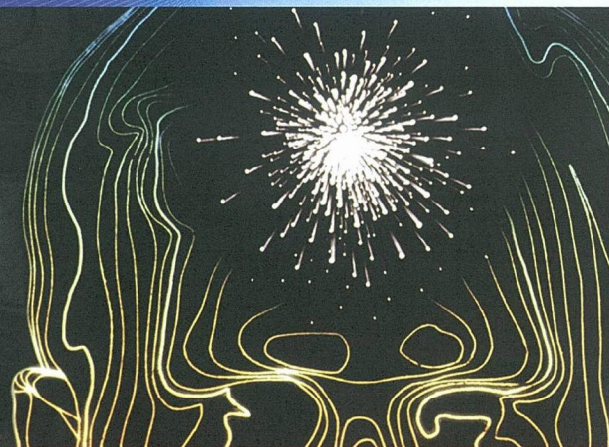


# The Brains Behind It All

## Effective Leadership is not Rocket Science It's Neuroscience



By Petra Loho, Marketing Manager, Zenlinks Ltd, and Dr. Colin Wallace

Will Neuroscience help drive greater efficiency in the office? Petra Loho and Dr. Colin Wallace explain why they believe it will.

There are no shortcuts to effective and efficient leadership. Integrating neuroscience will enlighten the understanding of human behavior and its impact on leadership and add substantially to our knowledge of what the best practices in leading people are.

As research into the mind develops, more and more businesses will see neuroscience being applied to areas of human behavior – be it in consumer marketing, accounting or people management. Implementing the learning from neuroscience to excellent leadership creates an innovative path to organisational success through creating followership.

### Breaking new ground

Neuroscience, the study of the biology of the brain, has made great strides over the past few years and research has revealed that remarkable changes occur in the brain during the second decade of life. Contrary to long-held ideas that the brain was mostly 'grown-up' by the end of childhood, it is now clear that adolescence is a time of profound brain growth and change.

The way we behave involves the activities of the nervous system and is the result of the interplay mainly between four opposing parts of the brain – the frontal and rear cortex, and the right and left hemispheres of the limbic system. This nervous system is composed of billions of cells, the most essential being the nerve cells, or neurons.

We are born with around 200 billion neurons, but learning processes, experiences and external stimuli define the connections between them. In a 'survival of the strongest' process, those neurons that are used during early life grow stronger while those that are not used die, leaving us with some 100 billion effective neurons. While the overall programme for determining which neurons should be connected together is under genetic control, it is external stimuli that drive the network connections being made. Indeed, our brains are continually rewiring themselves to cope with passing experiences.

Advanced computer technology allows us to link the brain with the mind, the human consciousness that thinks, feels, acts, and perceives, and analyse these neuron connections. Imaging technologies such as functional magnetic resonance imaging (fMRI) and positron emission tomography (PET) help scientists to reveal unseen neural connections in the living human brain.

This exotic union of science and the arts provides a better understanding of human nature and behavior change that can be translated into new learning and approaches to leadership and workplace performance.

### Understanding our brain – the opportunity to transform performance

Organisational success often rests on effectively managing individuals, diversity and teams. With each human brain being capable of generating endless neural connections, the range of behaviors is virtually infinite. This makes our behavior pattern as unique as a fingerprint.

Bringing neuro-scientific knowledge into the areas of leadership development and management training supports individuals and organisations to reach full potential through better understanding how the human brain functions at individual, team and systemic levels. Exploring central elements of leadership through the lens of neuroscience includes self-awareness, awareness of others, decision-making and influencing more effective conflict management.

### Mapping the brain

A way of applying neuroscience and leadership development is mapping brain patterns. For example in "The Leadership Neuroscience Project", Pierre Balthazard from the Arizona State University School of Global Management & Leadership worked with neuroscientists to monitor the brains of 44 business leaders while they discussed scenarios such as layoffs. Balthazard seeks to identify brain patterns, and then train managers to replicate the patterns within their own brains.

Another example is PRISM Brain Mapping, an online, neuroscience-based behavior assessment instrument developed by the Center for Applied Neuroscience. As a management tool PRISM deconstructs day-to-day behavior back to its physiological origins in the brain. PRISM has eight indicative dimensions based on the observed – and observable – behavior tendencies associated with four counter-balancing parts of the brain.

On average, only around 50% of behavior is hardwired and PRISM Brain Mapping focuses on the balance of behavior that can be adapted according to a situation such as a task, job, relationship or a particular kind of 'customer'.

### Recognising the potential to affect positive outcome

Mindful leaders want to create lasting change in themselves, others, and their organisation without being confrontational or compromising their values. For even the most successful leaders, challenging work situations and conversations are stressful. Executives, managers, and team leaders need to hold people accountable in a way that balances being firm with being reasonable.

The findings of neuroscience provide tools to create an empowering leadership style and let you be a successful professional with authenticity. The key to success is to be aware of the brain states and accompanying increase in self-awareness and regulation.

An understanding of the neuroscience of leadership creates a powerful source for development purposes. Such an understanding facilitates the mechanism to better select, place and develop the leadership capabilities of executives. ■

### About the authors

Dr. Colin Wallace, holds a PhD in Neuropsychology and has worked as a government emergency planning officer holding a number of senior management appointments with the British Airports Authority. He is a member of the Cognitive Neuroscience Society, The Center for Mind and Brain (University of California), as well as the Chartered Institute of Personnel & Development and the Institute of Directors in the United Kingdom.

Petra Loho is an experienced and versatile marketing professional with expertise in strategic and tactical marketing.

About Zenlinks: Zenlinks is a performance-improving consultancy that supports organisations to evaluate the effectiveness of their people management and development processes to improve performance and inspire loyalty.

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