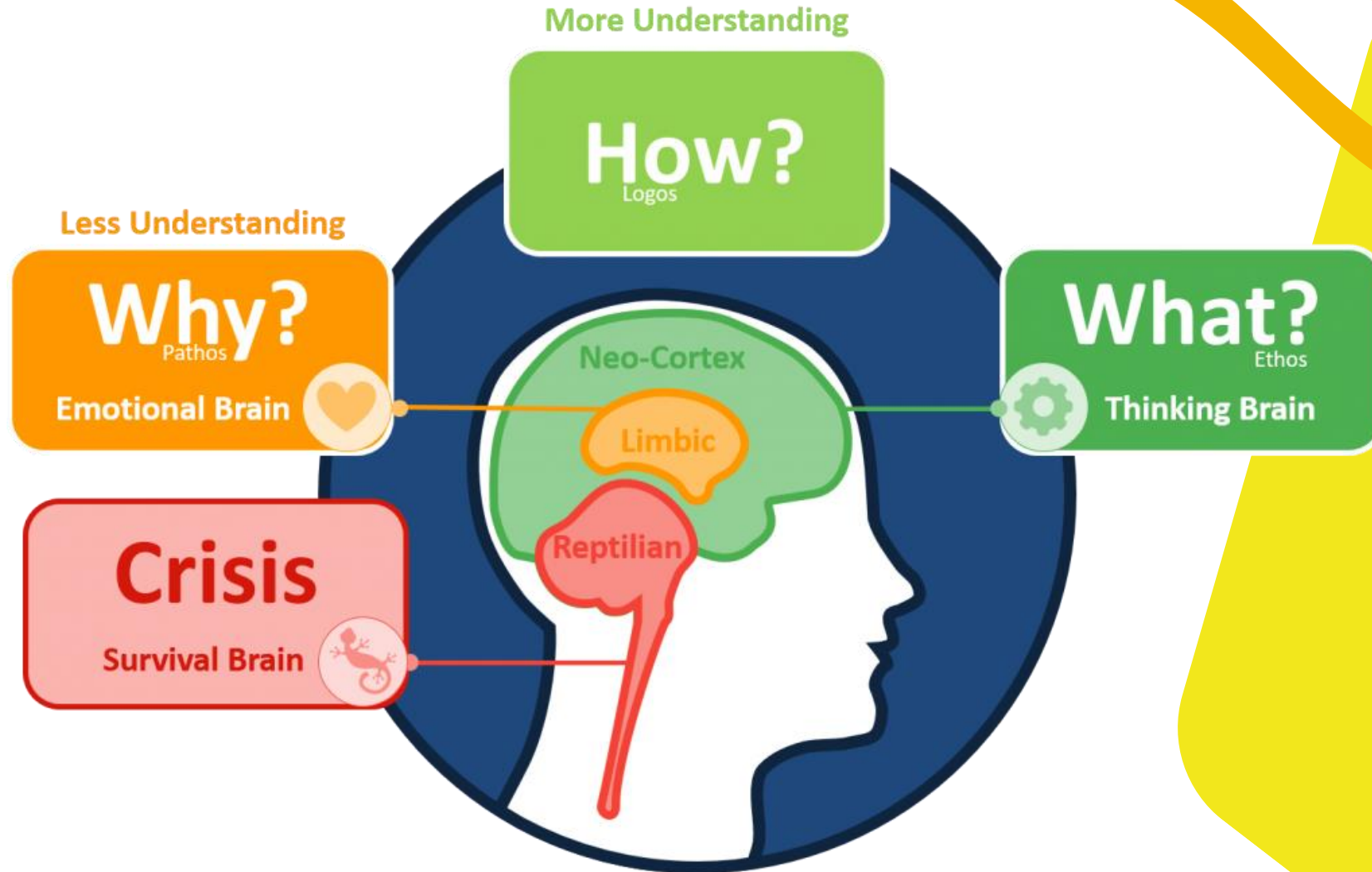
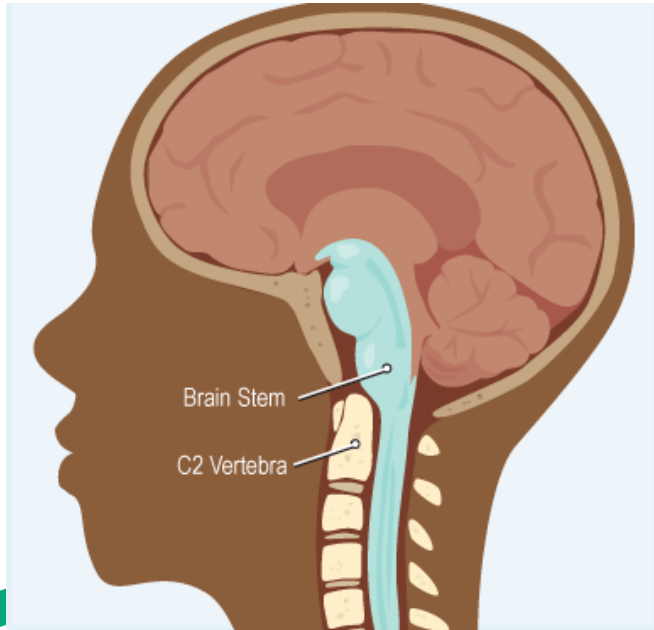


The Triune Brain



The Brain Stem



- Connects the Brain with the Spinal Cord
- Monitoring and Regulating Basic body functions for survival:

Consciousness
Breathing
Swallowing
Heart Rate
Blood Pressure
Sleep Cycles

The Limbic System

- Responsible for emotional maturity, behaviour control, and healthy relationships
- Survival reflexes (fight, flight, freeze) are determined via the limbic system, the survival centre of the brain.
- Develops at 9 months

Home of the **Amygdala**

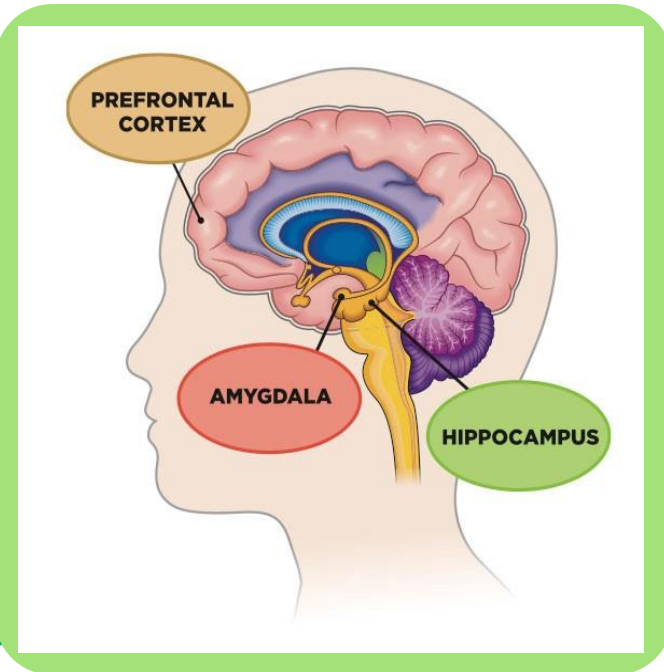
- Strongly linked to human emotions

strongly linked to emotions – acts as an alarm bell and instructs how we respond. Drives our FFF response. Strong links to sensory info.

Home of the **hippocampus**

- connected with the amygdala
- Organises and stores memories
- Can't manage stress
- Links emotions and sensations to memories

The Prefrontal Cortex



- The thinking centre
- Area for conscious thought, awareness, planning, decision making
- It helps us to deal with thoughts, emotions and reactions to situations
- And stops us from doing impulsive/ dangerous things, to keep us safer.
- Thinking, recalling facts, descriptions, understanding, time frames etc all take place in the cortex.

- Low levels of stress increase functions, higher levels of stress and being flooded by adrenaline overloads us and reduces function in these areas.
- Trauma disconnects this part from the rest of the brain – it goes 'offline'

Survival Responses to Trauma

Trauma Responses



Fight: Confront the threat.

anger
rage
confrontation
high energy



Flight: Run away from the threat.

anxiety
panic
avoidance
high energy



Freeze: Shut down to block out the threat.

dissociation
numbness
shutdown
low energy



Fawn: Appease the threat.

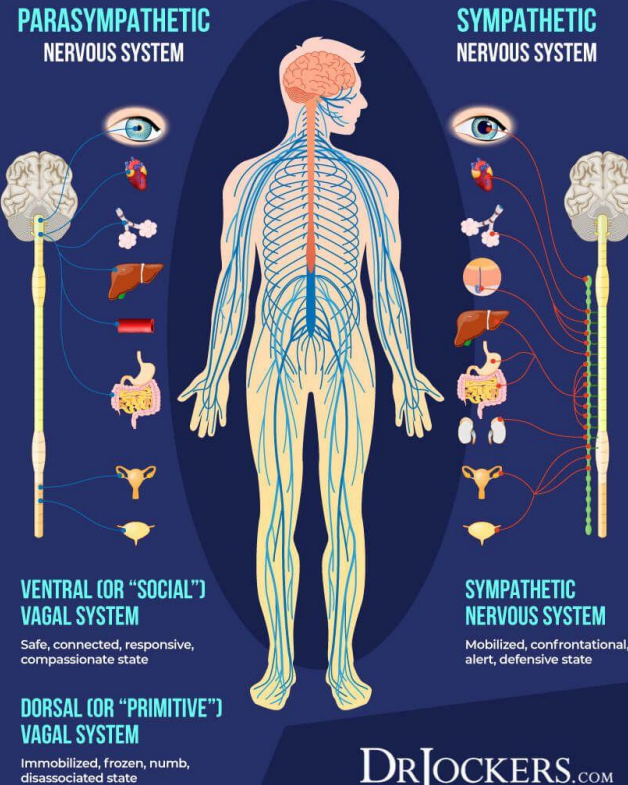
people-pleasing
codependency
lack of boundaries

THE POLYVAGAL THEORY OF STRESS RESPONSE



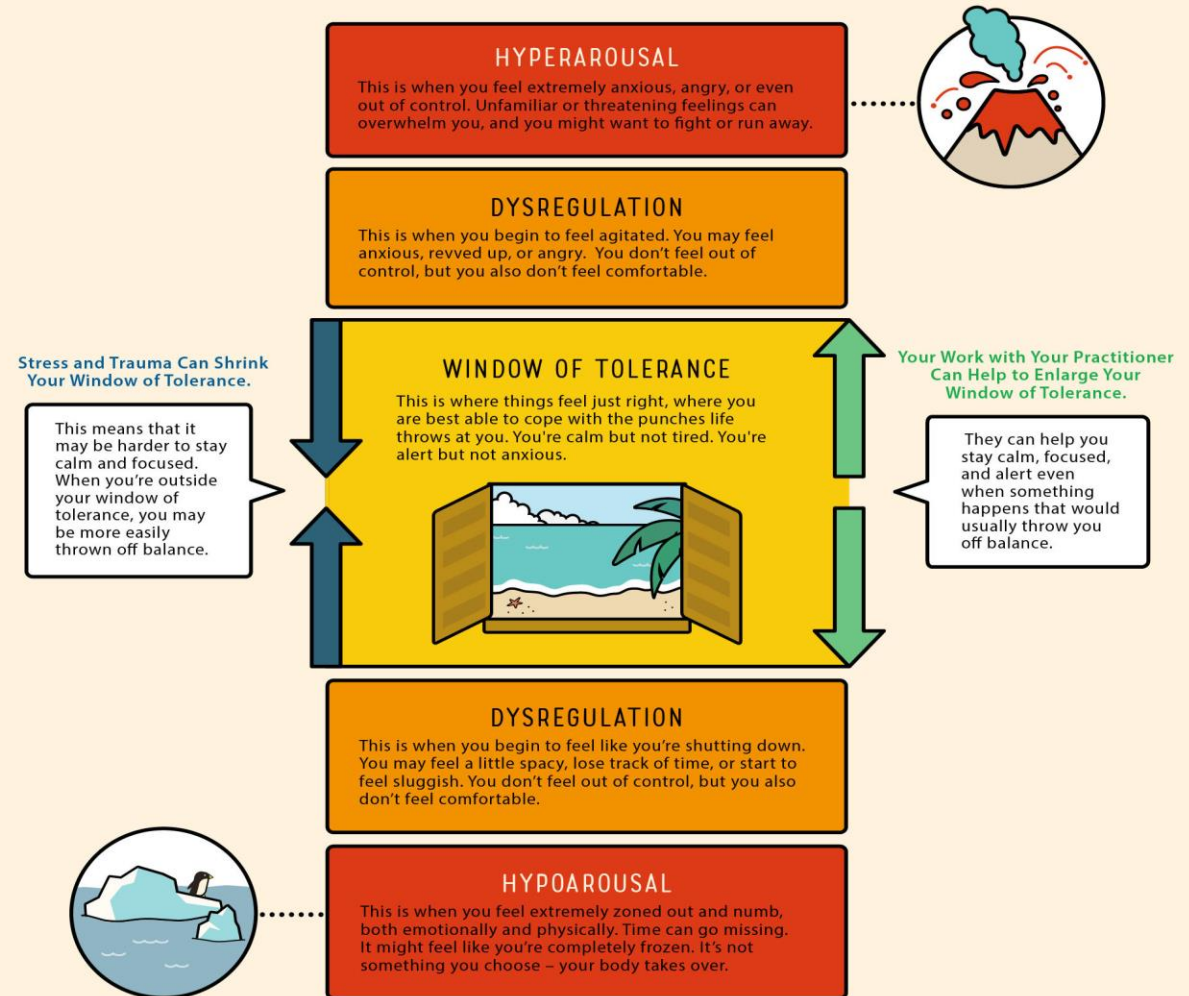
AUTONOMIC NERVOUS SYSTEM

(ACCORDING TO POLYVAGAL THEORY)



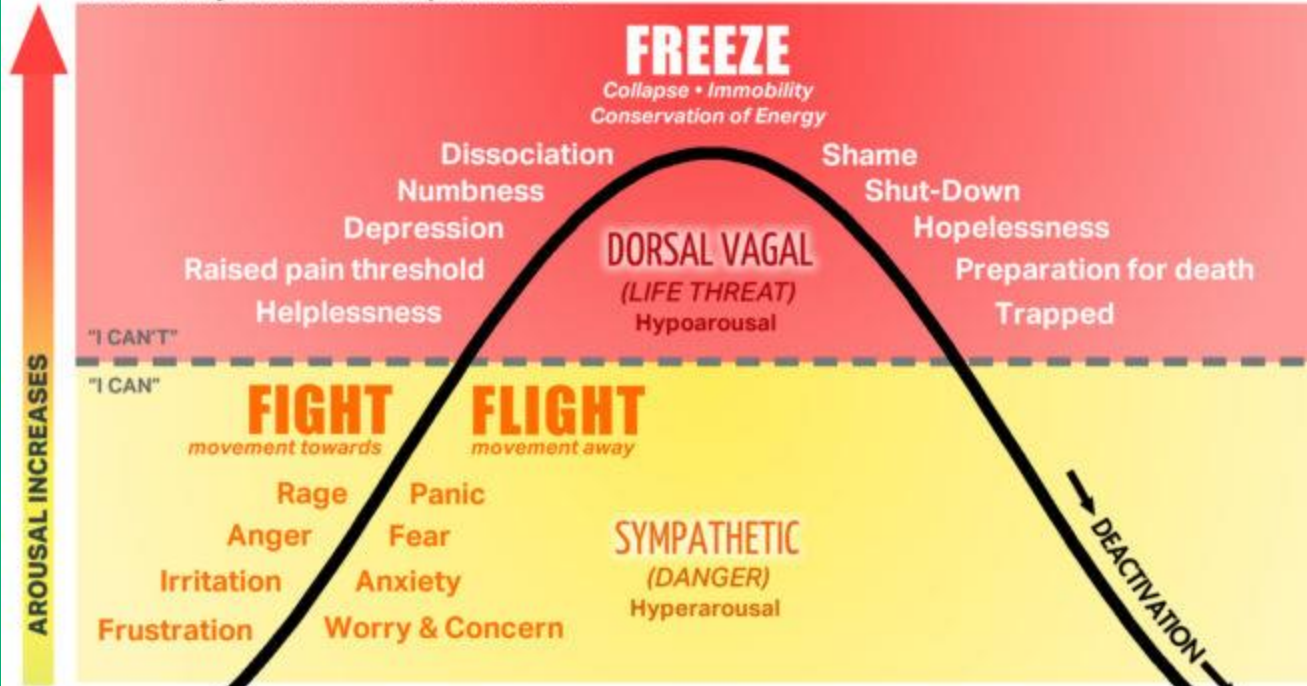
The Window of Tolerance

How Trauma Can Affect Your Window of Tolerance



POLYVAGAL CHART

The nervous system with a neuroception of threat:



The nervous system with a neuroception of safety:



VVC is the beginning and end of stress response.
When VVC is dominant, SNS and DVC are in transient blends which promote healthy physiological functioning.

PARASYMPATHETIC NERVOUS SYSTEM

DORSAL VAGAL COMPLEX

Increases

Fuel storage & insulin activity • Immobilization behavior (with fear)
Endorphins that help numb and raise the pain threshold
Conservation of metabolic resources

Decreases

Heart Rate • Blood Pressure • Temperature • Muscle Tone
Facial Expressions & Eye Contact • Depth of Breath • Social Behavior
Attunement to Human Voice • Sexual Responses • Immune Response

SYMPATHETIC NERVOUS SYSTEM

Increases

Blood Pressure • Heart Rate • Fuel Availability • Adrenaline
Oxygen Circulation to Vital Organs • Blood Clotting • Pupil Size
Dilation of Bronchi • Defensive Responses

Decreases

Fuel Storage • Insulin Activity • Digestion • Salivation
Relational Ability • Immune Response

PARASYMPATHETIC NERVOUS SYSTEM

VENTRAL VAGAL COMPLEX

Increases

Digestion • Intestinal Motility • Resistance to Infection
Immune Response • Rest and Recuperation • Health & Vitality
Circulation to non-vital organs (skin, extremities)
Oxytocin (neuromodulator involved in social bonds that allows immobility without fear) • Ability to Relate and Connect
Movement in eyes and head turning • Prosody in voice • Breath

Decreases

Defensive Responses