



# TRAUMA INFORMED YOGA SUMMARY

## Stress versus' Traumatic Stress

Created by expectable life changes (i.e. divorce, job loss, interpersonal conflict...)

Results from exposure to **life endangering** stressors (i.e. war, abuse, natural disaster...)

## PTSD (Post Traumatic Stress Disorder)?

One who is exposed to life endangering stressor and exhibits: re-experiencing (i.e. flashbacks, nightmare), avoidance of reminders of trauma, negative thoughts and moods (i.e. pessimistic view of life, hopelessness), and arousal dysfunction (i.e. Hyper vigilance, numbing).

Exposure to traumatic experience does not equal development of PTSD

## Quick PTSD Prevalence Facts!

- 8% of Americans with PTSD, this translates to 24.4M = Texas
- 12% of Veterans who fought in Iraq (1 of 8)
- 1 of 9 women = 11% of all women, making women 2x more likely than men
- 10-40% adult refugees and 50-90% children/adolescent refugees
- 30-40% victims of disasters, 10-20% of the rescue workers and 5-10% general population
- 16% of those who experienced Epidemics (i.e. Ebola)

## Quick Trauma Facts! (US based)

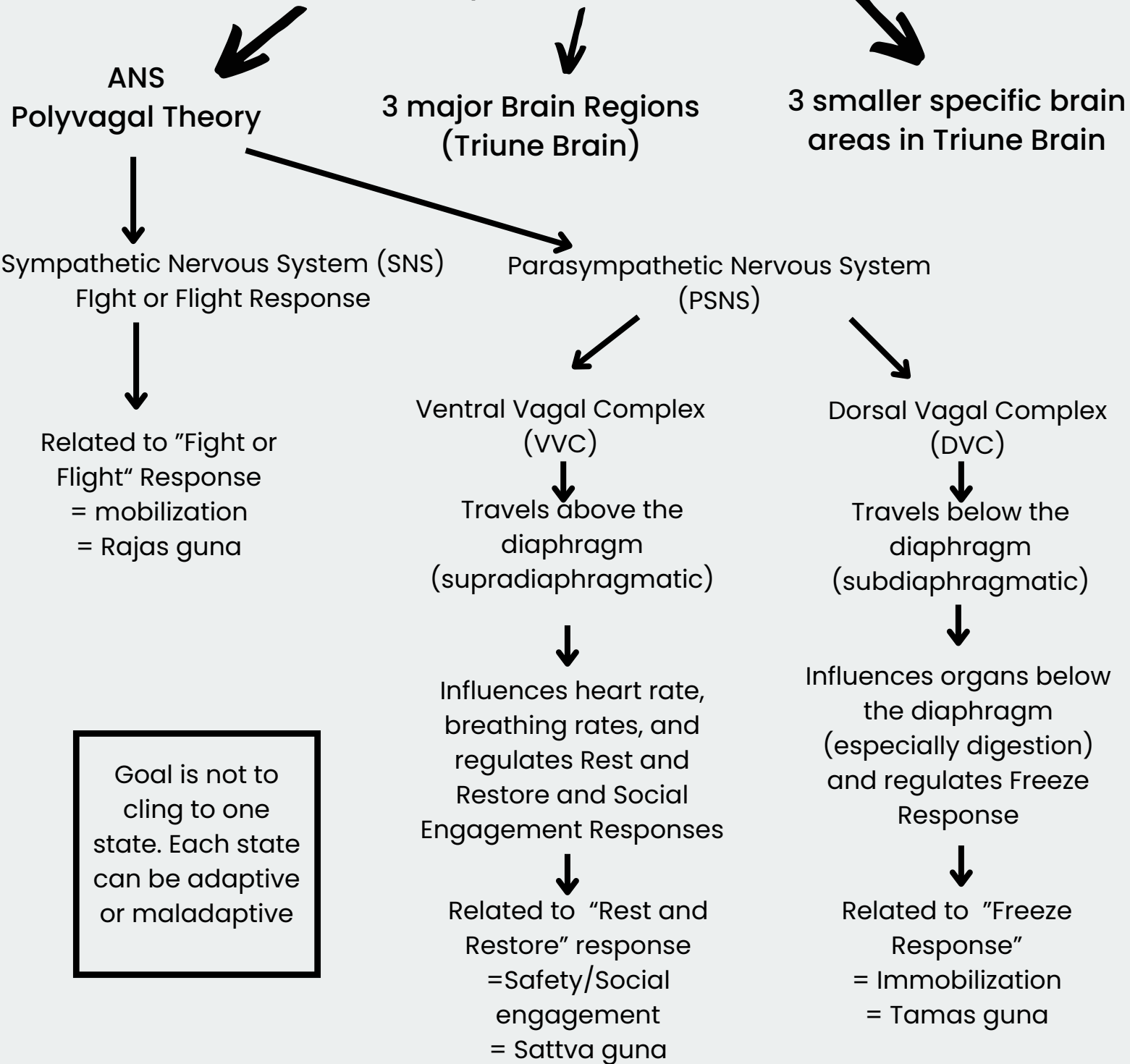
- 90% of all people will be exposed to some type of traumatic event in their lifetime.
- 8-20% develop debilitating symptoms of PTSD
- 1 in 4 children will experience physical abuse; 1 in 5 sexually assaulted
- Transgendered males are 10x more likely to experience sexual violence
- Every 28 hours a Black person is murdered in the US by police, security guard, or state sanctioned violence

“ Trauma is not just an individual tragedy but deeply interconnected to large systems of domination that shape the world.  
(Treaven, 2018)



# TRAUMA DYSREGULATION

## The 3 Complexes of ANS (Autonomic Nervous System) and Trauma



## DYSREGULATION? In complexes of ANS and Trauma

SNS is overactivated (Fight or Flight Response) = unpredictably triggered responses  
VVC is under activated (Rest and Response) = reduced self-awareness  
DVC is unpredictable (Freeze Response) = unpredictable fluctuations between hyperarousal/hypoarousal, fear/numbing

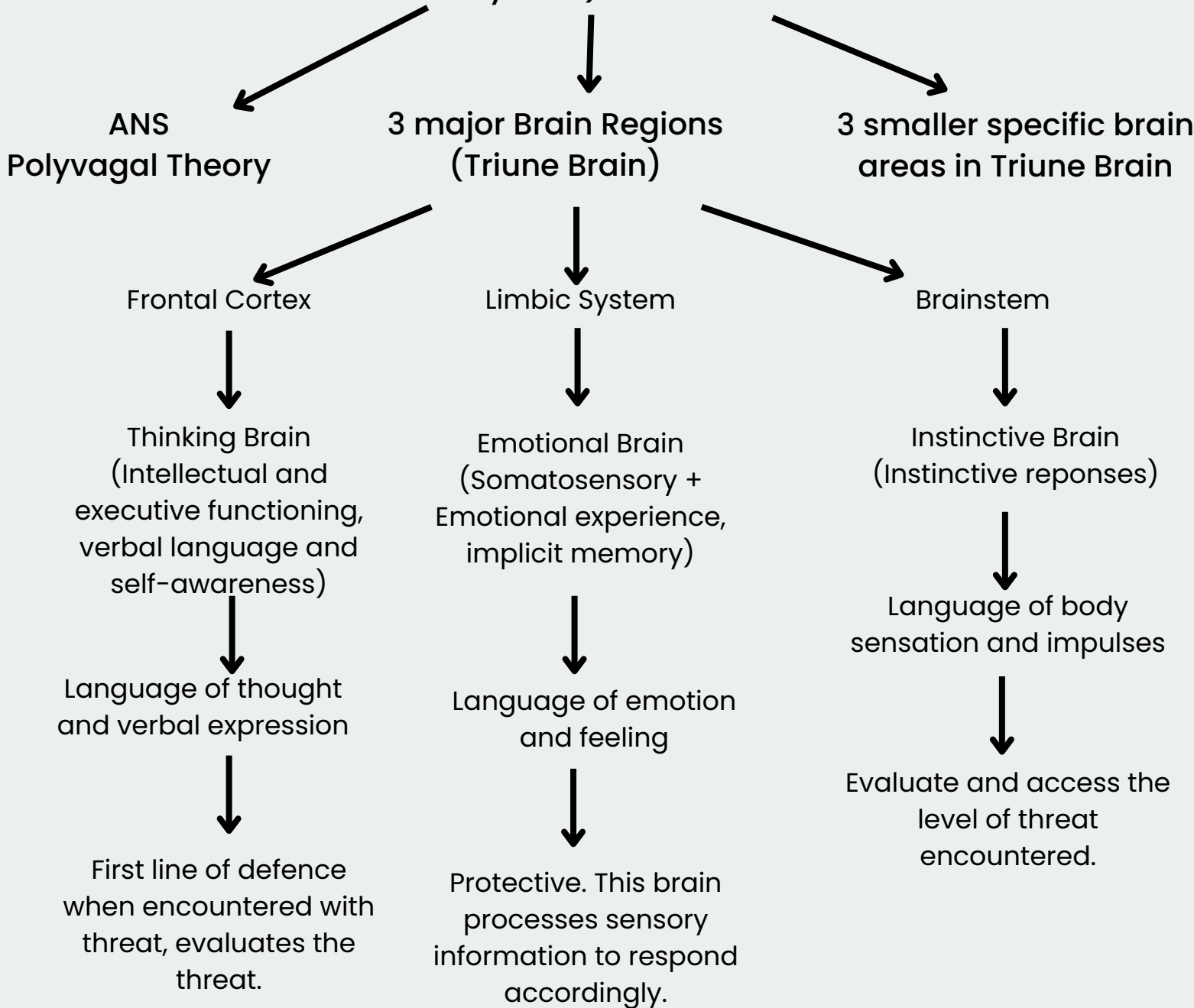
## 2 Additional States

1. Safe mobilization VVC/SNS activated (i.e. play, dance, yoga)
2. Safe Immobilization VVC/DVC activated (i.e. intimacy, deep listening)



# TRAUMA DYSREGULATION

## The 3 Complexes of ANS (Autonomic Nervous System) and Trauma



“ We remember trauma less in words and more with our feelings and our bodies. Van Der Kolk & Fisler, 1995 ”



# TRAUMA DYSREGULATION

## The 3 Complexes of ANS (Autonomic Nervous System) and Trauma

### ANS Polyvagal Theory

### 3 major Brain Regions (Triune Brain)

### 3 smaller specific brain areas in Triune Brain

#### Periaqueductal Gray (PAG)

Located in instinctive brain. It is the most primitive danger detection of the brainstem.

PAG activated by threat sense through sight and activates fight/flight or freeze Response

PAG gets dysregulated by trauma and becomes over active = increased messages to ANS to self-protect

Dysregulation = overactive, increased triggering of fight/flight or freeze response

#### Amygdala

Located in the emotional brain it's known as the "smoke detector"

Activated by threat based on emotional and sensory information and activates fight/flight or freeze response.

Dysregulated by trauma and becomes overactive = continually sending messages to respond to threat even in absence of threat.

Dysregulation = overactive, NS overreacts and responds even to neutral (Non-threatening) cues

#### Medial Prefrontal Cortex (PFC)

Located in the thinking brain (above eyes), it's known as "watchtower" of the brain.

It processes what we are observing and accesses if there is a real threat that requires a response.

Dysregulated by trauma and becomes under activated

Dysregulation = goes offline, ability to remain self-aware and consciously evaluate threat is compromised

## Hormonal Response to Trauma

Elevates levels of cortisol and Adrenalin which rev up the metabolism, preparing the body to meet threats/react. Chronic stress causes continuous exposure of cortisol and Adrenalin in the brain. Excess cortisol interferes with hippocampus to sense a traumatic event has past. Excess Adrenalin causes Amygdala to be hyperactive, constantly signalling the body to protect/react.

Excess Cortisol + Excess Adrenalin = constant feeling and reacting as if threat is present



## YOGA AND TRAUMA

Yoga rebalances ANS by:

- increasing functioning of VVC (PSNS) the rest and restore response
- dampening overactive SNS (fight/flight response) and the unpredictability of DVC (freeze response)

### Yoga Research

According to a meta-analysis of 11 studies published by Goethe et al, 2019:

- Yoga practitioners had greater cortical thickness in the prefrontal cortex, “watch tower”= individuals became more self aware and conscious, with increased ability to evaluate threats
- Yoga practitioners showed decreased reactivity in Amygdala “smoke alarm” = individuals were less reactive and not remaining in triggered responses/states
- Yoga practitioners showed greater volume of the hippocampus = increased communication between Amygdala and Prefrontal Cortex, communication to thinking brain restored to signal when threat is over.

### Specific Yoga Practices for Regulation

- Breath – nose breathing, exhale focused, depth, width, slow pacing, resistance breath (ujjayi)
- Movement – slow, intentional movements, mirroring exercises to encourage safe mobilization
- Relaxation – guided relaxation with different positions for rest
- Meditation – guided meditations that bring them back to the present moment

### Mindfulness can Increase the Healing Power of Yoga. What is Mindfulness?

1. Non judgemental – accept and receive what is here with kindness and compassion
2. Paying attention on purpose – bring the “watch tower” back online
3. Present moment – start to care for yourself now.

“ Mindfulness means paying attention in a particular way: on purpose, in the present moment and non-judgementally.  
Jon Kabat-Zinn ”



## BEING PRESENT AND TRAUMA

Traumatized individuals are overwhelmed by memories, sensations, and feelings from past traumatic events. Mindfulness allows one to become aware of the effects of trauma, to be the observer and learn to take care of oneself.

## NON-JUDGEMENT AND TRAUMA

Traumatized individuals may get caught up in negative self talk and judging oneself harshly. The cultivation of nonjudgmental acceptance, compassion and kindness is essential to improve self-view.

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Mindfulness, awareness of one's inner experiences is necessary for a person to respond according to what is happening and is needed in the present rather than reacting to certain somatic sensations as a return to the traumatic past. Such awareness will free people to introduce new options to solve problems and not to merely react reflexively.

(Van Der Kolk, P42)

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## Incorporating Mindfulness into TIY Class

- mindfulness mediation
- mindful cuing - exploratory language
- mindful check in's and check-outs = observe feelings, breath, and sensations
- Embody mindfulness as a teacher (calm attracts calm)
- offer choice to help them move away from the sense of helplessness

## Goals in Mindful, TIY Classes

1. Help students recognize and regulate their level of arousal
2. Help students become less emotionally reactive
3. Help students become more aware of their thoughts, feelings and sensations.

## 4 R'S OF TRAUMA INFORMED YOGA (TIY)

1. **Realizing** the impact of trauma on a person's body and mind.
2. **Recognizing** the signs and symptoms of trauma
3. **Responding** skillfully to these symptoms in your class
4. Avoid **Re-traumatizing** students



## ELEMENTS IN A MINDFUL TIY CLASS

1. Physical details - creating a safe space, minimize interruptions, lights on (not too bright), non distracting dress code for instructor
2. Creating Safety - establish a relationship, move mindfully, offer choice, invitation language
3. Cultivate Mindfulness - check-ins and check-outs, mindfulness meditation, exploratory language, calm teacher = calm energy
4. Breath work - educate the connection of body, mind and breath, practice deepening/lengthening/expanding, slow mindful breath (ujjayi, bee breath), avoid retentions
5. Movement - slow, flowing movements, demonstrate through movement and not adjustments
6. Cuing - verbal and visual cue over physical (unless requested)
7. Auditory Environment - music can help anchor attention to the present, avoid too much lyrics or very stimulating music
8. Final Relaxation - offer choice and consider shortening the time left alone
9. Class Endings - remind them of theme or tools they learned, check-outs
10. Anticipate Risks - class size, student dynamics, and how will you manage any crisis that may occur (aggression, abuse, threats, crying)

## TRACKING AROUSAL DYSREGULATION

### Signs of Hyperarousal

Rigid muscle tone  
Hyperventilation  
Exaggerated startle response  
Emotional lability (anger, hysteria, explosive, sadness)

### Signs of Hypoarousal

Slack muscle tone  
Collapsed posture  
Notable dissociation/disconnection

## SHIFTING AROUSAL DYSREGULATION

### If Hypoaroused

Focus on upregulation (active movements).  
Create deep sensations (twists, eagle arms).  
Use techniques that create connection to the moment.

### If Hyperaroused

Focus on down regulation.  
Focus on grounding movements and slow breath work.  
Engage in slow, continuous flow/movements.



# VICARIOUS TRAUMA (Indirect Exposure to Trauma)

## Vicarious (VT) and Secondary Traumatization

- indirect exposure to trauma through listening to, hearing about, or witnessing another's trauma
- VT occurs gradually over time with exposure, ST occurs suddenly after one exposure
- can result in symptoms or full diagnosis of PTSD
- individual and situational factors play a role in the level of risk one has to developing PTSD through VT

It's important the instructor establish personal coping skills and social support system to reduce the risk of developing PTSD

## Loving Kindness for Providers

May I offer my care and presence unconditionally, knowing that it may be met by gratitude, indifference, anger or anguish.

May I offer compassion, knowing that I cannot control the course of life or of suffering.

May I be peaceful and let go of expectations.

May I recognize my own limitations.

Sharon Salzberg