

Human Attachment: Relationships, Mind, and Brain

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Resources

- ◆ *Parenting from the Inside Out* (Book and Workshop DVD with Mary Hartzel)
- ◆ DrDanSiegel.com

- ◆ *The Developing Mind*
- ◆ *Mindsight*
- ◆ *The Mindful Brain*

Temperament and Attachment

Temperament

- ◆ An inborn feature of the child (not only genetic)
- ◆ Inborn predisposition of the nervous system
- ◆ May have lifelong impact that is influenced by experience – especially with caregivers

Attachment

- ◆ The relationship of the child to the caregiver over time
- ◆ Research has shown attachment shapes the developing mind
- ◆ Attachment impacts self-regulatory circuits

Chess and Thomas' Nine Aspects of Parental Report of Temperament: Matching

- ◆ **Activity Level** (the motor activity)
- ◆ **Rhythmicity** (regularity of functions)
- ◆ **Approach** (positive response to new stimuli vs. withdrawal)
- ◆ **Adaptability** (ease with which responses are modified)
- ◆ **Threshold of Responsiveness** (sensitivity level)
- ◆ **Intensity of Reaction** (the general energy level of a response)
- ◆ **Quality of Mood** (the intensity and nature of emotional responsiveness)
- ◆ **Distractability** (responsiveness to extraneous stimuli altering ongoing behavior)
- ◆ **Attention span/persistence** (vigilance in attending to task)

Attachment I: Relationships in Research (ISS: Infant Strange Situation) Studies

Relationship Type

- ◆ B - Secure
- ◆ A - Avoidant.....
- ◆ C - Ambivalent
- ◆ D - Disorganized.....

Parenting Behavior

- ◆ Responsive, Consistent
- ◆ Rejecting, Distant
- ◆ Inconsistent/Intrusive
- ◆ Frightening,
Confusing, Fearful

Attachment II: Adults Making Sense of Their Lives (Adult Attachment Interview)

Adult Narrative-----	→ Child Attachment
◆ F – Free/Secure-----	-----Secure
◆ Dis – Dismissing-----	-----Avoidant
◆ E-Entangled, Preoccupied	-----Anxious
◆ U–Unresolved----- Trauma or Grief	-----Disorganized

Attachment III: What do the different types of adult stories sound like?

- ◆ ***Free*** - flexible, coherent, ***self-reflective***, balanced perspective
- ◆ ***Dismissing*** - incoherent, inflexible, minimize emotional significance, insist on ***lack of recall***
- ◆ ***Entangled*** - preoccupation with past ***intrudes*** on present, intense idealization
- ◆ ***Unresolved*** - ***disorganization***, disorientation around issues of grief or trauma

The Brain is a Social Organ

- ◆ The function of the brain is to engage with other people, other brains, in the shaping of its development over time and in shaping its activity in the present
- ◆ Mirror Neurons and the capacity to develop empathy and insight = MINDSIGHT

More on the Social Brain

- ◆ Our brains are extremely social. Areas involved in self-regulation overlap with those involved in interpersonal communication and plasticity
- ◆ How one brain interacts with another has important effects on how the brain functions: Social interactions are one of the most powerful forms of experience that help shape how the brain gives rise to the mind

The Brain in the Palm of Your Hand

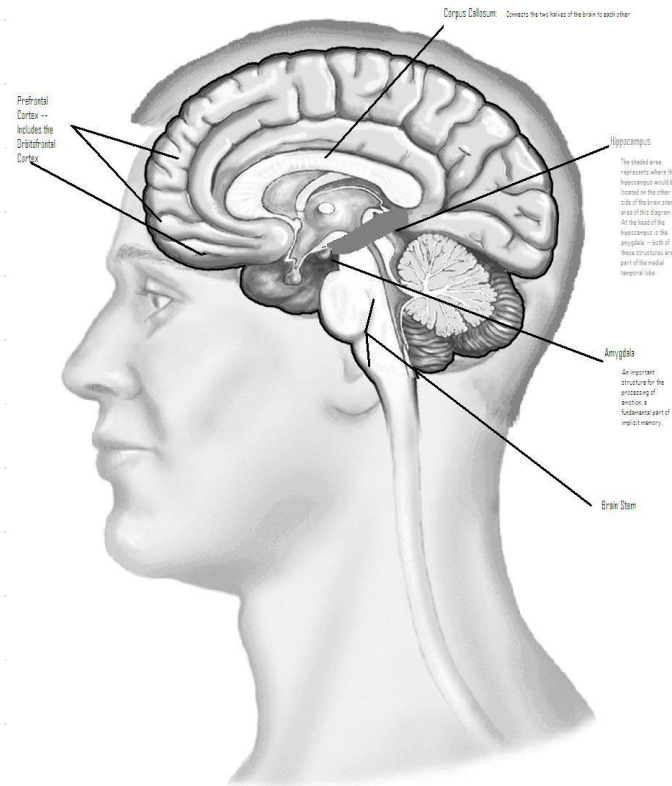
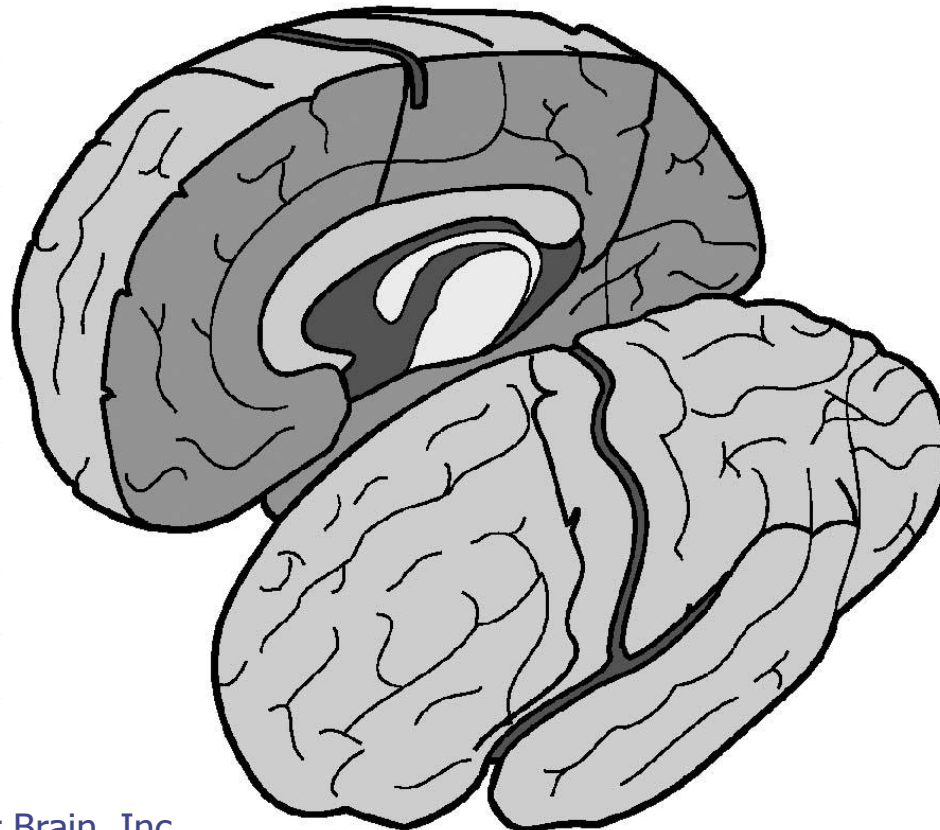


Figure 1: Diagram of the Human Brain looking from the middle toward the right side. Some key structures involved in memory are noted, including the Amygdala (implicit emotional memory processing), the Hippocampus (explicit memory) and the Orbitofrontal Cortex (explicit autobiographical memory processing). Coherent Life Stories may involve integration across the hemispheres via the Corpus Callosum.

The Brain: A Systems View of Brain Anatomy, Function, and The Mind



Neurobiology in the Palm of Your Hand

- ◆ A Readily Available, Three-Dimensional Model of the Brain
- ◆ Structure and Function
- ◆ Neural Integration
- ◆ Self-Regulation

Brain Development: Inspire to Rewire

- ◆ Repeated Activation Creates, Strengthens and Maintains Connections:
 - “Neurons which FIRE together WIRE together”
- ◆ Development across the lifespan: plasticity, neural pathways and self-organization.
- ◆ A simple idea: “Human connections shape neural connections”

Secure Attachment Promotes:

- ◆ Flexible self-regulation
- ◆ Prosocial behavior
- ◆ Empathy
- ◆ Positive sense of emotional well-being and self-esteem
- ◆ Coherent life-story

The Central Role of the Integrating Middle Prefrontal Cortex:

- Bodily Regulation
- Attuned Communication
- Emotion Regulation
- Response Flexibility
- Fear Modulation
- Insight
- Empathy
- Morality
- Intuition

The Low Road

- ◆ Temporarily Disengaging the Middle Aspect of the Prefrontal Cortex dissolves the nine functions of the middle PFC including Body Regulation, Attunement, Emotional Balance, Response Flexibility, Fear Modulation, Insight, Empathy, Morality, and Intuition

Secure Attachment and Compassionate Connections

- ◆ Mindsight enables us to meet life's challenges with more flexibility and joy in our internal and interpersonal worlds
- ◆ We are ultimately connected to each other as part of a larger whole