

Neuroscience of Performance

Session Summary and Key Insights

Shaun Burke | Quantum Leadership Coach

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The brain is not fixed. Every insight you act on today is a step towards rewiring how you think, feel and perform.

About This Session

This document summarises the key concepts, frameworks and practical tools shared during the live Work Life Central webinar on the Neuroscience of Performance. It also includes answers to questions raised by attendees during the Q&A. Everything here is designed to be immediately applicable — not just interesting to read.

Performance does not start with strategy. It starts with state.

The Core Premise

Most performance conversations focus on output — results, productivity, what you produce. The neuroscience tells us something more fundamental: performance is not primarily *what* you do, it is the **state** you are in when you do it.

The same person, with the same skills, on the same task can perform at completely different levels depending on their internal state. That state comes from one place: the brain and nervous system.

The Brain's Number One Priority

Your brain's overriding priority is not your career success, your goals, or your to-do list. It is safety. The brain runs a constant background scan — beneath every meeting, message and interaction — asking: *am I safe? Is this a threat?*

And the answer it arrives at, even when that answer is wrong, changes everything about how you think, communicate and perform.

Threat State vs Safety State

When the brain perceives threat — even a social or professional one — it shifts resources away from the prefrontal cortex (logic, creativity, empathy, complex thinking) and into protection mode. This is why under pressure you might go blank in a meeting, overreact to a message, or miss the obvious solution. That is not incompetence. That is a nervous system doing its job.

THREAT STATE

- Logic and creativity offline
- Reactive and defensive
- Narrow focus
- Protect yourself
- Performance drops

SAFETY STATE

- Full thinking capacity available
- Clear and considered
- Broad perspective
- Connect with others
- Performance rises

High performance is not about trying harder. It is about creating the right internal conditions for your brain to do what it is already capable of.

The Performance Loop

Almost every performance challenge can be understood through one simple framework:

What actually happens	The meaning your brain attaches	Your emotional and behavioural response

Two people can experience the exact same event and have completely different performance outcomes — not because one is more capable, but because the belief running in the middle is different. Beliefs are not fixed. They can be examined, questioned and updated.

Your Brain Filters Reality

Your brain receives millions of pieces of information every second. Your conscious mind processes only a tiny fraction. The system that decides what gets through is called the **Reticular Activating System (RAS)** — and your beliefs directly influence that filter.

- Belief: *"I always struggle under pressure"* — brain scans constantly for every stumble and hesitation
- Belief: *"I handle pressure well"* — brain scans for evidence of composure and capability

Your brain is not showing you reality. It is showing you a filtered version of reality based on the instructions your beliefs are giving it.

Regulation as a Performance Tool

Before great thinking, clear communication or confident performance comes nervous system regulation. Regulation means returning yourself to the state where your brain can perform — out of threat response and back to safety. This is a learnable, trainable skill, not a personality trait.

1. Extended Exhale

Inhale through the nose for 4 counts. Exhale through the mouth for 6 to 8 counts. A longer exhale signals safety to the nervous system and activates the parasympathetic state. Three rounds before a difficult conversation or high-stakes presentation changes the state you enter that moment in.

2. Grounding

Press your feet into the floor, soften your shoulders, slow your speech slightly. These physical signals tell the nervous system: I am present, I am not in danger, it is safe to think clearly.

3. Metacognition

When you feel your state shifting — heart rate rising, thoughts racing — ask: *'What am I thinking right now?'* That question shifts you from being inside the thought to observing it. The moment you observe a thought, you create space between it and your reaction. That space is where performance lives.

These are not relaxation techniques. They are performance tools — and they work because they communicate directly with the nervous system.

Prepare Your State, Not Just Your Content

Most people approaching a high-pressure moment focus entirely on content — what to say, how to present it, what the right answer is. High performers also prepare the state they are going to be in when they say it.

Walking into a conversation already activated means your words carry the nervous system signal — people feel it before they process what you are saying. Walking in regulated means the same words land completely differently.

Formula One principle: slow in, fast out. Slowing down before a high-stakes moment consistently produces a faster, cleaner result.

Identity and Performance Patterns

Much of how we perform is driven not just by in-the-moment beliefs, but by identity — the ongoing story of who we are. These identities often form early in life and once the brain adopts them, it protects them even when they become exhausting.

- Someone who handles everything alone
- Someone who needs to prove their value to feel secure
- Someone who never slows down because slowing down feels like falling behind

The shift: instead of asking *'What is wrong with me?'* when you notice a limiting pattern, ask:

"What pattern might my brain be protecting me with right now?"

That question moves you from judgment into curiosity — and curiosity is where new choices become possible.

Three Shifts for Sustainable Performance

Sustainable high performance is not about pushing harder. It is about recovery, regulation, and the ability to return to your optimal state more quickly after disruption. Try one of these this week:

Notice one trigger

When does your state shift away from your best thinking? Awareness alone begins to change things.

Regulate before you need to

Build regulation into normal moments, not just crisis ones. Train the nervous system in low-pressure situations so it responds well in high-pressure ones.

Question one belief

Ask: does this belief expand me or restrict me? A useful belief opens options. A limiting one keeps you in the same loop.

Small, consistent shifts compound over time. That is neuroplasticity working in your favour.

Questions from the Session

The following are answers to questions raised by attendees during the live Q&A.

Are positive affirmations actually useful?

Yes — but timing and action are everything. Affirmations used at the wrong moment can actually backfire, because if your nervous system is already activated or your conscious mind is sceptical, the statement feels false and the brain rejects it.

The most effective window is when the brain is in an **alpha state** — the relaxed, receptive state that occurs naturally as you fall asleep or wake up, and that can also be accessed during breathwork. In alpha state the conscious critical mind quiets, making the brain far more open to receiving new beliefs as instructions.

The second critical ingredient is **inspired action**. An affirmation works as a signal to the brain about the identity you are building — but it needs to be paired with behaviour that confirms that identity. If you are affirming *'I am a calm, high-performing leader'* and then taking one small action that reflects that — pausing before reacting, regulating before a meeting, asking a considered question instead of responding defensively — the brain starts to build genuine evidence for the new belief.

Affirmation without action creates noise. Affirmation with action creates a new neural pathway.

How long does it take for new habits to stick?

The popular belief that it takes 21 days — or 66 days, depending on which article you read — can actually work against you. If you believe change takes a long time, that belief slows the process down. The brain follows the instructions it is given.

Think about it this way. If you discovered a shortcut on your commute that saved you 40 minutes, you would not spend weeks gradually transitioning to it. You would take it the next day — and within a short time, the new route would feel completely normal. The old one would feel strange.

Habits and beliefs work on the same principle. The brain builds neural pathways through **repetition**. Every time you practise a new behaviour — regulating before reacting, questioning a limiting belief, pausing before responding — you are laying down and strengthening a new pathway. The more consistently you repeat it, the more automatic it becomes.

This is **neuroplasticity** in practice. The brain is not fixed. It is constantly being shaped by what you repeatedly think, feel and do. The question is not *how long will this take* — it is *how consistently am I repeating the new pattern*.

Start small, repeat often. That is the most efficient route to lasting change.

Recommended Reading

If today's session sparked something, these three books go deeper into the neuroscience, mindset and performance principles we explored. Each one is practical, grounded and genuinely worth your time.

Breaking the Habit of Being Yourself

Dr Joe Dispenza

Dispenza bridges neuroscience and quantum physics to show how thoughts and feelings create habitual states — and how to break free from them. If the performance loop and belief work resonated with you today, this book goes much deeper into the science of rewiring who you are at a neurological level. Practical, detailed and genuinely transformative.

Mind Magic

Dr James R. Doty

Written by a Stanford neurosurgeon and founder of the Centre for Compassion and Altruism Research, this book explores how the mind shapes reality — and how to harness that deliberately. Doty weaves together personal story, neuroscience and practical technique in a way that makes the science feel immediately human. Excellent on the relationship between intention, belief and performance.

Effortless

Greg McKeown

A counterintuitive take on high performance from the author of *Essentialism*. McKeown argues that the right approach to important work should feel lighter, not harder — and provides a practical framework for achieving more by trying less. Pairs well with everything we covered today on sustainable performance and the trap of equating effort with output.

All three are available from major booksellers and as audiobooks.

Connect with Shaun

Shaun works with individuals and organisations on performance, mindset and human potential. If you would like to explore coaching, corporate programmes or speaking engagements, get in touch using the details below.

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Email: shaunb@elevatesuccesscoaching.com
Website: www.elevatesuccesscoaching.com




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CONQUER. SUCCEED. ELEVATE - ESC YOUR LIMITS

www.elevatesuccesscoaching.com | shaunb@elevatesuccesscoaching.com