



What Stress Actually Does to the Brain and Body

MASTERCLASS 2

SUSTAINABLE EXCELLENCE TRACK

Module 2 — Emotional Regulation & Performance Psychology



Core Question: Why does pressure sharpen some students and derail others?



Performance Is More Than Knowledge

Students often assume that preparation alone determines results. But in high-pressure moments, the equation is more complex. True performance depends on two things working together:

Knowledge

What you know — content, skills, and preparation built over time.

State Management

How you regulate your mind and body *in the moment* of performance.

Understanding your stress response gives you the ability to **perform consistently**, avoid mental shutdown, and recover quickly when pressure peaks.

How This Session Works



Provocation

A challenging question or scenario to activate thinking and surface assumptions.



Application

Practical exercises and tasks that connect the model to your real experience.



Concept & Model

A clear framework grounded in research that gives structure to the idea.



Artefact Build

You document your insights to build a personal performance system over time.

Session Objectives

By the end of this session, you will be equipped to recognise and work with your stress response rather than be controlled by it.

1

Understand the Stress Response

Learn what happens biologically and psychologically under pressure.

2

Recognise Early Warning Signs

Identify your personal physical and mental stress signals before they escalate.

3

Connect Physiology to Performance

Understand how body states directly influence cognitive output.

4

Begin Building a Regulation System

Start developing tools and strategies you can apply in real performance moments.

The Thinking Gap

One of the biggest barriers to performance improvement is a simple but persistent misconception about stress itself. Let's close the gap.

Common Belief

"Stress is bad. It hurts my performance and I need to eliminate it."

This belief leads students to **avoid pressure**, catastrophise stress signals, and feel powerless in high-stakes moments.

The Reality

"Stress is neutral. **Unmanaged** stress is the problem."

Stress is a biological signal — neither good nor bad. The outcome depends entirely on how you **interpret and regulate** it. This shift in framing changes everything.



A Tale of Two Students

Student A

Thrives under pressure. Delivers their best performance when the stakes are highest. Feels alert, focused, and in control.

Student B

Freezes under pressure. Blanks on material they know well. Feels overwhelmed, scattered, and unable to recover.

❏ **Same exam. Same knowledge. Same preparation.** What explains the difference? The answer is not intelligence — it's something trainable.

Unpacking the Difference

The gap between Student A and Student B is not about who studied harder or who is more capable. The difference lies in three trainable areas that separate consistent performers from inconsistent ones.



Physiological Response

How the body reacts to a stress trigger — heart rate, breathing, muscle tension.

Performers learn to **recognise and modulate** these responses before they escalate.



Mental Framing

The interpretation placed on stress signals. Is a racing heart a sign of *danger* or *readiness*?

Framing determines the direction of performance.

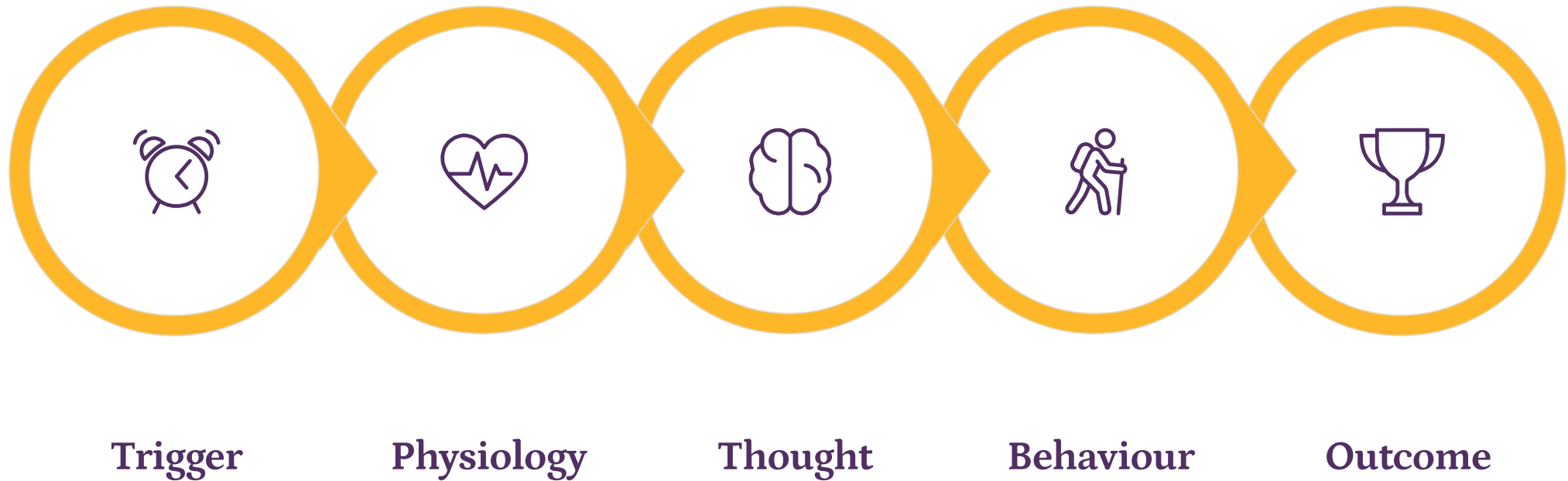


Regulation Ability

The capacity to intervene — using breath, attention, or self-talk — to shift from a reactive state to a controlled one during performance.

The Stress Response Model

High performers don't eliminate stress — they understand the sequence it follows and intervene at the right point. This model maps that sequence from start to outcome.



Every stress episode follows this path. The most powerful intervention points are **between Physiological Response and Thought**, and **between Thought and Behaviour** — where regulation strategies have the greatest impact on final outcomes.

The Biology of Stress

When a threat or high-stakes moment is perceived, the body activates an automatic survival response — designed to protect, but capable of derailing performance when left unmanaged.

Cortisol

The primary stress hormone, released to mobilise energy. Useful in short bursts — but **sustained cortisol impairs memory consolidation** and reduces cognitive flexibility.

Adrenaline

Triggers the fight-or-flight response, increasing heart rate and sharpening immediate focus. At high levels, it **narrows attention** and reduces access to stored knowledge.

Working Memory Impact

Under acute stress, the prefrontal cortex — responsible for reasoning and recall — is **partially suppressed**. This is why students "blank" on material they know well.



The Psychology of Stress

Beyond the biological response, stress exerts a powerful effect on cognition and emotion — shaping how you think, what you remember, and how you interpret everything around you.



Narrowed Attention

The stressed brain fixates on perceived threats. Peripheral information — including useful context and prior knowledge — becomes inaccessible.



Reduced Recall

High cortisol interferes with retrieval pathways. You may "know" the answer but be unable to access it under pressure — a retrieval failure, not a knowledge gap.



Emotional Amplification

Negative emotions — anxiety, self-doubt, frustration — are intensified under stress, making it harder to think clearly and maintain performance confidence.

Stress & Performance: The Divergence

The same stressor — same exam, same pressure, same environment — produces fundamentally different outcomes depending on how a student responds to their internal state.

High Performers Under Pressure

- **Regulate state** — they recognise stress signals and apply intervention strategies in real time.
- **Control thoughts** — they reframe threats as challenges and maintain constructive self-talk.
- **Recover quickly** — when disrupted, they return to baseline fast without compounding the error.

Low Performers Under Pressure

- **Spiral** — one stressful moment triggers a cascade of anxiety that grows rather than subsides.
- **Overthink** — excessive rumination consumes cognitive bandwidth needed for actual performance.
- **Shut down** — the system becomes overwhelmed and disengages, producing blank-outs or avoidance.

The Performance Loop

CORE TOOL

This four-stage loop is the foundational framework for this masterclass. It maps the journey from stress trigger to recovered performance — and reveals exactly where to intervene.

1

Trigger

An internal or external stressor activates the stress response — a question, a crowd, a time constraint.

2

Reaction

Automatic physiological and psychological responses kick in: heart rate rises, thoughts narrow, emotion intensifies.

3

Regulation

A deliberate intervention is applied — breath control, reframing, attention shifting — to redirect the stress response.

4

Recovery

Return to a functional, focused performance state. The loop is complete — and each repetition builds the skill.

📌 The Performance Loop is not about eliminating stress. It is about **shortening the distance between Reaction and Recovery**.

Guided Task: Know Your Stress Profile

Before you can regulate stress, you must know how *your* stress behaves. This task begins the process of building self-awareness as a performance skill.

1

Personal Stress Triggers

What situations, environments, or moments reliably activate your stress response? Time pressure? Social evaluation? Unexpected changes?

2

Physical Signs

Where do you feel stress in your body? Elevated heart rate, shallow breathing, tension in the jaw or shoulders, sweating, or a hollow stomach?

3

Mental Patterns

What thoughts arise under pressure? Catastrophising, self-doubt, comparisons to others, replaying mistakes, or going blank?



Upgrading Your Language About Stress

Precision in self-description is a performance skill. Vague language keeps you stuck; specific language creates the conditions for change. Upgrading how you talk about stress is the first act of regulation.

✗ Weak Response

"I get stressed in exams."

This is too broad to act on. It labels the experience without mapping it — leaving you with no entry point for intervention.

✓ Strong Response

"I notice increased heart rate and negative self-talk **before** my performance drops."

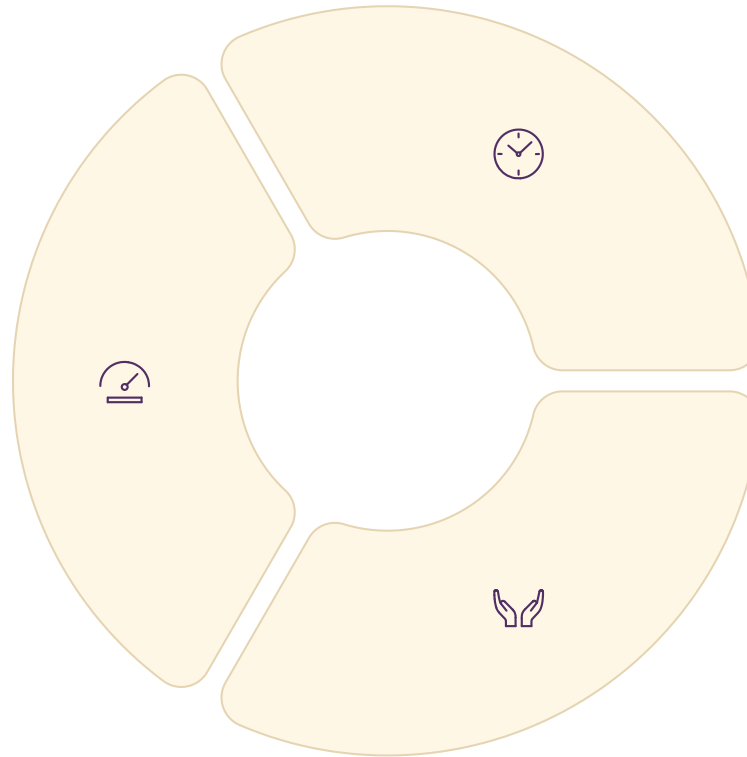
This is specific, sequenced, and **actionable**. It identifies the signal, the thought pattern, and the timing — giving you a clear moment to intervene.

Discussion: Is Stress Helpful or Harmful?

The honest answer is: **it depends**. Stress is not inherently destructive — in many cases it is the fuel that drives elite performance. The outcome is determined by three variables.

Intensity

Low-to-moderate stress enhances focus and motivation. High intensity overwhelms the system and impairs thinking. The optimal zone exists — and it's different for everyone.



Duration

Brief stress followed by recovery is healthy and even adaptive. Chronic, sustained stress without recovery leads to burnout, cognitive decline, and emotional depletion.

Management

The same level of stress, managed well, produces growth. Unmanaged, it produces breakdown. Management is the variable you can most directly train and control.

Artefact 8 — Performance Regulation Manual

ARTEFACT BUILD

This is the first entry in your **Performance Regulation Manual** — a living document you will build across the Sustainable Excellence Track. It begins with self-knowledge.

Triggers

List the specific situations, contexts, or cues that reliably activate your stress response in academic or performance settings.

Physical Signals

Document the bodily sensations that indicate stress is rising — your personal physiological early warning system.

Mental Signals

Record the thought patterns and emotional shifts that emerge — self-doubt, narrowing focus, catastrophising, or avoidance urges.

Current Responses

Honestly describe what you currently *do* when stress arrives — helpful or unhelpful. This is your baseline for growth.



Reflection & Extension

Reflection Question

When do you perform best under pressure?

Think back to a moment where pressure actually *helped* you. What was different about that situation — your mindset, your preparation, your environment? What can you learn from it?

Extension Task

Track one stressful moment this week.

Use the Performance Loop as your lens: **What was the trigger? What was your reaction? Did you regulate — and how? How quickly did you recover?**

Bring your observations back as raw material for Artefact 8. Real data from your own experience is the most powerful evidence you can use.

📌 **Key Takeaway:** Stress is not the enemy. The gap between pressure and performance is closed through awareness, framing, and a practised regulation system — all of which can be trained.