

#### WHY IS IT IMPORTANT FOR US TO LEARN HOW TO REGULATE YOUR OWN NERVOUS SYSTEM?

The better able we are to regulate our own nervous system, the better able we are to assist others in regulating their nervous system ("co-regulation")

- Children need us to help them regulate their nervous system (and it can be beneficial in all other relationships too!)
- A regulated nervous system means that a person will have access to their skills and resources and will be able to perform optimally. In this state they can think, feel and communicate purposefully.

Controlling your child's behavior is not indicative of good parenting. Regulating your own behavior - despite your child's - is.

# WHAT IS TRAUMA?

- An external event(s) and/or condition(s) that overwhelm our nervous system. In response, our nervous system forces the body to do something other than problem solve in the moment
- Our nervous system is built to respond to traumatic and threatening things in the environment in a selfprotective way
- But our nervous system is "conditioned", so after a while, the response to something traumatic in our environment can happen even when the environment is no longer threatening (this is what's happening when we are "triggered")



# THE POLYVAGAL THEORY DR. STEPHEN PORGES

Mammals automatically adjust to various levels of safety, danger or life threat. But these adjustments have consequences for daily living because our nervous system gets conditioned.



# THE VAGUS NERVE

The Vagus Nerve is the "main highway" of the Autonomic Nervous System

- > It's like a cable with lots of fibers in it
- Is a motor nerve AND a sensory nerve, which is unusual
- 80% of fibers are from body to the brain



PRIMARY & MIXE The Polyvagal Theory by Dr Step	D STATES of the Autonomic Nervous System hen Porges /"The Polyvagal Ladder" by Deb Dana, LCSW / image by Justin Sumeri, LMFT
	SAFE & SOCIAL
	FLIGHT sympathetic
	FIGHT
	dorsal SHUTDOWN
	JustinUMFLoor



# **NEUROCEPTION**

Healthy Neuroception =

- The body detects and shifts to the appropriate state based on environment
- The body uses safe & social behavior in a safe environment
- The body does not use defenses like fighting or fleeing unless in actual environmental danger

Unhealthy Neuroception =

- The body does not accurately detect or shift state based on environment
- The body does not flee or fight when in unsafe situations
- The body does not use safe & social behavior in a safe environment

# **CLIMBING THE LADDER**

- To get back to the top of the ladder, we need to go through each state.
- If we're in shut down, we need to go into fight, then flight and then into safety.
- If we're in fight, we need to move up to flight and then into safety



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## SAFETY

Feeling safe is crucial in mammals

- Facilitates general health:
  - Body functions, hormone release
- Cognitive functions:
  - Learning, productivity, critical thinking, problem solving
- > Social engagement:
  - Mutual play, eye contact, safe touch

# SAFETY

We efficiently detect safety cues in this state

Instantaneous social engage with others:

- Closer proximity to someone who is safe
- Eye contact, eye crinkles
- Facial expressions, smiles
- Physical gestures and posture are more relaxed
- Hear human voice and tune out other noises
- Prosody
- Stress, pitch, intonation, pauses, volume and pace

# HEALTH & SAFETY

- The Safe & Social State means the body can facilitate health, growth and restoration, instead of using resources for defense
- Survivors of trauma have higher rates of other problems because they are redirecting necessary resources (you've heard of ACES, right?)
  - Social, emotional and behavior problems
  - Shorter life span, suicidality
  - Diabetes, heart disease, lung cancer, autoimmune diseases

# THE EXPERIENCE OF SAFETY

The world is safe, fun and peaceful

- Soothe and be soothed
- Calm, happy, meditative, engaged, attentive, active, interested, excited, joy, relaxed
- > The negative is interpreted as neutral or unimportant
- This state may be unfamiliar to traumatized individuals and actually trigger a shift back to Flight/Fight
- Vitally important to understand that this is the reason the child in your care may not be able to accept your love and affection





# THE VAGAL BRAKE

Trauma survivors have a compromised vagal break

- Small moments of distress become enormous challenges to their ability to utilize the brake
- > They leave school when something goes wrong
- > They fight when they perceive threat
- They shut down quickly



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## SURVIVAL MODE

- Pain tolerance increases to help with running or fighting
- > Better able to scan the environment to find

danger

- Breathing becomes shorter and faster
  - To increase heart rate and stay mobilized Faster rate of speaking r able to scan the environment to find danger since we're inhaling less

# DOWN THE LADDER

We are no longer in Safe & Social

- Creating distance between ourselves and others in Flight or decreasing distance in Fight
- Others are now a threat

Facial Cues

- No longer identifying or giving facial social cues
- Now identifying neutral faces as threat

#### Hearing

- Middle ear muscles turn off to better hear deep sounds or high sounds
- Harder to understand the sound or meaning of human voice

#### DAILY EXPERIENCE

Flight: panic, anxiety, fear, dread, on guard, hypervigilant

- Foot/leg/pen tapping
- Fight: Anger, rage, irritation, aggression
- Muscles tense, clenched fists, tight jaw

Both:

 Flat affect, wide eyes, distracted, sitting upright or forward, shallow breathing, breathing into shoulders or chest, not hearing safe people, sensing danger everywhere, speaking faster and louder



# COMING OUT OF DANGER

Requires safely discharging the energy

- Done in a safe environment with a safe person
- Being mindful of the experience
- Focusing on body sensations and breath

Moving from Danger to Safety can feel like danger



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# PLAY

For traumatized individuals, play may activate the defense systems without the ability to co-regulate

- >Depends on their play history
- ➤ "Doesn't play well with others"

Play activates the state of flight/fight →But it needs the Safe & Social system to

be active

#### STILLNESS

- Stillness without Fear
  - ➢Sitting in silence
  - ➤Self-reflection
  - ➤Using the restroom
  - ≻Intimacy
  - ≻Sleeping
- Combination of Freeze and Safe & Social States
- Traumatized people experience a body perception
  - of danger when still

#### FREEZE

#### SHUT DOWN + FLIGHT/FIGHT High sympathetic energy combined with immobilization

- Like slamming on the gas and the brake at the same time
- > The flight/fight energy stays stuck in the body
- Wild animals release the energy through shakes and trembling
- Completes the freeze state



- Humans are spooked by the bodily sensations of moving up the ladder
- > Our bodies are stuck in a state of defense
- Stories we create about the event keep us stuck in trauma
- Isolating ourselves keep us stuck in trauma
- > Keeping it secret keeps us struck in trauma







# **CO-REGULATION**

We are a social species

- > We regulate with each other
- > Co-regulation is integral to mental and physical health
- Before language, mammals used vocalizations to indicate if they were safe or dangerous to come close to
- > Safety leads to closeness and touch
- > Closeness may have been adaptive for survival
- Non-traumatized individuals can move up and down the ladder
- > Self-regulation is built upon co-regulation



# TOUCH

Touch is a basic way of communicating

- > Indicates safety, threat, soothing
- Safety & touch important for breastfeeding, bonding after birth
- > Hugs are not safe for everyone
- Some people need greater proximity
- > Not all of us have experienced safe touch

# FACE TO FACE INTERACTION: THE FACE IS A POLYGRAPH

#### > All mammals do this

Face-to-face is often very helpful in reducing conflict, especially if the interactions occur in a safe environment

- Defense turns off the face/heart connection
  - Faces become blank when challenged, in pain or scared
  - Heart rate increases

## FACE TO FACE INTERACTION

- Using the upper part of the face means the heart is calm and the person is Safe & Social
- > Upper part of the face communicates State
  - Muscles around the eye make "crinkles"
    - o Listening
    - o Smiling
- Inner ear muscles are tense and able to hear human voice very well
  - Shutting off response to low frequency sounds that trigger predator

## BREATH

#### **BELLY BREATHING**

- Slowly in through the nose
- Pause
- Slowly out through the mouth
- Trust the next breath will come

# RUPTURES

- Routine events that lead us away from the Safe and Social state
  - Looking at a cell phone, looking away, internal distractions
- Ruptures can easily be interpreted as criticism or judgment of the other
- > Experienced as a withdrawal or confrontation
- > When ruptures happen, they need to be repaired
  - ► If not, negative expectations of future
    - interactions result



# WHAT TO DO NOW?

- Start by being aware that you, or others in your life, may be spending a lot of time in places that trigger neuroceptions of danger
- If you have choices you're making that concern you, they may be directly connected to a state shift of your body
- Notice how your body feels throughout the day and what it may be telling you

# REMEMBER...AND BE SURE THE KIDS IN YOUR LIFE KNOW THIS TOO...

#### ➤ You survived

- Your body did what it was supposed to and it still is You're not broken and don't need to be "fixed", but you may be stuck in a defensive state and have lost access to your Safe & Social system.
- It's important to learn this about yourself and how you can manage it and model it for others



- Justin Sunseri, LMFT: Polyvagal Podcast and associated Materials
- Stephen Porges, PhD: The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication and Self-regulation
- Deb Dana, LCSW: The Polyvagal Theory in Therapy

