

In *Becoming a Manager*, Harvard Business School Professor **Linda Hill** writes that a manager's role—and by extension, any leadership position—is characterized by overload, ambiguity and conflict. Successfully navigating such challenges requires distinct sets of cognitive, emotional and behavioural skills enabled by regulatory mechanisms that are housed in specific regions of the brain. Understanding the processes by which these skills develop, are utilized, and are sometimes inhibited, can enable leaders to gain mastery over their roles and responsibilities.

This topic is the subject of a relatively new discipline called Neuroleadership, which is partly informed by recent advances in functional MRI (fMRI)—a brain imaging technique that enables researchers to observe the normal brain responding to various types of situations, such as being criticized or performing problem-solving tasks. Following are four mindsets that characterize 'managing with the brain in mind'. When adopted, these principles can help to foster a psychologically healthy—and more productive—workplace.

ONE THING AT A TIME. While multitasking is often seen as a solution to busy work lives, research says otherwise. In fact, taking on multiple tasks at once leads to *more* errors, *less* efficiency, and reduced brain activity in the frontal lobes (home to executive functions) and hippocampus (where memory is housed). Curiously, people who promote themselves as 'great multitaskers' are actually *worse* at multitasking and tend to be more easily distracted. Furthermore, multitasking becomes harder later in life, suggesting that middle or late-career leaders should be particularly wary of this approach. Instead, we recommend *unitasking*: planning out a

project in advance, reducing external distractions to increase and sustain task focus, working through the task methodically, one step at a time, and completing it before starting something else.

NO MORE QUICK DECISIONS. We tend to be creatures of habit, and often develop routine responses that become reflex-like in certain situations. Research has shown that if a response can be withheld—even briefly—a more thoughtful one will often emerge; but this requires the critical executive functions of cognitive and emotional inhibition. Leadership approaches such as scenario planning or even a brief period for self-reflection prior to finalizing a major decision can be very effective in preventing impulsive, off-target reactions and responses.

KINDNESS AS A MANAGEMENT VIRTUE. Correcting and motivating employees is one of the key functions of management, but avoiding humiliating workers is critical to promoting a more productive work environment. Neuroscience informs us that feedback must be perceived as 'fair', and that managers should look for ways to increase an employee's sense of 'in-group' membership. One study by Carnegie Mellon's **Golnaz Tabibnia** and her colleagues considered whether perceived-as-fair financial offers were linked to brain-related changes. Indeed, a sense of fairness was associated with activation of the brain's reward system—the same regions that activate during a good meal or a financial windfall.

Groundbreaking work by **Naomi Eisenberger** and **Matthew Lieberman** at UCLA has also shown that when we experience social pain, such as embarrassment or humiliation, brain regions almost identical to those engaged when we feel *physical* pain become active. These findings suggest that during the feedback

process, efforts to increase a sense of fairness (for example, by providing a reasonable balance between praise and constructive, forward-thinking feedback) may lead to better follow-through and a more positive experience for supervisor and direct-report alike. Providing a team-oriented perspective (“You’re a great team player, and here’s a thought on how you can provide even *more* value”) can empower rather than demean the employee. A ‘feedforward’ approach—focusing on next steps rather than past problems—is a way to positively frame feedback and feels less threatening to the colleague receiving it.

DON'T IGNORE EMOTIONS AND INSTINCTS. Another critical skill set for brain-based leaders relates to improving self-awareness and managing emotion. Developing insight into internal emotions—in ourselves and in those we coach—can pay dividends towards effective collaboration, decision-making and resilience. This type of insight is often referred to as Emotional Intelligence—an ability to appreciate and understand our own and others’ emotions and perspectives.

A study by **Roderick Gilkey** and colleagues at Emory University asked managers to evaluate workplace dilemmas while undergoing brain imaging. Findings revealed that managers with the best solutions relied less on the prefrontal cortex (a region traditionally considered to be the home of strategic problem solving) than on social-emotional processing regions lying deeper in the brain. This suggests that the most effective managers value their ‘gut’ responses and don’t rely exclusively on decision-making skills that are more emotionally detached.

Rebounding from emotionally-charged interactions is another

critical skill that all leaders need to thrive. Some have warned against the ‘amygdala hijack’, which occurs when we feel a real or perceived threat in our environment. The resulting emotional upheaval—generated by the amygdala and other mid-brain structures—causes the prefrontal cortex to become less active, leading to decreased concentration and sub-optimal decision making. Leaders in these mental states can also infect others with their negative emotions, potentially reducing a team’s effectiveness. A useful tool for addressing these emotional processes is the ‘Emotional Audit’ described by **Relly Nadler** in *Leading with Emotional Intelligence*.

In closing

Looking ahead, leadership skill development will continue to be informed by brain and behavioural science, particularly as these disciplines continue to evolve. Integrating key early insights from Neuroscience can help leaders master the challenges of self- and organizational management.

John Randolph is an Adjunct Professor of Psychiatry at Dartmouth’s Geisel School of Medicine, a clinical neuropsychologist, and an executive coach. He is the editor of *Positive Neuropsychology: Evidence-Based Perspectives on Promoting Cognitive Health* (Springer, 2013). **Steven Rothke** is an Assistant Professor of Clinical Psychiatry and Behavioural Sciences at Northwestern University’s Feinberg School of Medicine and chair of the Organizational and Business Consulting Psychology section of the Illinois Psychological Association.