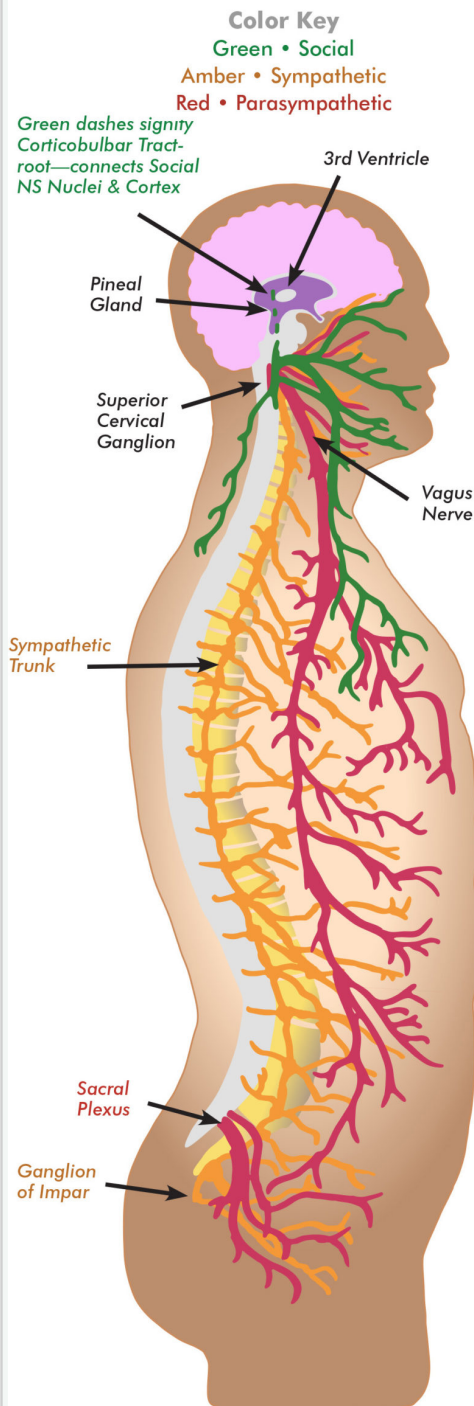


The Autonomic Nervous System's job is to ensure our survival.

Polyvagal ANS Model



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Charts are based on Stephen Porges' Polyvagal Theory from illustrations & information by John Chitty & Renee Peterson.

- The mechanism of the ANS is characterized by the processing of cues from our environment and creating an appropriate response in pursuit of survival. **This process happens involuntarily and happens in our unconscious.** Our cognition is often unaware that our ANS is picking up cues from our environment at all times. **This process is called Neuroception.**

- The 3 main pathways of response are the Sympathetic System and the Parasympathetic System (consisting of both Dorsal and Ventral Vagus Nerves)

- The Ventral Vagus (green) and Dorsal Vagus nerves (red) are part of the Parasympathetic System. They both originate in the cranial nerve, which is located in the brain stem. By contrast, the Sympathetic nerves are found along the middle of our spinal cord.

- The **Ventral** (posterior/front side) Vagus nerve responds to cues of safety and is responsible for the “Rest and Digest” and the calming of our bodies. It supports feelings of **safety, social engagement, and connection.**

- The **Dorsal** (anterior/backside) Vagus nerve is responsible to cues of danger and is responsible for the **freeze** mode of survival. It disengages us from our environment, conserving our energy and we experience a type of shut down.

- The **Sympathetic System** responds to cues of danger and is responsible to mobilize our bodies to **fight or flight.** It activates our stress-response systems such as the Sympathetic Adrenal Medullary (SAM) and the Hypothalamic-pituitary-adrenal gland (HPA). HPA releases the stress hormone Cortisol. The Sympathetic System is also responsible for the release of adrenaline.