

SAP and the Mind-Body Connection

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Agenda

Establishing the mind-body connection

Review of trauma

The neurological process of trauma

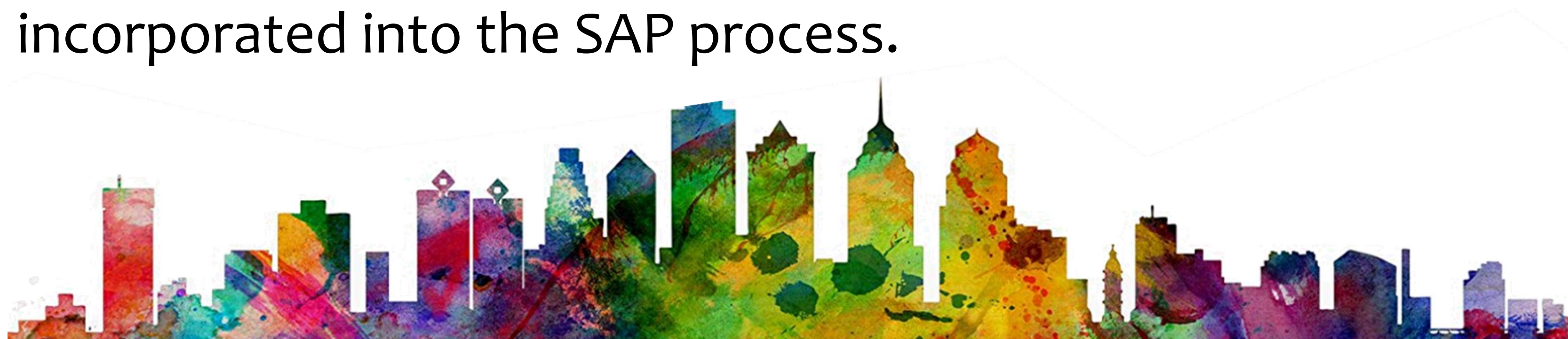
Practical applications

The mind-body connection's place within SAP

Resources

Learning Objectives

- ✓ Outline at least one concept that describes the mind-body connection.
- ✓ Demonstrate at least one skill that youth can practice to activate their mind-body connection.
- ✓ Identify at least two mind-body connection resources or practices that could be incorporated into the SAP process.

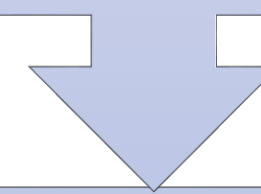


Establishing the Mind-Body Connection

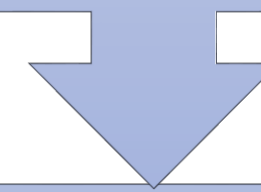


The Polyvagal Theory

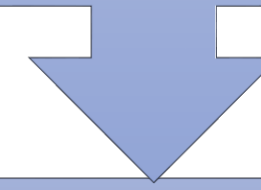
“...proposes that the evolution of the mammalian autonomic nervous system provides the neurophysiological substrates for adaptive behavioral strategies.”



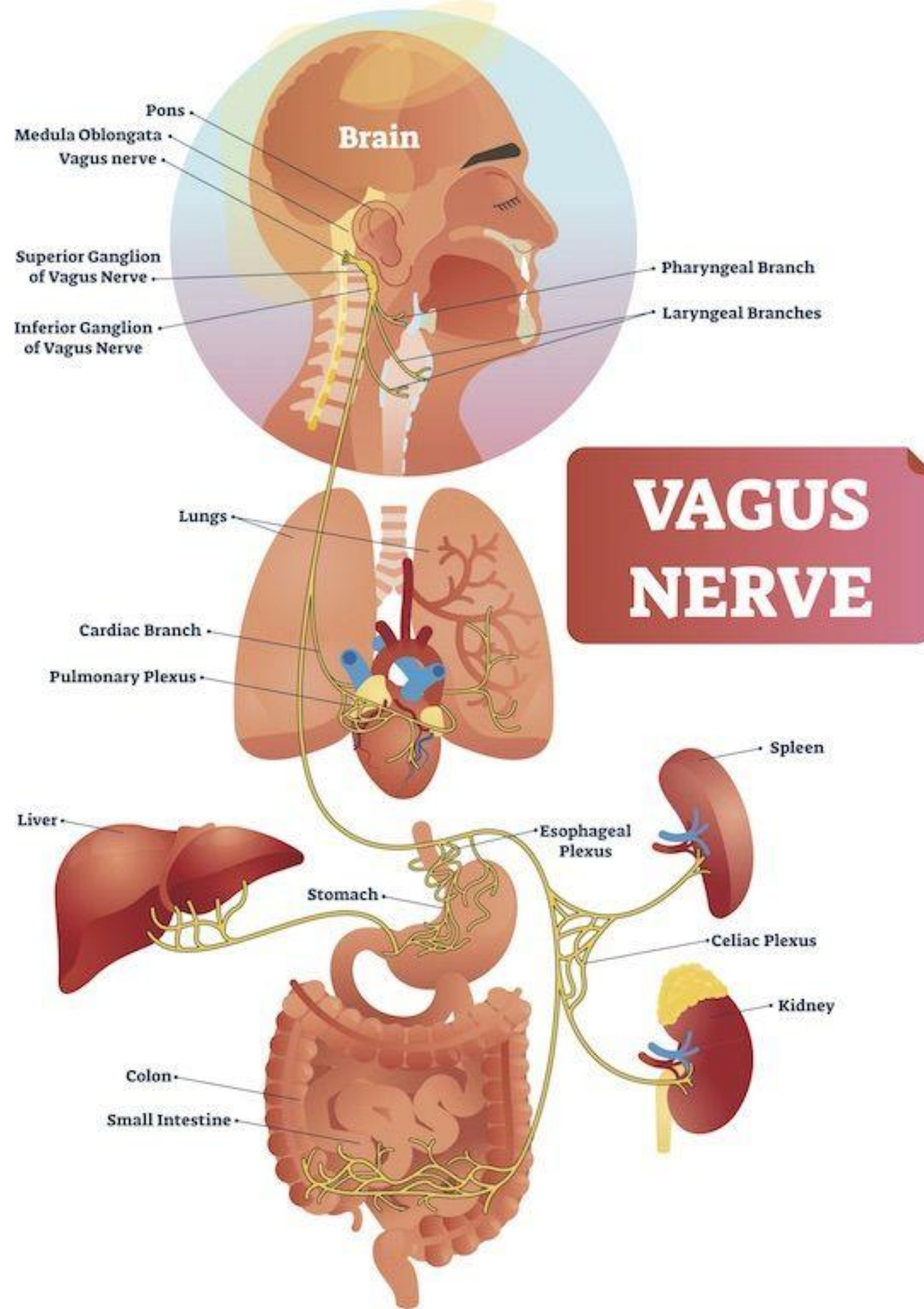
Physiological states impact types of displayed behavior



Integrated social engagement system (e.g. facial expressions, vocalization, listening)



Neuroception is the mechanism to trigger or to inhibit defense strategies



Neurofeedback

“...a learning technology that enables a person to alter his or her brain waves.”

Useful for: ADHD, specific learning disabilities, sleep, chronic pain, mood disorders, PTSD, developmental trauma, seizures, and TBIs, etc.

A painless, non-invasive process – uses EEG

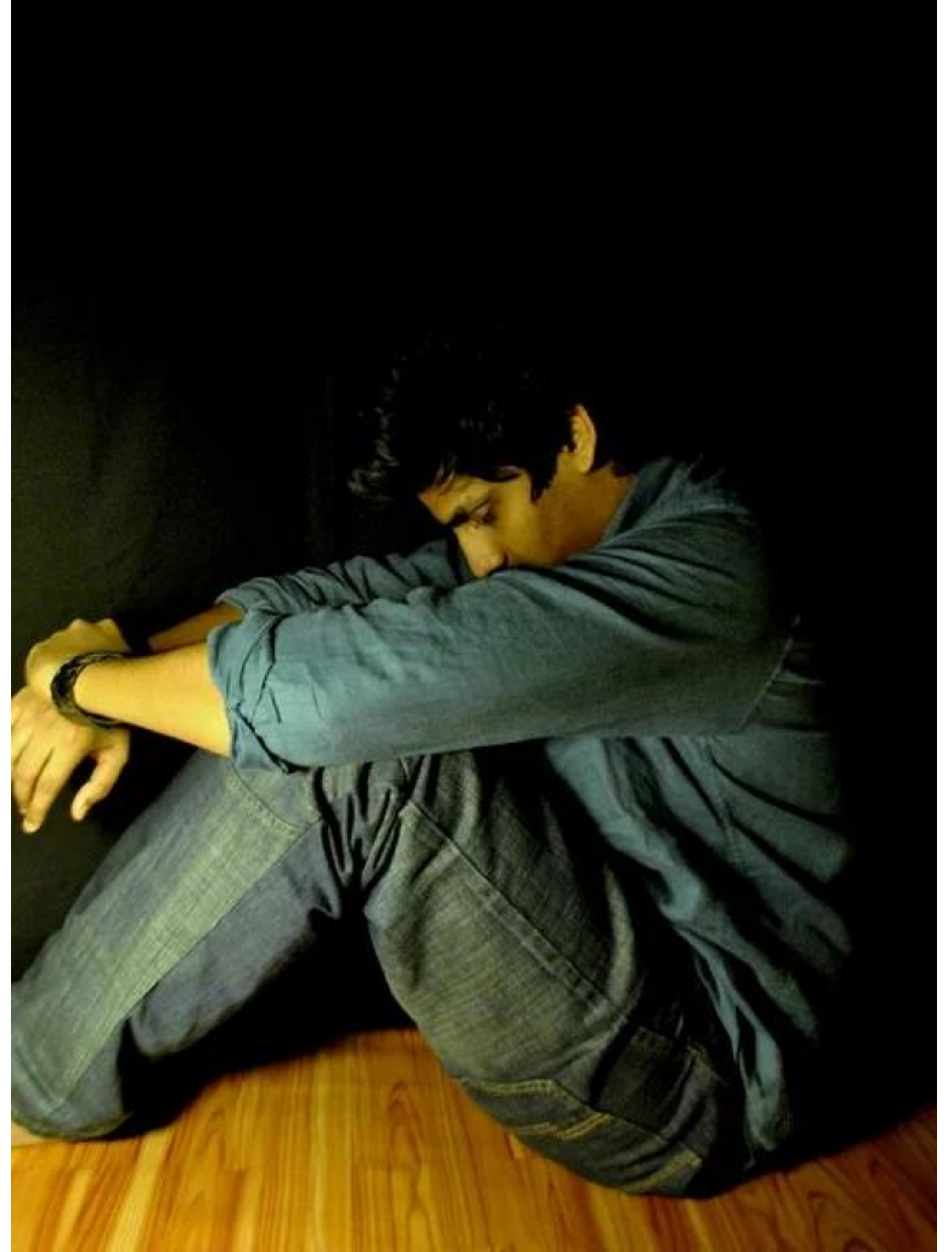
Focus on electrical brain components instead of chemical factors

Not as culturally influenced as some therapies – except for socioeconomic status

Neurofeedback

“These are nervous systems with no experience of constraint; these are people with no experience of being held.”

Source: Fisher, S. F. (2014).



Neurofeedback: How It Works

Review history
of symptoms,
health, and
family concerns

15-45 minute
sessions, at
least once per
week

Sensors are
placed on the
scalp and ear
to transmit
brain waves to
computer
system

Feedback is
displayed to
the trainee as a
video game or
other video
with audio

Trainee plays
the game or
responds to
video only with
their brain,
which triggers
desirable or
undesirable
frequency
bands

Brain learns
new patterns
based on
reactions to
frequency
bands

Review of Trauma



Adverse Childhood Experiences (ACE) Study

A close-up photograph of a child's hands, wearing a plaid shirt, stacking colorful plastic blocks. The blocks are stacked in a tower with colors including red, yellow, green, and blue. The background is blurred, showing more blocks and a wooden toy.

The flagship ACE Study was developed to measure the prevalence of stressful, traumatic experiences in childhood among a general, middle class group of adults (17,000) receiving medical and preventive care from Kaiser Permanente HMO in San Diego.

Anda & Felitti, 1998

ACE Indicators

Abuse

Physical

Emotional

Sexual

Household Challenges

Mother treated violently

Substance abuse in the household

Mental health challenges in the household

Separation from parent by divorce, death, or abandonment

Incarcerated household member

Neglect

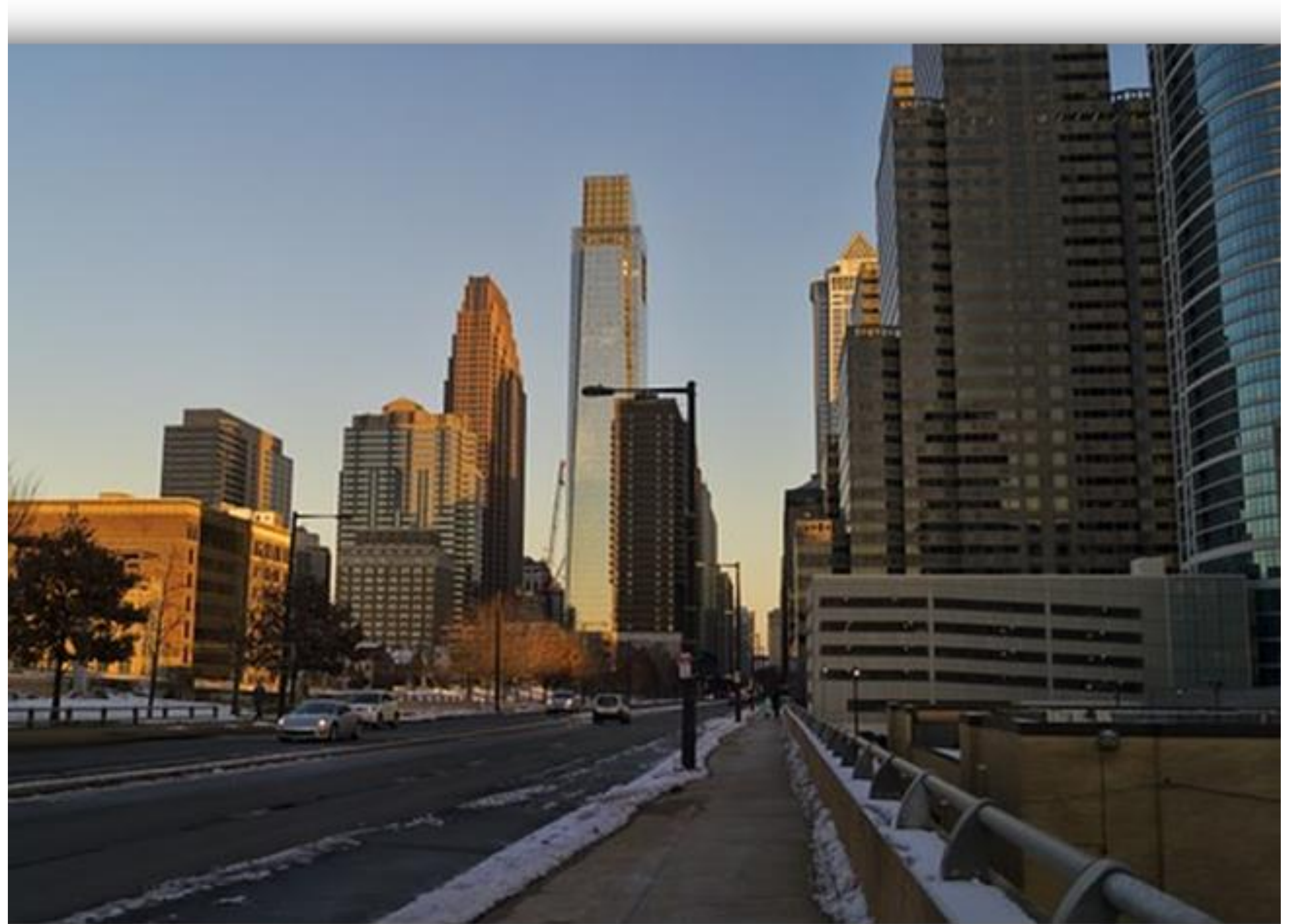
Physical

Emotional

Philadelphia Urban Ace Study: 2013

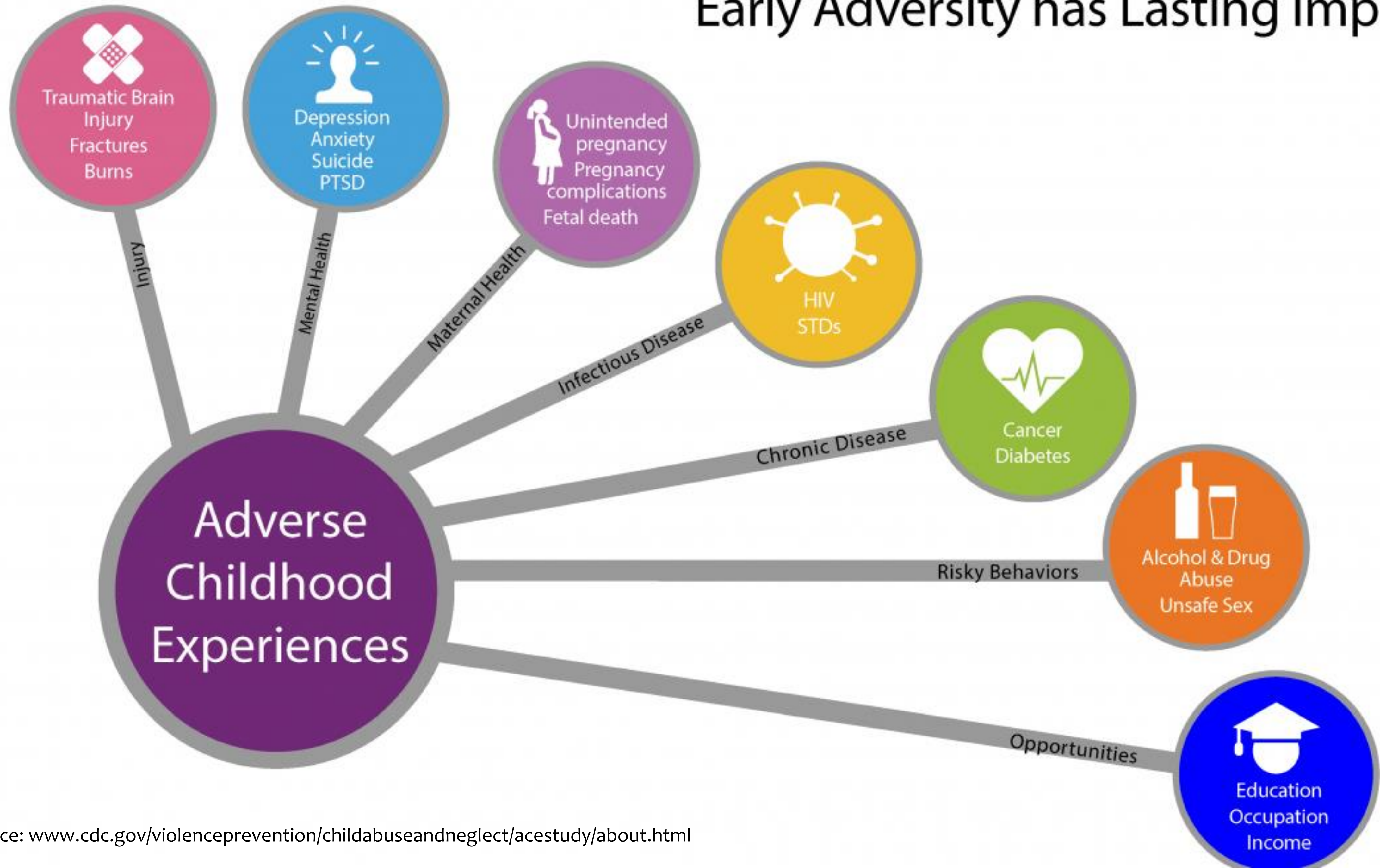
5 newly identified Urban ACE indicators:

- experiencing racism,
- witnessing violence,
- living in an unsafe neighborhood,
- living in foster care,
- experiencing bullying



<http://www.instituteforsafefamilies.org/philadelphia-urban-ace-study>

Early Adversity has Lasting Impacts



Neurobiological Effects of Trauma

Difficulty
controlling
Anger – Rage

Mental
Health
Problems

Panic
Reactions

Anxiety

Somatic
Problems

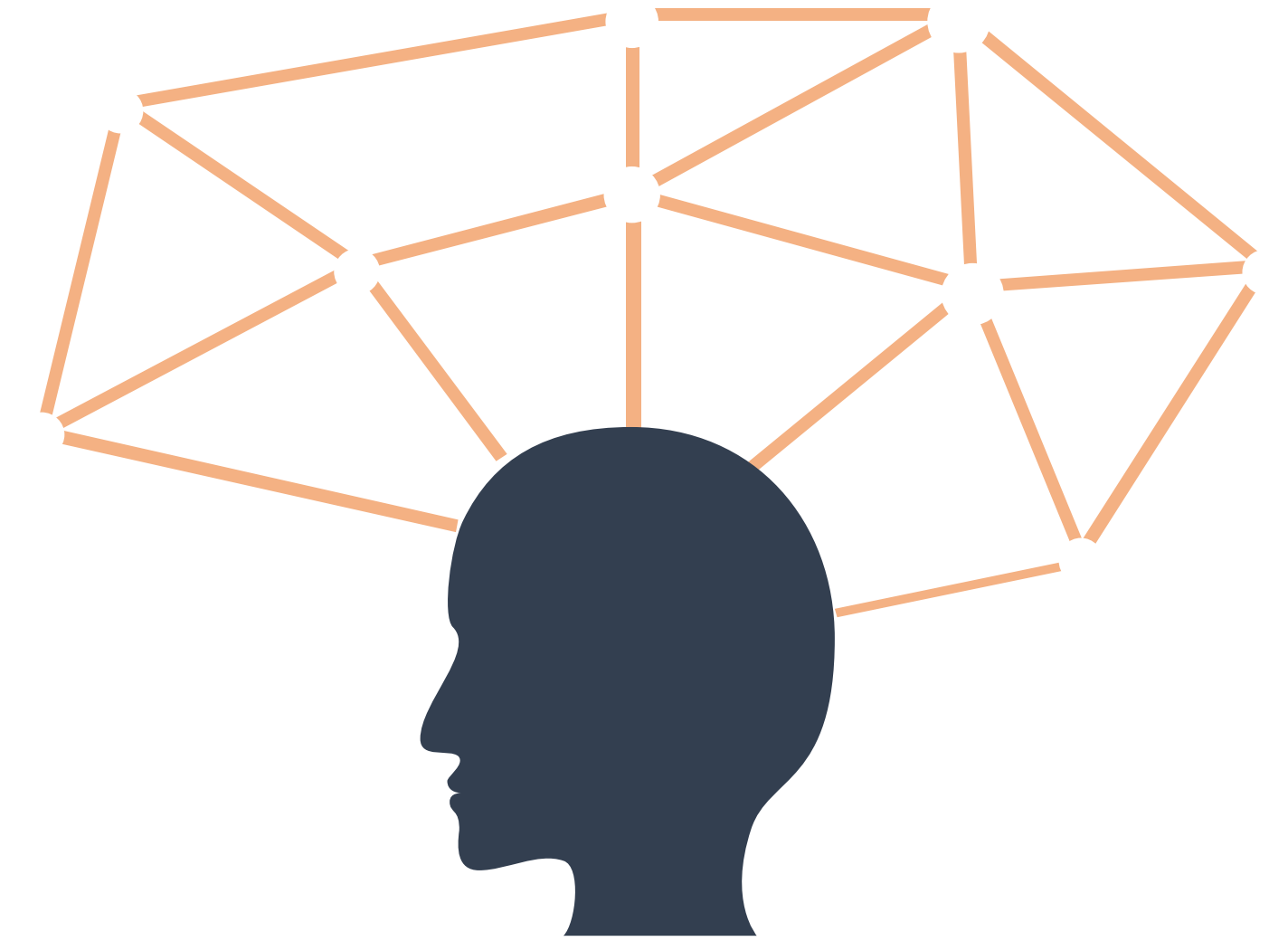
Problems
sleeping

Impaired
memory

Flashbacks

Dissociation

The Neurological Process of Trauma



Efforts to Cope



What are commonly viewed as Behavioral and/or Public Health *problems* are often individuals' *efforts to cope* with the effects of childhood trauma and adversity begun in childhood.

Psychological Trauma is a Physiological Process

- “The simplest way of defining trauma . . . it's an experience we have that overwhelms our capacity to cope.” -Dan Siegel
- “When we feel powerless... helpless... overwhelmed in response to what is happening.” -Judith Hermann
- Trauma is *an individual's **perception** of an event as threatening to oneself or others.*

Psychological Trauma is a Physiological Process

- Our body's survival response kicks in. Sometimes as a result our nervous system is hijacked.
- We can continue to react, when triggered, the same way as we did when traumatized...
... Even if we're not in danger.

Source: <https://psychcentral.com/blog/the-science-behind-ptsd-symptoms-how-trauma-changes-the-brain/>

Psychological Trauma is a Physiological Process

- It is important for individuals to stabilize their nervous system if it has been hijacked by trauma.
- Understanding the role of the brain and nervous system can bring depth and power to our interventions.

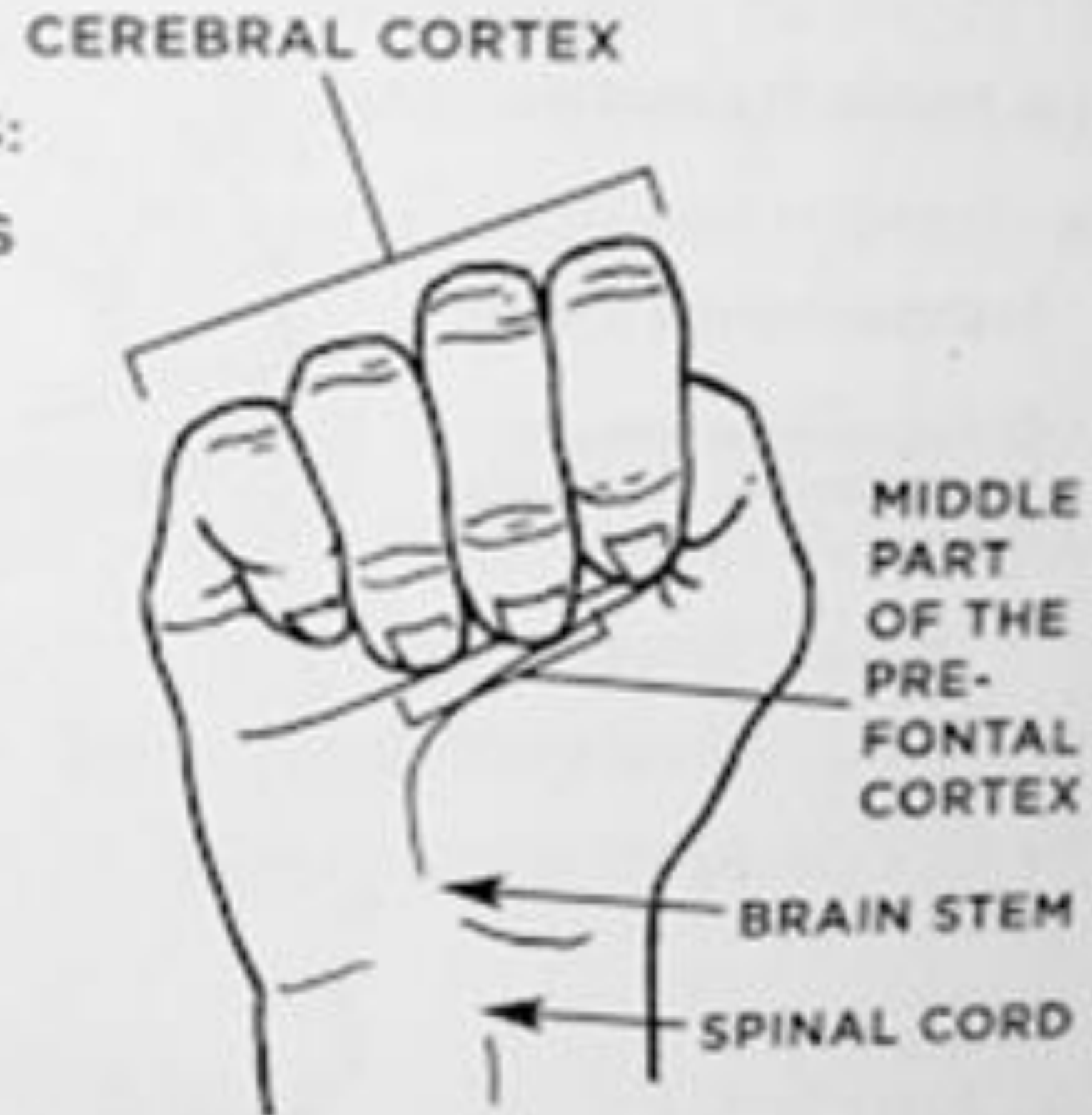
-Bessel van der Kolk



Hand Brain Model



Place your thumb in the middle of your palm as in this figure.



Now fold your fingers over your thumb as the cortex is folded over the limbic areas of the brain.

Daniel Siegel, MD

Safety as a Factor

- *Feeling safe is a basic need.*
- It is about feeling reasonably secure or protected from harm that can be caused by oneself and others.
- It is also about feeling that those one cares about are reasonably secure and protected from harm caused by themselves or others.



Recovery & Healing from Trauma

- Recovery from trauma involves learning how to restore a sense of visceral safety and reclaim a loving relationship with one's self, one's entire organism.
- Awareness of physical sensations forms the very foundation of our human consciousness.
- Healing can only occur if survivors can feel safe, self-led, and effective.

Bessel van der Kolk

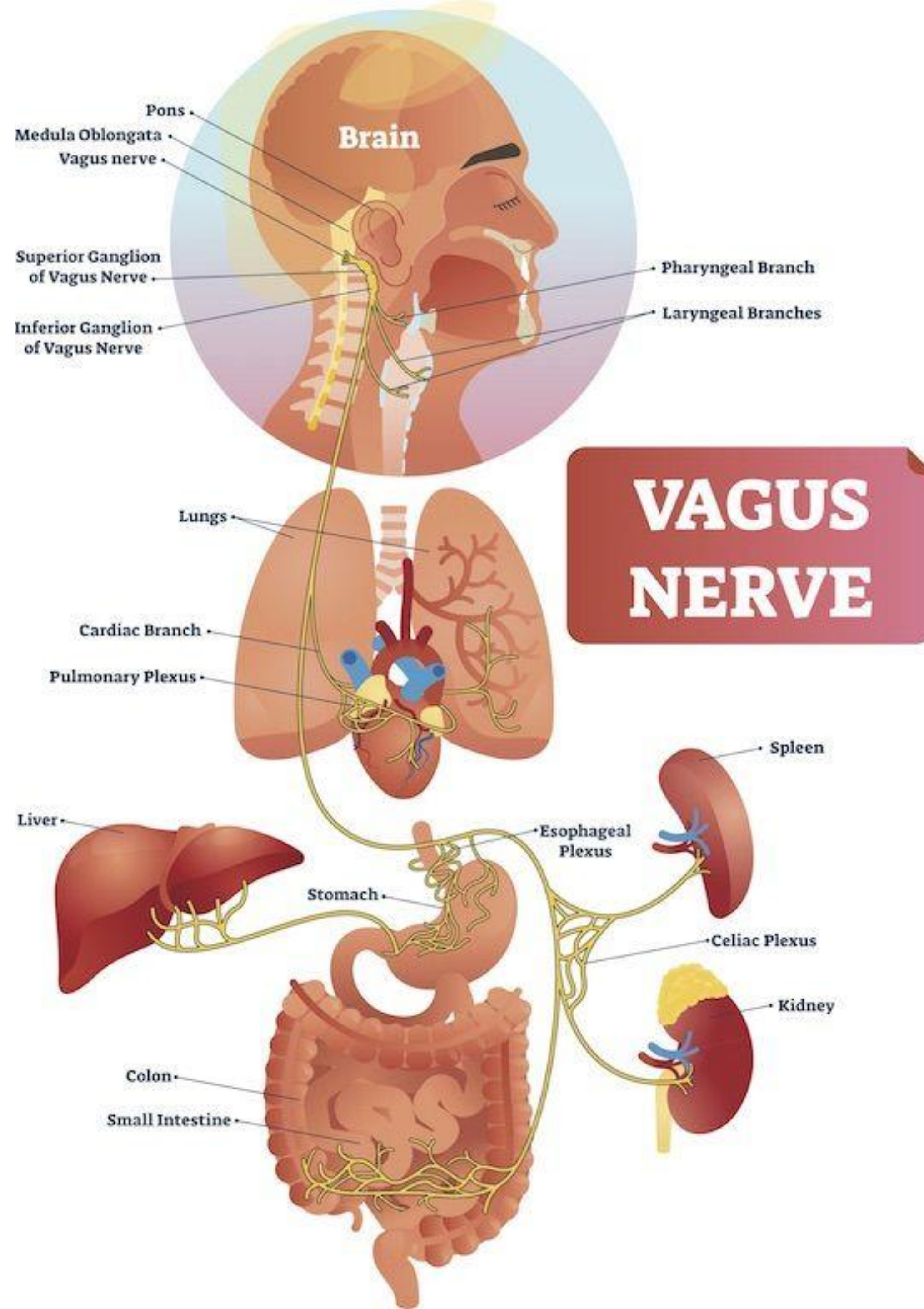
Practical Applications



Breathing

A close-up photograph of a woman with long, dark hair, seen in profile from the side. She is holding a vibrant pink flower with both hands and bringing it close to her face, as if smelling it. Her eyes are closed, and her expression is peaceful. The background is a soft, out-of-focus green, suggesting an outdoor setting with foliage. The lighting is natural and soft, highlighting the texture of her hair and the petals of the flower.

A voluntary body behavior that can overtake involuntary mental processes.



Voluntarily Regulated Breathing Practices (VRBP)

A brake on the
heart's pacemaker
(vagus nerve)

Reduce
inflammation

Improve
cardiovascular
function

Improve
respiratory
efficiency

Improve physical
health

Allow for a quick
return to a
parasympathetic
state (feeling safe)

Cognitive, Resonant, or Focused Breathing

“...induces a state of emotional calmness with mental alertness and enhanced cognitive processing.”

A non-stigmatizing tool for self-regulation

Reduces amygdala overactivity and increases prefrontal underactivity

Examples: Blowing bubbles or Breathing Buddy



Source: Gerbarg, P. L., Brown, R. P., Streeter, C., Katzman, M., & Vermani, M. (2019)

Yoga



Body-based intervention encourages focus on present moment awareness

Learn to recognize and tolerate physical & physiological states and respond to internal cues

Increase feelings of interpersonal connection in group practice

Increase ability to experience emotions safely

Promotes a sense of comfort within your own body

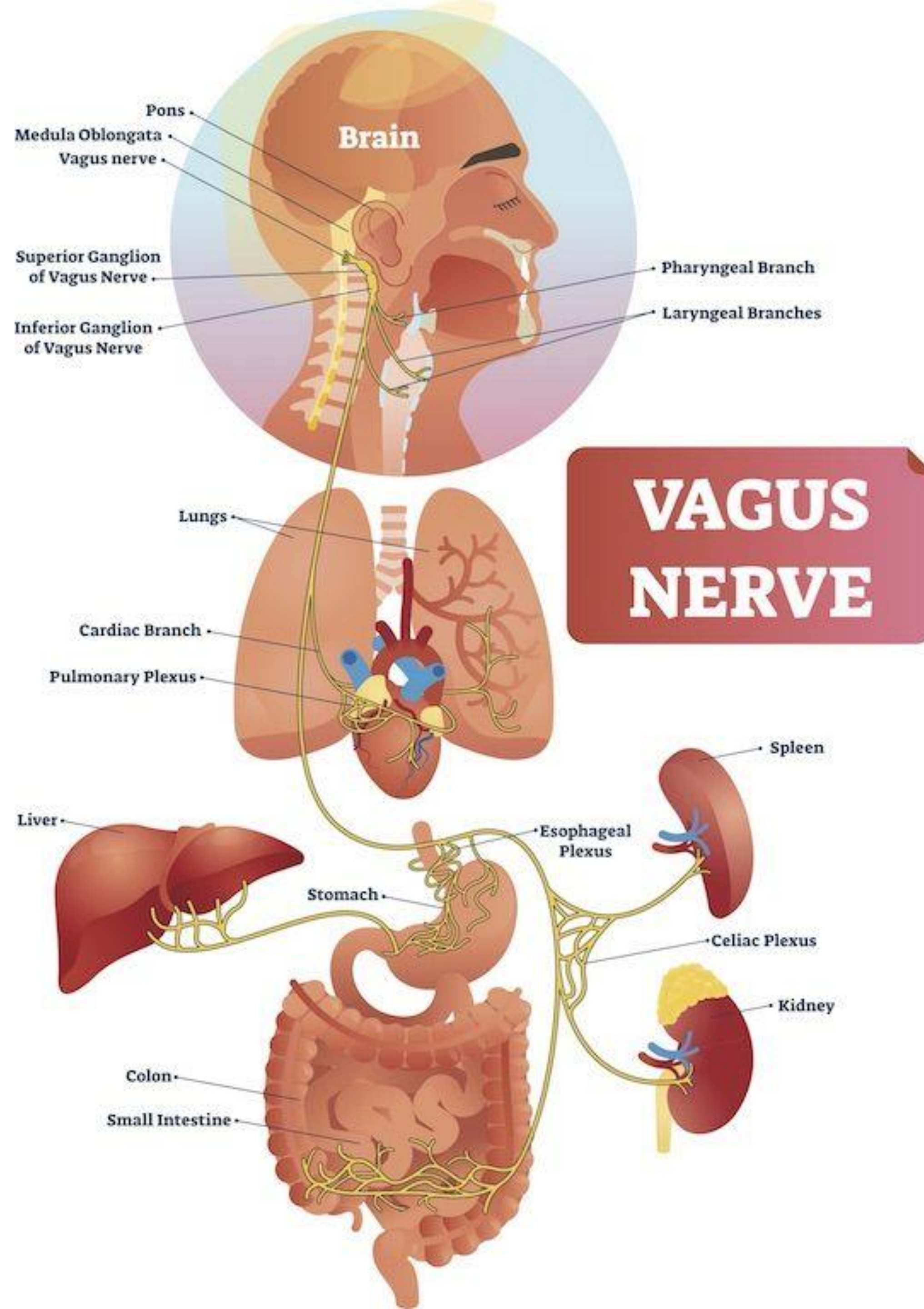
Exercise

Traumatic childhood experiences impact the inflammatory immune system across the lifespan

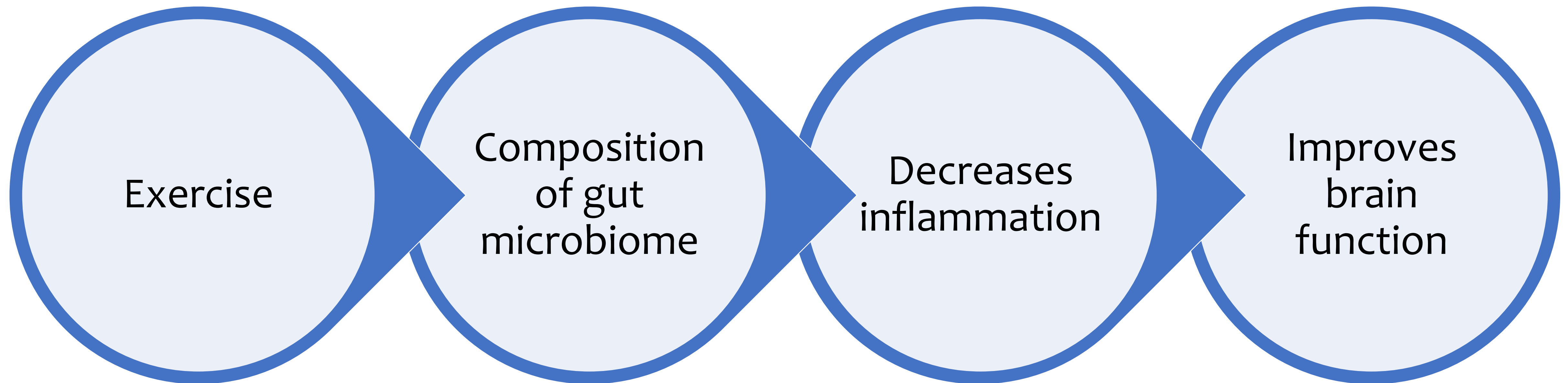
People with higher inflammation levels usually also have more stress, depression, and anxiety

Physically active adults have significant decrease in inflammatory biomarkers

Source: [https://www.physio-pedia.com/Adverse_Childhood_Experiences_\(ACEs\)_and_Adult_Inflammation:_Anti-Inflammatory_%26_other_Effects_of_Exercise](https://www.physio-pedia.com/Adverse_Childhood_Experiences_(ACEs)_and_Adult_Inflammation:_Anti-Inflammatory_%26_other_Effects_of_Exercise)



Exercise



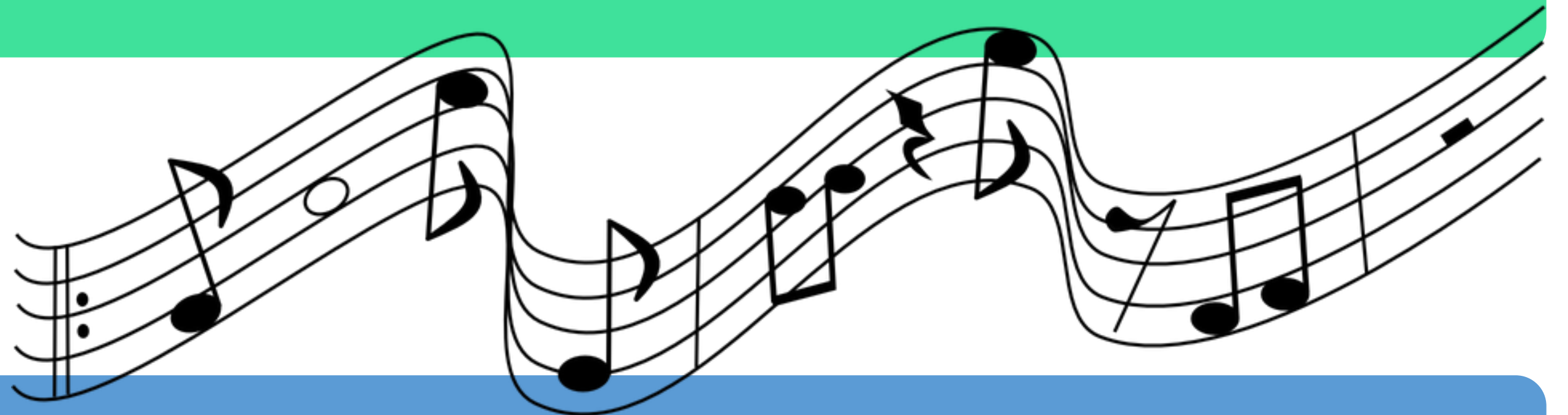
Music

Useful as a complementary treatment for pain management

Multiple interventions: listening, composing, playing, etc.

Selections include properties conducive to relaxation:

- Slow tempo
- Soft dynamics
- Long phrases

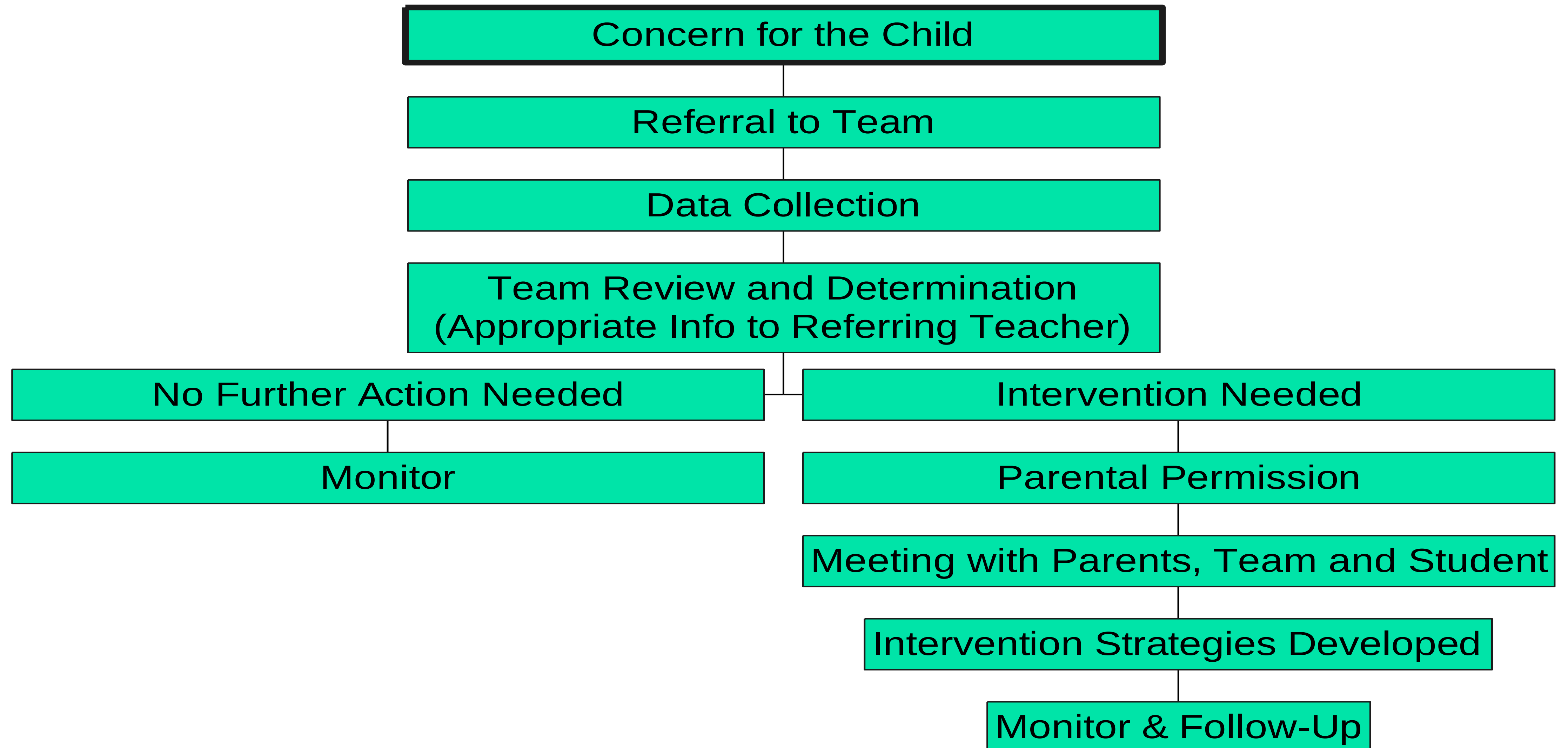


The Bonny Method of Guided Imagery and Music

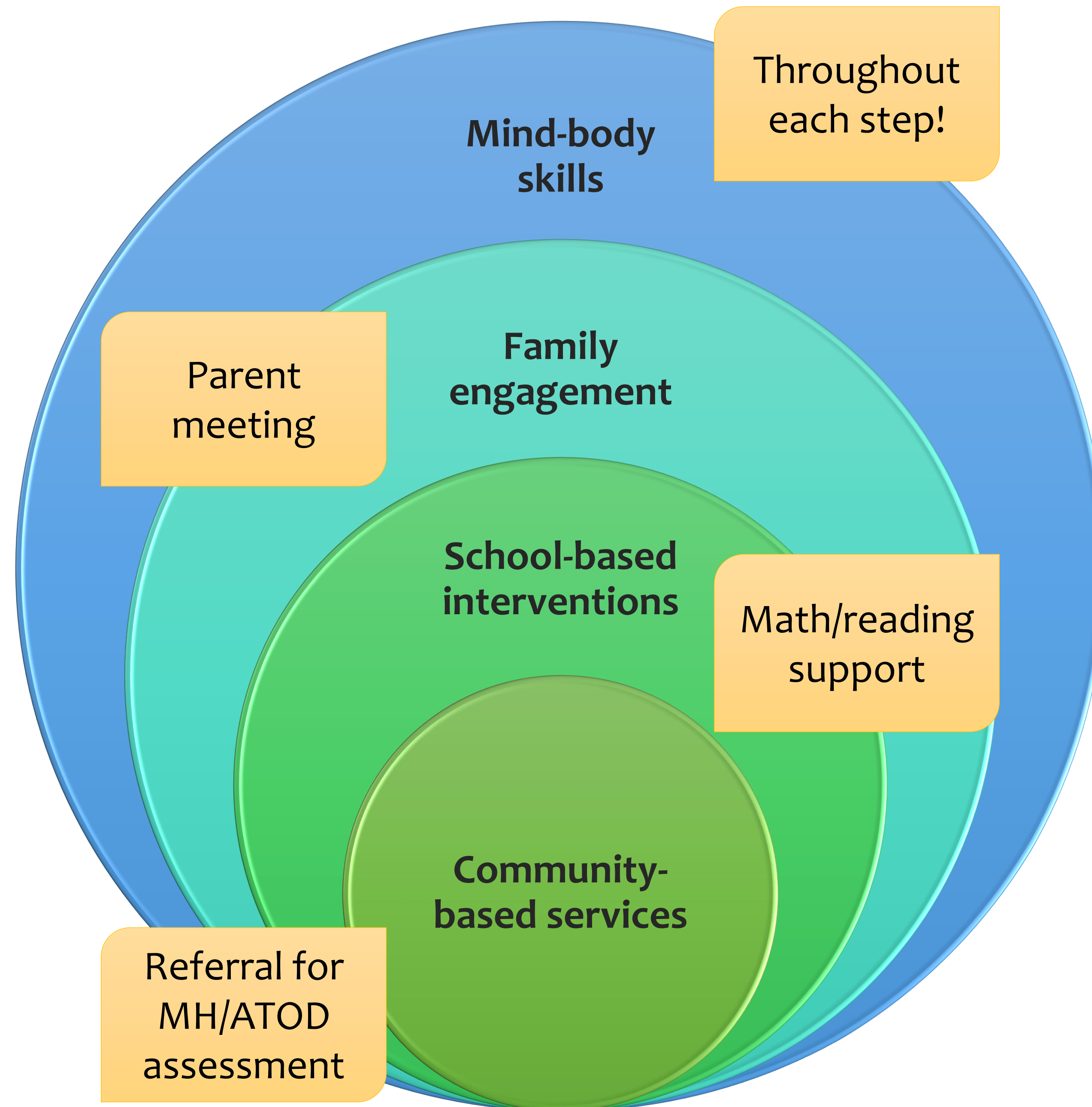
The Mind-Body Connection's Place Within SAP



The SAP Process



Thinking outside the box



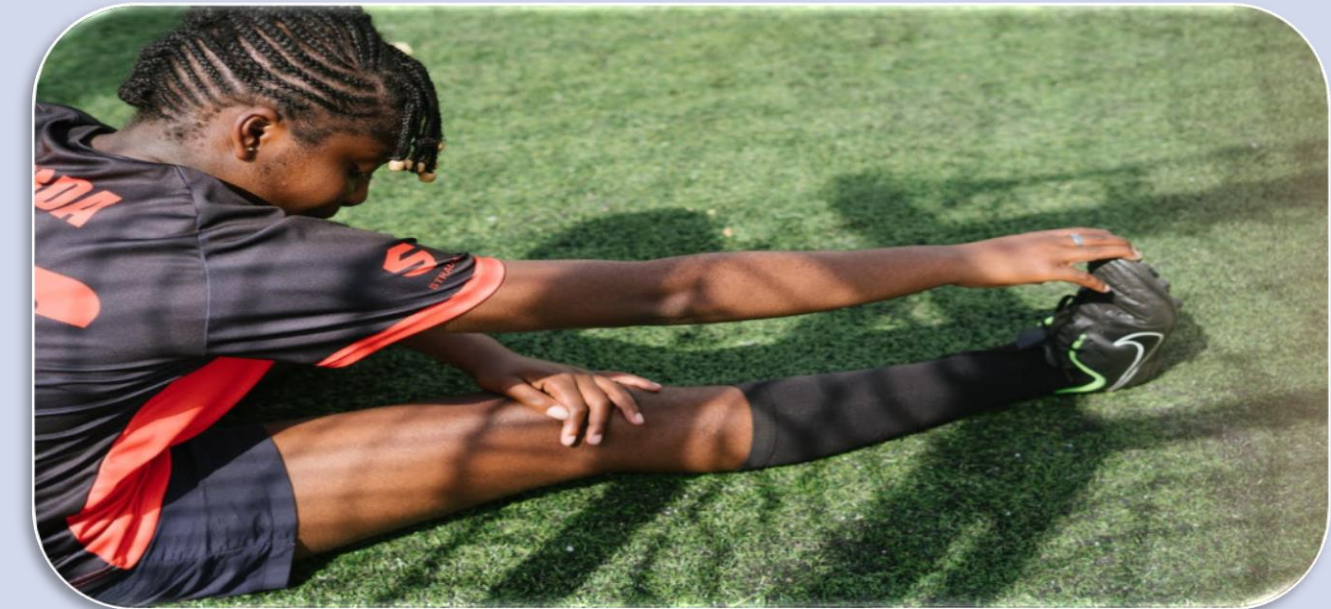
School services vs. community services



How can mind-body skills be incorporated into existing school services and/or curricula?



How are physical activity, the arts, etc. already being utilized in your schools?

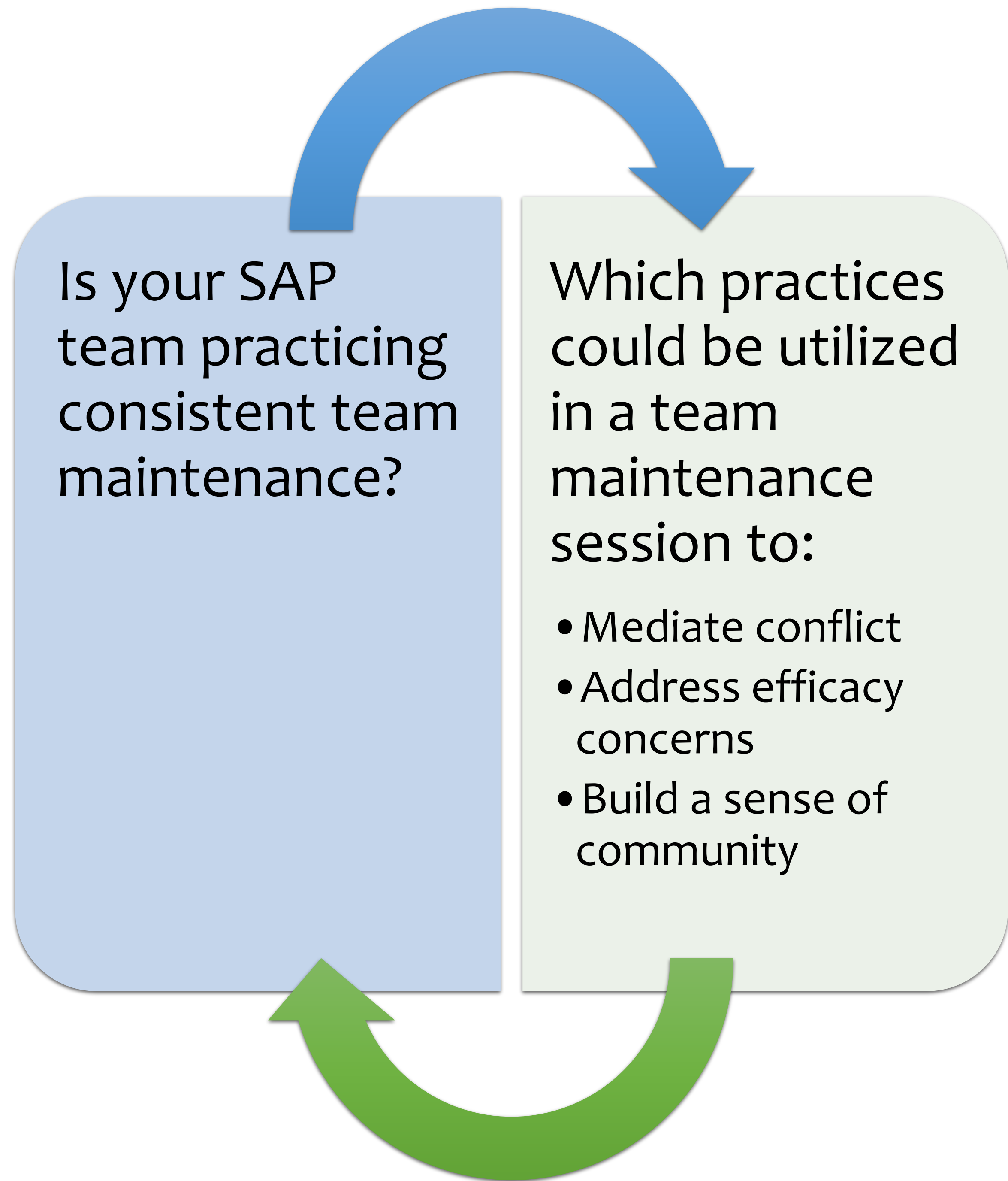


Does the student need assessment for MH/ATOD services as well as possible referral to sports, arts, etc.?

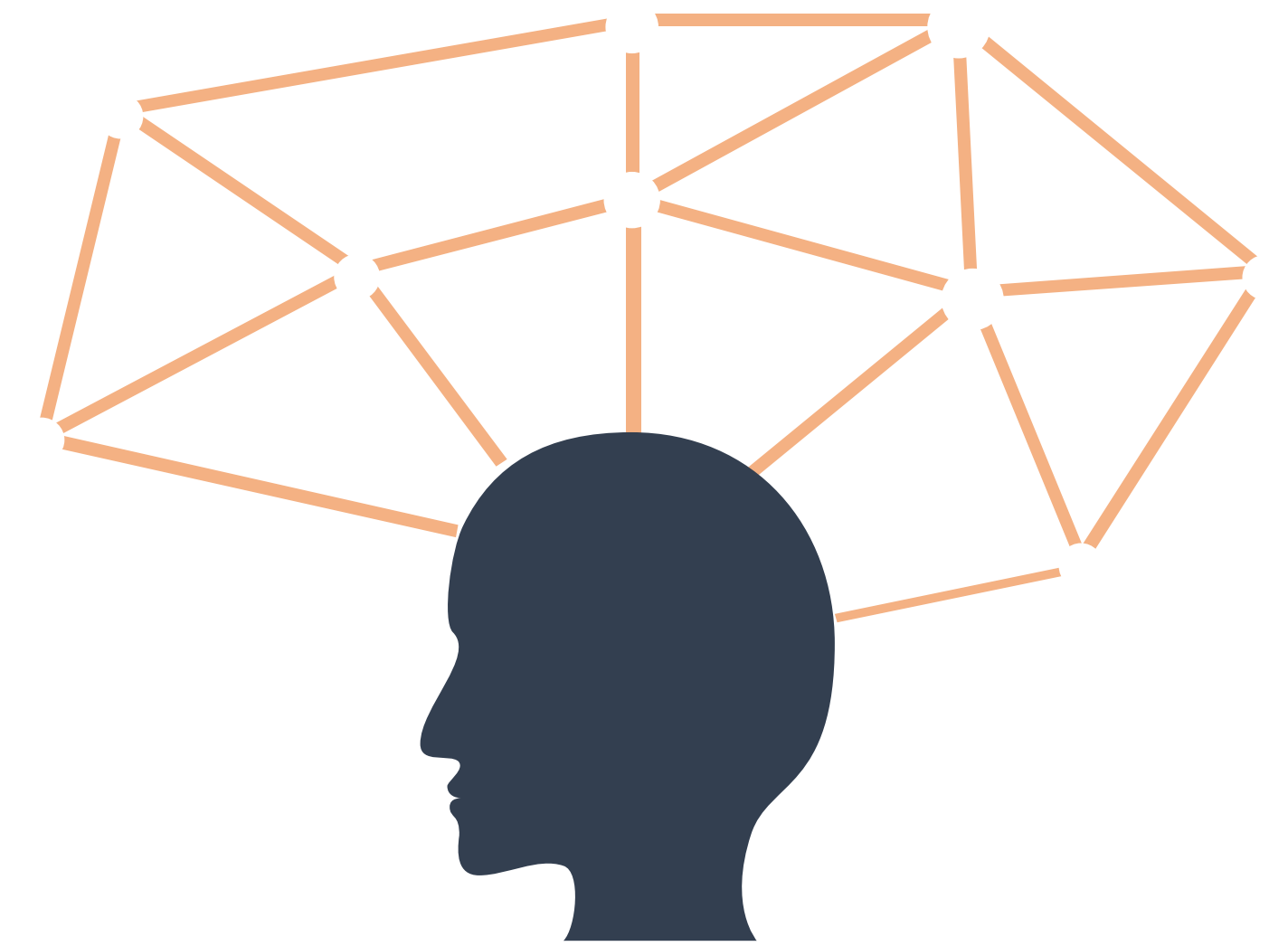
**This isn't just
for the
students!**



Team maintenance & the mind-body connection



Resources



Resources

- [PA Network for Student Assistance Services](#)
- [National Child Traumatic Stress Network \(NCTSN\)](#)
- [Philadelphia ACE Survey](#)
- [Trauma Resource Institute \(TRI\)](#)
- [The Sanctuary Model](#)
- [Zero to Three](#)

References

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- [https://www.physio-pedia.com/Adverse_Childhood_Experiences_\(ACEs\)_and_Adult_Inflammation:_Anti-Inflammatory_%26_other_Effects_of_Exercise](https://www.physio-pedia.com/Adverse_Childhood_Experiences_(ACEs)_and_Adult_Inflammation:_Anti-Inflammatory_%26_other_Effects_of_Exercise)

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Our Next Upcoming Training is:

**Sexting & Sexual Bullying
in Social Media**

Thursday, November 5th at
9:00am-12pm

Sign up at
www.bhten.com!

