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Understanding the traumatized brain

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Understanding the Traumatized Brain



(or)

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Agenda

OVERVIEW OF TODAY'S SESSION

Welcome and Introductions

What is Trauma?

How does trauma affect the body and brain?

Why is this important for educators?

What can we do to help?





Thought Exercise

Think for a moment about some children you have worked with that were difficult to manage.

Think about the behaviors they exhibited. Think about any themes of those behaviors.

Our goal today is to help frame them in a different way.

When viewed differently, the behaviors may even cease to be seen as something to manage.

What is Trauma?

“An event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual’s functioning and mental, physical, social, emotional, or spiritual well-being” (SAMHSA, 2014a)

”an event, series of events, or set of circumstances that is experienced by an individual... that has lasting adverse effects on the individual’s functioning and ... well-being” (SAMHSA, 2014a)

“Trauma is any event or experience (including witnessing) that is physically and/or psychologically overwhelming to the exposed individual” (Courtois, 2014)

“Two people may be exposed to the same event or series of events but experience and interpret these events in vastly different ways” (SAMHSA, 2014b)

Types of Trauma

IMPERSONAL TRAUMA

random, “act of God,” wrong place at the wrong time; examples: natural disasters, accidents, chronic illnesses. Acute traumatic stress reactions often result from impersonal events.

COMMUNITY TRAUMA

group trauma, historical trauma, colonial trauma, intergenerational trauma; comes from membership in a particular group; example: religious persecution

INTERPERSONAL TRAUMA

not accidental, deliberately caused, often repeated, includes all forms of victimization and exploitation

IDENTITY TRAUMA

pertains to victim’s inherent characteristics; examples: discrimination due to race, ethnicity, sexual orientation

CUMULATIVE/COMPLEX TRAUMA

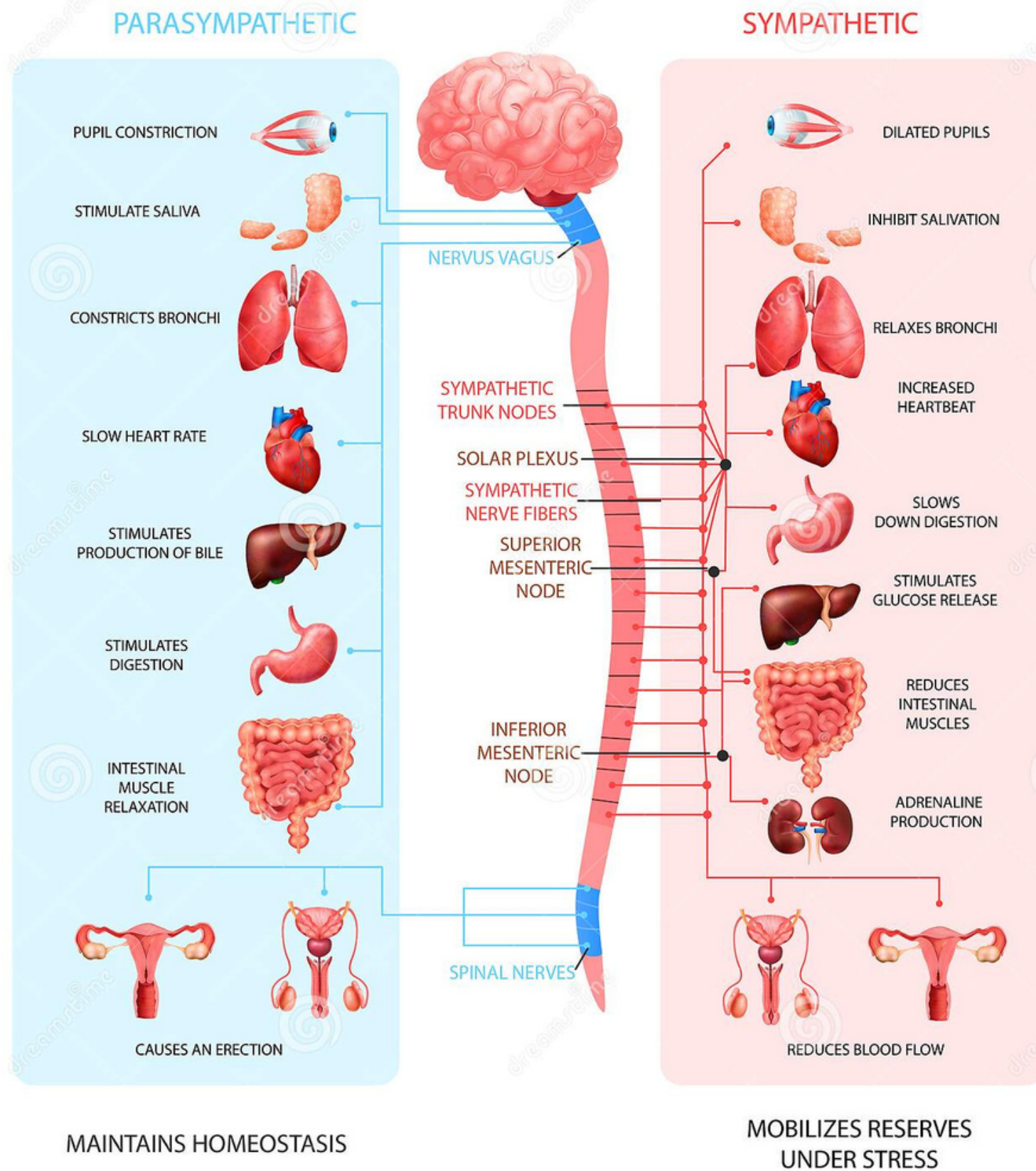
multiple traumas repeated and overlapping

How does Trauma Affect the Brain and Body?

“We have learned that trauma is not just an event that took place sometime in the past; it is also the imprint left by that experience on mind, brain, and body. This imprint has ongoing consequences for how the human organism manages to survive in the present. Trauma results in a fundamental reorganization of the way mind and brain manage perceptions. It changes not only how we think and what we think about, but also our very capacity to think.” - Bessel van der Kolk

“The detection of a person as safe or dangerous triggers neurobiologically determined pro-social or defensive behaviors. Even though we may not always be aware of danger on a cognitive level, on a neurophysiological level, our body has already started a sequence of neural processes that would facilitate adaptive defense behaviors such as fight, flight or freeze.” - Stephen Porges

PERIPHERAL AUTONOMIC NERVOUS SYSTEM



SYMPATHETIC NERVOUS SYSTEM

Stress Response

Revs you up, preparing you to fight, take flight or freeze

- Heart beats fast
- Breath is fast and shallow
- Pupils of eyes expand (can make you sensitive to light)
- Gut becomes inactive (difficult to digest)
- Blood rushes to your skeletal muscles and away from your brain, making it hard to think clearly
- Hormones rush through your body, making you feel anxious
- Expend your energy



PARASYMPATHETIC NERVOUS SYSTEM

Relaxation Response

Calms you down, preparing you to rest, think and restore

- Heart beats in slow, rhythmic pattern
- Breath is full and slow
- Pupils of eyes shrink
- Gut is active (helps you digest and absorb the nutrients from your food)
- Increased blood flow to gut, lungs and brain
- Hormones rush in, lifting your mood and helping you to relax
- Conserves your energy

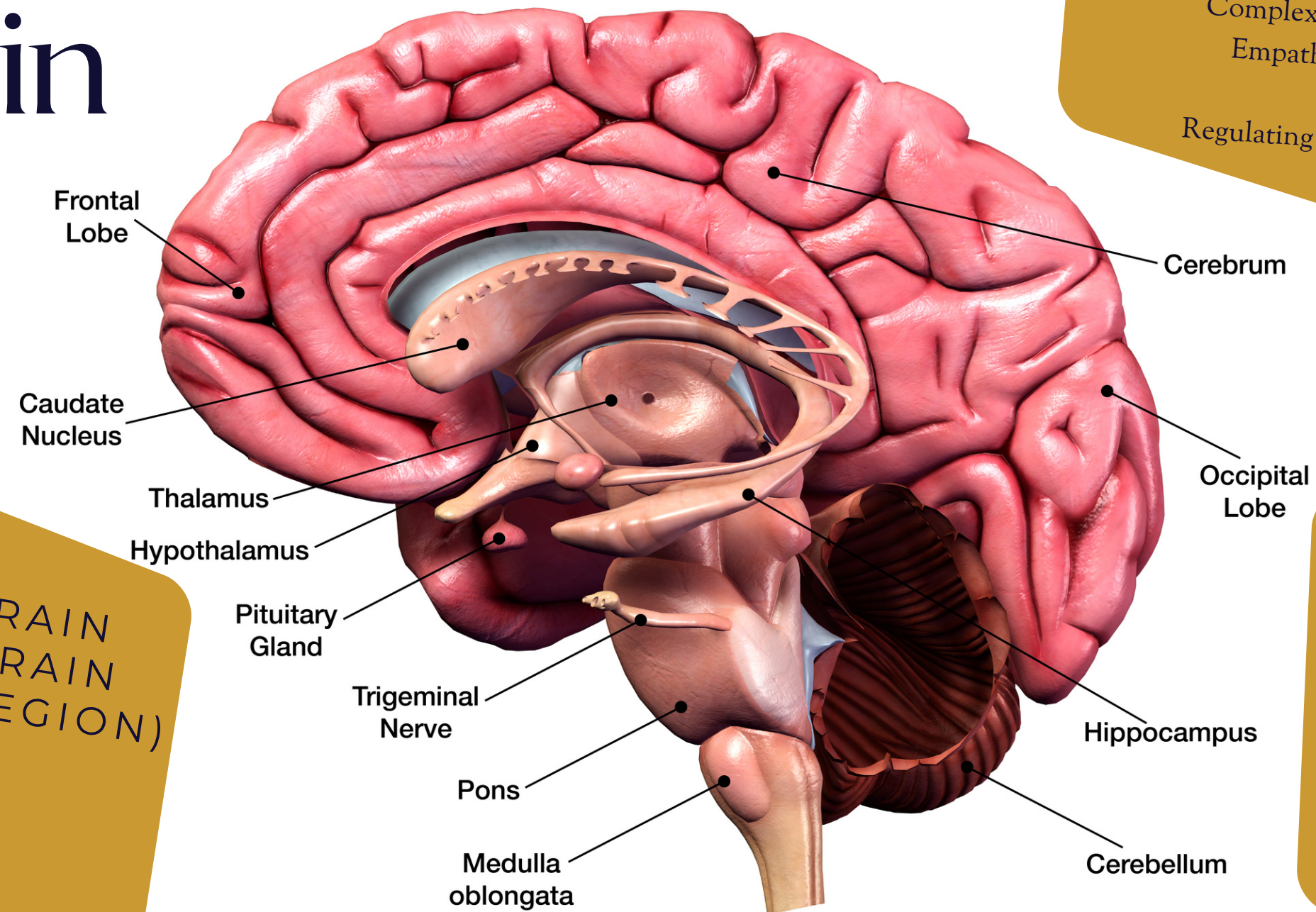


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The Different Functions of the Brain

**RATIONAL BRAIN
"HUMAN" BRAIN
(CORTEX)**

- Last part of the brain to develop
- Imagination
- Complex and abstract thought
- Empathy and Connection
- Language
- Regulating feelings and attention



**THE LIMBIC BRAIN
MAMMALIAN BRAIN
(SUBCORTICAL REGION)**

- Feelings
- Emotions
- Memory/Learning

**REPTILIAN BRAIN
(BRAIN STEM,
CEREBELLUM)**

- Oldest part of the brain
- Survival
- Heartbeat
- Breathing
- Vital functions

Adverse Childhood Experiences (ACEs)

- Partnership between CDC, Kaiser Permanente, others
- Skews white, middle/ upper class
- Over 17,000 people surveyed
- 10 Categories - types of abuse, neglect, and household dysfunction
- 2/3 had one or more, 1/5 had 3 or more

Adverse Childhood Experience (ACE) Questionnaire

Finding your ACE Score

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household often ...
Swear at you, insult you, put you down, or humiliate you?
or
Act in a way that made you afraid that you might be physically hurt?
Yes No

If yes enter 1
2. Did a parent or other adult in the household often ...
Push, grab, slap, or throw something at you?
or
Ever hit you so hard that you had marks or were injured?
Yes No

If yes enter 1
3. Did an adult or person at least 5 years older than you ever...
Touch or fondle you or have you touch their body in a sexual way?
or
Try to or actually have oral, anal, or vaginal sex with you?
Yes No

If yes enter 1
4. Did you often feel that ...
No one in your family loved you or thought you were important or special?
or
Your family didn't look out for each other, feel close to each other, or support each other?
Yes No

If yes enter 1
5. Did you often feel that ...
You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?
or
Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
Yes No

If yes enter 1
6. Were your parents ever separated or divorced?
Yes No

If yes enter 1
7. Was your mother or stepmother:
Often pushed, grabbed, slapped, or had something thrown at her?
or
Sometimes or often kicked, bitten, hit with a fist, or hit with something hard?
or
Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?
Yes No

If yes enter 1
8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
Yes No

If yes enter 1
9. Was a household member depressed or mentally ill or did a household member attempt suicide?
Yes No

If yes enter 1
10. Did a household member go to prison?
Yes No

If yes enter 1

Now add up your "Yes" answers: This is your ACE Score

Higher ACE scores are correlated with higher risks of:

ALCOHOLISM
COPD
DEPRESSION
FETAL DEATH
POOR HEALTH-RELATED QUALITY OF LIFE
ILLICIT DRUG USE
ISCHEMIC HEART DISEASE
LIVER DISEASE
RISK OF INTIMATE PARTNER VIOLENCE
MULTIPLE SEXUAL PARTNERS
STDs
SMOKING
OBESITY
SUICIDE ATTEMPTS
UNINTENDED PREGNANCIES

Trauma Responses

FIGHT

Aggressive
Demanding
Violent
Controlling
Bullying
Irritable

FLIGHT

Retreating
Anxiety
Panic
Adrenaline Junkie
Perfectionist
Overly analytical/critical

FREEZE

Dissociative
Isolating
Avoidant
Immobilized/Stuck
Shame
Depressed

FAWN

People-Pleasing
Can't say "no"
Lack of Boundaries
Over-Apologizing
Acquiescing
Needs to fit in



The kids who need love the most will ask for it in the most unloving of ways.

Window of Tolerance



HYPERAROUSAL

LASHING OUT
ANGER, ANXIETY, PANIC
FIGHT OR FLIGHT

Healing
expands the
window



STRESS IS MANAGEABLE
SELF-REGULATION IS POSSIBLE

Stress shrinks
the window



HYPOAROUSAL

SHUT DOWN
ZONED OUT, NUMB,
FROZEN, SLEEPY,
DISSOCIATIVE

What to Do: Connection

The human body is designed for connection and synchrony. When we are able to calm our bodies, other bodies will match the energy and rhythms we project and also calm down.

“Only when we are in a calm physiological state can we convey cues of safety to another.”

— Stephen W. Porges

Interventions that involve body engagement have an increased likelihood of success.

BE GENTLE
BREATHE TOGETHER
PLAY CATCH
CLAPPING GAMES
DRUMMING
SINGING
DANCING

What to Do: Emotional Regulation

Regulation skills are developed in relationship with primary caregivers

Securely attached children experience caregivers who respond to their emotions and teach them how to effectively manage distress

Insecurely attached children do not experience attuned caregivers and learn that they must either deny their emotions or intensify them in order to be soothed.

Children who lack emotional regulation skills suffer socially and academically and show higher symptoms of anxiety and ADHD.

BREATHING

BELLY BREATHING

DARTH VADER

“HA” MOUNTAIN

WAVE BREATH

4 COUNTS BREATHING

BODY SCANS

ENGAGE THE 5 SENSES

YOGA, STRETCHING

TAPPING

What to Do: Emotional Intelligence

Children with trauma histories struggle to understand emotions

Add language to a child's emotions

Teaching differences between thoughts and feelings

Discuss distressing emotions during calm times

Asking "Where do I feel..."



In My Heart
by Jo Witek

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