

HOW GRATITUDE AFFECTS THE BRAIN

GRATITUDE may be a gesture or a group of kind words that we give or receive from others. But these simple exchanges of thankfulness goes a long way in affecting our overall biological functioning – especially the brain and the nervous system. The effect of gratitude on the brain is long lasting (Moll, Zahn, et al. 2007). Besides enhancing self-love and empathy, gratitude significantly impacts on body functions and psychological conditions like stress, anxiety, and depression.

1. GRATITUDE RELEASES TOXIC EMOTIONS

The limbic system is the part of the brain that is responsible for all emotional experiences. It consists of the thalamus, hypothalamus, amygdala, hippocampus, and cingulate gyrus. Studies have shown that hippocampus and amygdala, the two main sites regulating emotions, memory, and bodily functioning, get activated with feelings of gratitude.

Consistent evidence has established that what we call 'emotions' or 'feelings' are neural activations in the neocortical regions of the brain (Moll et al. 2005). A study conducted on individuals seeking mental health guidance revealed that participants of the group who wrote **LETTERS OF GRATITUDE** besides their regular counseling sessions, felt better and recovered sooner.

The other group in the study that were asked to journal their negative experiences instead of writing gratitude letters reported feelings of anxiety and depression.

2. GRATITUDE REDUCES PAIN

Counting Blessings vs Burdens (2003), a study conducted on evaluating the effect of gratitude on physical well-being, indicated that 16% of the patients who kept a **GRATITUDE JOURNAL** reported reduced pain symptoms and were more willing to work out and cooperate with the treatment procedure. A deeper dig into the cause unleashed that by regulating the level of dopamine, gratitude fills us with more vitality, thereby reducing subjective feelings of pain.



*"It is not happiness that brings us gratitude.
It is gratitude that brings us happiness."*

MINDFUL ITEMS

NOTEBOOK

(TOOL TO SUPPORT: **MINDFUL NOTING PRACTICE** AND **MINDFUL INTENTIONS**)

CONCEPT: The first lesson in mindfulness is non-judgmental awareness. It is seeing without judging what might be showing up for us. Noting helps us see our habit loops and triggers. When done regularly can help us build our capacity to change certain habit loops that are no longer useful for our well being.

SCIENCE: When we activate the part of the brain (pre-frontal cortex) we are more likely to be reactive rather than responsive. When we notice our triggers we are creating space for what we are noticing and allowing it to settle and pause. When we do this the other parts of our brain are able to function with greater capacity. The brain regions that open up give greater space for creativity and compassion for ourselves and others. We shut down our "fight or flight" mind state.

PRACTICE: Use the notebook this quarter to do the workout of noticing what shows up for you. The notebook can be an intention to focus on triggers that show up. The notebook can be an intention to note gratitudes. The notebook can be an intention to notice self talk. The goal is not to make it an over whelming exercise but an exercise in mindful noting and building the muscle of doing the practice.

LIP BALM

(TOOL TO SUPPORT: **SELF CARE** AND **SENSORY NOTICING**)

CONCEPT: The lips are one of the most sensitive parts of our body. Building our capacity to pause, pay attention to, and practice self care daily for this sensitive area can build our awareness to practice total self care daily. The need for designated "self care" days are lessened because the practice is part of our daily lives.

SCIENCE: The lips and fingertips are areas with highest concentration of receptor cells. Receptor cells give your brain information. The area of the brain that receives messages from touch receptors in the lips are much larger than the areas for receiving messages from less sensitive places like the back. More brain power is spent interpreting the sensations of touch from the lips. Sensing into and intentionally paying attention to the lips builds our interoceptive awareness.

PRACTICE: Intentionally utilize the lip balm at times that is appropriate for you. This could be regularly throughout the day, it perhaps could be set by your bed at night, or in bathroom as you wake in the morning. Use this one lip balm with intention of making part of your mindful daily practice. Sensing in and slowly taking in the care you are showing for this most sensitive part of your body. Use it as a gentle reminder to practice daily self care for yourself to build those moments into your daily routine.

YOGA CARDS

(TOOL TO SUPPORT: **MINDFUL MOVEMENT** AND **INTEROCEPTIVE AWARENESS**)

CONCEPT: Connecting with the body is a fundamental practice of mindfulness. Doing a mindful movement practice allows you to build the capacity to sense in. Sensing in is the practice of interoceptive awareness.

Balanced effort is also an important foundation of mindfulness. Balanced effort is the practice of non striving. We are committed to pushing to achieve yet mindful and compassionate with ourselves to trust the right effort necessary.

The intention of the yoga cards is not striving for perfection but to enhance our capacity to sense into our body through movement. It is also the intention that we can push ourselves in movement but with trust in our own capacity to know when we should push a bit more and when to settle with where we are at in this moment so as not to do harm.

SCIENCE: Mindfulness movement studies show that those who practice mindful moment such as yoga regularly have less physical ailments and greater patience and compassion for ourselves. This patience and compassion build over time have show to lower the amount of self rumination and negative self talk.

Building our interoceptive awareness through mindful movement and body scan meditation when practiced regularly strengthens the brain regions that impact decision making. Paying attention to the signs our body indicates gives us greater capacity to take in and move forward with greater clarity for the entirety of a situation.

PRACTICE: There are various different yoga poses that can be used throughout the quarter for practice. They are created as door hangers so that you can use them as a gentle visual reminder to do the practice. Moving into the pose, setting