

Your body's state shapes the quality of decisions

The starting point of my research line

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Summary of: "Physiology of performance"

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01 The question

Most performance programmes ask whether a person can handle a challenge. My question was different: how can the same person handle the same challenge better? I suspected the answer starts below conscious thought, in the physiological state a person is in when they decide and act. If that state can be recognised and deliberately changed, then performance under pressure becomes something people can train, not just something they have or lack. This paper, my earliest, is the starting point of my research line: it sets out the model that my later work builds on and tests.

02 What I did

- I brought together work from physiology, cognitive science and systems thinking, treating the human organism as a complex system of linked subsystems that constantly exchange signals.
- I described the stress responses (fight, flight and freeze) and how each one changes heart rate, hormones and the capacity for careful thinking.
- I separated two things that are often confused: how activated or calm a person is, and whether their emotional state is positive or negative.
- I introduced heart rate variability (HRV): the small, healthy changes in the time between heartbeats, a marker of how well the body adapts to pressure. I linked it to physiological coherence, a steady, rhythmic pattern in those changes.
- I mapped, as a simple feedback loop, how a signal from the senses passes through the brain's threat detector, reaches either the stress response or the thinking brain, and how the heart's rhythm feeds back into that loop.

03 What I found

- In the model, the level of activation matters less than its emotional direction. High energy can be enthusiasm or anger; calm can be focus or apathy. Better results come from the positive side, whichever level the task needs.
- Under a strong stress response, the parts of the brain that handle careful reasoning are pushed aside in favour of speed. That suits real danger, which is rare at work, and often leads to poorer decisions in meetings and negotiations.
- Coherence does not mean being slow or relaxed. The literature I drew on suggests a heart rhythm can stay coherent at a high heart rate during demanding tasks and at a low one during quiet concentration.

- Breathing is the most direct lever a person has over this system. Paced, rhythmic breathing changes the heart's rhythm, and with it the signal the heart sends back to the brain.
- I proposed a practical test for a good decision state: one where, given the same information, you would willingly make the same decision again, even if the outcome surprised you.

The goal is not to remove pressure but to choose the state you meet it in.

04 What it means for leaders

- Treat decision quality as partly physiological. A capable leader in a stress response is not using their full capability.
- Do not train only for calm. Teach people to recognise whether their energy is positive or negative, and to shift its direction, not just its level.
- Short breathing practices before high-stakes moments (a negotiation, a difficult conversation, a board presentation) are a low-cost place to start.
- Where HRV is used, keep it voluntary and individual: the person owns their data, and it serves their own coaching, never appraisal or surveillance. It is a self-regulation tool, not a diagnosis.

05 Limits, honestly

This is mainly a conceptual paper: a model built from the existing literature, not a test of it. The abstract refers to an experimental framework and to improvements among participants, but the body of the paper does not report a study. It gives no number of participants, no control group, no duration and no measured results, so those improvements should be read as early observations rather than findings. Several points also rest on popular books rather than peer-reviewed studies, and topics named in the abstract, such as neuroplasticity and cognitive reframing, are not developed in the body. Testing this model with real HRV measurement, in real organisations, is what my later papers set out to do.

– Source

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