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Research Explains Why the Connection Practice Works

1. Naming feelings reduces the reaction of the amygdala.

In a UCLA research study called *Putting Feelings into Words*, 30 participants were shown photographs of people who were emotionally upset, and then were asked to label the emotion (for example, “angry”) while the researchers measured the response of their amygdalae. The researchers found that naming the feelings in this way reduced the amygdala’s response.

In a control group, the participants looked at faces and selected a name underneath them that corresponded to the person’s gender, like “Harry” or “Sally” while the researchers measured the response of their amygdalae. The researchers discovered that the amygdala – the part of the brain that sounds an alarm in time of danger – was *less* active when an emotion label was attached to the upset face, compared to when a name was attached. This leads us to believe that when the amygdala has been triggered, naming feelings reduces its reaction. Naming feelings is the first step in the Connection Practice.

Source: *Putting Feelings Into Words: Affect Labeling Disrupts Amygdala Activity in Response to Affective Stimuli*

Matthew D. Lieberman, Naomi I. Eisenberger, Molly J. Crockett, Sabrina M. Tom, Jennifer H. Pfeifer and Baldwin M. Way

Association for Psychological Science, Volume 18, Number 5, p. 421-428

2. Naming our own needs, and guessing another person’s needs, gives us perspective and leads to the development of cognitive empathy.

The *Science of Empathy* explains that cognitive empathy includes perspective taking, which has been shown to increase empathic concern. Empathy plays a critical interpersonal and societal role, enabling sharing of experiences, needs and desires between individuals and providing an emotional bridge that promotes pro-social behavior. This capacity requires an interplay of neural networks and enables us to perceive the emotions of others, resonate with them emotionally and cognitively, to take in the perspective of others, and to distinguish between our own and others’ emotions.

Research in the neurobiology of empathy has changed the perception of empathy from a soft skill to a neurobiologically based competency. All perceptions in our environment are routed through the thalamus. From there, the amygdala, the threat sensor in the brain, reacts to

threats, unfamiliar stimuli, conditioned fears, and perceived threats in as few as 50 milliseconds long before conscious thoughts come into play. When these threat signals reach the midbrain, (specifically in the area of the pons) automatic reactions such as the fight, flight or freeze response take place unless there is cognitive input from executive functions in the prefrontal cortex.

In the Connection Practice, when we name our own needs or guess another's needs, we are overcoming the irrational reactions of the amygdala through cognitive empathy. Building this skill is at the heart of the Connection Practice.

Source: *The Science of Empathy*, Helen Riess, MD, *Journal of Patient Experience*, June 2017 4 (2): 74-77

3. Heart-brain coherence helps extinguish the irrational reactions of the amygdala and leads to insight.

Research from the HeartMath Institute. *Science of the Heart, Exploring the Role of the Heart in Human Performance*, explains the impact of coherence on the amygdala and how it establishes a new baseline of response.

In a separate study from Northwestern University, *A Brain Mechanism for Facilitation of Insight by Positive Affect* showed that people in a better mood are more likely to solve problems by insight. Research demonstrated that self-reported positive affect of participants uniquely increased insight before and during the solving of a problem, as indicated by differing brain activity patterns. People experiencing anxiety showed the opposite effect, and solved fewer problems by insight.

Heart-brain coherence changes an individual's mood to one of positive affect, which results in the insights that are discovered in the last step of the Connection Practice.

Source: *Science of the Heart: Exploring the Role of the Heart in Human Performance*, Volume 2, Chapter 5: Establishing a new baseline, 29-35, Boulder Creek, CA: HeartMath Institute

Source: *A Brain Mechanism for Facilitation of Insight by Positive Affect*, Karuna Subramaniam, John Kounios, Todd B Parrish and Mark Jung-Beeman *Journal of Cognitive Neuroscience*, Volume 21, number 3, p. 414-432