

# PART I: Working With Traumatized Youth: Trauma & Brain Development

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# What Is Trauma?

- Posttraumatic Stress Disorder – variety of symptoms following exposure to a traumatic event. Clinical presentation varies among individuals and may include:
  - Fear-based re-experiencing, emotional, and behavior symptoms.
  - Anhedonia or dysphoric mood and negative thoughts.
  - Arousal
  - Dissociation
  - Combination of all of these
- Other Trauma- and Stressor-Related Disorders
  - Reactive Attachment Disorder – relationally inhibited and emotionally withdrawn
  - Disinhibited Social Engagement Disorder – socially disinhibited

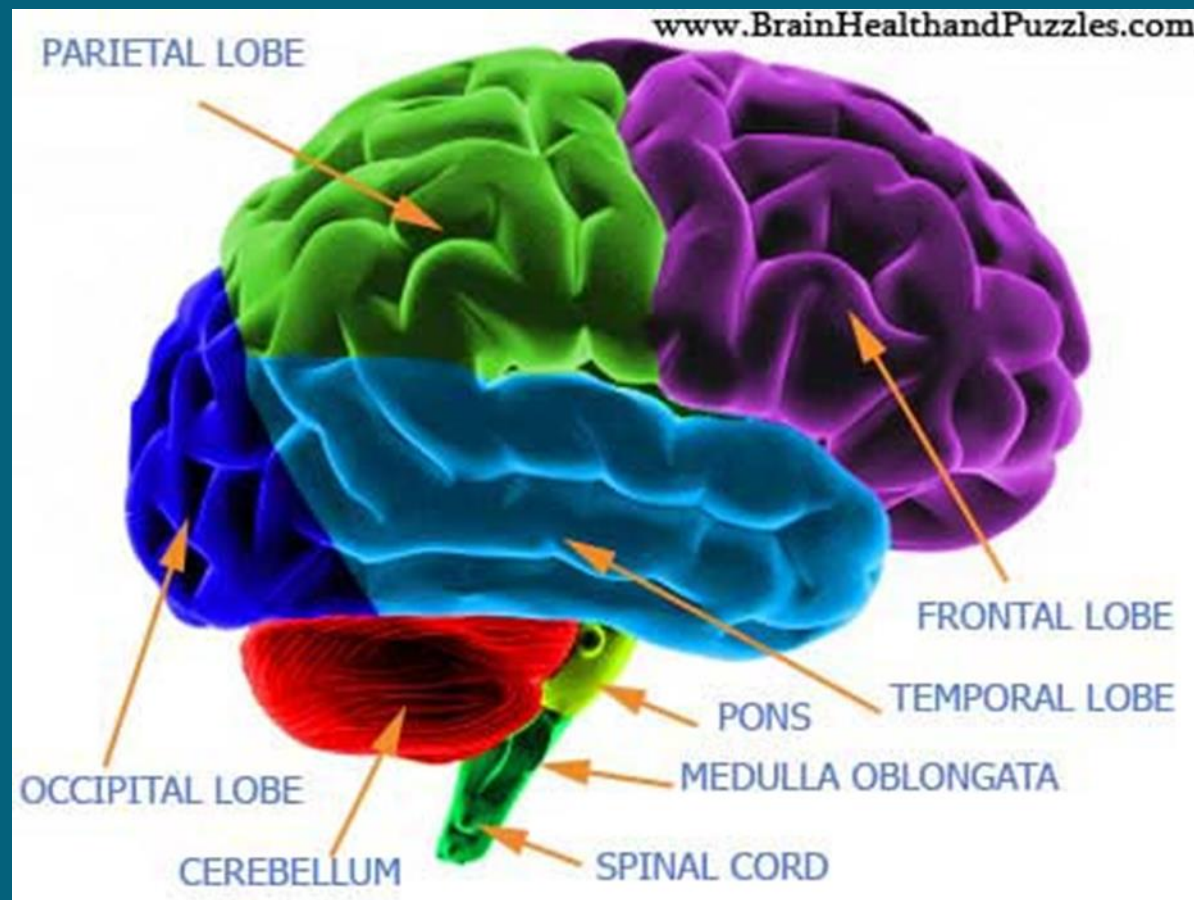
# What is Trauma?

- Definition: A response to a negative event(s) that exceeds the child's ability to cope
- 6 primary risk factors:
  1. Prenatal Stress
  2. Prenatal Substance Exposure (80% of foster children)
  3. Birth Trauma/Early Hospitalization
  4. Abuse (sexual, physical, emotional)
  5. Neglect
  6. Traumatic Incidents (violence, disaster, separations, multiple placements, etc.)

# How Does Trauma Impact Development?

- “What fires together wires together”
- Sensitive periods (when there is the most neuroplasticity) of brain development occur during childhood. Therefore, trauma experienced during childhood is particularly harmful to brain development.
- Childhood trauma can change the structure *and* functioning of a child’s brain.

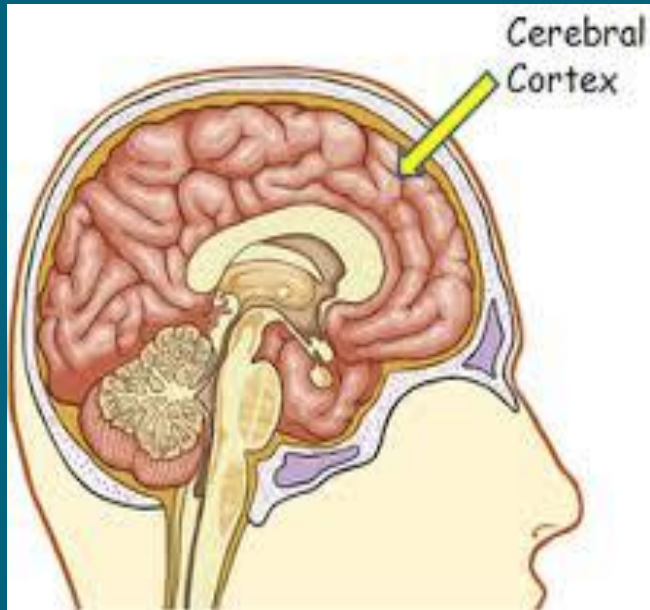
# The Human Brain



# Brain Development

- ▣ Bottom Up – from primitive to most complex
- ▣ Brain development is sequential. More complex systems are dependent on development of less complex systems.
- ▣ For normal brain development to occur there must be specific patterns of activity at specific times during development = *sensitive periods*
- ▣ Experiences (positive or negative) during sensitive periods organizes brain systems.
- ▣ Therefore, trauma during early childhood can effect all future functional capabilities!

# Cerebral Cortex



- Outer layer of neural tissue
- Fully mature at age 20
- If it is not nurtured it does not mature
- Primary function is higher brain function such as thought and action
- Where “true personality” is held

## Activity Across Brain Regions

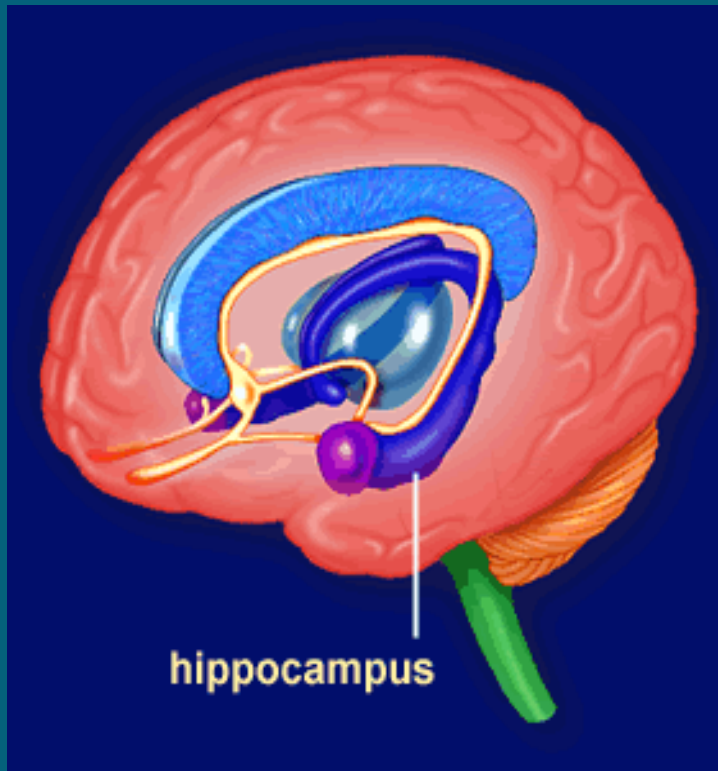
Brain Region	Functions	Critical Period	Experiences needed	Functional Maturity
Cortex	Thinking, Planning, Reasoning, Creativity, & Sensory Integration	3 - 6 years	Complex conversations, social interactions, exploration, safe, fed, secure	Adult
Limbic	Emotion, Attachment Memory, & Sensory Integration	1 - 4 years	Complex movement, social experience, narrative	Puberty
Diencephalon	Sensory Motor & Sensory Processing :	6 months - 2 years	Complex rhythmic movement, simple narrative, affection	Childhood
Brain Stem	State Regulation & Sensory Processing	In utero - 9 months	Rhythmic, patterned input, engaged caregiving	Infancy



# Trauma Leads to Problems with Sensory Integration

- The more effective our brain is at processing sensory input, the more effective our behavioral output will be.
- 90% of children with trauma have sensory difficulties.

# Hippocampus

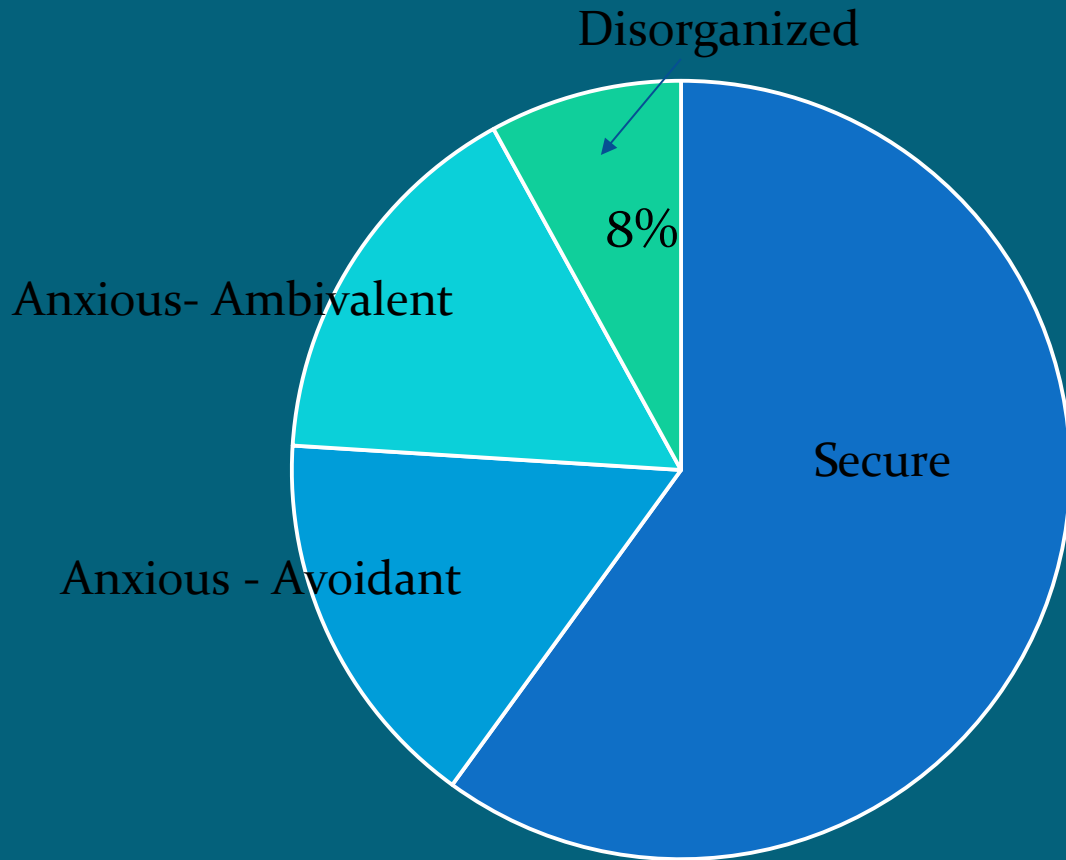


- Primary role is short-term and long-term memory
- Underactive in traumatized children, leading to problems with learning

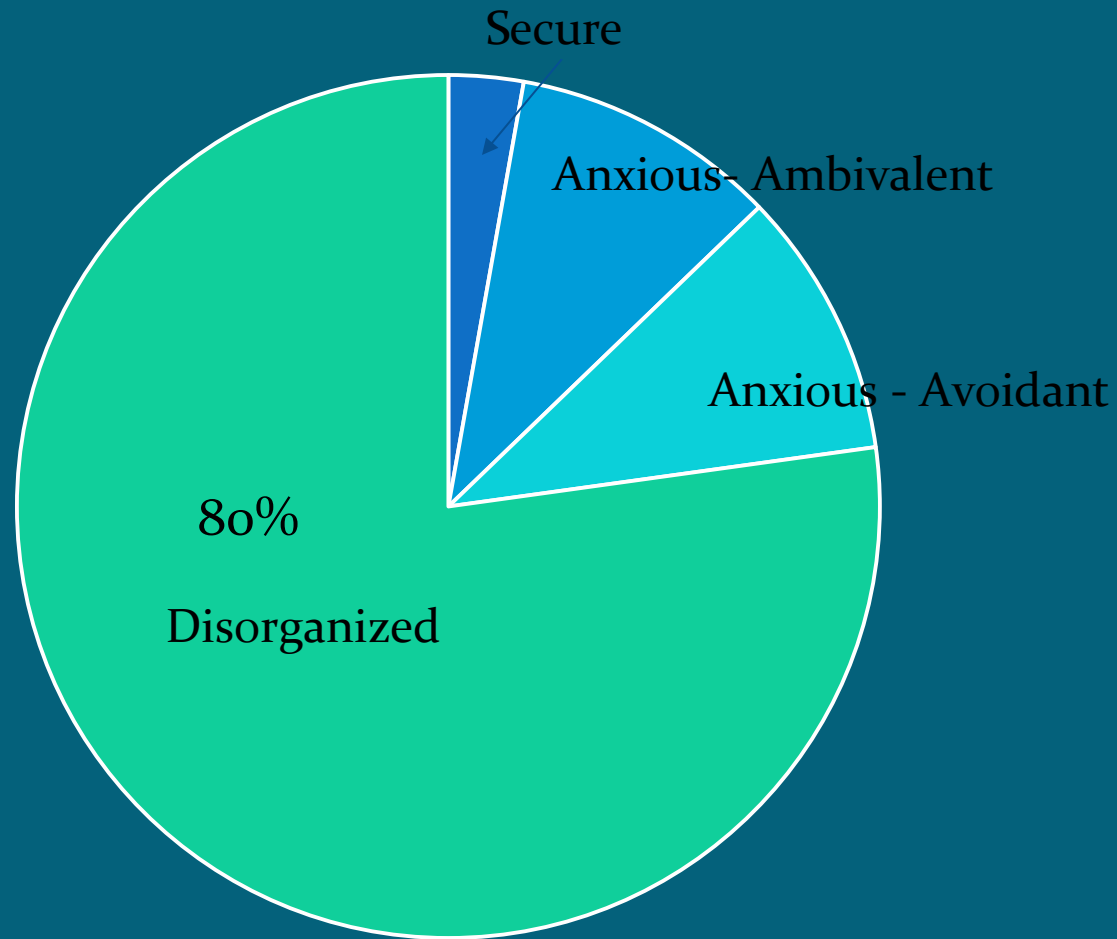
# Trauma Leads to Problems with Attachment

- Attachment is a system in the brain that that develops to ensure infant safety and survival
- The comfort, pleasure, and calm and balanced attuned interaction between the infant and caregiver creates a sense of safety within the infant
- Forms the basis for:
  - all future relationships
  - sense of self-worth
  - resilience to stress
  - ability to regulate own emotions
  - make sense of life
  - create meaningful connections with others

# Secure Vs. Insecure Attachment General Population



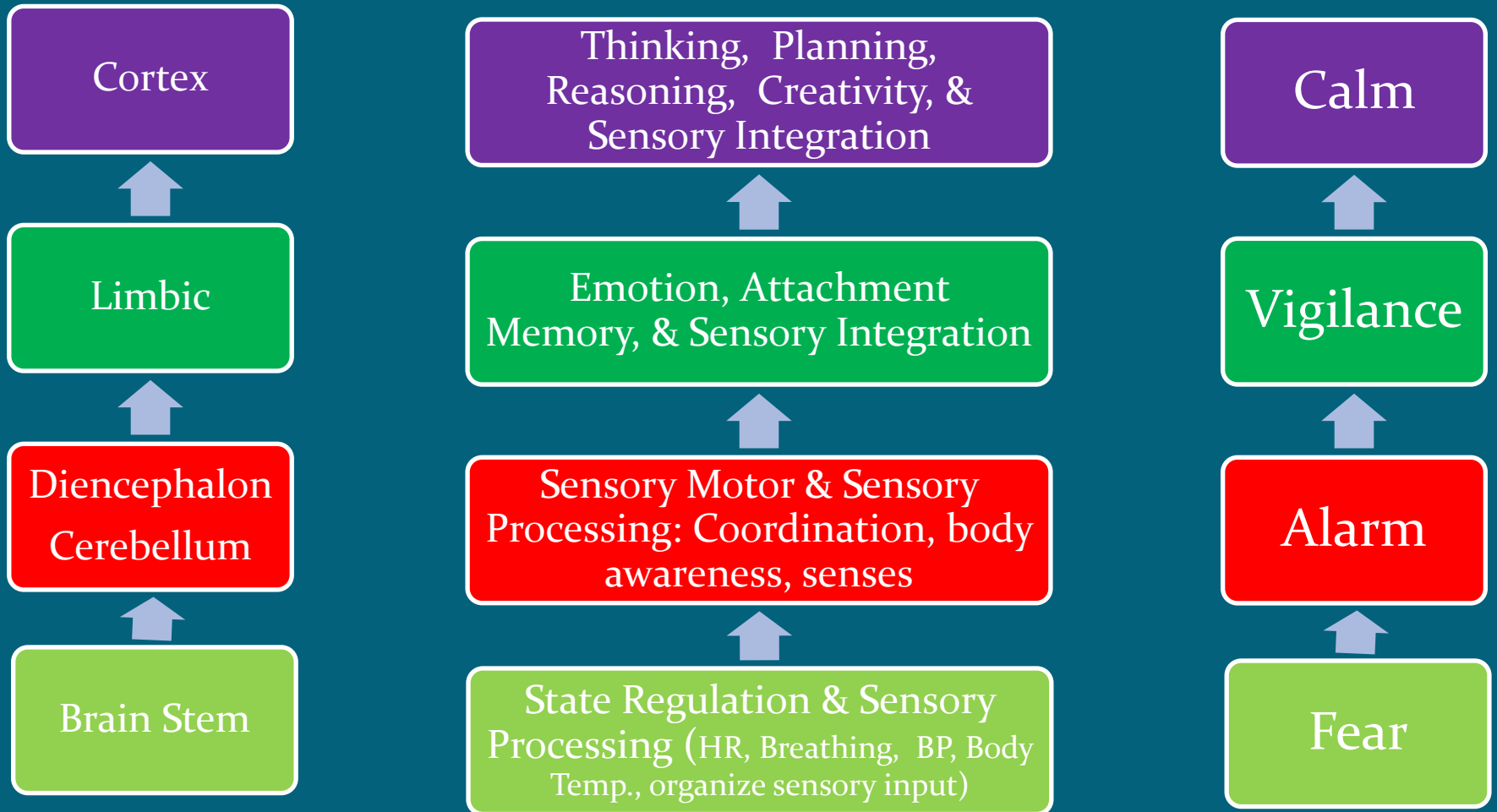
# Secure Vs. Insecure Attachment Foster/Adopted Children



# Mirror Neurons

- In Normal Youth:
  - the brain mirrors what is being projected by the caregiver
- In Traumatized Youth:
  - The mirror becomes inaccurate
  - Hypersensitive and highly reactive to negative nonverbal cues
  - Over-perceive negative behavior to mean presence of threats
  - Inability to recognize feelings
  - Difficulty with empathy

# Fight, Flight, or Freeze



# How Trauma and Neglect Impact the Brain

Overbuilding stress reactivity

+

Underdeveloped cortex

=

primitive, immature and violent responses



# Problems of Traumatized Youth

- Impulsivity
- Hyperactivity
- Distractibility & Inattention
- Dysphoria
- Emotional Numbing
- Social Avoidance
- Dissociation
- Sleep Problems
- School Failure
- Anger
- Eating Difficulties
- Relationship Difficulties
- Aggression/Violence
- Substance Abuse
- Disrespectfulness
- Refusal to attend school
- Refusal to follow instructions
- Regressed or delayed development
- Sensory Issues

# What is Trauma?

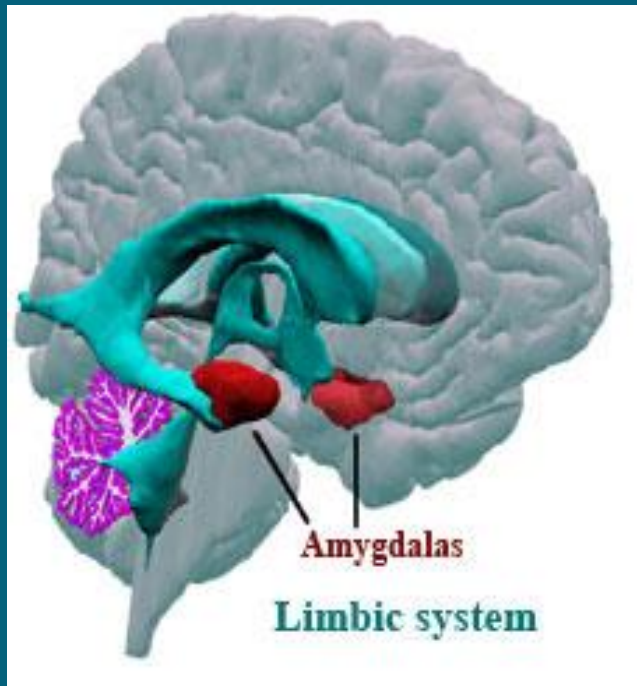
- Violence and betrayal in our own lives, as well as in our histories and cultures.
- Unbearable. Intolerable. Overwhelming. Out of Control.
- Trauma has direct and indirect effects.
- Imprint on the mind, body, and brain.
- Traces of trauma remain in our minds, emotions, and biology.

# Trauma & Left-Right Brain



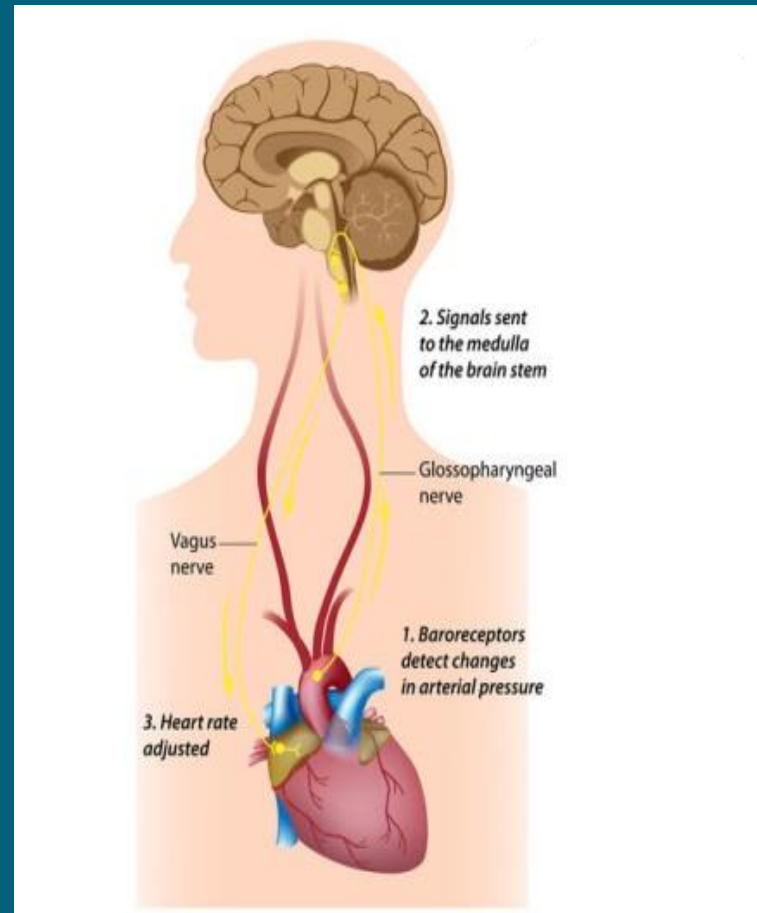
- Left side rational brain
  - Facts
  - Statistics
  - Sequence
- Right side emotional brain
  - Sensory experiences
  - Nonverbal signals

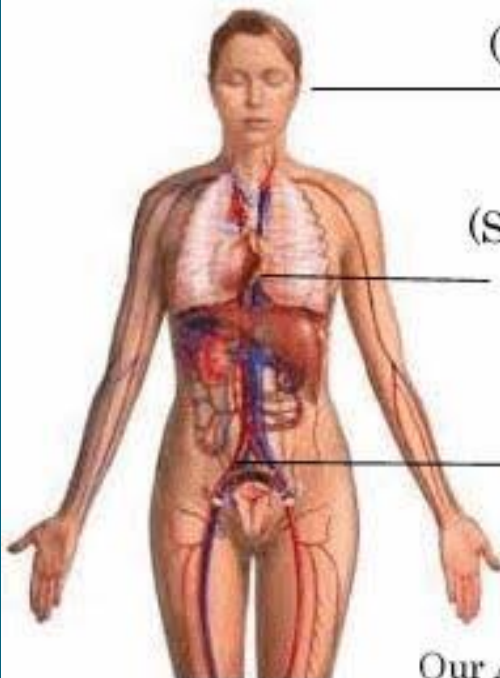
# Amygdala



- Part of the limbic system
- Important role in expression and modulation of aggression
- Survival based
- “Boss” of the limbic system
- Activates fight-flight-freeze response
- Overactive in traumatized children, creating a “constant state of emergency”

# Trauma & Visceral Feelings





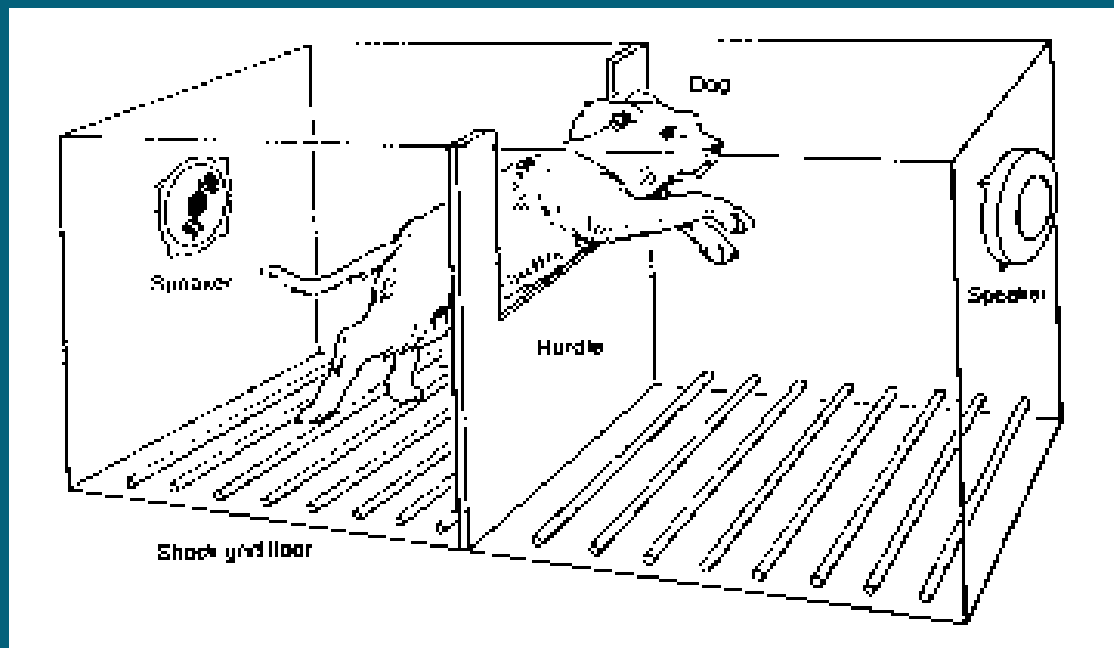
(VVC) Ventral Vagal Complex: Signaling System for motion, emotion & communication. (Our Social Engagement System)

(SNS) Sympathetic Nervous System: Mobilization System for Flight or Fight Behaviors. (Our Aggressive Defense System)

(DVC) Dorsal Vagal Complex: Immobilization System for Conservation Withdrawal. (Our Passive Defense System)

Our Autonomic Nervous System fires muscular tensions triggered by feedback signals from the external & internal world at millisecond speeds below conscious awareness. These muscles tensions fire our Thoughts?

# SELIGMAN'S SHUTTER BOX EXPERIMENT



# Learned Helplessness

- LH is NOT a moral choice
- LH is a conditioned response to adversity
- The individual is conditioned to believe they have NO CONTROL over their life so they give up trying
- LH destroys *desire* to try (not ability)



# The Indian Boarding School



# How Does Trauma Impact Relationships?

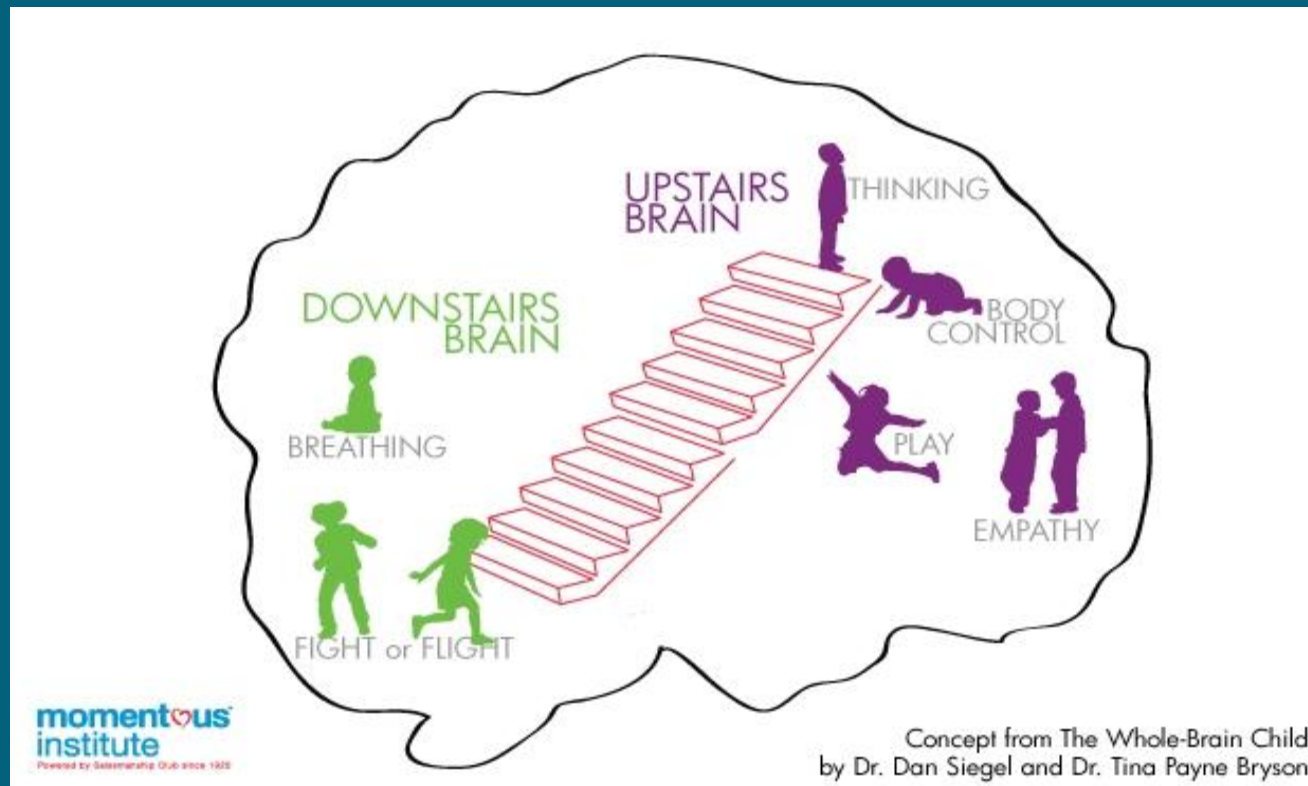
- Attachment problems arise from repeated experiences of failed emotional connection
  - Abuse; neglect; trauma; prolonged separation; multiple caregivers; maternal depression and/or substance addiction; lack of harmony between child and parent; inexperience mother with poor parenting skills
- Attachment problems are passed on from one generation to the next unless repair occurs



# Trauma-Informed Care

- Amygdala is overactive in traumatized children
- Goal of TIC is to de-activate the amygdala when it is over-firing
- When the amygdala is de-activated, rational thought, self-control, empathy, and the ability to engage with others is activated!
- TIC rebuilds the child's brain!

# Strategies for Trauma-Informed Juvenile Judicial Practice



# Strategies for Trauma-Informed Juvenile Judicial Practice

## 3 Pillars of Trauma-Informed Juvenile Judicial Practice

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# Strategies for Trauma-Informed Juvenile Judicial Practice

- 1) Environment: Structured, Predictable and... Nurturing
- 2) Recognize that even though their chronological age may be 15, their emotional age is 7
- 3) Approach: Caring, Listening, Respectful, Honest and Empathic
  - 1) Relationship trauma can only be healed by relational interventions
- 4) Awareness of potential triggers: strip searches, restraints, isolation, sudden room changes, yelling, insults, etc.
  - 1) Every misbehavior is an attempt to fulfill an unmet childhood need
  - 2) Adaptive behaviors developed to cope with the past.
  - 3) Must look to understand the meaning behind the behavior = fear of loss of control.

# Strategies for Trauma-Informed Juvenile Judicial Practice

- “How” matters as much as “What”
- Express concern
- Indicate their worth
- Use less negative language
- Emphasize strengths
- Provide a clear explanation
- Save questions about sensitive issues for when the courtroom is empty
- Allow the participant to approach the bench to protect confidentiality
- Eliminate all nonverbal intimidation

# Strategies for Trauma-Informed Juvenile Judicial Practice

- Ask Trauma-Informed Questions:
  - Has the child experienced a traumatic event?
    - Does the child have a history of foster placement?
    - Have there been multiple or prolonged exposures to trauma?
  - What is their intervention history and outcomes?
    - Multiple placements; poor progress?
  - Who is the caregiver(s) and what is their role?
    - Does the caregiver help the child feel safe/unsafe?
    - Is the caregiver consistently/inconsistently present?
    - Is the caregiver suffering from their own trauma?
      - Substance Abuse?



# Strategies for Trauma-Informed Juvenile Judicial Practice

- Ask Trauma-Informed Questions:
  - Who/what are the child's safe connections?
    - People?
      - Counselors, social workers, teachers, probation officers, extended family?
      - Peers, siblings?
    - Places?
      - School, church, sport or other activity groups?
      - Community, culture?
  - Is the child being exposed to trauma triggers?
    - Re-traumatization?

# Strategies for Trauma-Informed Juvenile Judicial Practice

- Ask Trauma-Informed Questions:
  - Is the child displaying trauma-related behaviors?
    - Extremely passive; incongruent or inappropriate affect; easily angered; extreme emotions; non-responsiveness.
    - Do they appear regulated or dysregulated?
  - Is the child able to understand and participate in court proceedings?
    - Delays in development, cognition, sensory processing issues, etc.
  - Is there anything that I can do as a court official to help this child feel safe, connected and in control?
    - Enhance participation
    - Improve outcomes

# Citations

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