

The brain's response to coaching

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Psychological research

[Carol Dweck's](#) research on fixed and growth mind-set found two different sets of beliefs about performance.

Fixed mind-set: characterised by believing performance is based on abilities fixed by our intelligence or talents. These beliefs suggest there is little individuals can do to change; employees do not seek feedback and may avoid it. Managers who believe in this view of the world find it hard to see the point of coaching because they believe performance is based on innate traits and trying to improve them is pretty much a waste of time.

Growth mind-set: characterised by believing performance is based on hard work, experience and effort. Dweck's studies show people with a growth mind-set work harder, learn from experience, respond to change and are willing to take more risk to achieve results. Managers who share these beliefs are more inclined to give positive feedback, and coach their employee.

Research by Peter Heslin, who frequently collaborates with Carol Dweck, measured managers' mind-sets. Their employees were then asked how much the manager helped analyse performance, gave useful feedback, acted as a sounding board, inspired confidence and supported new challenges.

Fixed-mind-set managers did little or none of this. Those with a growth mindset noticed improvement in their employees.

In Heslin's study, employees evaluated their growth-mind-set managers as providing better coaching for development. The research also found a link between mind-set and the *way* managers coached. Managers who had or adopted a growth mind-set were more willing to coach and give quality suggestions for improvement.

When managers were trained to adopt a growth mind-set they were able to change. This lasted over time and the managers' ability to coach got better.

Neuroscience research

Mental maps

Brains work by making connections and associations: linking what is happening now and what has happened in the past, both conscious and unconscious memories. The result is a kind of map of connections in the brain. No two maps will be the same. Just to give you an idea of the complexity, your brain is creating over a million new connections every second.

The brain likes order, and tries to connect new information to what is already known, in order to categorise it. It is also a prediction machine. Predicting how something will happen and getting it right creates a sense of reward in the brain. The brain likes to be able to know what is going to happen and what is expected. Telling someone to change is likely to set up a threat response, because the employee's predictions and connections aren't set up for this new information. This difference in perception creates an error message which turns people away from the new information and increases the likelihood of resistance.

Managers who tell rather than coach are not only wasting their own time and energy, they're potentially making it more difficult for employees to accept a new idea.

Forming new habits

When we first encounter something, we're relatively slow to understand it. We need to get the foundations in place first. Learning a new skill (that is to say, creating the map for it) takes a while before it becomes familiar – maybe a few minutes or maybe days, depending on the complexity.

The more embedded the maps are, the more we free up mental resources for acquiring and understanding new information.

This process of creating maps is what we call "forming a habit." It is the process of shifting activity from the high-energy, relatively inefficient prefrontal cortex down to the more efficient habit-forming areas is the basic operating mode for the brain.

All of this happens when we learn something new or receive new information. Before we can use it, it needs to be fitted into our mental map and then over time we can use it on autopilot: a new habit has been formed.

UCLA's Matt Lieberman says we must go beyond the conscious "reflective" systems where goals are created, and manage the triggers for the old behaviours in our unconscious "reflexive" systems.

Goals designed to act in the new way tend to be created in the conscious reflective system but we need to also control the unconscious habit system by managing triggers that generate the old behaviour.

The focus of Elliot Berkman's research is goal-setting and achieving new behaviour, and his studies suggest there's a necessary sequence for creating new habits of behaviour: cue; when to act; routine; the steps to take; reward.

Only if people are able to redirect well-rooted behaviours, by managing the triggers that prompt them and by building in rewards for the new behaviour, is change going to happen without lots of additional effort.

The habit model

