

The Neuroscience of Leadership: The Brain and Change

By: Judith Bell

Have you ever wondered why so many people resist change, whether it's adopting a new computer system at the office or giving their new aerobics instructor the benefit of the doubt?

Major change forces people outside their comfort zone, upsetting their emotional equilibrium and triggering unconscious fear and anxiety. There's a good reason for this. When we're faced with something new or different – even if we're consciously looking forward to the change – the “old” primitive part of our brain that is focused on survival goes into high alert. By trying to protect us from unpredictability and chaos, both emotionally and physically, our brain pressures us to make decisions that are “safe” – even if they're not necessarily logical, well thought out, or innovative.

Let's take a look at the mind of a person who is in a state of fear compared to a person who is relaxed and thriving.

- In a fearful state, the survival brain is hyper-vigilant, focused on the easiest escape route, the strategy to gain an upper hand, or the means to ameliorate the ferocity of a perceived enemy – be it a person or a situation. It's guided by the amygdala, which is responsible for the defensive behaviors of fight or flight, freeze or appease.
- On the other hand, in a relaxed state, the cerebral cortex – the logical, analytical “new” part of the brain – is in charge. Feeling safe, the cerebral cortex is able to take it's time, savor a moment, consider the pros and cons of a variety of options, create art, and think outside the box while remaining sure and calm.

The problem is that when the old brain perceives a threat, it hijacks the cerebral cortex and sends it on vacation. So, even though we may feel as if we are making logical decisions, we're unconsciously saying and doing things designed to stabilize the situation and return us to a feeling of safety. As long as the new brain is on vacation – and the crusty old amygdala in charge – it's much less likely than an individual or organization will be able to navigate change successfully.

Hard Wired for Safety

Time also plays an important role in how we respond to change. When we take in information (via the thalamus), the data is relayed to our old and new brains simultaneously to make meaning of it and to determine a course of action. Though the message is sent at the same moment, the path to the amygdala is much faster than the path to the cerebral cortex – so our survival center is reacting to the new information (and processing it based on the perceived level of threat) before it even reaches the point of logical reason. If there's the

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slightest threat to our physical or emotional safety, the old brain will choose the safest survival strategy.

That might ensure our security and longevity – better that we eat than are eaten – but our brain’s natural negativity bias can cause us to misread others’ intentions, doubt ourselves when there is no “real” reason to do so, and choose predictability (and safety) at the sake of change, whether we’re at work, on vacation, or in the classroom.

While we might want the amygdala in charge as we’re preparing to go skydiving, it’s essential to have the cerebral cortex calling the shots during organizational change in a work environment. With the new brain in the lead, people are more capable of and ready to embrace change; they’re both relaxed and stimulated. It’s a state of mind comparable to someone taking a walk in an unknown but safe environment, curious about the surroundings, eager to find the treasures that lay ahead, and devoid of any background chatter spurred by anxiety.

Creating Neural Networks

In this “learning state,” the brain is literally growing, developing new neural connections as we consider an idea, examine it, evaluate it, reflect on any experiences we may have had that are similar, and begin to practice it. Our brain cells, called neurons, grow more dendrites (which look similar to the roots of a plant) which in turn connect to the head of other neurons, creating a vast neural network of behaviors, attitudes, feelings and thoughts. The new networks don’t replace the old; instead, they’re laid over the top of the old networks like a new city springing from the ruins of the old – and replacing it as the hub of activity.

Like an Olympic athlete practicing a new skill, it takes time and work for new patterns in the brain to become unconscious habits. Attention, intention, and commitment are also necessary to learn new processes, procedures, and systems – not only by individual contributors but by leaders as well. Leaders who understand what is occurring in the brain while learning is taking place can create an environment in which people are free to make mistakes and learn from them. It’s not easy for some leaders to encourage people to “relax” while striving for high performance. But the more leaders are able to create a learning environment, and model it through their own attitudes and behaviors, the more easily and quickly change will occur.

If you’re a leader managing change, ask yourself the following questions:

- What are the elements of an environment that encourage and support successful learning?
- How do we create such an environment?
- How do we, as leaders, use our understanding of the brain to manage our own conscious and unconscious fears as well as support others to function from a thriving state?

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In our next issue – “Part II, The Neuroscience of Leadership: Managing Change” – we’ll answer these questions and examine the following issues as we describe practices, tools, and techniques that support change:

- The role of awareness in change
- Attending to conscious and unconscious fears
- Shifting our state of mind
- Changing our physiology