

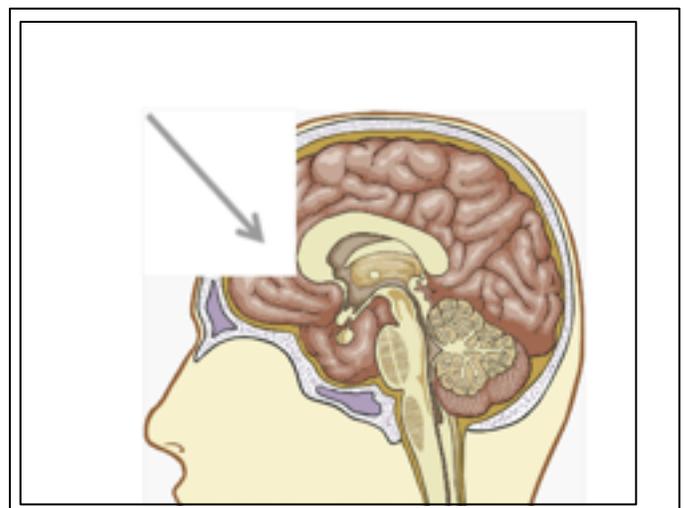
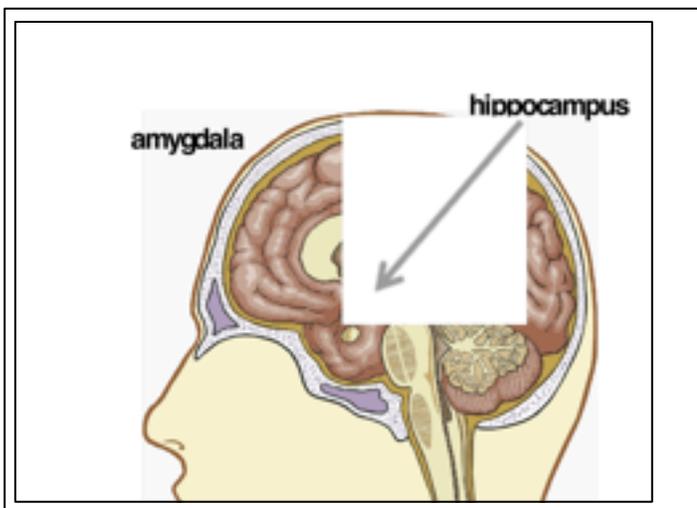
# Jack's Nimble Brain Challenge

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## The Brain in Your Hand

If we fold our left thumb under our fingers, tucking our nails into our palm to make a fist, we can use our left hand to remind us of very general brain anatomy. Your spinal cord is your left forearm, and your left wrist represents your brain stem. Your fingers at the top of your fist, close to the middle joint, represent the sensory cortex where information is gathered from all over the body, including the sides (auditory) and back (visual) of the brain. Next to the sensory cortex, also at the top of your fist, is the motor cortex, which coordinates intentional muscle movement. The back of your hand indicates where out-of-awareness connections are made in your brain, ones that for instance allow us to bring together memories and unconscious signals to produce an "aha" moment of insight. The brain area represented by your fingers between the first and middle joints, behind what would be your forehead and eyes, is a front connection area, including the pre-frontal cortex. Open the fingers of your left hand while keeping your thumb tucked against your palm. Your thumb and the places it touches represent the limbic area, including the amygdala, hippocampus, and basal ganglia.



### Functions of the Limbic System

- Stands on guard, reacts to strong stimuli
- Mutually activates autonomic nervous system
- Gatekeeper to long-term memory
- Can interfere with short-term working memory
- More sensitive to negative emotions

### Functions of the mPFC

- Physical: brain/body regulation, emotional balance, fear modulation
- Mental: response flexibility (shifting from detail to big picture, short- to long-term, intuition, self-insight)
- Social: attuned communication, empathy, morality

### Limbic/mPFC Interaction

- Simplified, like a see-saw
- Limbic activation tends to disrupt PFC functions
- Can result in a downward spiral

## SCARF® Model of Threats

- STATUS
- CERTAINTY
- AUTONOMY
- RELATEDNESS
- FAIRNESS

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- mPFC activation (naming, reframing, taming) tends to calm limbic reactions
- Metacognition can interrupt downward spiral

### Further Reading

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## Adlerian LifeStyle Priorities

- SUPERIORITY
- CONTROL
- AUTONOMY
- PLEASING
- COMFORT