Neuroscience of Leadership and Organizational Effectiveness

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Performex® ensures the future for innovation driven companies by transforming **STEM Professionals and their managers** into engaging and outstanding leaders.

**Why Neuroscience of leadership?**

- It’s all about behaviors
  - Understanding it produces results
- Engineers, IT, R&D, Finance, and Medical professionals want to know the science behind positive leadership behaviors
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Activity

**Left Side of Meeting Room** – Recall the last time you were very upset at work
- The circumstance
- How you handled the situation
- How you felt at the time and 2 hours afterwards
- Did you notice time, others around you, and your energy level?

**Right Side of the Meeting Room** – Recall the last time you were totally focused on a task or activity
- The circumstance
- How you handled the situation
- How you felt at the time and 1 hour afterwards
- Did you notice time, others around you, and your energy level?

5 Minutes
Neuroscience of Leadership refers to the application of findings from neuroscience to the field of leadership\(^1\).

**Brain imaging techniques such as:**
- Functional Magnetic Resonance Imaging (fMRI)
- Positron Emission Tomography (PET)
- Electroencephalography (EEG)
- Near-Infrared Spectroscopy (NIRS)

**Are used with experiments** to map the brain’s response to stimulus we experience each day in our work lives.

\(^1\) Dr. David Rock - Professional Doctorate, Neuroscience of Leadership - Middlesex University 2010
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From Data collected from over 2,750 STEM professionals since 1978
Top 10 developmental needs are:

1. Communication and interaction skills:
2. Delegation skills
3. Coaching and developmental skills
4. Leadership skills
5. Collaboration
6. Accountability
7. Strategic Thinking and Vision
8. Delivering Results
9. Integrity
10. Alignment

- 97% had significant developmental needs in the first 7 competencies
- The data did not correlate with position
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Neuroscience of Leadership Focus areas:

- Leadership development
- Management training
- Change management
- Coaching effectiveness
- Learning
- Engagement
- Relationships

[Image: Leadership Development, Engagement]
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Key Findings of the Neuroscience of Leadership – Performex’®s take

✓ Stress influences the uptake and storage of information and the engagement level of the brain’s logical / problem solving centers

✓ Behavioral change is especially difficult, is often painful, and the key to becoming a great leader for many STEM professionals & other managers

✓ Neuroscience provides significant insight into how companies and managers can facilitate the development of their staff

✓ Neuroscience validates emotional intelligence and it’s fundamental role in leadership

✓ The keys to full engagement are not understood by most managers
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Stress level and Amygdala hijack

Threats to our Self-esteem

Triggers for a hijack are:

- Conflict / disagreement
- Negative Feedback without context / sequence
- Unexplained change
- Treated without respect or fairness
- Unappreciated
- Not listened to / no input
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Performance vs. Brain Activity

How to achieve engagement

- Delegate - Don’t micro-manage
- Provide Development
  - PFX data
- Understand Coaching Fundamentals
- The Progress Principle®
- Avoid Amygdala Hijack
- Address Passive Aggressive Behavior
- Build relationships
Neuroplasticity - the ability of the adult brain to change its structure or function in an enduring way.

To learn something new, feel, or behave differently
“Neural Inflection Point” is when **new** complex behaviors are equally attractive as the old behavior.

“I’ve got this”

“Neural Landmark” is where you do it well without having to think about it.

Feels “Normal”

21 days

6 – 8 Months
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“Neuroplasticity” Techniques for skill acquisition and behavioral change

- **Visualization** – In your mind’s eye
- **Mindfulness / Awareness** – observing your thoughts and feelings with the objectivity of a disinterested, nonjudgmental witness
- **Practice, Repetition, and Time** - at every naturally occurring opportunity
- **Mental Exercises** – Activities designed to promote positive change
- **Contemplation / Game planning** - How could I intentionally counter that habit
- **Know your Triggers** – What circumstance, person, or situations
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SCARF – A Model of Human Motivation

AWAY (Threat Stimulus)

Status
Certainty
Autonomy
Relatedness
Fairness

TOWARD (Reward Stimulus)

The SCARF model was originally researched and conceived by David Rock of the NeuroLeadership Group

Dr. David Rock - Professional Doctorate, Neuroscience of Leadership - Middlesex University 2010
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SCARF Model for Motivation

Status – ones relative importance to others

Certainty - being able to predict the future

Autonomy - a sense of control over events

Relatedness - a sense of safety with others - of friend rather than foe.

Fairness - a perception of fair exchanges between people.
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“Neuroplasticity” and Organizational Effectiveness

✓ Who knows, understands the practical applications, and disseminates the latest findings on NeuroLeadership and EQ in my organization?

✓ Do my Managers understand and use Leadership techniques validated by NeuroLeadership?

✓ Are we spending valuable OE $ on developmental techniques that drive positive behavioral change or do they focus on skills / knowledge?

✓ Are you doing anything to promote relationship building among your managers and fight the ever increasing reliance on digital media?

✓ Do my STEM managers value full engagement as much as they value technical knowledge, knowhow and expertise?

✓ Where would we stand against the SCARF Model?
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Questions

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