

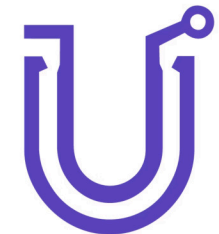
☆ MASTERCLASS 2 · SUSTAINABLE EXCELLENCE  
TRACK

# What Stress Actually Does to the Brain and Body

Emotional Regulation & Performance  
Psychology

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

**Total Duration:** 75 minutes



**U GLOBAL**  
— ACADEMY —



# Performance Is More Than Knowledge

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

## Knowledge

What you know, built over time through content, skills, and preparation. This is the foundation — but it is not the full picture.

## State Management

How you regulate your mind and body in the moment of performance. This is the variable most students overlook — and the one that decides the outcome under real pressure.

- ① Understanding your stress response gives you the ability to **perform consistently**, avoid mental shutdown, and recover quickly when pressure peaks.

# How This Session Works

Four stages, each building on the last — designed to move you from concept to personal application by the end of 75 minutes:

1

## Provocation

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

2

## Concept & Model

A clear framework grounded in research that gives structure to the idea and explains the science behind the stress response.

3

## Application

Practical exercises and tasks that connect the model to your real experience — building self-awareness as a performance skill.

4

## Artefact Build

You document your insights to build a personal performance system over time — your own regulation manual.

# 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. Four objectives:



## Understand the Stress Response

What happens biologically and psychologically under pressure — and why it affects performance.



## Recognise Early Warning Signs

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



## Connect Physiology to Performance

Understand how body states directly influence cognitive output — and why blanking happens.



## Begin Building a Regulation System

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

SECTION 2 — 10-22 MIN

# The Thinking Gap & Provocation

Surfacing what students believe about stress — and challenging it

# The Thinking Gap

One of the biggest barriers to performance improvement is a persistent misconception about stress itself.

## 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 a **biological signal** — neither good nor bad
- The outcome depends entirely on how you **interpret and regulate it**
- **Unmanaged stress** is the problem — not stress itself

- ✔ **This shift in framing changes everything.** You move from feeling controlled by stress to being able to work with it deliberately.



PROVOCATION — 3-MINUTE OPEN DISCUSSION

# A Tale of Two Students

Same exam. Same knowledge. Same preparation. Two very different outcomes.


## Student A

Thrives under pressure — delivers their best performance when stakes are highest. Feels **alert, focused, and in control**. Pressure activates rather than derails.

## Student B

Freezes under pressure — blanks on material they know well. Feels **overwhelmed, scattered, and unable to recover**. Pressure shuts the system down.

**Discussion Prompt:** What explains the difference? Is it intelligence? Preparation? Something else?

 **Hold your answers** — we'll return to them once we've explored the science. Don't reveal the explanation yet.

KEY INSIGHT

# 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:



## Physiological Response

How the body reacts to a stress trigger — heart rate, breathing, muscle tension. Performers learn to recognise and **modulate these 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. **All three are trainable.**

# Reframing Stress — Class Discussion

When has stress ever *helped* your performance? Think of a moment — a sport, a performance, a deadline — where pressure made you **sharper, not worse**.

## → What Was Different?

Compare that sharpening moment to moments when stress derailed you. What changed — your mindset, the context, the stakes?

## → What Did You Do Differently?

Did you interpret the pressure differently? Did your body respond differently? Did you have more preparation or a clearer focus?

## → What Can You Replicate?

If stress helped you once, it can help you again. The goal is to understand the conditions — and create them deliberately.

🕒 **Establish with the class:** The goal of this session is not to eliminate stress. It is to understand it well enough to **use it**.

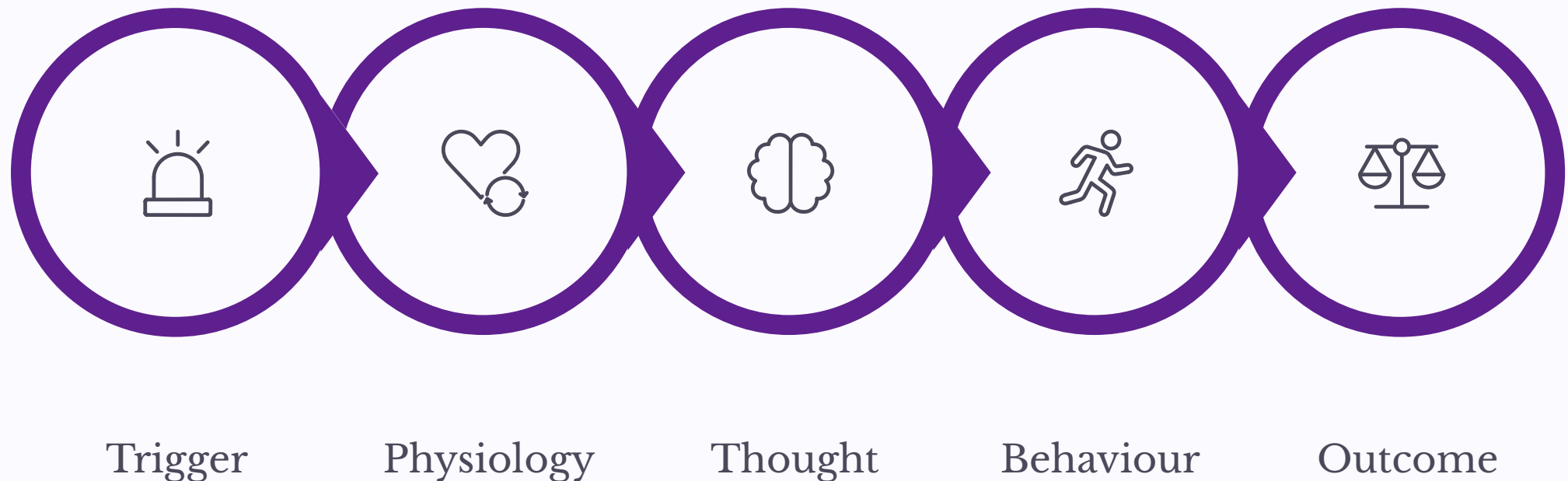
SECTION 3 — 22-38 MIN

# The Science of Stress

Understanding the biological and psychological mechanisms behind the stress response

# The Stress Response Model

High performers don't eliminate stress — they understand the sequence it follows and intervene at the right point. The 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.

**i** Understanding the sequence is what makes intervention possible. You cannot regulate what you cannot map.

# 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

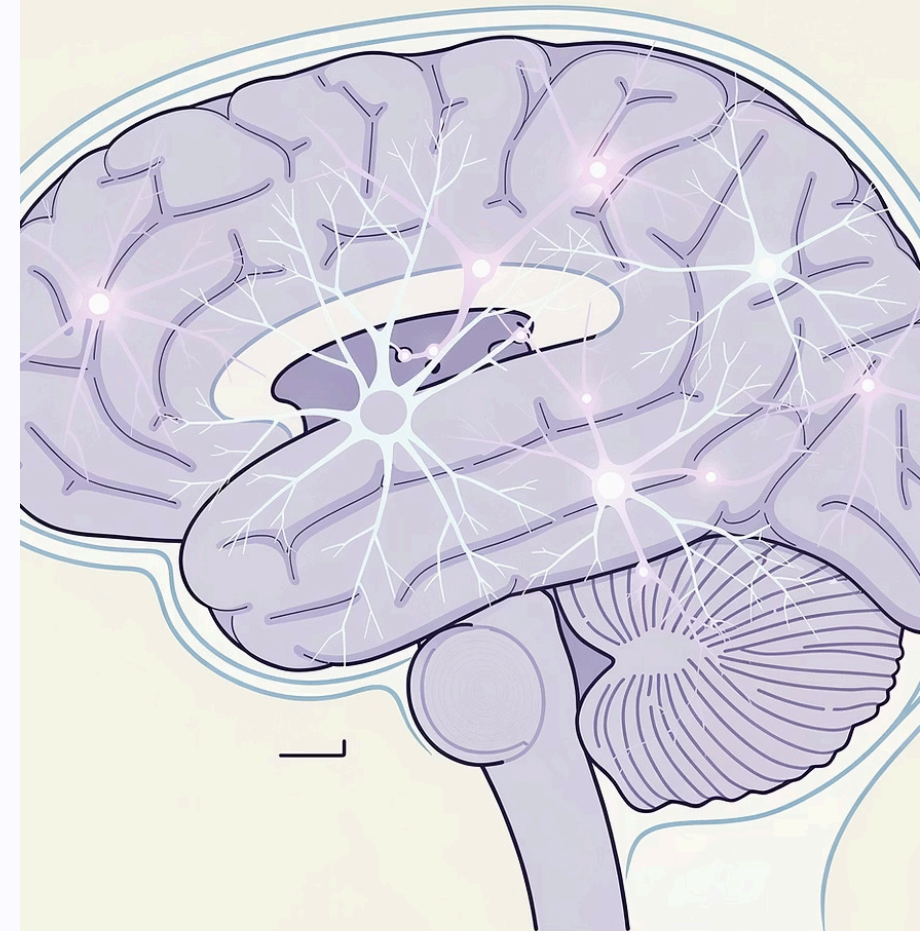
The primary stress hormone, released to mobilise energy. Useful in short bursts, but **sustained cortisol impairs memory consolidation** and reduces cognitive flexibility.

## 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, recall, and feel under pressure.



## 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** — this is 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.

 **Key distinction:** Blanking in an exam is not evidence that you don't know the material. It is a stress-induced retrieval failure — and it is manageable.

# Check for Understanding — Quick Quiz

Without looking at notes, pairs answer three questions. Then share answers with the class.

1

## Question 1

What does **cortisol** do to memory under sustained stress?

2

## Question 2

Why do students "**blank**" on material they've studied — what is actually happening in the brain?

3

## Question 3

Name **one psychological effect** of stress beyond the physical response.

- ☑ **Reinforce the key distinction:** Blanking is a *retrieval failure caused by stress physiology* — not evidence that you don't know the material.

# 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 in real time. Reframe threats as challenges.

**Recover quickly** without compounding errors. Each stressful moment is managed and released.

## Low Performers Under Pressure

**Spiral** — one stressful moment triggers a growing cascade of anxiety. **Overthink** — rumination consumes cognitive bandwidth. **Shut down** — the system becomes overwhelmed and produces blank-outs or avoidance.

🕒 **The divergence is not fixed.** It is a skill gap — and skill gaps close with deliberate practice.

# The Performance Loop

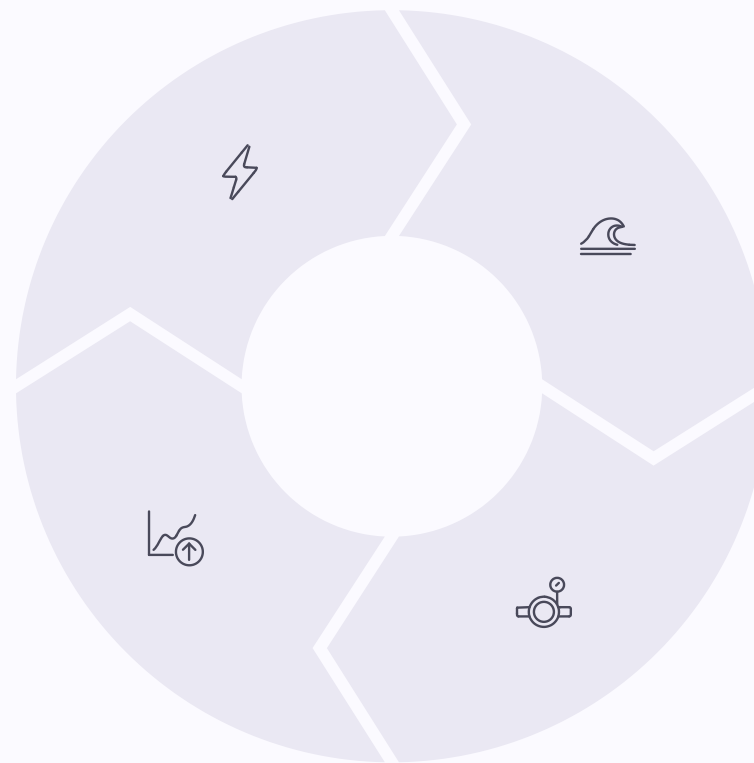
This four-stage loop is the foundational framework for this masterclass. It maps the journey from stress trigger to recovered performance — and reveals exactly where to intervene.

## Trigger

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

## Recovery

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



## Reaction

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

## Regulation

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

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

# Regulation Strategies — The Toolkit

Three categories of intervention that work at different points in the Performance Loop. These are not tricks — they are **learnable, repeatable skills**.

## Physiological

- Slow, controlled breathing — **extended exhale** activates the parasympathetic system within 60–90 seconds
- Progressive muscle relaxation
- Cold water on wrists

## Cognitive

- Reframing — *"this feeling is energy, not danger"*
- Instructional self-talk — *"focus on the next step, not the outcome"*
- Attention anchoring — bring focus back to the task in front of you

## Behavioural

- Brief physical movement to discharge adrenaline
- Structured pre-performance routines that signal "safe to perform"
- Strategic pausing before responding

# 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:

**1** **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.

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

**3** **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.



# Know Your Stress Profile — Part 1

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. Answer three questions in writing:

01

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## Personal Stress Triggers

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

02

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## Physical Signs

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

03

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## Mental Patterns

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

- ❏ **Write honestly.** This is personal data — not a test of how well you perform under stress. Precision now creates the conditions for real change.

PAIR WORK — 4 MINUTES

# Upgrading Your Language — Part 2

Precision in self-description is a performance skill. **Vague language keeps you stuck; specific language creates the conditions for change.**

## Weak Response

*"I get stressed in exams."*

Too broad to act on — it labels the experience without mapping it, leaving **no entry point for intervention.**

## Strong Response

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

Specific, sequenced, and actionable — it identifies the signal, the thought pattern, and the timing, giving a **clear moment to intervene.**

- ① **Task:** Take one of your triggers from Part 1 and rewrite it using the Strong Response format. Share with your partner and refine together.

# Class Debrief — Stress Profiles

Invite 3–4 students to share one insight from their stress profile — a trigger, a physical signal, or a mental pattern they hadn't previously named.

→ **How Many People Share the Same Triggers?**

Notice the patterns in the room. Shared triggers reveal how much of the stress experience is universal — and therefore workable.

→ **How Different Are the Physical Signals?**

Signals vary significantly between individuals — one person's racing heart is another person's frozen stillness. There is no single "correct" stress profile.

→ **What Has Never Been Named Before?**

For many students, this is the first time they have articulated their stress pattern with precision. That precision itself is powerful.

🕒 **Reinforce:** Naming your stress pattern precisely is itself a regulation act — it activates the prefrontal cortex and begins to interrupt the automatic stress cascade.

# Live Regulation Practice — Breathing Exercise

Guided physiological regulation using **extended-exhale breathing**. Instructor leads the whole class through the sequence:

1

## Breathe In

Inhale slowly for **4 counts**

2

## Hold

Pause for **1 count**

3

## Breathe Out

Exhale slowly for **6–8 counts**

4

## Repeat

Complete **4–5 cycles**

## After Practice — Ask the Class

What changed? Heart rate? Attention? Sense of control?  
Have students name what they notice.

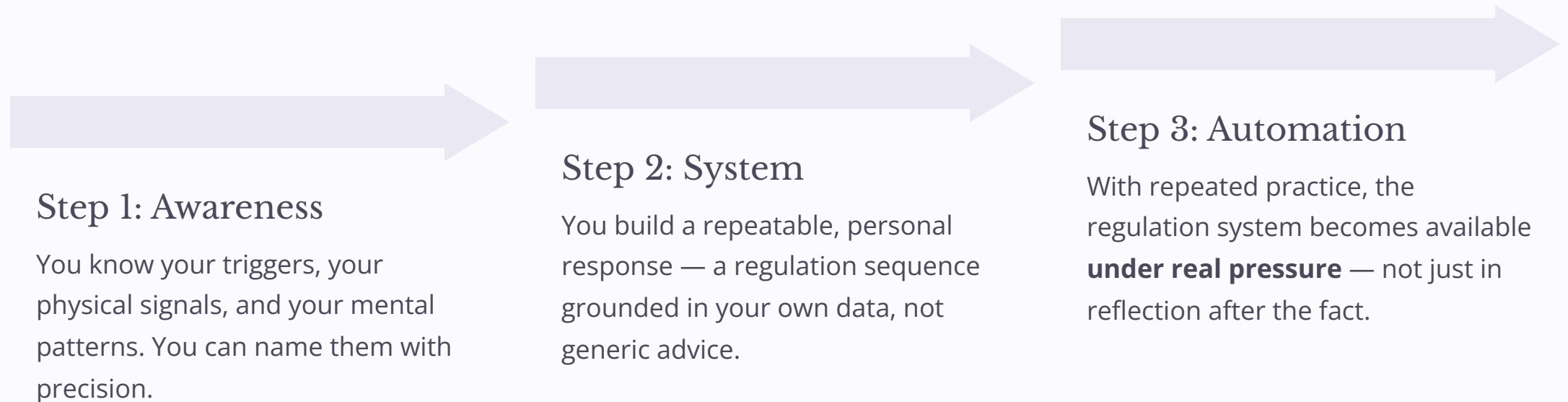
## The Mechanism

Extended exhale stimulates the vagus nerve, activating the parasympathetic nervous system — the biological "rest and recover" mode. Deployable in **60 seconds** before any high-stakes moment.

 This is not relaxation. This is **deliberate physiological regulation** — a learnable, repeatable skill.

# From Awareness to System — The Transition

Self-awareness without a system is incomplete. Knowing your triggers and signals is **step one**. Step two is building a repeatable, personal response — a regulation system you can deploy automatically when pressure arrives.



- ❑ The Performance Regulation Manual is that system. It is built from **your own data** — and over time, it becomes one of the most valuable performance tools you own.

# Artefact 8 — Performance Regulation Manual

Your first entry in a living document you will build across the Sustainable Excellence Track. It begins with self-knowledge. Four sections to complete:

01

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## Triggers

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

03

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## Mental Signals

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

02

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## Physical Signals

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

04

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## Current Responses

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

 Students begin writing — **5 minutes in class**. Remainder to be completed before the next session.

# 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, the stakes involved?

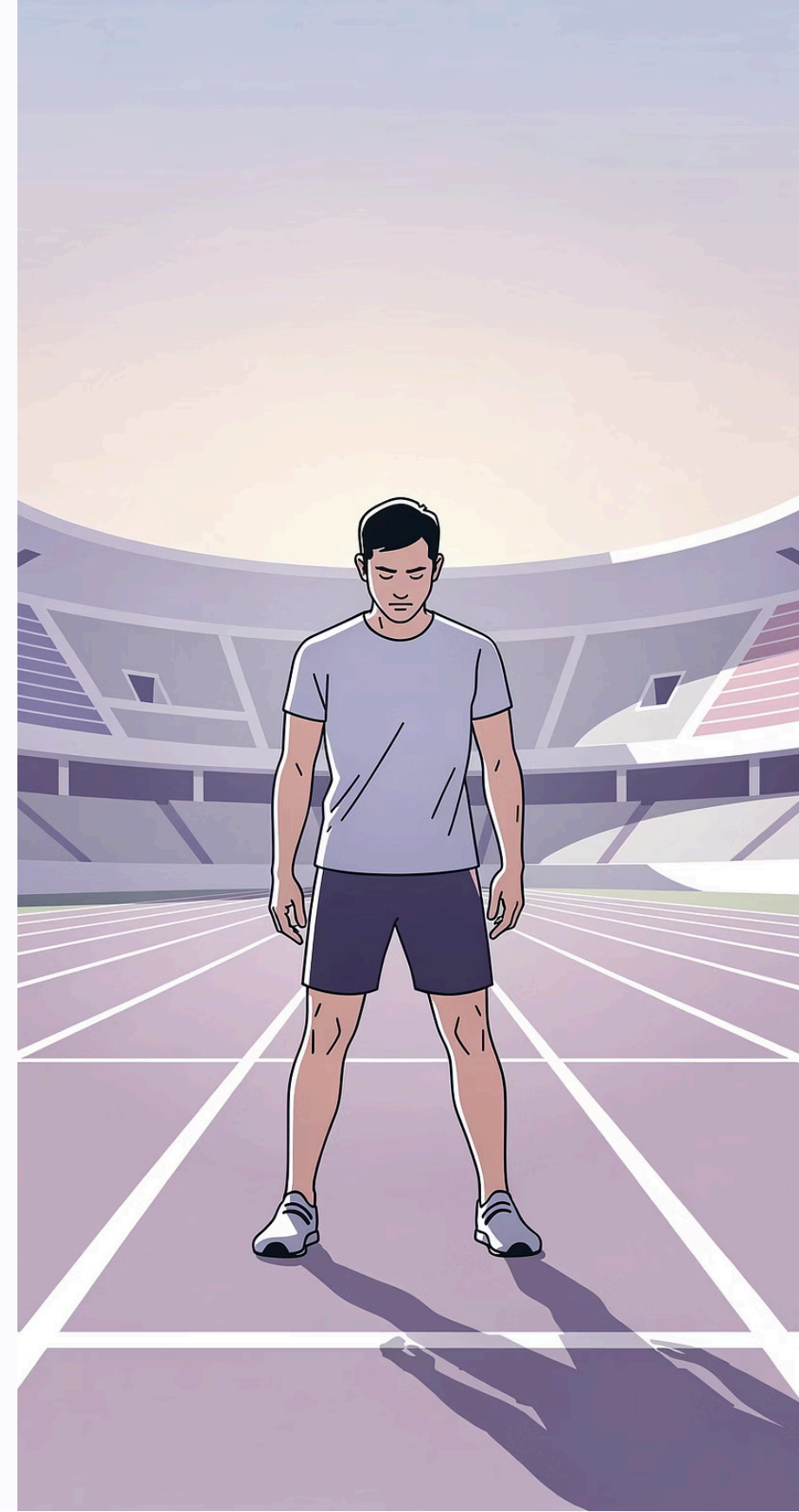
## → What Made It Different?

Was it the level of preparation? A supportive environment? A clear sense of purpose? Lower stakes that allowed your system to stay open rather than shut down?

## → What Can You Deliberately Replicate?

If those conditions helped once, they can be created again. Understanding what unlocked your best performance is the beginning of a regulation strategy.

- ❏ **Write one sentence** that captures what "performing well under pressure" looks and feels like for you specifically. Bring this to your Artefact 8.



# Key Takeaways — What You Now Know

Stress is not the enemy — unmanaged stress is.

The framing shift from "stress is bad" to "stress is neutral" changes what you can do with it.

The stress response follows a predictable sequence.

Trigger → Physiology → Thought → Behaviour → Outcome. Knowing the sequence reveals where to intervene.

Cortisol and adrenaline impair working memory.

Blanking is a retrieval failure caused by stress physiology — not evidence of a knowledge gap.

High performers regulate; low performers spiral.

Both responses are trainable. The divergence is a skill gap, not a fixed trait.

The Performance Loop shortens the distance between Reaction and Recovery.

Self-awareness is the first act of regulation — naming your stress pattern interrupts it.

# Track One Stressful Moment This Week

Use the **Performance Loop** as your lens on one real stress moment this week. Record the following:



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

SESSION CLOSE

# What's Next

Next session, we move from understanding the stress response to actively training it.

## Regulation Under Pressure

You will practise regulation strategies under **simulated pressure** — building the skill so it is available when it counts.

## Pre-Performance Routines

You will develop a **personal pre-performance routine** — a repeatable sequence that primes your system for peak output.

## Stress Inoculation

You will begin **stress-inoculation techniques** used by elite performers to build tolerance and resilience over time.

**⚠ Complete Artefact 8 before the next class.** Your stress profile is the foundation everything else builds on.