

# Pressure at work shows up in the heartbeat and people can learn to steady it

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Summary of: "Methodology for improving personal performance in the organization"

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## 01 The question

Most performance management looks at results and behaviour. It rarely looks at the state a person is in when they make a decision or stand up to present. My question was whether a measurable body signal could help people manage that state, and whether a structured coaching programme could improve it. The signal I chose is heart rate variability (HRV): the small, healthy changes in the time between heartbeats, a marker of how well the body adapts to pressure. This is not a medical study. HRV is used here as a self-regulation and coaching tool, not as a diagnosis.

## 02 What I did

- Reviewed the research on performance management, stress responses, attention and the "flow" state, and on how HRV relates to focus and emotional control. This dissertation draws on 180 sources.
- Surveyed 137 volunteer employees in Bulgaria, from specialists to managers, in roles with high demands. The online survey ran from September 2021 to May 2022.
- Watched live HRV readings in the office of a recruitment agency in Sofia, as employees moved from an ordinary conversation with their manager to presenting the same information.
- Designed a coaching method in 2 stages: breathing techniques first, to calm the body's stress response, then cognitive techniques, such as reframing unhelpful thoughts and visualising success. A small chest sensor gave real-time feedback.
- Ran the full programme with 1 volunteer: 12 sessions over 6 months (May to October 2023), with 2 HRV recordings before and 2 after, plus interviews before and after.

## 03 What I found

- Stress is common and poorly managed. 36% of respondents rated their stress as high, 47% found it hard to keep full concentration at work, and 63% used no technique to help them focus.
- Pressure is not seen as a performance booster. 49% did not believe that higher stress leads to better results.
- The same task can feel very different. In one observation, an employee with no coaching showed a sharp drop in HRV the moment "talking about" a role became "presenting" it, although the knowledge needed was identical. A colleague who had completed 3 coaching sessions showed the opposite: HRV rose when asked to present. These are 2 single observations, not a comparison of groups.

- In a single-participant pilot case, the participant's HRV readings were clearly higher after the programme (an average of about 21 before and about 31 after). In interviews they described less anxiety and more confidence before presentations, and rated their own confidence 2 out of 10 before and 8 out of 10 after.

**Two people can hold the same knowledge and still meet the same task in very different states, and that state can be seen and trained.**

#### 04 What it means for leaders

- Treat performance under pressure as a skill. Breathing and thinking techniques can be taught step by step, in the flow of real work.
- Start with the body, then the mind. In this method, people first learn to steady their breathing and only then work on the thoughts that drive anxiety.
- Use measurement only as a mirror for the individual. Participation should be voluntary, the person owns their data, and it is used for their coaching, never for appraisal or surveillance.
- Plan for time and commitment. Organisations I worked with found the time needed demanding, so a practical rollout should start small, with willing volunteers.

#### 05 Limits, honestly

The main before and after result comes from one participant, with no control group, so it cannot show that the method works for people in general. The statistics were run on individual readings rather than on people, which makes the result look more certain than it is. The office observations are single cases. The survey describes how people feel; it does not test the method. Organisations found the time and equipment demands heavy, which limited how many people could take part. The next step is a larger study with more participants, a comparison group and longer follow-up.

#### — Source

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