

TRAUMA AND LEARNING:
TRAUMA INFORMED
PERSPECTIVES ON
ADULT LEARNERS

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• Introduction
 • Overview of objectives/ scope of trauma-informed practice
 • The basics of trauma in the brain: What is trauma?
 • How is our brain structured?
 • How does trauma impact the brain?
 • The presentation of trauma/ identifying the residue of trauma
 • In daily life
 • In the learning environment
 • During COVID-19
 • Why does trauma change the way we learn?
 • Mechanisms of learning in the brain
 • Viewing trauma as resilience
 • Questions, comments, wisdom, hopes for next session!

TODAY'S AGENDA

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CHECKING IN:

**HERE
GETTING HERE
NOWHERE NEAR HERE**

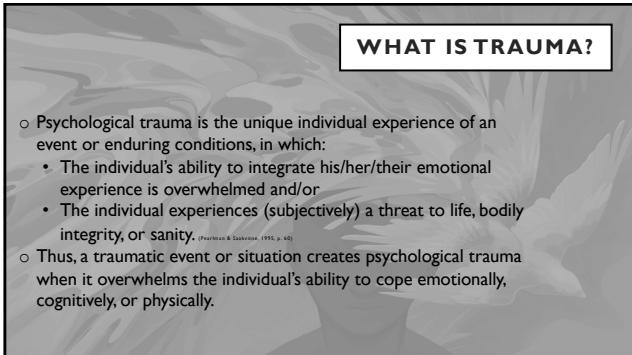
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WHAT EVENTS AND EXPERIENCES RESULT IN TRAUMA?

One-time incidents such as: accidents, natural disasters, crimes, interpersonal violence, medical events, surgeries, deaths or sudden loss, adoption, violent events.

Responses to chronic or repetitive experiences such as: child abuse, neglect, lack of attachment, combat, community violence, abusive/coercive relationships, incarceration, global pandemics, oppression, marginalization, and enduring deprivation.

This description intentionally does not allow us to determine whether a particular event is traumatic; that is up to the subjective experience of each survivor.

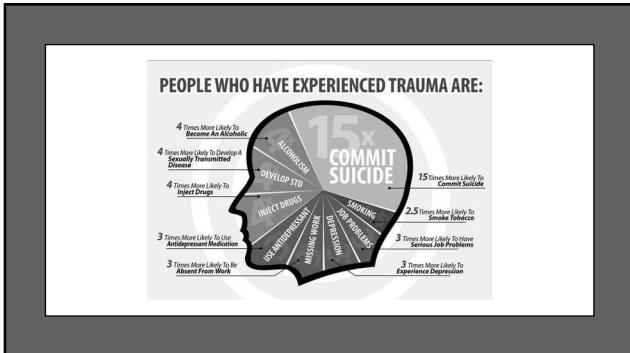
This definition provides a guideline for our understanding of a survivor's experience of the events and conditions of their life.

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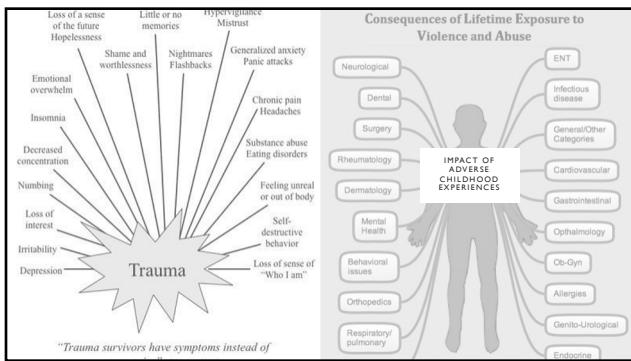
ATTACHMENT AND TRAUMA

- Attachment: the lasting psychological connection between human beings.
- Healthy attachment: early caregivers provide a foundation of safety from which developing infants/ children feel safe to explore the world.
- Attachment is relevant to trauma in several ways:
 1. A lack of early attachment is, in and of itself, an experience of trauma.
 2. Poor attachment early in childhood can lead to challenges in connecting with and being in supportive relationships with others later in life.
 3. Healthy attachments later in life can restore feelings of safety in healing from trauma.

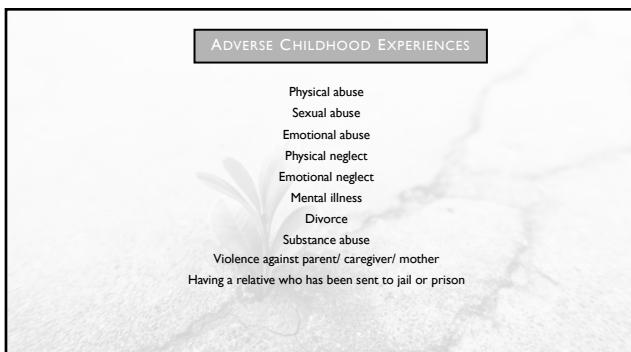
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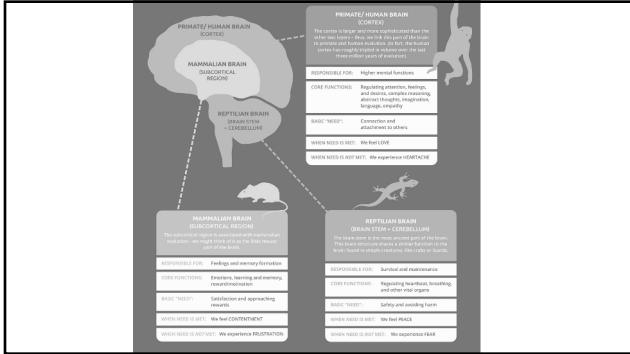
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THE BRAIN BASICS

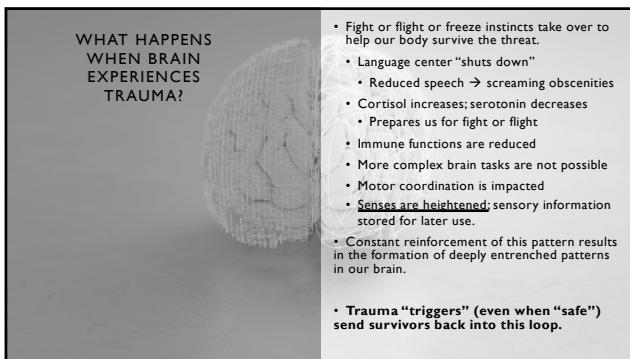
- The human brain is like a house with additons.
 - Brainstem/ cerebellum (reptile brain):
 - Primal brain. Vital functions: eat, sleep, wake, cry; sensing temperatures, hunger, thirst, pain; urinate, defecate, breathing, balance, reproduction.
 - Reptilian brain sustains life.
 - Limbic system (mammalian brain):
 - Center of emotion and learning. Regulates motivation and emotion.
 - "Limbic system evaluates everything as either agreeable (pleasure) or disagreeable (pain/distress). Survival is predicated on the avoidance of pain and the repetition of pleasure." (Panksepp, 1998)
 - Does not register concepts of time nor apply logic.
 - Past, present, future are one and the same.
 - Contains the amygdala: the smoke detector of the brain.
 - Scans for danger: threats vs. non-threats.
 - Activates response to threat: fight, flight, freeze.
 - Shaped in a use-dependent way: plasticity. Neurons that fire together, wire together.
 - The neocortex (conscious/ logical brain- 4%):
 - Slowest part of brain to develop (in typical development ~7 years)
 - Logical, can deal with the abstract, moment-to-moment management of physiology, context, meaning, planning, timing, sequencing, inhibition of inappropriate action, empathetic understanding, imagination, decision-making, creativity, innovation, predict consequences, advanced language.

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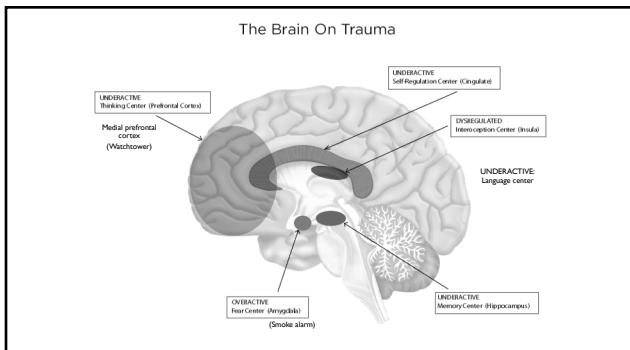
WHAT HAPPENS WHEN A BRAIN EXPERIENCES TRAUMA?

- The amygdala detects a threat (based on experience).
 - Our brain, in its resilient quest for survival, prioritizes survival functions above all else.
 - The neocortex/ frontal lobe goes off-line.
 - Effectively unavailable to us: logic, abstract, moment-to-moment management of physiology, context, meaning, planning, timing, sequencing, inhibition of inappropriate action, empathic understanding, imagination, decision-making, creativity, innovation, ability to predict consequences, advanced language.
 - The left and right hemispheres of our brain "disconnect" when what we are experiencing does not fit into our understanding of the world.
 - More R brain activity (intuitive, emotional, visual, spatial, tactile) than L brain activity (logical, analytical, sequential, linguistic).

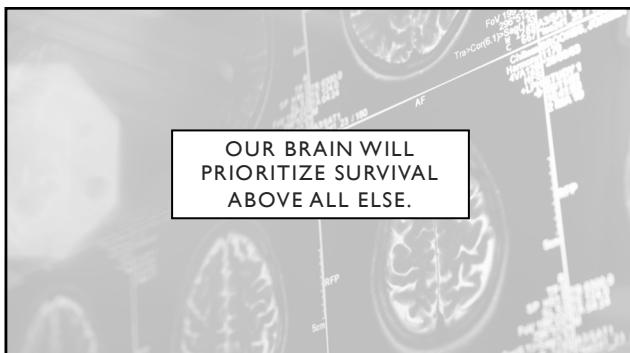
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WHAT IS THE RESIDUE OF SURVIVING TRAUMA?

- Neurons that fire together wire together: superhighway between smoke detector and response.
- Trauma increases the chance that our amygdala will misinterpret whether something is a threat or not.
- The brains of trauma survivors become stuck—individuals are stuck in their growth because they can't integrate new information from new experiences into their lives.
- The nervous system post-trauma is different than before the trauma.
 - Hyperarousal: the bodily systems are constantly at the ready.
 - Energy is focused on suppressing inner chaos at the expense of engagement in life.
 - Efforts to control physiological reactions can result in physical symptoms—fibromyalgia, chronic fatigue, auto-immune disorders.
 - "The body keeps the score." van der Kolk, 2012

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THIS RESULTS IN SYMPTOMS SUCH AS:

- Avoidance
- Shock, denial, or disbelief.
- Disorientation.
- Confusion, difficulty concentrating.
- Anger, irritability, mood swings.
- Anxiety and fear.
 - Nightmares, jumpiness
 - Guilt, shame, self-blame.
 - Withdrawing from others.
 - Feeling sad or hopeless.
- Feeling disconnected or numb.
- Feelings of emptiness and boredom.
- Engagement in high-risk behaviors.
- Engagement in self-harming behaviors.
- Aggression, rage, violence.
- Significant changes in interpersonal functioning.
- Alterations in vigilance: hyper to hypo.

In relationships, the default becomes suspicion, not openness.

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THE MOST SIGNIFICANT CHALLENGE FOR TRAUMA SURVIVORS IS THE INABILITY TO LIVE IN (OR MAKE DECISIONS BASED ON) THE PRESENT MOMENT.

Anything might be interpreted as a threat.

These interpretations are not happening under the supervision of our logical brain.

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WHAT IS THE CONNECTION BETWEEN TRAUMA AND LEARNING?

- To survive traumatic experiences, the brain makes split-second decisions to ensure survival.
- In order to do this, the brain prioritizes certain functions over others.
- The process of learning requires a very different set of brain functions than survival.
- These two categories of brain functions are at odds and make the process of learning for a trauma survivor look and feel different.
- The brain that is in survival mode becomes primed to recognize, encode, and store experiences that cause harm over those that are neutral or positive.
- Learning is uncomfortable; risky.

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WHAT ARE THE SKILLS NEEDED TO BE EFFECTIVE LEARNERS?

- Engagement!
- Open mindedness!
- Creativity!
- Present centeredness!
- Collaborative mindsets!
- Willingness to take a risk!
- Ability to try again...and again...and again!
- Executive functioning skills! Organization!
- Attention to details!
- Awareness of the needs and experiences of others!

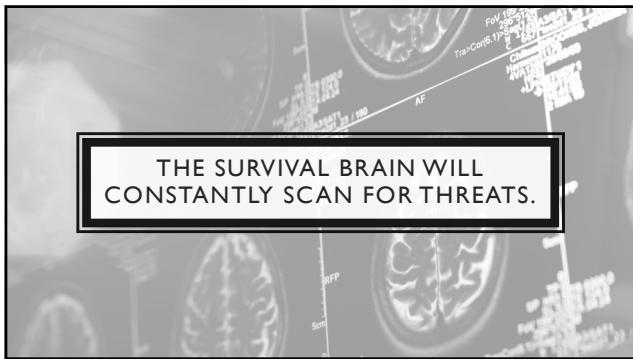
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THE SURVIVAL BRAIN VS. THE LEARNING BRAIN

<ul style="list-style-type: none"> Learning brain: <ul style="list-style-type: none"> Is open to new information. Is comfortable with ambiguity: <ul style="list-style-type: none"> Grey areas are okay and even exciting! Can see the big picture. Can see possibilities. Can imagine! Is calm, peaceful, excited about what's ahead, playful, fun, curious. Is not afraid of making mistakes- that's what learning is all about. Is not afraid of looking stupid- doesn't want to volunteer or be called on; filled with doubt about abilities. 	<ul style="list-style-type: none"> Survival brain: <ul style="list-style-type: none"> Is hyper-focused on threat. Trust is not easily given. Views ambiguity as dangerous. Seeks certainty. Is panicked, fearful, obsessive, fixated on small details. Is afraid of getting things wrong; defensive about mistakes. <ul style="list-style-type: none"> Mistakes = disaster or death. Lacks the patience to learn---wants to get things over with. <ul style="list-style-type: none"> The longer the learning process takes, the more fear builds. Is afraid of looking stupid- doesn't want to volunteer or be called on; filled with doubt about abilities.
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- Survival brain will always overrule learning brain for a trauma survivor---can't risk a mistake.
- The longer a person is in survival brain, the harder it is to get into learning brain.
- The more stress a person is under; the more likely they are to slip back into survival brain.
 - Any threat is interpreted as DANGER. This makes the stakes so much higher.

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TRAUMA SHAPES OUR INTEREST.

1. A person recently in recovery enters the party
2. A person reeling from a recent breakup enters the party
3. A firefighter enters the party
4. A person enters the wrong party

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THE CHALLENGES FOR WORKING WITH ADULT LEARNERS THEN BECOME:
HOW DO WE INVITE IN THE LEARNING BRAIN?
HOW DO WE NURTURE RESILIENCE?

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- A brief recap of last session
- Trauma and learning
 - Meet the survival brain
 - Survival brain, meet learning brain
 - How do both present in the learning environment?
- Becoming trauma-informed
 - What does this mean?
 - What are the foundational aspects of a trauma-informed approach?
 - Who does this benefit?
- Trauma-informed learning
 - Suggestions: structuring the learning process in a trauma-informed way
 - Approaches
 - Acknowledgement and revision
 - Supporting learners in understanding how they learn
 - Questions, comments, wisdom, parting thoughts, next steps!

NEXT SESSION

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YOUR INPUT, QUESTIONS, COMMENTS,
HOPES FOR NEXT SESSION!

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