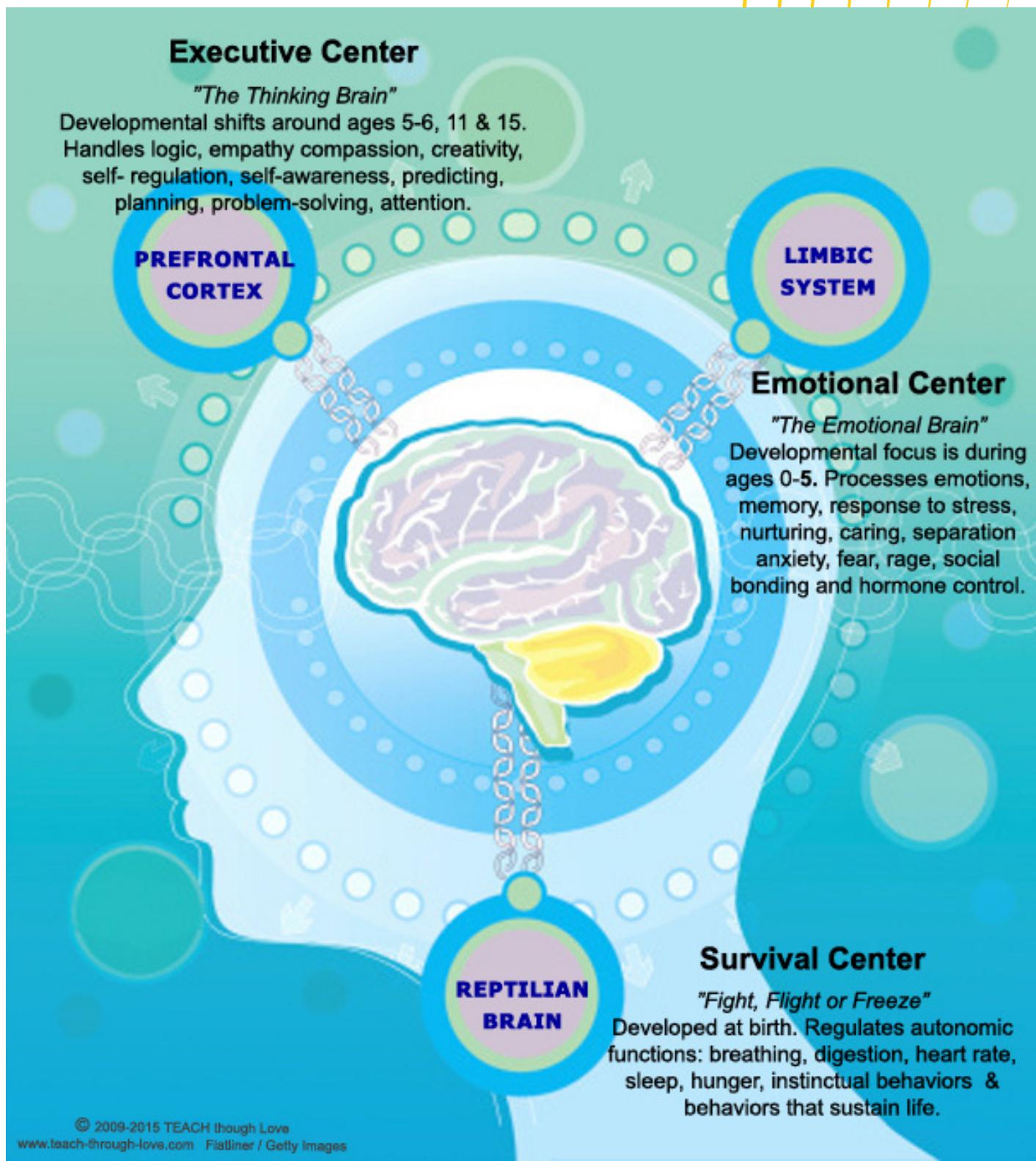


How and When the Brain Develops



While the brain is a complicated system, we can think about three sections of the brain when it comes to human development.



What Happens When There is Developmental Stress or Trauma



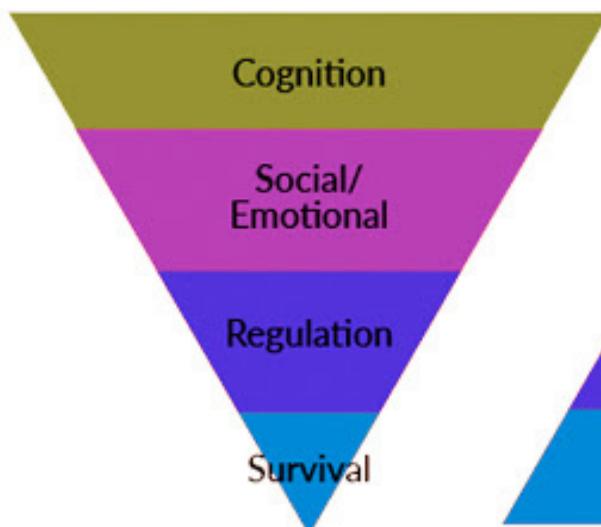
When a child's basic needs for love, food, shelter, and connection are met consistently and without confusion or disruption, the emotional center of the brain can adequately develop. Similarly, when a child is nurtured and there is adequate attunement to his or her emotions, stress responses, and social bonding, the executive center can fully develop. Poverty, homelessness, addiction, "walking on eggshells," and other stressors can profoundly alter resilience, affect, and learning.

Trauma & Brain Development

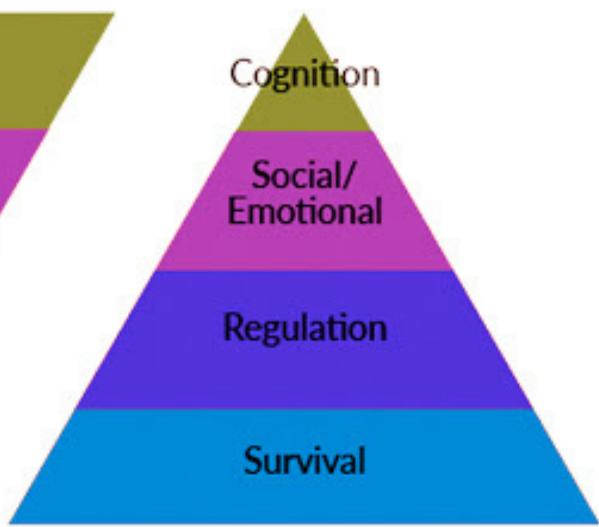


Reptilian Brain
Limbic System
Neocortex

Typical Development



Developmental Trauma



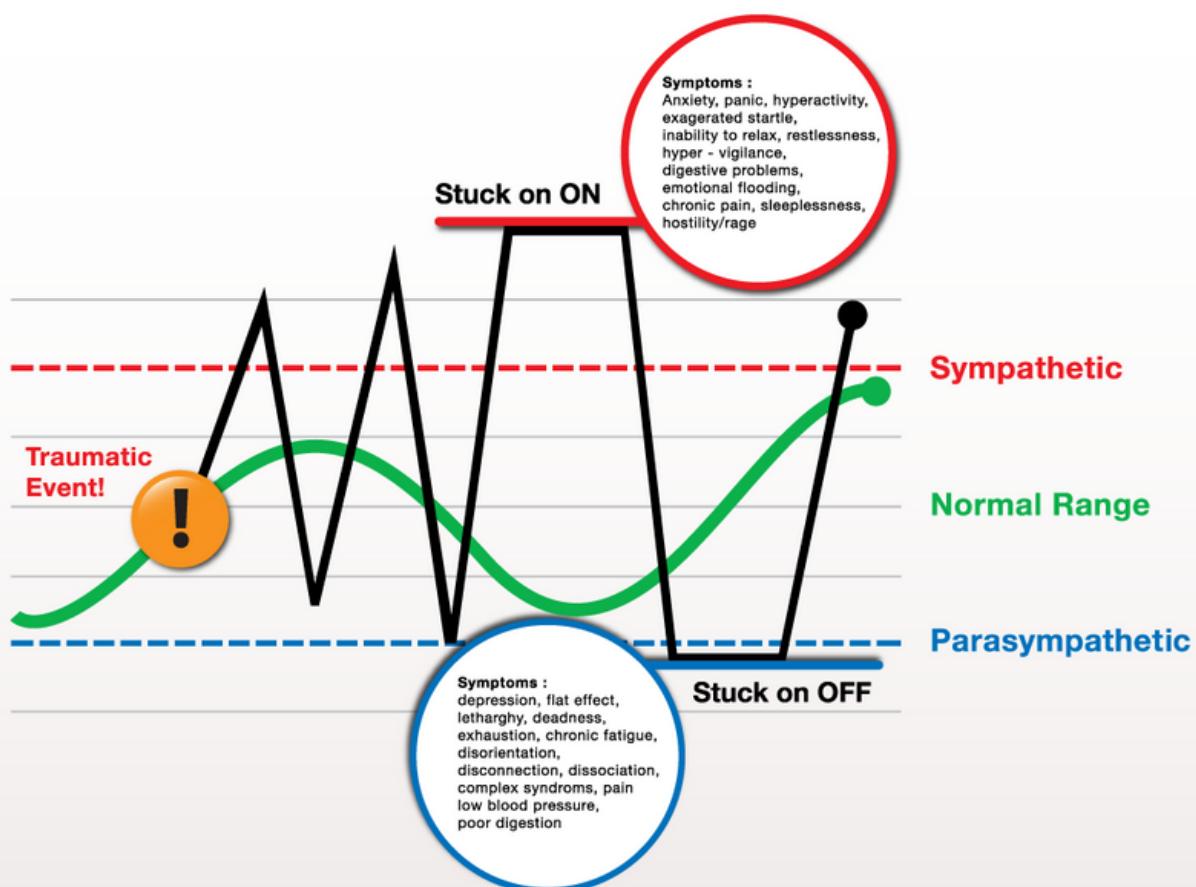
Adapted from Holt & Jordan, Ohio Dept. of Education

Trauma and Chronic Stress Create "Stuck" Energy

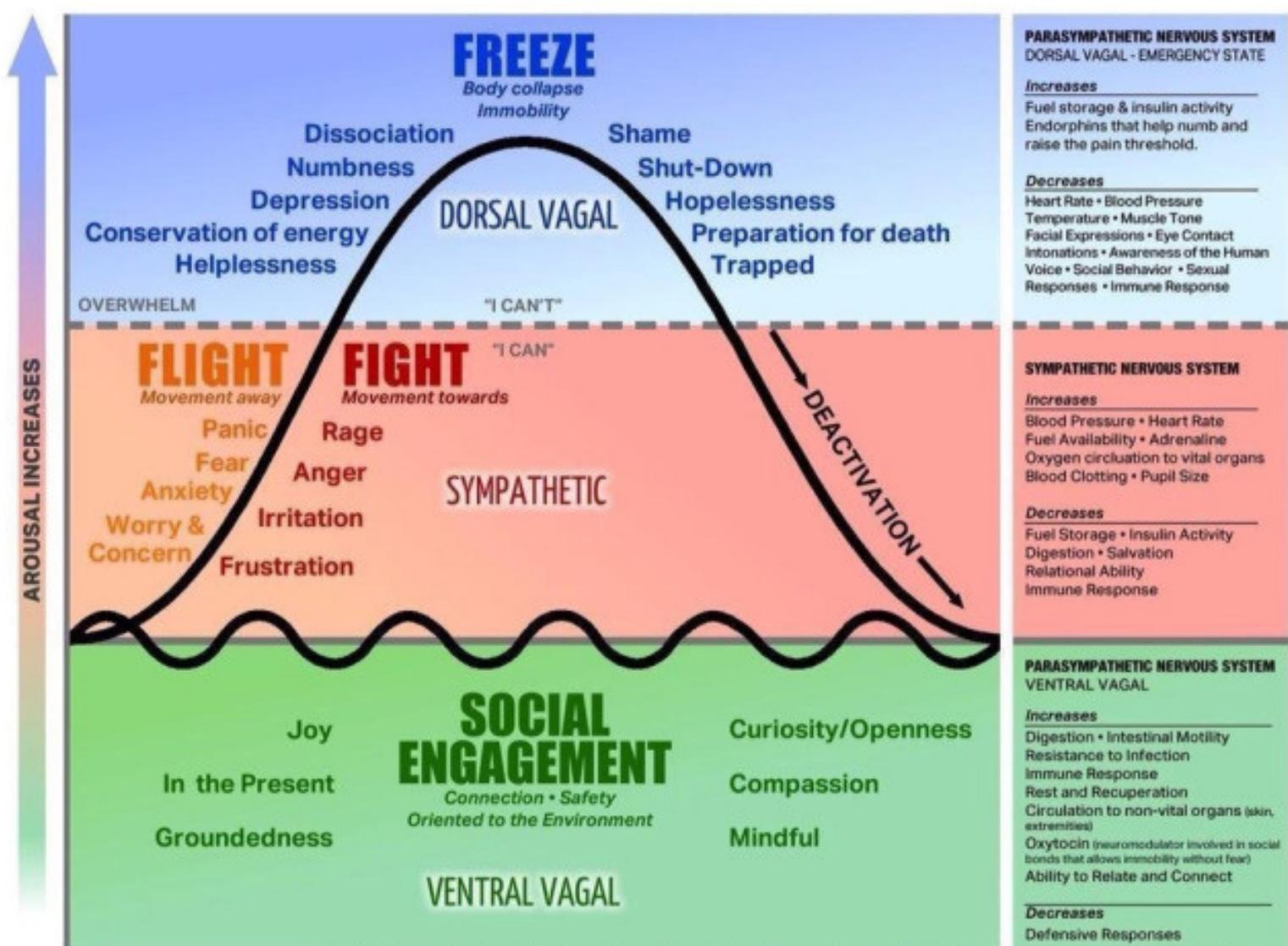


When our nervous system doesn't have the capacity or built-in pauses to rest, digest and integrate (both experience and information), we get "stuck" in either hyperarousal or hypoarousal, which is physiological and thus compromises our mental, physical, emotional, and spiritual health.

Symptoms of Un-Discharged Traumatic Stress



Another View of Physiology and Emotional Response of Vagus Nerve Arousal Spectrum

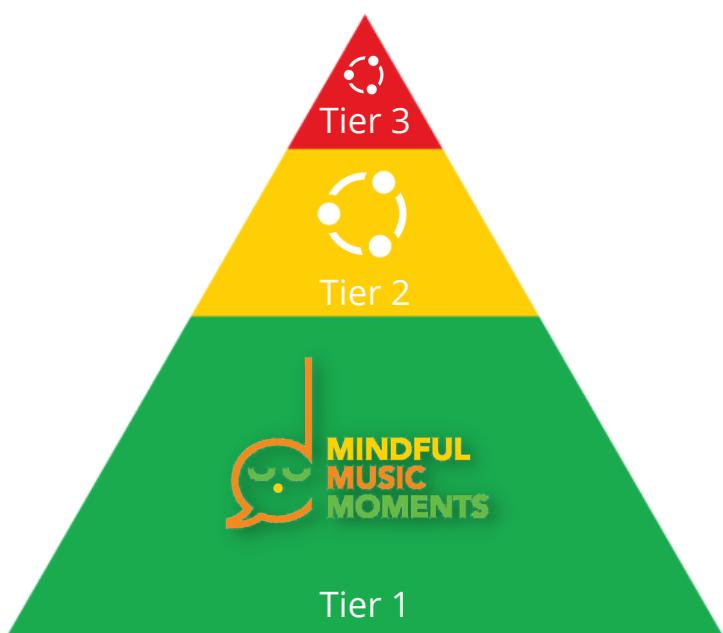


Mindful Music Support for PBIS and CASEL Frameworks

Mindful Music Moments is an **evidenced-based program** that has been featured on the Greater Good for Education by UC Berkeley, PBS NewsHour and utilized by hundreds of schools nationwide. MMM is a **flexible program** that can be delivered to your entire school community over the morning announcements or individually in each classroom. We work with schools to help them implement the program and measure what is most meaningful for them. We can **assist in providing ideas and feedback** for your needs.

Mindful Music Moments is an excellent **Tier 1 Positive Behavioral Intervention Strategy** because it moves beyond just words and into experience. This opportunity for experience helps create the capacity for self-awareness and self-management.

Moving into Tier 2, The Well's award-winning youth development True Body Project: My True SELF curriculum can be used for **more targeted prevention** and build Social Awareness and Relationship Skills. We are in a pilot year with embedded mindfulness educators in a single school. For information on curriculum, training and tools, contact Rowe@TheWell.World.



PBIS Tiers of Support



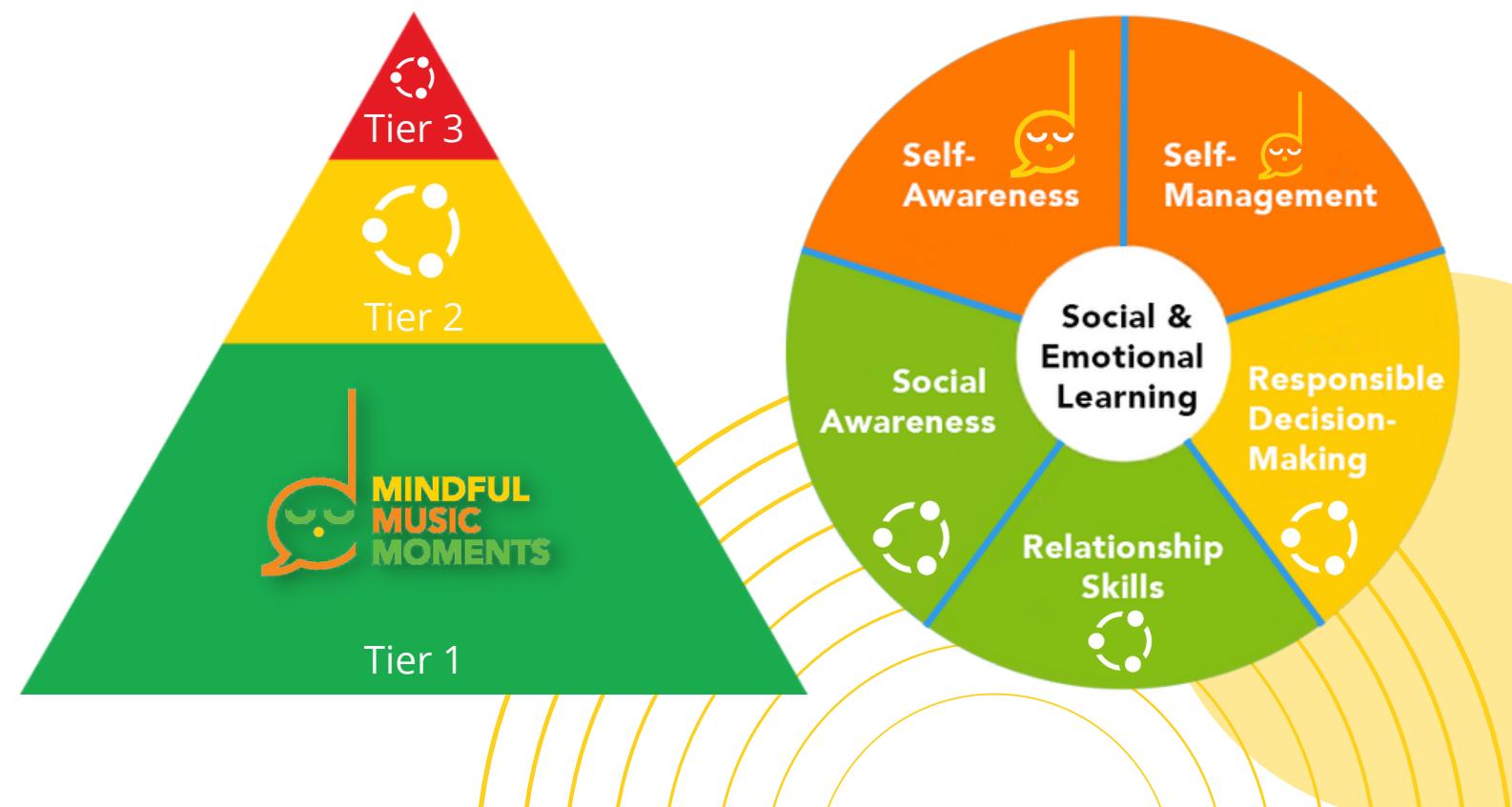
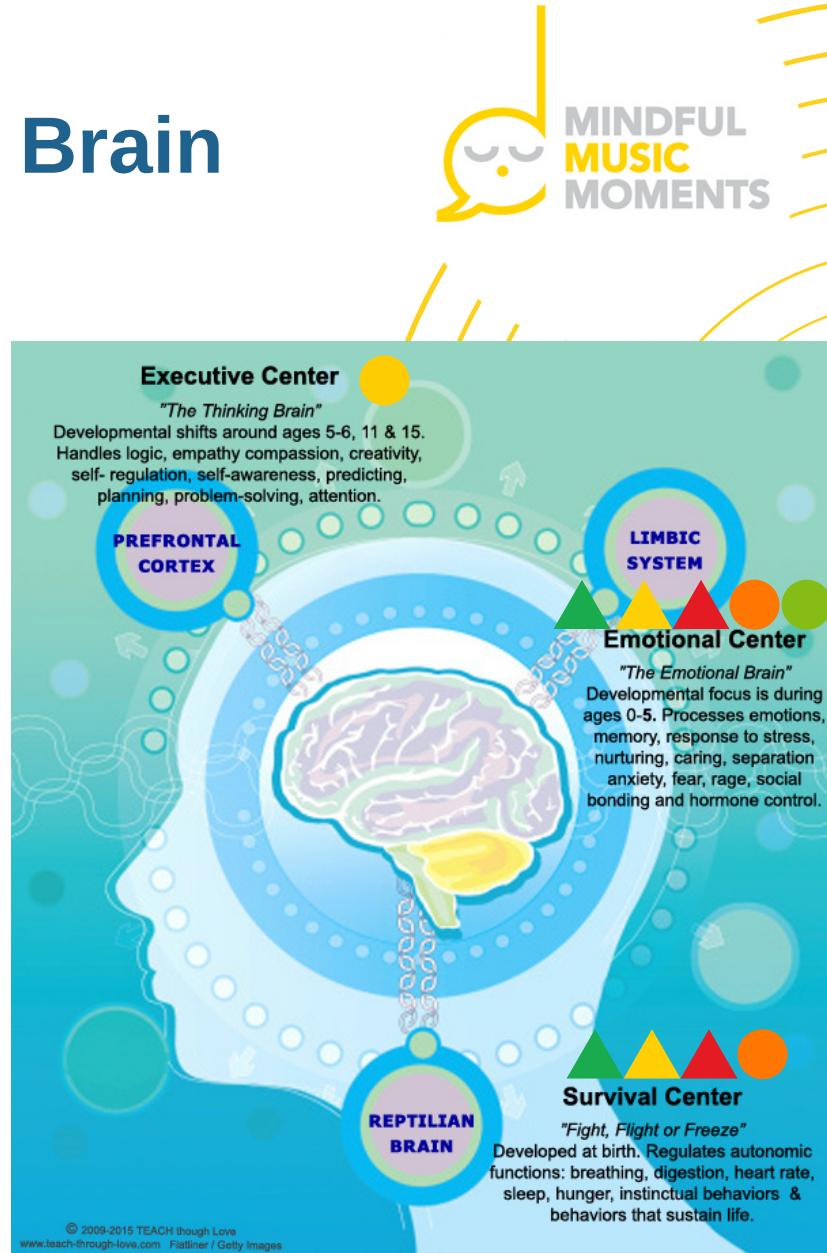
CASEL Framework

PBIS, CASEL Frameworks and Brain Development

As we saw earlier in the "How the Brain Develops" there are three centers of brain development. We can look at how PBIS and CASEL systems activate these different centers.

All three PBIS tiers connect to the survival and emotional center.

In CASEL, self-awareness and self-management connect to the survival center. Social-awareness and relationship skills connect to our emotional center. And, responsible decision-making connects to the executive center.

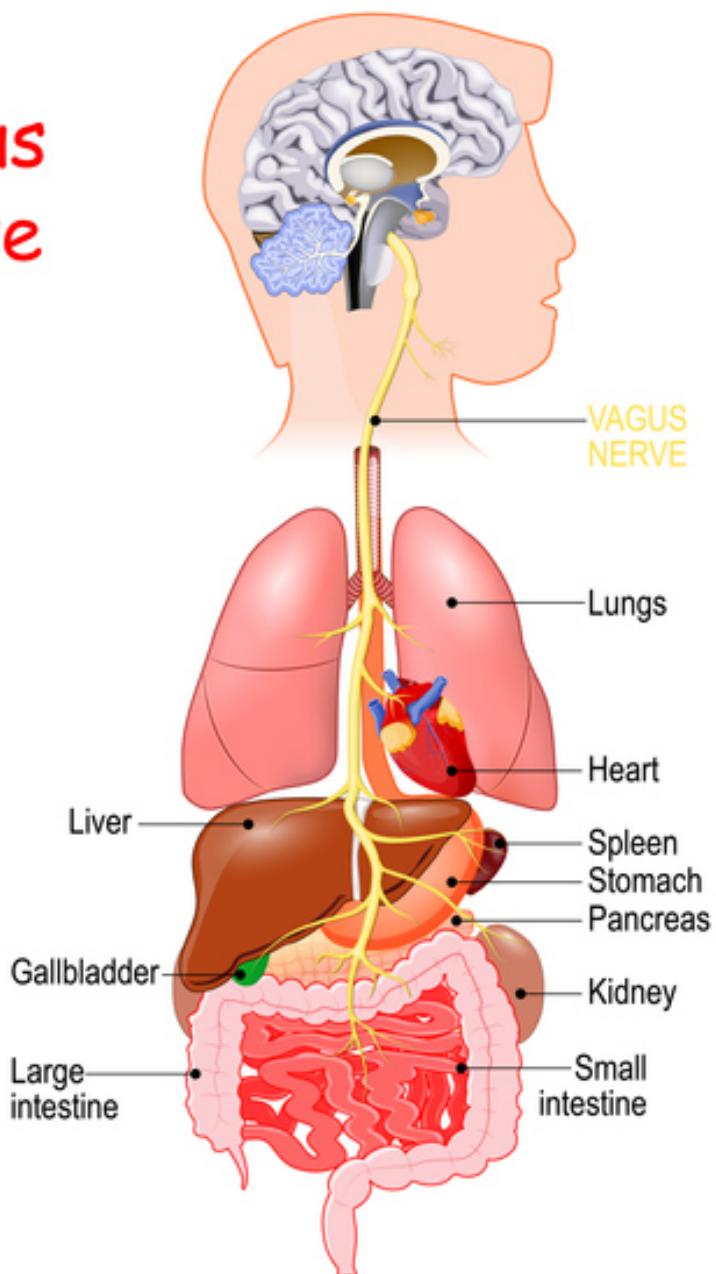


Why Mindfulness and Music Matter the Nervous System

The vagus nerve is part of the parasympathetic nervous system (PNS) and toning it via activities that are calming, focusing, and soothing can have significant reflects on overall health and mental capacity.



Vagus
nerve



Mindful Meditation, Done Regularly, Has High Impact



Recent studies have found that schoolchildren taught the technique show:

24% INCREASE in positive social behaviors

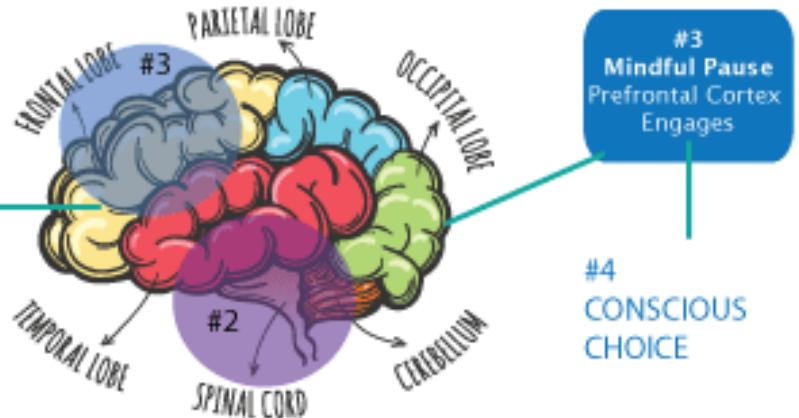
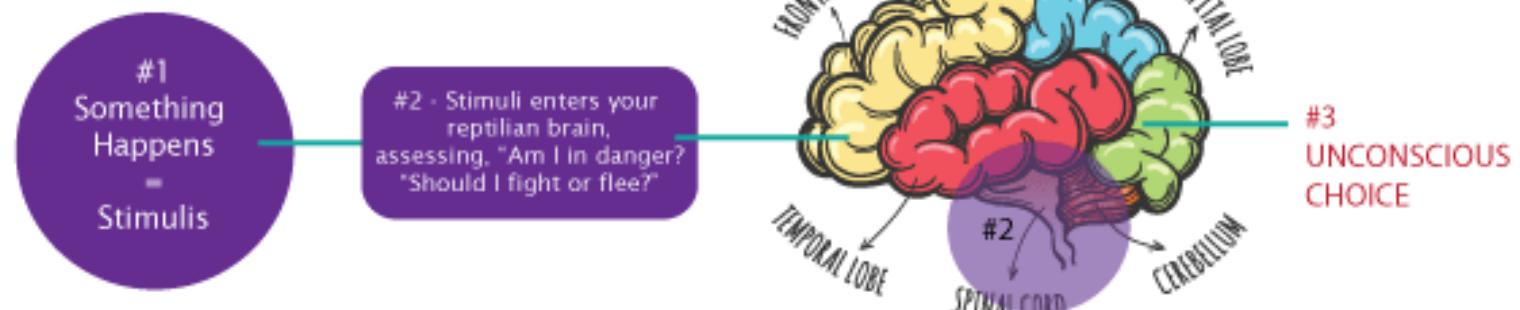
24% DECREASE in aggression

15% IMPROVEMENT in math scores

REDUCTION and prevention of depression-like symptoms

IMPROVED classroom behavior (self-control, paying attention, respect for others)

Sources: Developmental Psychology; Mindfulness; Journal of Child and Family Studies



Combining Mindfulness with Music Makes Focusing Easy and Has Added Benefits



1. Music rewards the brain

- a. Music stimulates the brain regions involved in reward and emotions. The result? It's a fun, awesome mental exercise that improves your self-esteem.

2. Learn to actually listen

- a. Kids that study music are better at picking up foreign languages and detecting speech in noise - even if they only studied briefly, long ago!

3. Do better in school

- a. Studies show that kids involved in music have better reading skills, know their maths, and tend to be brighter. SAT takers that studied music scored 47 and 43 points higher on their verbal and math tests, respectively.

4. Best way to stay in school

- a. A staggering 96% of school principals agree that music education encourages and motivates students to stay in school.

5. Helps kids grow up

- a. Learning music enables kids to better express their ideas, accept criticism, and improves their critical thinking and problem-solving.

6. Makes kids nicer

- a. Kids hooked on music are better team players, less aggressive, and more cooperative with teachers. There are fewer fights, racism, and hurtful sarcasm in schools with good music programs.

