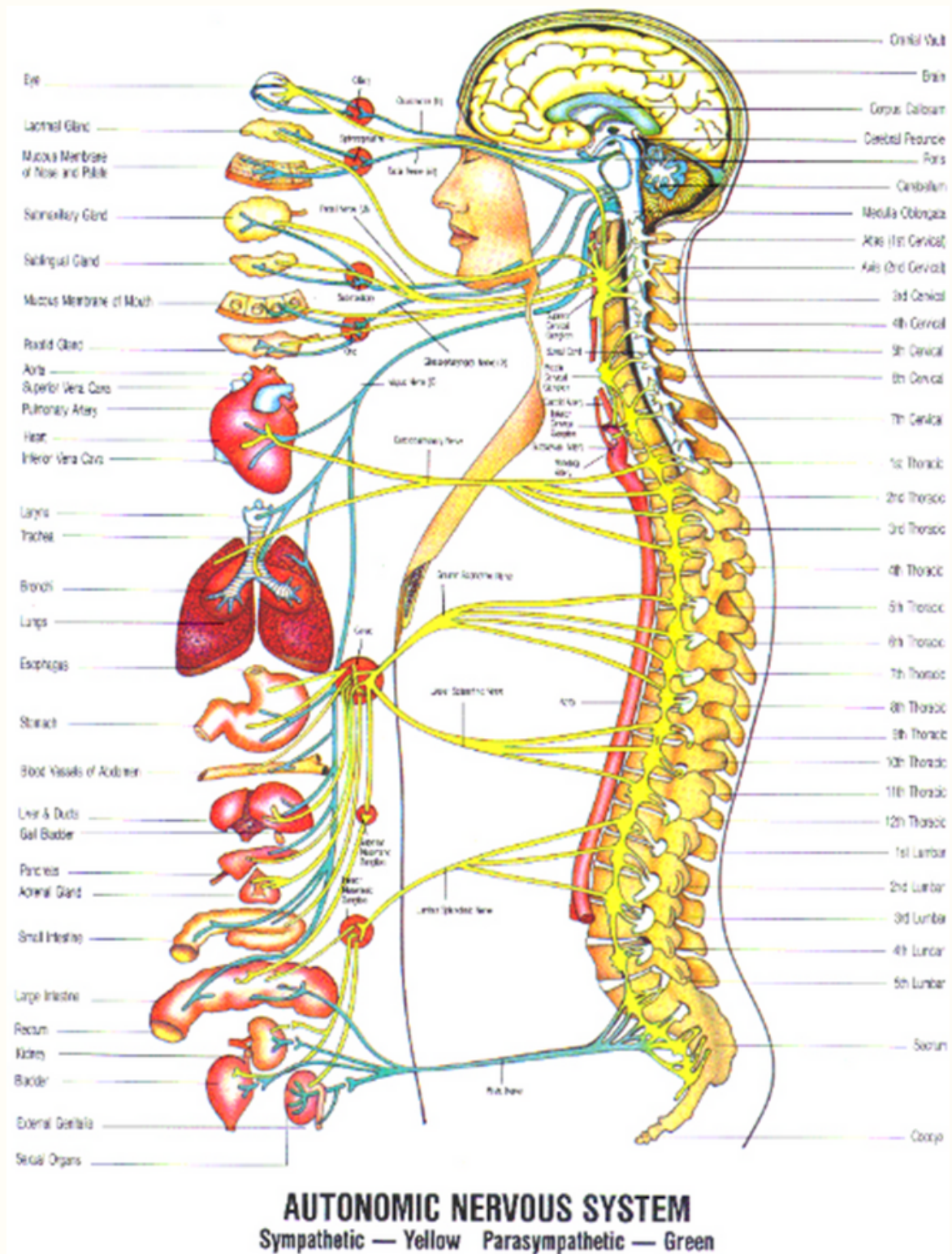
Ensures that the brain and body are supplied with sufficient amounts of glucose and oxygen to support life. Its nerves go to all our organs & glands and back to the brain. It's comprised of:

Parasympathetic branch

Supports homeostatic functions → slow breathing, slow variable heart rate, supports the digestion and absorption of food and the creation of energy stores in liver & muscles “**REST & DIGEST**”

Sympathetic branch

A response to threat → **fight or flight** – speeds up heart rate & breathing rate, makes glucose and therefore, **energy available** to muscles



Parasympathetic Nerves

Sympathetic Nerves

Run in parallel to each organ & gland - and back to the brain

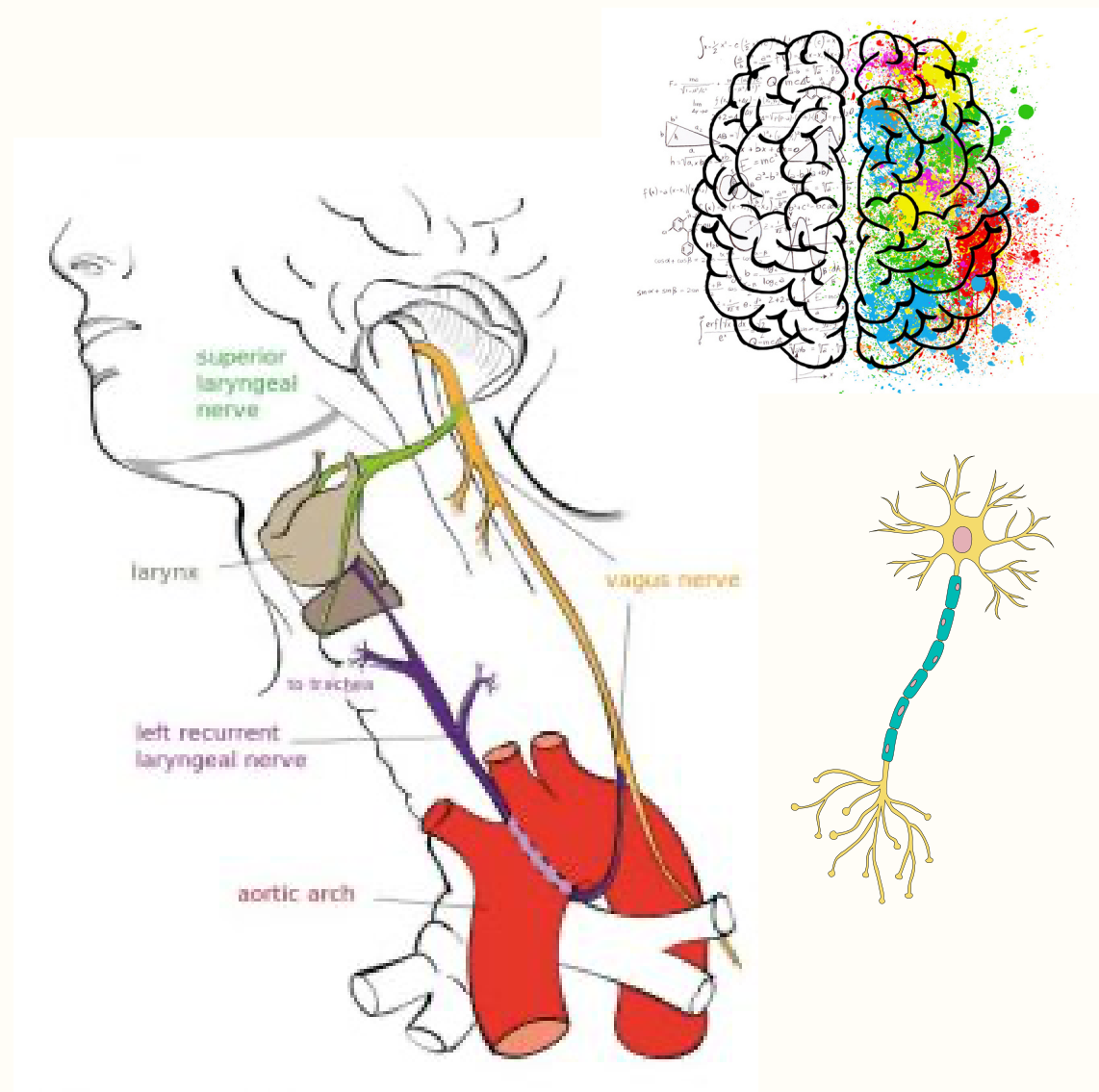
Vagus Nerve(s)

Connects mind and body

Longest of the cranial nerves; it connects the mind and body

Communicates information from our internal organs to the brain and back

One important branch goes to the heart and back

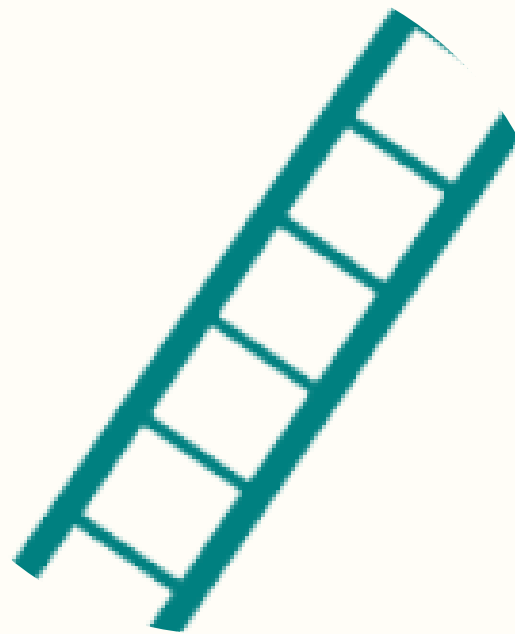


Plays a role in

- social connection
- heart rate
- stress responses
- emotion regulation
- The working of our gut

Three Organising Principles

Will look at each of these in
more detail in the next few
slides



Hierarchy



Neuroception



Co-regulation

Hierarchy



Each state has a continuum of responses

Ventral Vagal

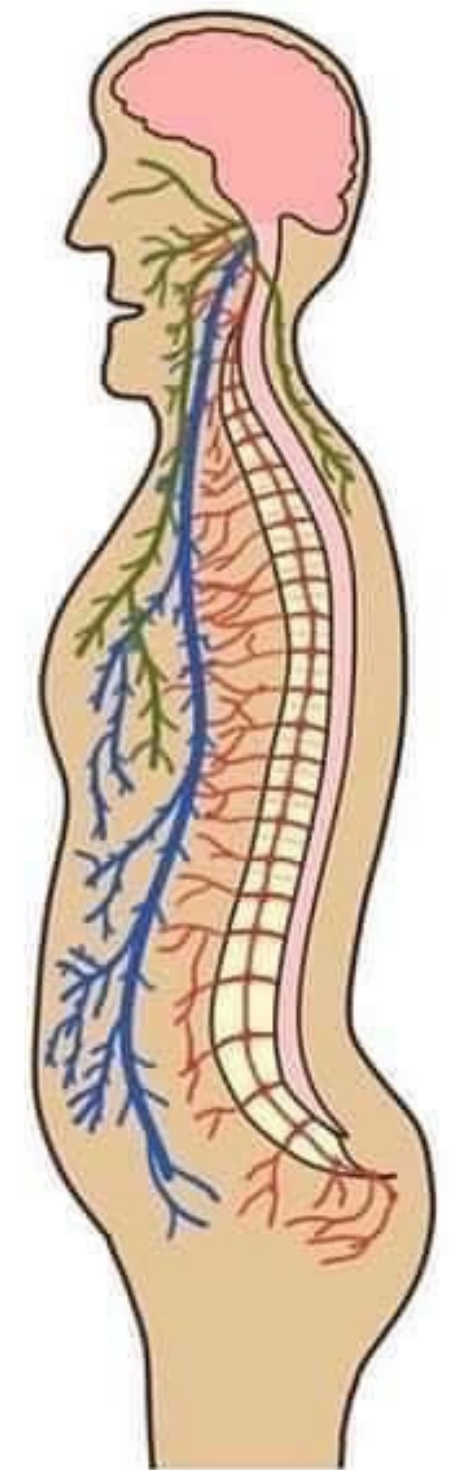
- Social Engagement Network
- Location: Face, throat, chest
- Ability to talk, engage, co-regulate, self-soothe and remain calm
- Top of the regulatory and evolutionary ladder

Sympathetic

- Fight & Flight (Mobilization)
- Location: Along the spinal cord
- Mobilize the body to fight, or run away from danger
- Increased heart rate, tense muscles, fast shallow breathing
- Middle of the regulatory and evolutionary ladder

Dorsal Vagal

- Freeze, Collapse, Dissociate (Immobilization)
- Location: Diaphragm, heart, gut
- Shut off from the threat, when can't fight or flight
- Decreased heart rate, low energy, depressed, numb, shut down
- Bottom of the regulatory and evolutionary ladder



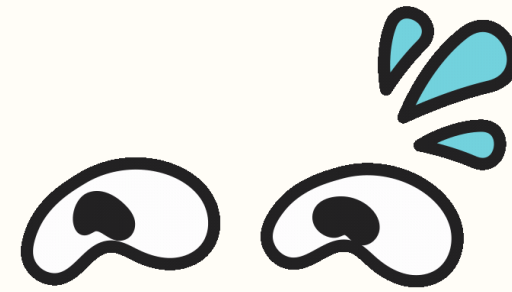
@Ayan_Mukherjee_

#principleone

Neuroception



Neural circuits decide in the moment if a person or situation is safe, dangerous or a major threat



INSIDE
(THE BODY)



OUTSIDE
(THE ENVIRONMENT)



BETWEEN
(NERVOUS SYSTEMS)

#principletwo

Is it safe to connect?

Co-regulation

Our Nervous Systems long to be connected to other nervous systems. PVT helps us to work with the nervous system in order to develop safe connections with other people

The drive to survive



The longing to connect

#principlethree

<https://integratedlistening.com>

Dr. Stephen Porges

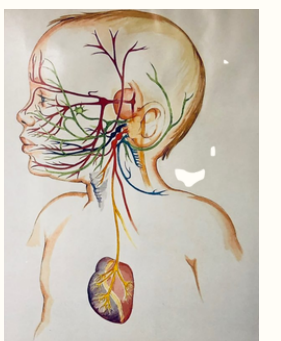
Social Engagement System

The Social Engagement System is part of our face-heart connection. When safety is perceived, our heart rate is variable. This pattern of heart-beat activity feeds back along the vagus nerve to the brain. This kick-starts activity in the cranial nerves in the face and head. They work together to control:

- Facial expression (emotional expression)
- Eyes (social gaze)
- Mastication (ingestion, sucking)
- Larynx, pharynx (vocalising, swallowing, breathing)
- Head turn and tilt (social gesture, orienting)



Through these pathways you send and search for signs of welcome and signals of warning





Vagal Brake

- Dual aspect of the two Vagus Nerves
- Internal: interoception
- External: exteroception
- Efficiently increases and decreases heart rate
- Brings mobilisation without a move into a sympathetic fight and flight survival response
- Supports the ability to move between action and calm

Autonomic Impact of Trauma



- Co-regulation has often been unavailable, unpredictable and unsafe
- Self-regulation may be inadequate and unsuccessful
- Opportunities to build autonomic responses override social engagement
- Patterns of protection replace patterns of connection

"Trauma is a chronic disruption of connection"

Befriending your nervous System

Deb Dana

Polyvagal Theory in practice



INSIDE
(THE BODY)



OUTSIDE
(THE ENVIRONMENT)



BETWEEN
(NERVOUS SYSTEMS)

AMMI
SAFE?

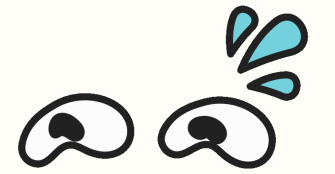


Bodies Communicate



Neuroception

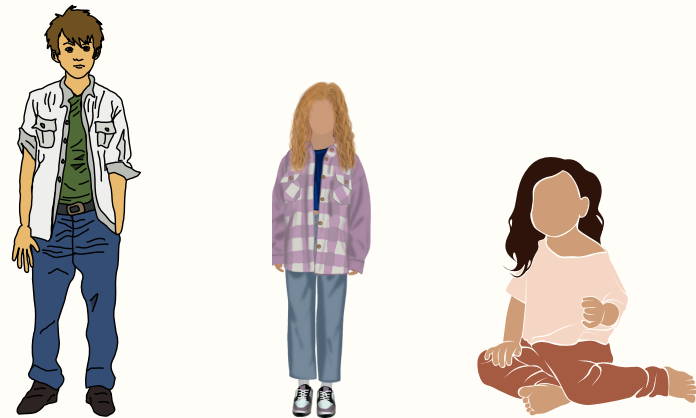
Am I Safe?



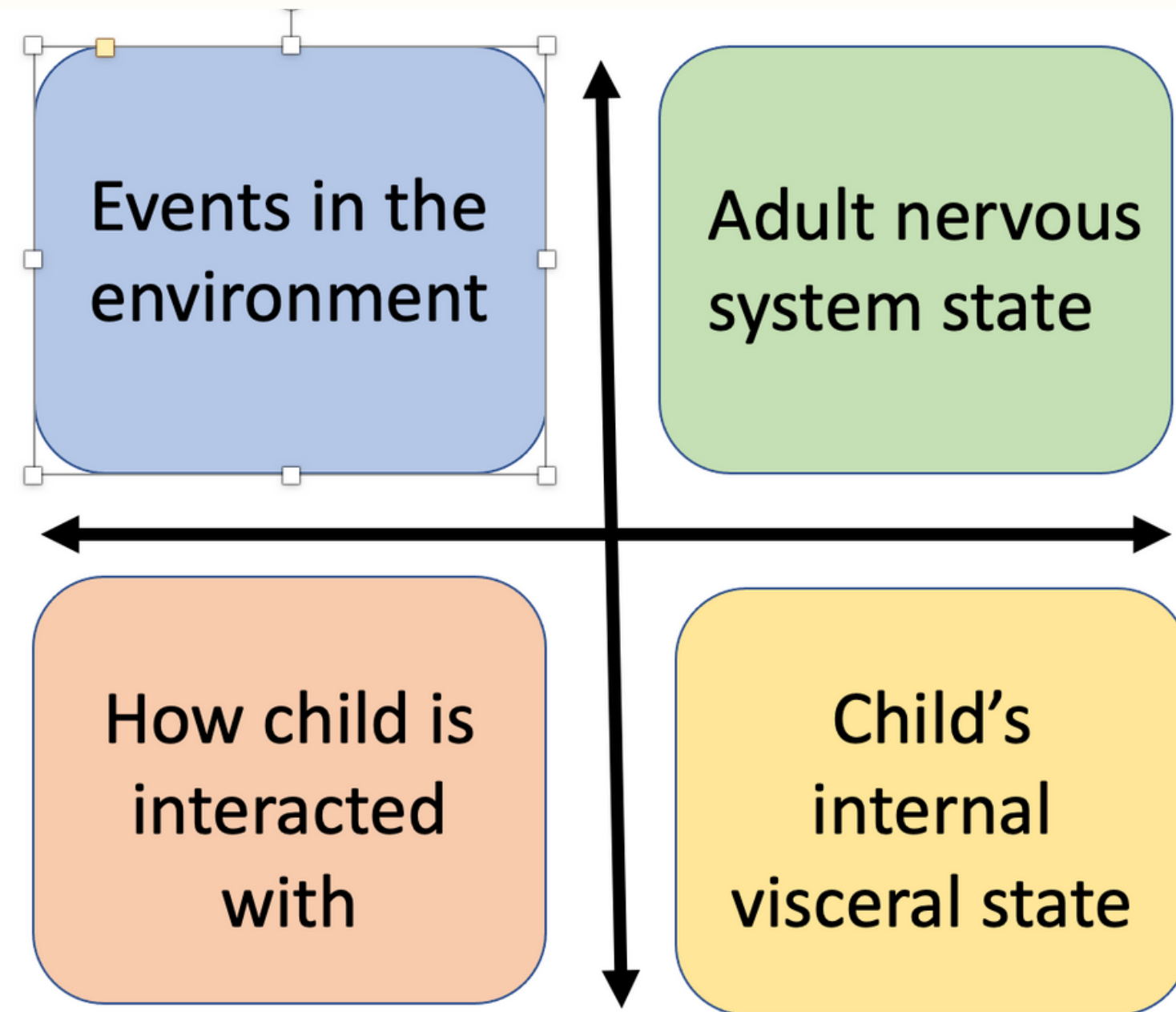
- The Autonomic Nervous System **SENDS & SEARCHES** for cues of safety or danger. The cues sent from one system to another either.....
 1. Co-regulate and invite new possibilities or
 2. increase reactivity and reinforce habitual survival patterns

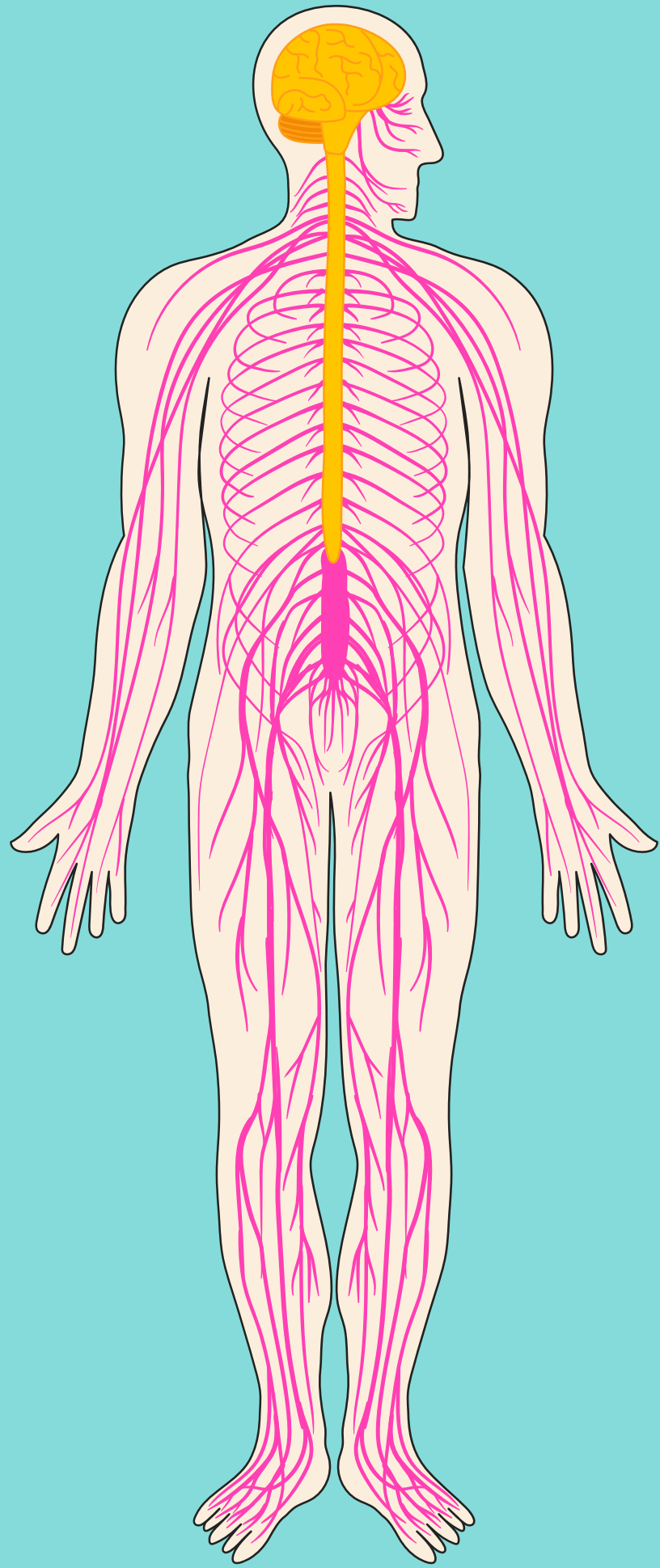
Spreading Safety

Four main areas we need to consider if we want to understand what factors may be affecting a young person and their level of emotional and physical safety in a particular, present moment



“most profound and intervening variable is our own physiological state”

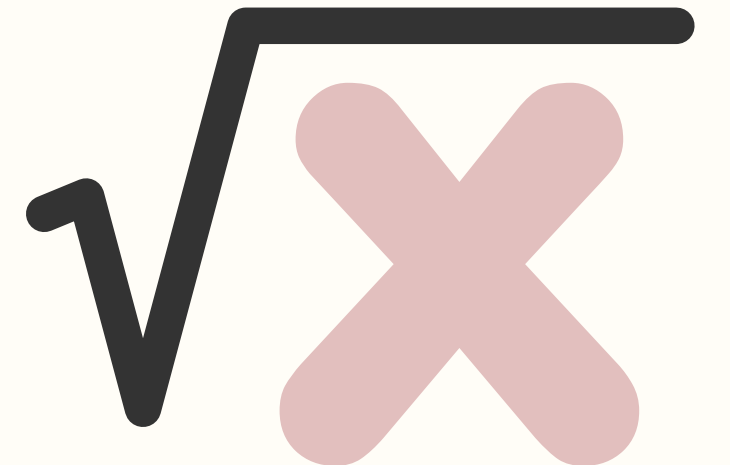




Precision Regulation

Regulating activities
to reset the autonomic
nervous system

Safety/danger equation



"The clinical goal is not always to be in a state of ventral vagal regulation but to be able to flexibly navigate moving down and back up the hierarchy"

Deb Dana

The Autonomic Ladder



VENTRAL VAGAL

Neuroception of safety

Social, engaged, connected



SYMPATHETIC

Neuroception of danger

Mobilized, action taking, fight and flight



DORSAL VAGAL

Neuroception of life-threat

Immobilized, shut down, collapsed



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Ventral Vagal



Ventral Vagal

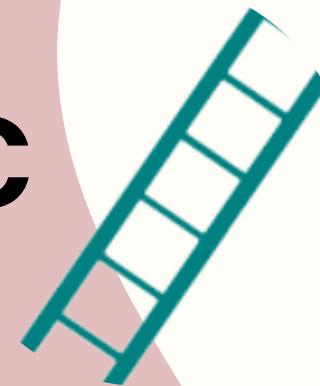
- Social Engagement Network
- Location: Face, throat, chest
- Ability to talk, engage, co-regulate, self-soothe and remain calm
- Top of the regulatory and evolutionary ladder

Primary State	Safely embodied, Co-regulate, Self-Regulate, Connect to self & others, Social Engagement, Resourced & Resourceful
Arousal	Low, Calm
Respiration	Easy, often into belly
Heart Rate	Resting
Eyes, pupils, lids, brows	Pupils smaller, eyes moist, eye lids relaxed
Voice, tone	Usual sound, calm tone
Emotions	Calm, pleasure, relaxed
Contact with self & others	Probable
Frontal Cortex	Should be accessible
Recommended intervention	Continue as are



Observe client states to modulate arousal

Sympathetic



Sympathetic

- Fight & Flight (Mobilization)
- Location: Along the spinal cord
- Mobilize the body to fight, or run away from danger
- Increased heart rate, tense muscles, fast shallow breathing
- Middle of the regulatory and evolutionary ladder

Primary State	React to danger, await opportunity to escape
Arousal	High
Respiration	Fast, often in upper chest
Heart Rate	Quick, forceful
Eyes, pupils, lids, brows	Pupils dilated, eyes dry, eye lids tense, brows raised
Voice, tone	Loud, shouting, shaky, broken
Emotions	Fear, Rage, Terror, Anger
Contact with self & others	Limited/Not likely
Frontal Cortex	Likely inaccessible
Recommended intervention	Applying the vagal brake



Observe client states to modulate arousal

Older Dorsal Vagal



Dorsal Vagal

- Freeze, Collapse, Dissociate (Immobilization)
- Location: Diaphragm, heart, gut
- Shut off from the threat, when can't fight or flight
- Decreased heart rate, low energy, depressed, numb, shut down
- Bottom of the regulatory and evolutionary ladder

Primary State	Immobilisation, shut down, collapse, disconnection, disappearance
Arousal	Too Low
Respiration	Shallow
Heart Rate	Slow
Eyes, pupils, lids, brows	Pupils smaller, lids may be heavy
Voice, tone	Not speaking, low, mumbling
Emotions	Shame, sadness, disgust, grief
Contact with self & others	Withdrawn
Frontal Cortex	May or may not be accessible
Recommended intervention	Activate, gently increase energy



Observe client states to modulate arousal

Ventral Vagal Anchors



Who?

- Who brings you feeling of being safe and welcome?

What?

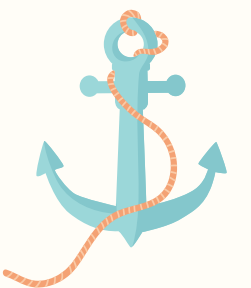
- What do you do that is nourishing, relaxing and inviting of connection?

Where?

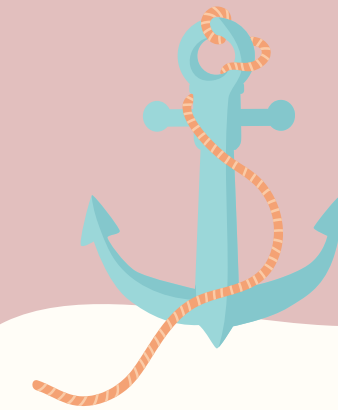
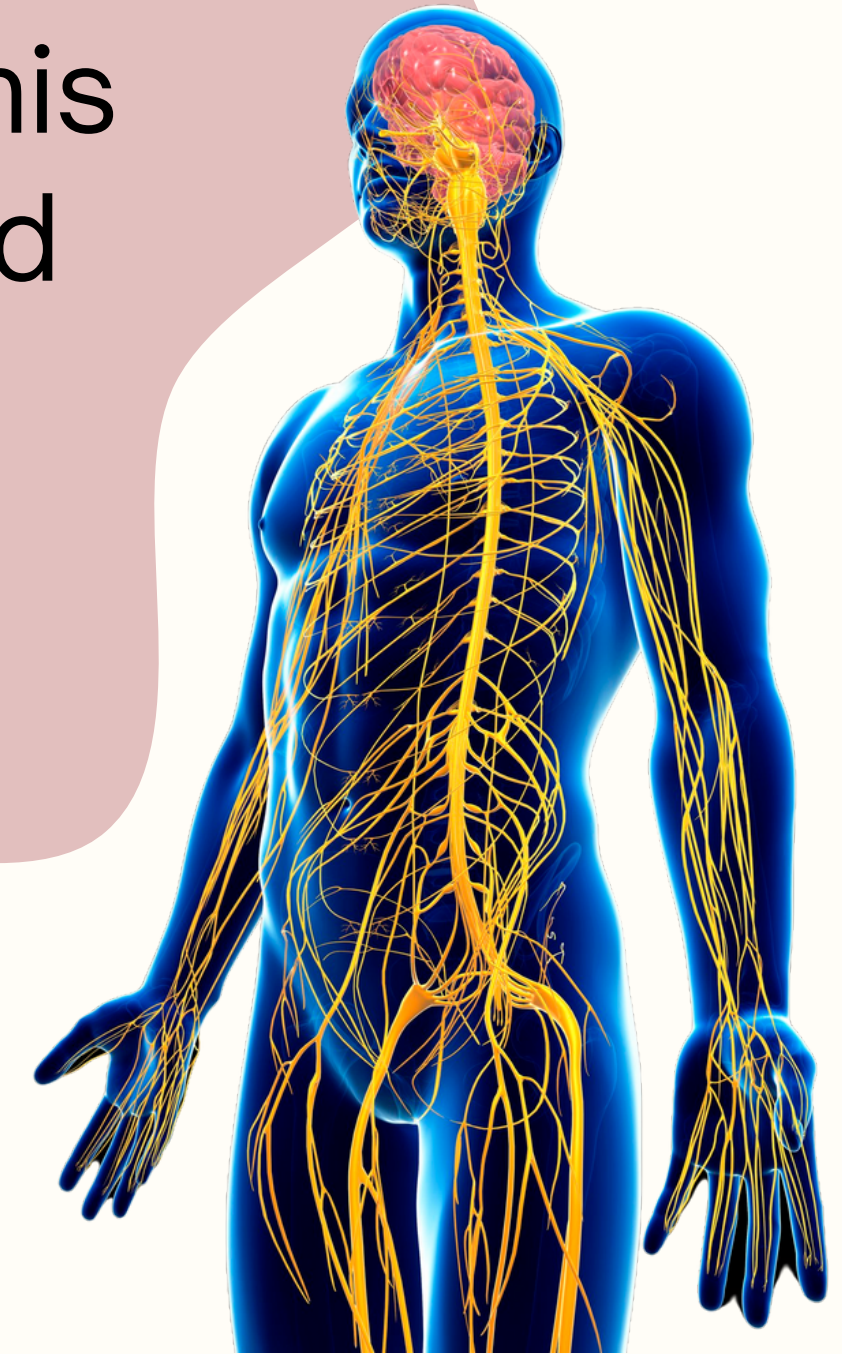
- Bring to mind the everyday places you move through - where is it that brings you cues of safety?

When?

- Identify the moments in time when you feel anchored in your ventral vagal energy.

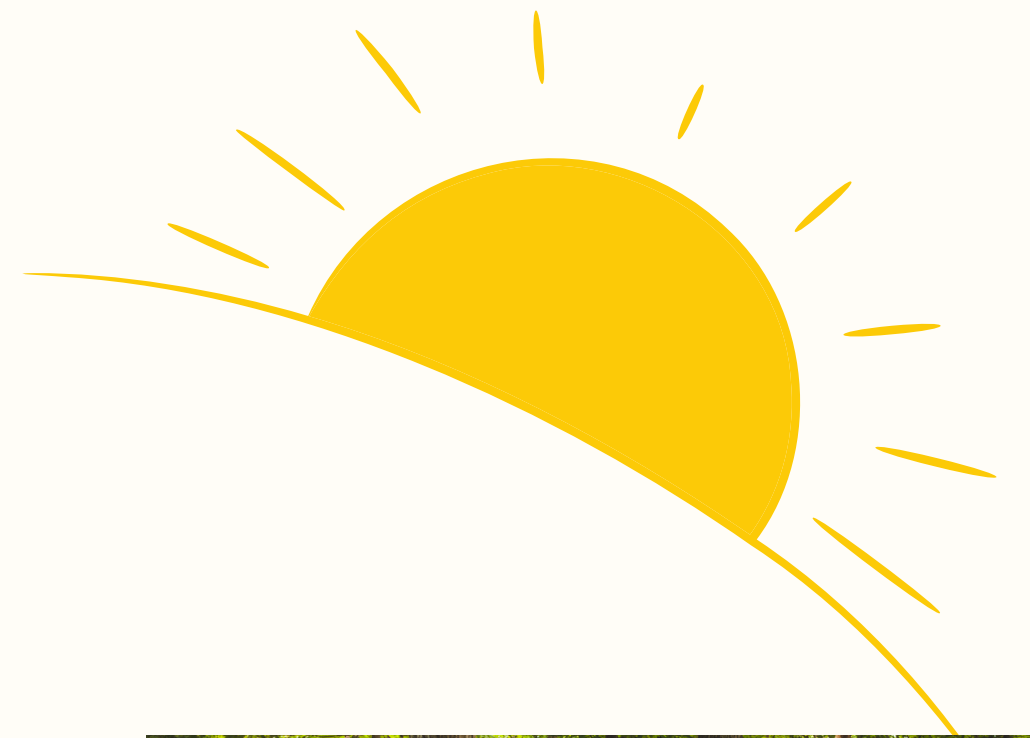


What does my nervous system need in this moment to find the way up to ventral and anchor there?



Ventral vagal activity is the essential ingredient in wellbeing

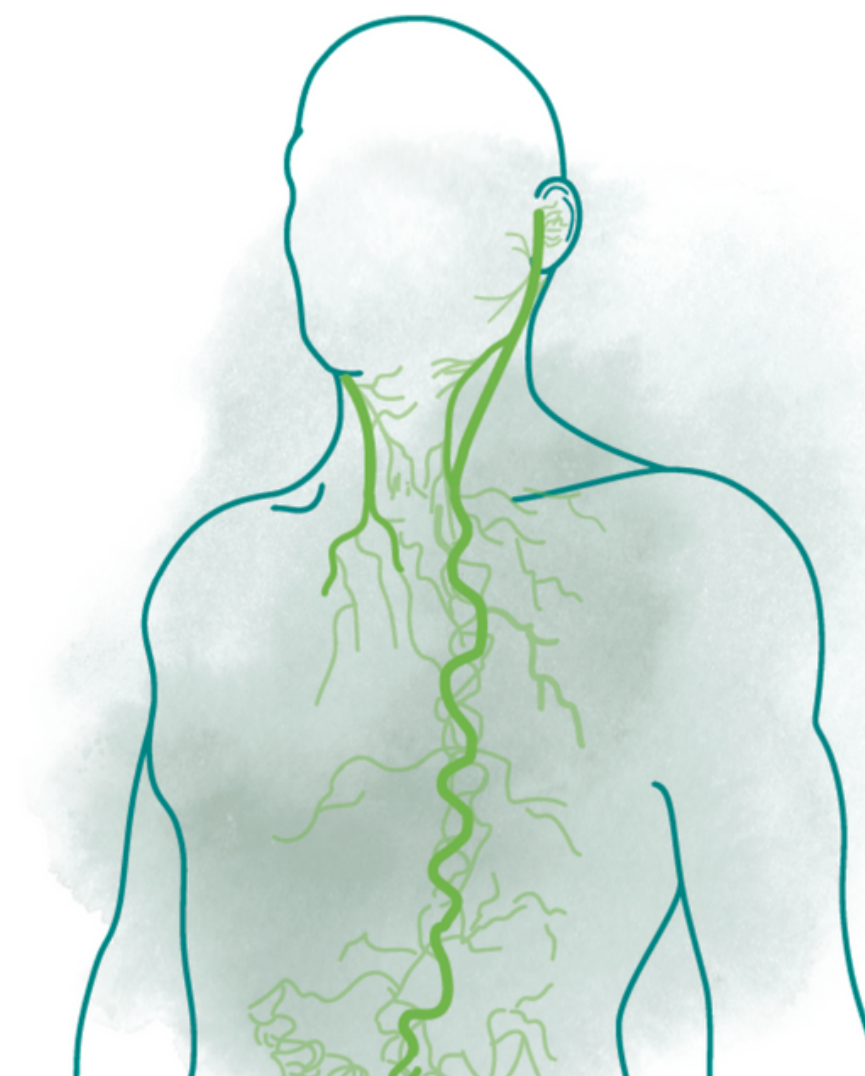




Precision Regulation

**STIMULATE
THAT VAGUS
NERVE!**

Regulating activities
to support the nervous
system through changes



unyte | iLs INTEGRATED
LISTENING SYSTEMS

Nervous System Regulating Activities

Supporting Awareness,
Embodiment and Resilience

Precision Regulation



Regulating activities
to support the nervous
system through changes

MINDFULNESS

Sensory Orientation
Visualization

VOCALIZATION

Singing and Chanting
Humming

BREATHING

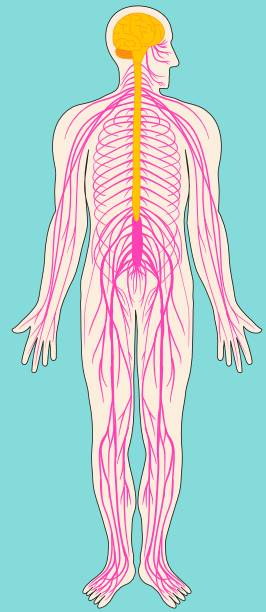
4-Part Box Breath
Yawning
Diaphragmatic Breathing
Resonance Breathing
Extended Exhale

MOVEMENT

Releasing the Neck
Gentle Shaking
Self-Touch
Rhythmic Movement
Joint Circles
Joint Compression/Deep Pressure
Yoga
Ear Massage

**STIMULATE
THAT VAGUS
NERVE!**

Precision Regulation



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.



Sensory Orientation

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

- Bring attention to your body.
- 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.

Precision Regulation



Witherslack Group's Three Waves Model

This holistic therapeutic support and intervention service provided by our multi-disciplinary teams can be mapped onto the **Witherslack Group's Three Waves Model**.



- PVT is good for everyone
- It underpins existing whole school approaches & programmes
- Suitable for whole classes, targeted groups & individuals

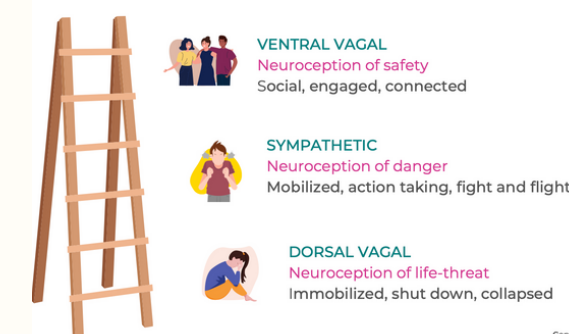
Location	Cues of Safety	Cues of Danger
bus	earphones music seat in front	no reserved space; random seating
classroom in morning	schedule for day	substitute; unplanned day
recess	directed plan for play	no plan; free for all
lunch	eating at end of table	no designated place to eat
PE	spot to stand on & activity plan	random activity
computer lab	assigned seating on end	random seating
afterschool care	Planned activity; quiet space	random activity; no option for quieting

Notice and Name Skill

- 1 Notice where you are on the autonomic map
- 2 Name the state
- 3 Turn toward your experience
- 4 Bring curiosity
- 5 Listen for a moment to the story of your state



The Autonomic Ladder

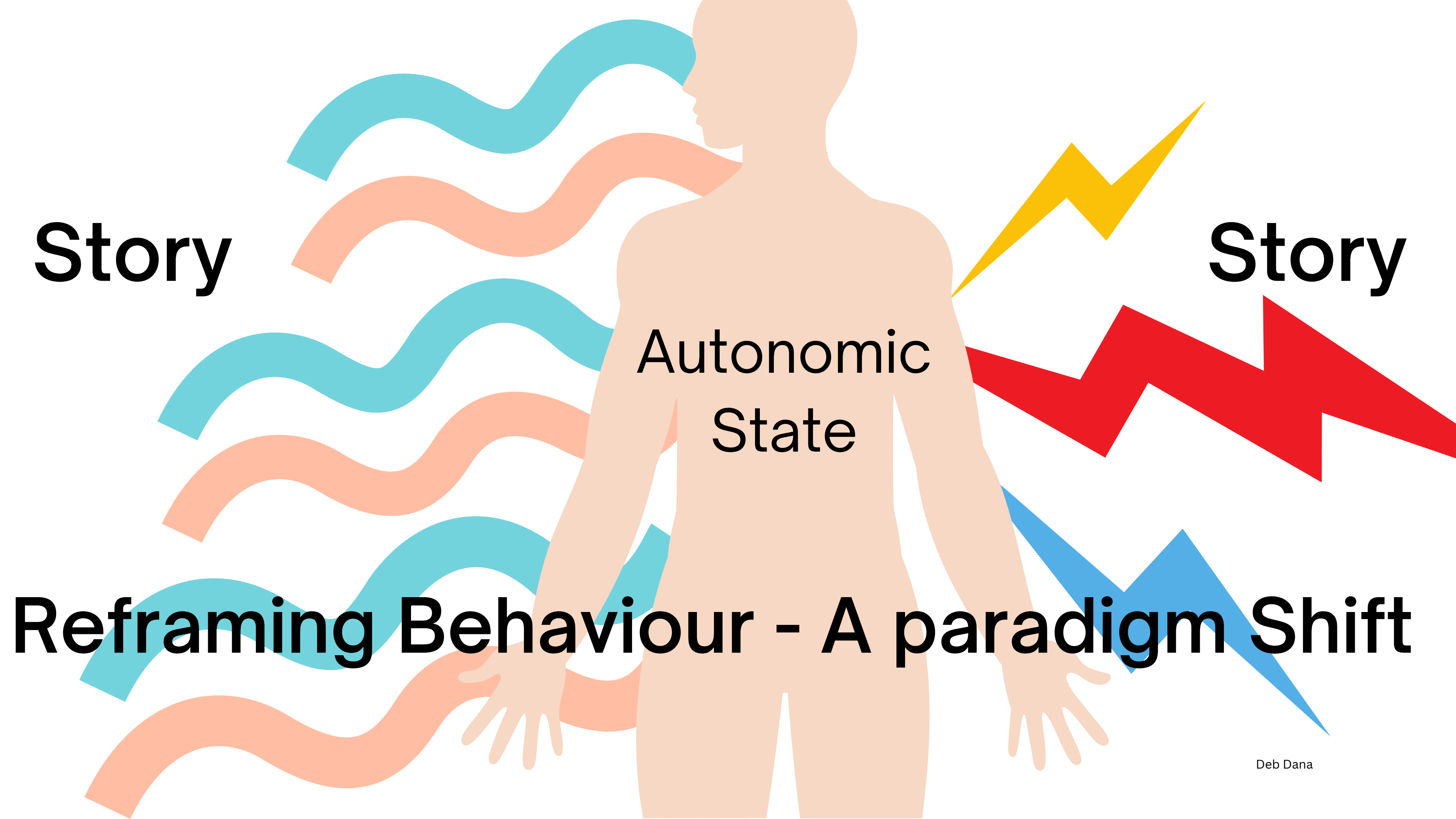


Story

Story

Autonomic
State

Reframing Behaviour - A paradigm Shift






The Polyvagal Way!

- Our very essence is the biggest gift we can offer to help another
- Nervous Systems communicate!
- We might not be able to change the world but we can be responsible for our own body and the messages it communicates
- It is how our young people can feel safe
- It is how we can be approachable
- We hope that polyvagal theory offers some clarity and helps you and your young people find ventral vagal peace

Resources by Deb Dana

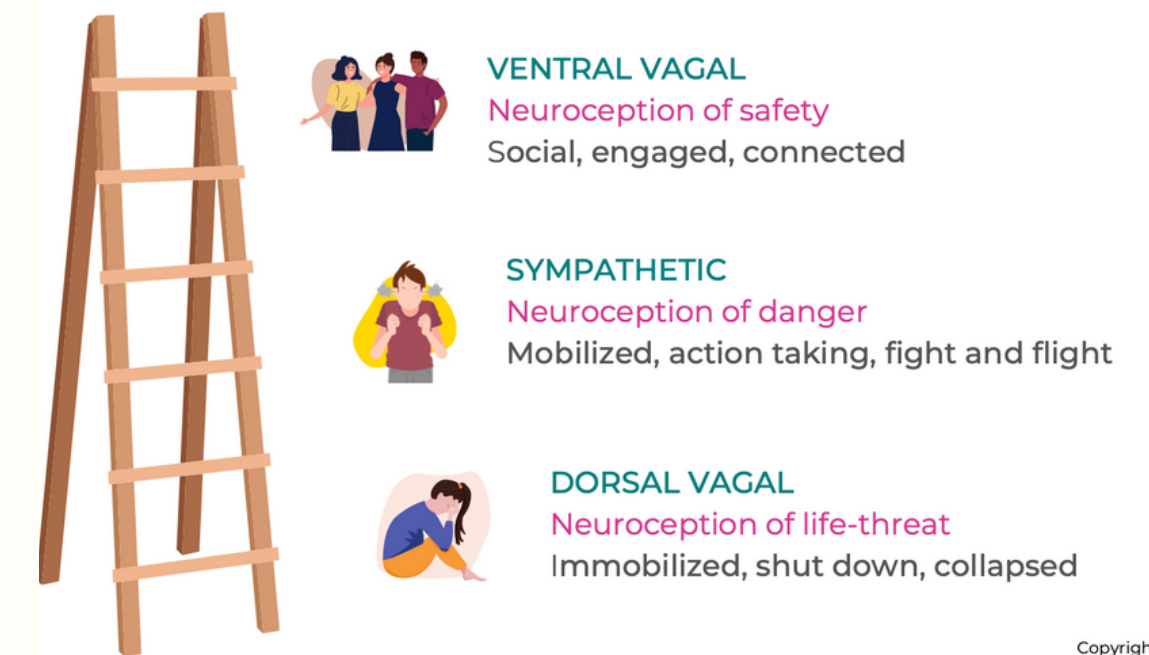
Notice and Name Skill

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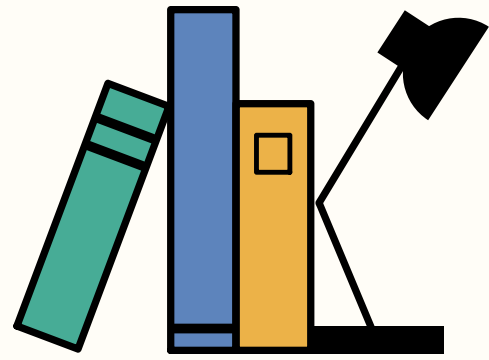
	Things I can do on my own: What helps me stay here?	Things I can do with others: What helps me stay here?	<input type="text"/>
	What moves me out of here?	What moves me out of here?	<input type="text"/>
	What moves me out of here?	What moves me out of here?	<input type="text"/>

© Deb Dana. From Dana, D. (2018). *The polyvagal theory in therapy: Engaging the rhythm of regulation*. New York: W. W. Norton.

The Autonomic Ladder



<https://www.rhythmofregulation.com>



References & Resources

01 The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-regulation (Norton Series on Interpersonal Neurobiology), Stephen W. Porges

02 The The Pocket Guide to The Polyvagal Theory: The Transformative Power of Feeling Safe, Stephen W. Porges

03 Polyvagal Theory in Therapy: Engaging the Rhythm of Regulation, Deb A. Dana

04 Grounded: Discovering the Missing Piece in the Puzzle of Children’s Behavior, Claire Wilson

05 Polyvagal Exercises for Safety and Connection: 50 Client-Centered Practices by Deb Dana

<https://my.unyte.com>

<https://www.bdperry.com>

<https://www.rhythmofregulation.com>

