

Whole Brain Parenting



Objectives

- Understand basic brain functioning
- Explore the links between brain functioning and attachment
- Explore the role of reflective parenting to repair attachment
- Understand and improve left brain - right brain integration
- Learn strategies to help youth integrate thoughts, actions and feelings and thereby operate from a whole brain perspective

Brain

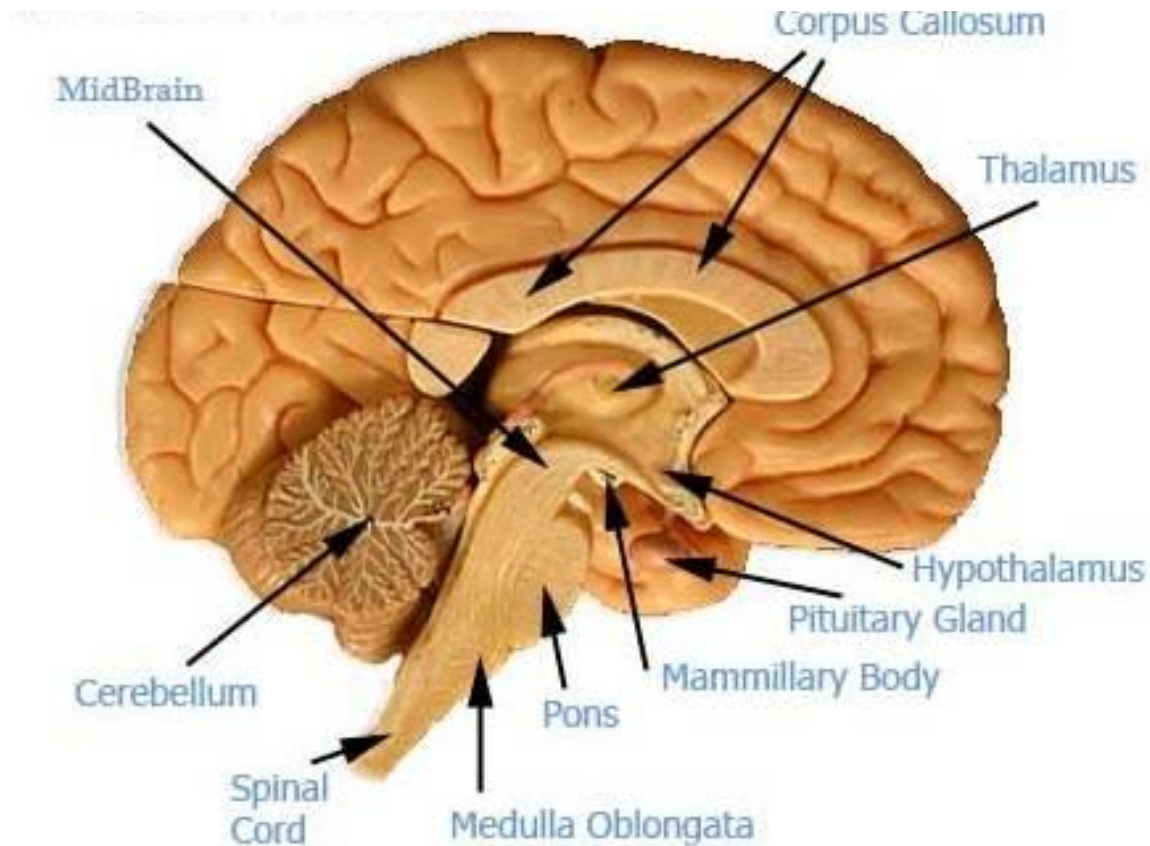


- Definition: Organ of thought and feeling; the controlling center of the nervous system in vertebrates, connected to the spinal cord and enclosed in the cranium (Webster)
- A process that regulates the flow of energy and information (Daniel Siegel, M.D.)

Brain Functioning 101



Brain Functioning 101



Flip the Lid (Hand Model of the Brain)

Make a **Fist** with your thumb tucked inside your fingers. This is a model of your brain.

Thumb = Midbrain (Stem & Limbic) = Emotional Brain. This is where emotions and memories are processed. This is where the fight, flight & freeze is triggered.

Fingers = Cerebral Cortex = Rational Brain. Houses our ability to think and reason.

Fingernails = Prefrontal Cortex = Problem-Solving

When something triggers us, we are prone to “**Flip our Lid**” which means the Prefrontal Cortex (Fingernails) have a very poor connection with the Midbrain (Thumb), and we’re not able to access the logical, problem-solving part of our brain. Our emotions are overriding our ability to think clearly.

-Dr. Dan Siegal



Hemispheres of the Brain

Left

- Loves and desires order
 - Logical
 - Linear
 - Literal
 - Linguistic

Right

- Cares about the big picture, meaning and emotions
 - Emotional
 - Non verbal
 - Experiential

Upper and Lower Brain



- Upper brain
 - Has the ability to process logic and cause and effect
Uses right and left side to develop personal insight
The brain center for empathy and morality
- Lower brain
 - Instinctual
 - Fight, flight or freeze reactions
 - Operates more primal responses
 - Driven by strong emotions like fear and anger

Amygdala and Hippocampus

- Amygdala
 - Gateway to our fears
 - Controls flight, fight or freeze responses
 - Buried near the tip of the temporal lobe
 - Name comes from its shape, Latin for almond
- Hippocampus
 - Responsible for encoding and organizing memories
 - Classifies and categorizes them so they may be used at a later time

Attachment and the Brain



Attachment patterns the personality and effects the lifelong ability to have relationships. Foundation for all relationships and how we relate to others!

Attachment and the Brain



Securely Attached

- Attuned brain
- Connected in a healthy way to others
- Operates in a state of harmony and balance
- Can regulate motor activities
 - Physical, self, emotional regulation

Attachment and the Brain

Insecurely Attached

- Avoidant
- Disconnected from others
- Ambivalent/ anxious
- Sense of confusion regarding relationships
- Disorganized
- Fearful of attachment figure

Mirror Neurons

Reflective Parenting

A process of reflecting a child's internal world; interpreting their actions with an understanding of the underlying thoughts, intentions, feeling in children's behavior:

- Helps children provide a voice to a subjective experience, understand where things come from
- *Helps to repair attachment issues*
- *Stay open, not judgemental!*

Trauma and the Brain

- In early childhood, trauma can be associated with reduced size of the cortex which may impair complex functions like memory, thinking and language
- Trauma may effect “cross-talk” between the brain’s hemispheres, including parts of the brain governing emotions

Trauma and the Brain

In school-age children, trauma undermines the development of brain regions that would normally help children:

- Control fears, anxieties and aggression
- Keep up attention for learning and problem solving
- Control impulses
- Manage stress

Trauma and the Brain

In adolescents, trauma can interfere with development of the prefrontal cortex, the region responsible for:

- Consideration of the consequences of behavior
- Realistic appraisal of danger and safety
- Ability to govern behavior
- Meeting longer-term goals

Calming the Mind and Brain



- Meditation is one way to calm the mind and brain
- Helps to quiet the animal brain and step out of a fear response
- With practice, one can call up memories of a meditative state and instantly calm oneself
- What can be calming to a child?

- “BELLY BREATHE”

- Sesame Street

“When we are no longer able to change a situation - we are challenged to change ourselves.”

— Viktor E. Frankl

Strategies for Integrating Left Brain and Right Brain

- Right to left brain: Achieving a balance between the two
- Join the emotional storm in a calm and nurturing manner
- (Right side) Use touch language and eye contact to connect
- Tell your story... child /young adult tell their story
- Put words to emotions help your child describe and label internal experiences
- (Left side) Logically explain what is going on and redefine the situation

Teach Your Child About Their Brain



Activities to Increase Integration



Learn Something New

- Learning a new language, painting, or adopting a new craft
 - Requires the coordination of multiple regions of the brain
- Help your brain to make new connections

New neural pathways form new memories –” What fires together wires together” – Dan Siegal

Activities to Increase Integration



- Talking/Listening Exercise
 - Having a conversation is one way to exercise your brain
 - Confuse your brain
 - Eat and brush your teeth with a different hand
 - Switch things up to present your brain with a completely new set of stimuli

Cognitive Mindfulness

- Non- reactivity
- Observation
- Acting with insight
- Described feeling
- Nonjudgmental

Memory Integration

- The Hippocampus, located in the medial temporal lobe, helps us process memories and place and organize Information (during sleep sometimes)
- Memories are first stored like puzzles pieces of sensations. Feelings and impulses are then organized and stored by the brain to be used as time goes from implicit to explicit memory

Questions or Discussion?



References

- <http://children.meditation.org.au/whois.asp>
- <http://reflectiveparenting.org/>
- Zen Brain Reflections: Reviewing Recent Developments in Meditation and States of Consciousness by James H Austin M.D. The MIT press 2006
- The Mindful Brain: Reflection's and Attunement in the Cultivation of Wellbeing. by Daniel Siegel (Norton Press)
- The Whole-Brain Child: 12 Revolutionary Strategies to Nurture Your Child's Developing Mind, Survive Everyday Parenting Struggles, and Help Your Family Thrive: by Daniel J. Siegel, M.D. and Tina Payne Bryson, Ph.D. (Delacorte Press 2011)
- Mindsight: The New Science of Personal Transformation by Daniel Siegel M.D. (Random House 2010)

Thank You!

