

BE WELL

The Hand Brain Model

I recently learned a portable way to view the most important parts of the brain, in relation to mindfulness and well-being: your own hand! Dr. Dan Siegel has created a "Hand Model of the Brain" (see image below) that allows each of us to begin to understand the parts of our own brain.¹ This is important because when you know about the parts of the brain, you can learn to direct your attention in a way that can get certain areas to not only get activated, but also to start to work together. Thus, you can change both the function and the structure of your brain by knowing about how the brain is structured.

Overview of the areas of the brain and how they link together:

- Start with a closed fist. The entire hand/brain is connected to the body through the spinal cord, represented by the wrist.
- Brain Stem (represented by the center of the palm) – the deepest and oldest part of the head brain, takes in information from the body and regulates how you breathe, how you digest food and how your heart functions.
 - Important set of regions in the brain stem create the fight/flight/freeze/faint reaction when you feel threatened. Creates a reactive sympathetic state.
- Works closely with the limbic region – a 200-million-year-old region of the brain that works with the 300-million-year-old reptilian brain. Combined these two oldest parts of your brain create emotion in working with the body.
- Lift up the fingers – the thumb represents the Limbic System, which functions closely with the Cortex region of the brain (discussed below when you

close your fingers down). The important functions of the Limbic System include:

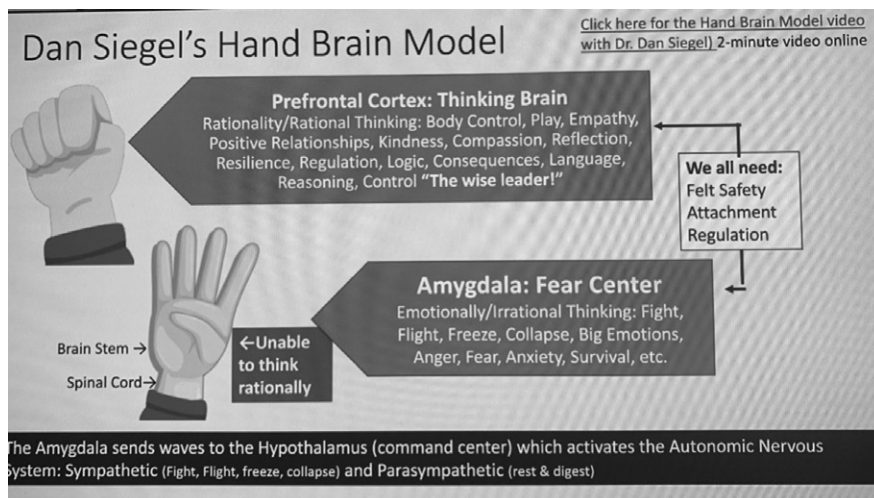
- Connections up to the cortex above it.
- Connections down to the area below it, the brain stem of the palm.
- The body, brain stem and limbic area create emotions. "Unable to think rationally."
- The limbic system motivates us and drives our behaviors.
- It appraises the meaning of things, whether they are significant or not, good or bad.
- Creates the attachment experience we have as mammals with caregivers to protect us and we can be soothed by them.
- Certain ways memories are divided up into the Hippocampus and Amygdala region.
 - The Amygdala is a part of the Limbic system, AKA the Fear Center:
 - Emotionally/Irrational thinking
 - Collapse
 - Big Emotions: Anger, Fear, Anxiety, Survival
 - Nervous System is triggered:
 - Amygdala sends waves to the Hypothalamus (Command Center), which activates the autonomic Nervous System, both Sympathetic (Fight/Flight/Freeze/Faint) and Parasympathetic (Rest/Digest/Heal)
- Top of the brain – Cortex
 - The Cortex region (all four closed fingers) makes maps of the outside world through our eyes and ears
 - The Frontal Cortex (area between the two knuckles) is known as the association cortex where you make associations in thought.

- Prefrontal Cortex (last knuckles to your fingernails) – involved in integration, integrates the Cortex with the Limbic system, brain stem, body and even the external social world. AKA "The Wise Leader", the important functions of the Prefrontal Cortex include:

- Rationality/Rational Thinking
- Body Control
- Play
- Empathy
- Positive Relationships
- Kindness
- Compassion
- Reflection
- Resilience
- Regulation
- Logic
- Consequences
- Language
- Reasoning
- Control

When you do an awareness/mindful practice, you are integrating the entire system. This is essential for feeling safe, attachment and emotional regulation. When you are not integrating the brain systems, it can become chaotic, like flipping your lid (lift up the fingers on the hand brain model). Thus, instead of living with harmony within yourself and harmony in connection with others, you are literally becoming chaotic with an outburst or rigid and withdrawn. When the Prefrontal region (lift up fingers) is no longer linking with the rest of the system, it has become dis-integrative. There are some interesting Connectome brain studies that show that the best predictor of your overall well-being is how interconnected your brain is.²

Thus, anything you can do to bring a connection of these areas promotes integration and will increase your overall well-being. Integration of your entire brain is the source of well-being with others and even with nature. Integration stimulates both creativity and collaboration, two of the most effective ways to increase your overall productivity in your legal profession as well. It is my hope that other lawyers may use the Hand Model of the Brain to know the different parts of the brain, to understand how they may be differentiated when you are emotional, and then be open to ways of integrating them together in a mindful practice. It is my hope that you may utilize this brain integration to increase your overall well-being as lawyers.



¹ See <https://drdansiegel.com/hand-model-of-the-brain/>

² See <http://www.humanconnectomeproject.org/>