

Gratitude Through the Lens of Neuroscience

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Perhaps you've all heard it: "Look on the bright side", "count your blessings", or "practise gratitude". It's easy to dismiss these phrases as clichés, especially when life feels overwhelming. But what if gratitude wasn't just a feel-good platitude? What if it was a powerful tool, backed by neuroscience, that could enhance your wellbeing?

Recent research reveals that gratitude is more than just a cultural or religious concept; it's a tangible process within your brain. And the best part? It's a skill you can cultivate, rewiring your neural pathways to experience the world in a new light. Let's dive into the science of thankfulness.

Your brain is constantly working to define "you" – differentiating between what's you and what's not. It's a complex process involving inputs from inside and

outside your body. Think of the “rubber hand illusion”, where synchronous stroking of a hidden real hand and a visible fake hand tricks the brain into accepting the fake hand as its own (Damasio & Carvalho, 2013; Khalsa et al., 2009). This highlights the brain’s ability to integrate information and create a sense of self.



(BBC, 2010)

Your brain isn’t just a passive receiver of information; it’s consistently anticipating and trying to prevent disruptions to your internal balance (homeostasis). Rewards, whether it’s primary (e.g., a delicious meal) or secondary (social or monetary reward), signal the resolution or prevention of these disruptions (Lin et al., 2012). However, becoming overly reliant on external rewards can lead to problems. Chasing that next “high” can create a cycle of needing ever-increasing rewards, ultimately amplifying feelings of unhappiness when those rewards aren’t met. This constant striving can lead to what scientists call “allostatic overload” (Koob & Le Moal, 2001).

This is where gratitude steps in. Instead of constantly seeking external validation, gratitude encourages you to appreciate what you already have (Adler & Fagley, 2005). Practices like gratitude journaling, mindful reflection, or structured gratitude exercises can recalibrate neural activities (Kini et al., 2016; Kyeong et al., 2017). By intentionally focusing on positive aspects, even in challenging situations, you shift your perspective and reduce the need for external validation.

Gratitude allows you to reframe negative experiences by identifying growth opportunities (Lambert et al., 2012). This cognitive reappraisal recalibrates your expectations, lessening the grip of external rewards and fostering intrinsic positive

emotions. Over time, regular gratitude practice may reduce allostatic load, boosting your resilience and equipping you to handle stress more effectively.

Gratitude isn't about forcing a positive outlook; it's about actively engaging with your thoughts and emotions. By shifting from reactive, reward-driven behaviour to proactive cognitive engagement, you transform gratitude from a fleeting emotion into a powerful skill. This skill, developed through consistent practice, can profoundly impact your well-being, creating a more balanced and fulfilling life.

So, the next time you find yourself caught in the whirlwind of daily life, take a moment to pause and appreciate the small things. You might be surprised at the powerful impact a little gratitude can have on your brain and your overall well-being. It's not just about feeling good; it's about rewiring your brain for resilience and a more positive outlook on life. You have the power to change your brain, one "thank you" at a time.

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Biography

Boseok Kim is a PhD Candidate at the Faculty of Education, University of Cambridge, supervised by Dr. Ros McLellan. His research explores children's social-emotional development and well-being across adolescence, with a particular focus on psychological factors grounded in positive psychology. His doctoral work examines culturally sensitive understandings of gratitude in Korea through an interpretative phenomenological lens, with the aim of translating these insights into inclusive educational practices.