

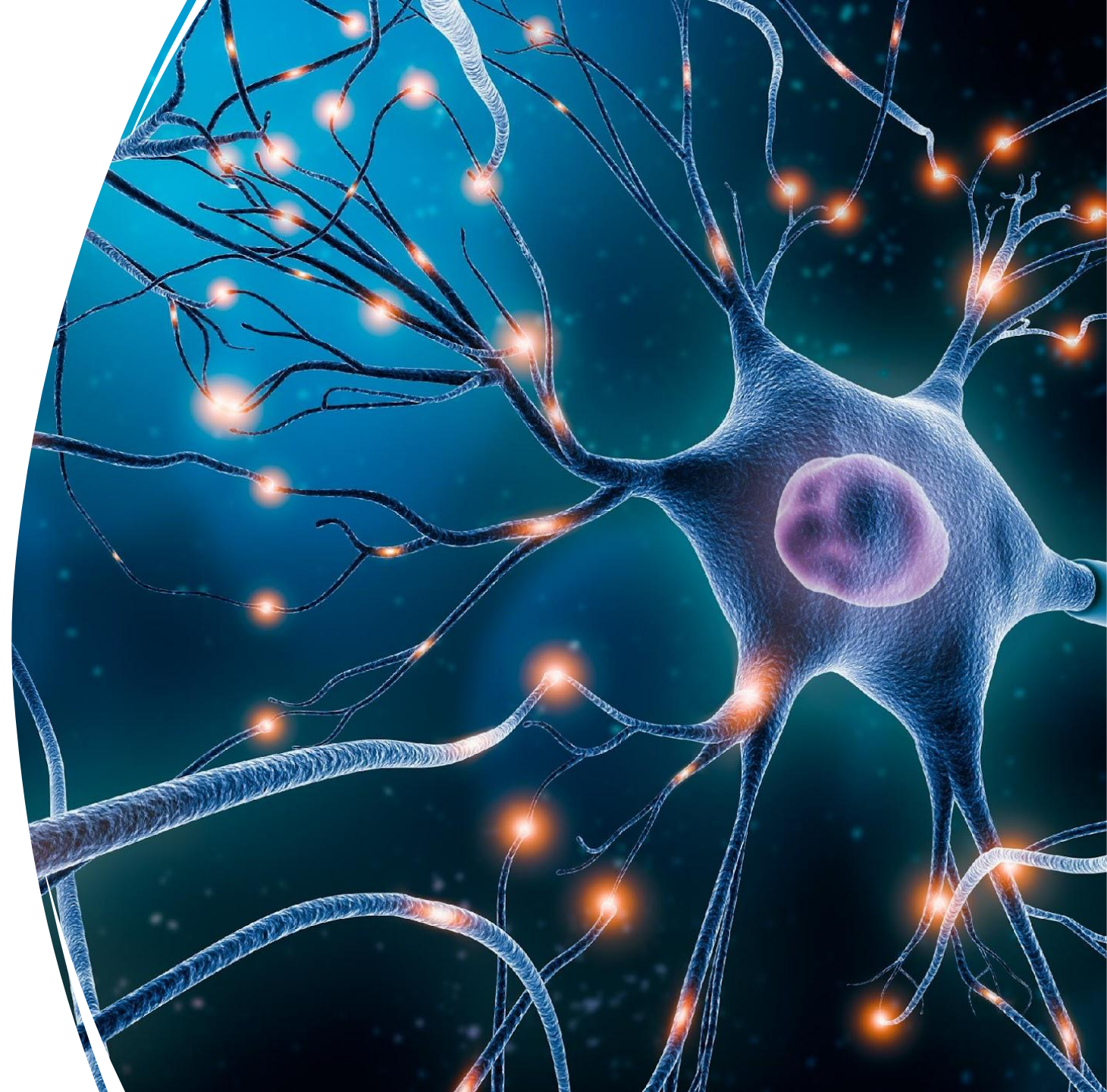


Nightmares and the Nervous System

Dr. Leslie Ellis

Overview

- Nightmares as an image of the state of the autonomic nervous system (ANS)
- Porges' Polyvagal Theory has changed the way trauma is treated, but not nightmares
- Polyvagal Theory's key concepts
- Evidence linking nightmares and the nervous system: physiology and dream content
- Proposed treatment taking PVT into account: safety first



A polyvagal primer


- Porges' PVT updates the former view of the ANS as paired circuits of sympathetic arousal and parasympathetic relaxation
- Instead: a hierarchical and *adaptive* response to threat: fight/flight, immobility
- Under threat, the uniquely mammalian ability to mitigate threat response (social engagement system) shuts down
- WE NEED TO FEEL SAFE TO CONNECT WITH OTHERS
- Ventral branch governs health, growth, restoration, connection
- Dorsal branch (below the diaphragm) initiates shutdown



Key New Ideas from Polyvagal Theory

- “Safety is the treatment”
- Porges identified 4 key aspects relevant to therapists
- *Vagal brake* regulates heart rate, is released under threat
- *Social engagement system*: face-heart connection
- *Neuroception*: an automatic, embodied perception
- *Frequency Band of Perceptual Advantage*: sound frequency communicates threat or safety





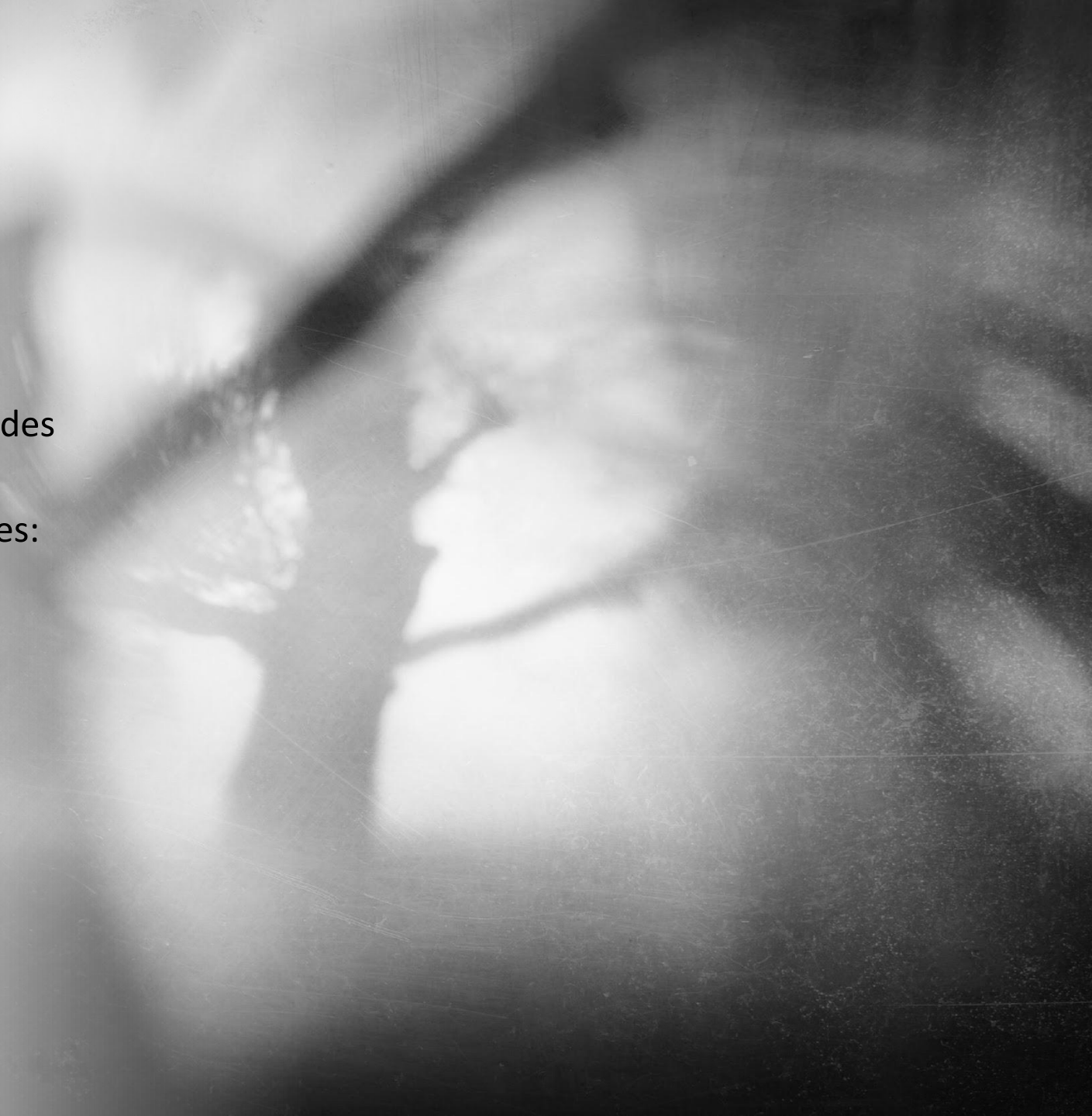
Dreaming with our hearts as well as our minds

- ‘Activation of brain-heart access during REM sleep: a trigger for dreaming’ (Nardelli et al. 2021)
- Study shows ANS activation (HRV, blood pressure) coincides with the shift into REM sleep
- Researchers found a *causal link* between body state and conscious dream experience...
- AND this in turn influences our body – a bi-directional link
- Our dreams are a picture of the shifting state of the ANS
- *Blog link:*
<https://drleslieellis.com/dreaming-with-our-hearts-as-well-as-our-minds/>



Nightmare Content and the ANS

- The most common nightmare content coincides closely with ANS threat responses:
- In order, the most frequent nightmare themes:
 - failure or helplessness (immobility)
 - physical aggression (fight)
 - accidents
 - being chased (flight)
 - illness or death (immobility)
 - interpersonal conflict (fight)





Who has nightmares?

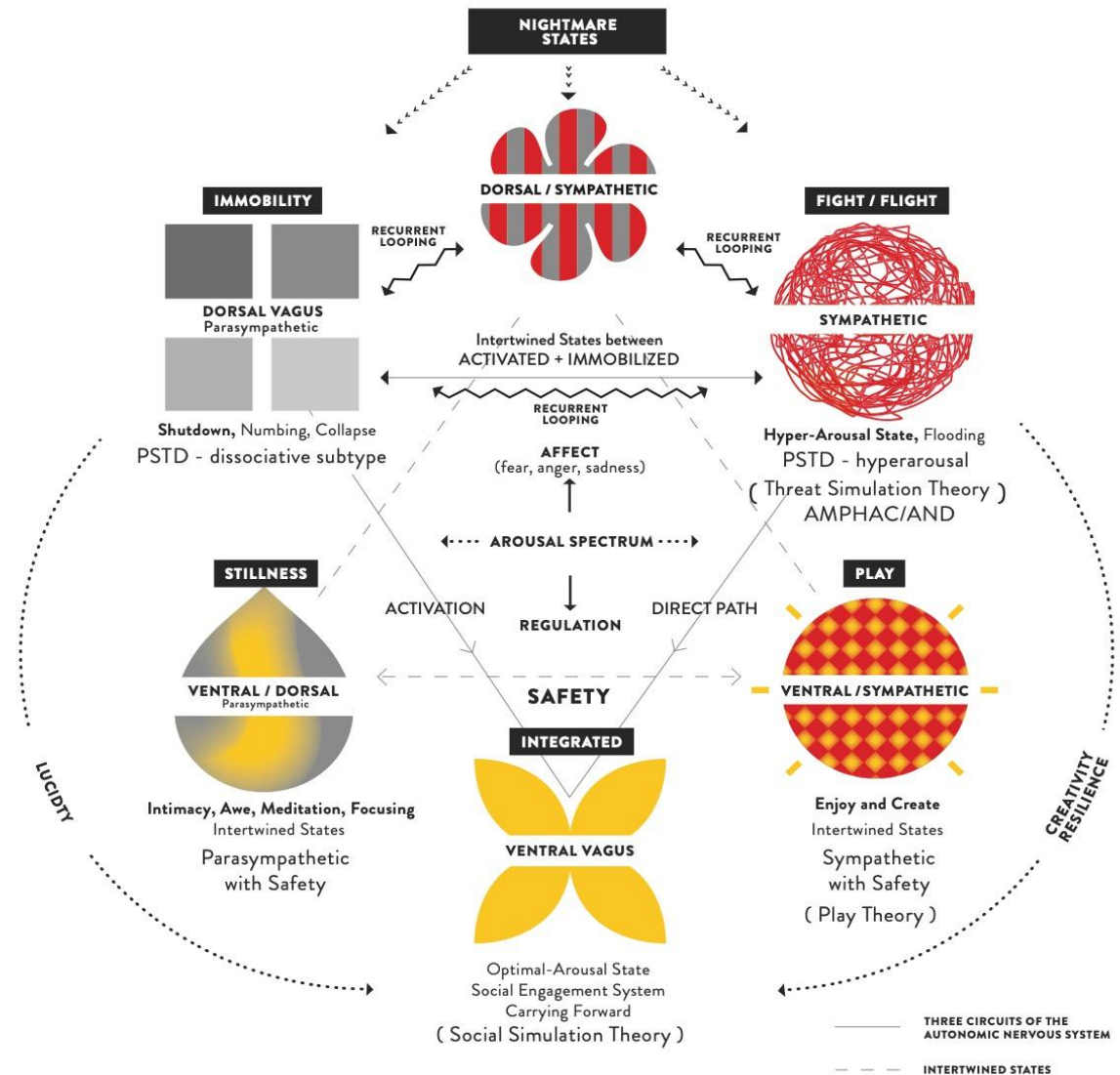
- Researchers have found that NMS need two conditions: a trait and a trigger
- Traits: emotional dysregulation, high sensitivity, highly active stress response
- *My question: Are these inborn traits or signs the ANS has been sensitized to threat?*
- 'Early adversity' is linked to NMs (siblings' birth, maternal separation, ACES)
- NMs linked to post-traumatic stress (90%), anxiety, depression, higher suicide risk and in general, all forms of psychological injury


FSPM for Nightmares - Notes

- The top half of the diagram demotes states where there is little or no sense of safety
- ANS can loop between activation and immobility, leaving someone locked in a state of PTSD
- Post traumatic stress INJURY is the preferred term: PVT does not pathologize ANS response
- Based on Jan Winhall's *Felt Sense Polyvagal Model*

THE FELT SENSE POLYVAGAL MODEL™ OF NIGHTMARES

CLINICIAN VERSION





Nightmares: a symptom and an (attempted) solution

- Nightmares are an indication of a nervous system that doesn't feel safe – they reflect a history of trauma and adversity
- They occur in the state shift between non-REM and REM sleep
- They can be seen as the body's attempt to regulate
- When overwhelmed, the ANS can be locked in a cycle of activation and immobility that is reflected in dreams
- ***Nightmares can and should be treated***



Nightmare Treatment: Finding 'home'

- Dreams also depict the full range of the ANS: ie social engagement, intimacy, creativity, and play
- Nightmare therapy is typically a 'rescripting' process
- *Nightmare Relief* incorporates polyvagal theory:
 - Begins with resourcing and establishing a sense of safety
 - Bring in this sense of safety while dreaming the dream onward
 - Dream content shifts to *home* (not a place but safe and with others)
 - Future dreams (often no longer nightmares) reflect this shift

Nightmare Relief protocol

- Instil hope, positive expectation
- Calming, clearing (from Focusing)
- Bringing back the dream (manage activation/overwhelm)
- Finding and embodying help
- Dreaming the dream onward
- Consolidate new dream and resulting transformation





Clinical Considerations

- NM treatment best as an adjunctive treatment, ideally within the course of trauma therapy
- Consider the two very different responses to traumatic injury: activation/hyperarousal and dissociative sub-type (about 30%)
- Frequent NMs are robustly associated with higher suicide risk
- Ask about nightmares and learn to treat them, even if you do no other kind of dream therapy
- When NMs are reduced, sleep improves and daytime symptoms dissipate (the reverse isn't true)
- Instil a sense of safety and mastery





For more information

- Email: leslie@drleslieellis.com
- Web site resources (blog, courses):
drleslieellis.com
- Article (under review): *Solving the Nightmare Mystery: The Autonomic Nervous System as Missing Link in the Aetiology and Treatment of Nightmares*
- 2-hour talk Jan. 28 GoodTherapy.com

