

# USING NEUROSCIENCE FOR PROJECT SUCCESS

**Carole Osterweil**'s new book provides a valuable guide to the human side of running projects, using insights from neuroscience to understand why some projects fail – and how we all have the power to better control our emotions and behaviour to help them succeed. In this extract, she looks at the antidote to a toxic project culture: psychological safety and a growth mindset culture

**P** psychological safety is “[t]he belief that the work environment is safe for interpersonal risk-taking... feeling able to speak up with relevant ideas, questions or concerns. It is present when colleagues trust and respect each other and feel able – even obligated – to be candid.” This definition from Amy Edmondson, in her 2019 book *The Fearless Organization: Creating psychological safety in the workplace for learning, innovation and growth*, is deceptively simple and the ramifications are profound.

Think of the organisations, project teams and leaders you know. How many demonstrate a disconnect between aspiration and reality? They want to be known for delivering great results and finding creative solutions. Yet many just get stuck because

of invisible dynamics that play out on a daily basis.

You see it when a team member keeps quiet, even though they can see something is clearly going wrong. You see it when a contractor doesn't mention a different way of working in case they get laughed at. And you see it in ritualised board meetings and team meetings where groupthink prevails or the risk of being cast as the dissenting voice is just too high.

When psychological safety is low, we secretly fear being punished, humiliated or ostracised for speaking the truth as we see it. Low psychological safety gets in the way of team performance and project delivery. And when you can't deliver the outcomes you've promised, it gets in the way of personal success. If you are wondering about the



evidence, take a look at Edmondson's book, which includes numerous case studies, or check out Google's Project Aristotle.

### Project Aristotle

The multi-year research programme Project Aristotle set out to identify what makes Google's most effective project teams so successful.

Julie Rozovsky, one of the lead researchers, explains the findings: "After examining 180 project teams and 250 variables, we discovered that who is on the team matters far less than how the team members interact, structure their work and view their contributions. It comes down to the group's norms of behaviour and five key dimensions:

- **Psychological safety** – is it safe to take risks and be vulnerable in front of each other?
- **Dependability** – can we count on each other to do high-quality work on time?
- **Structure and clarity** – are our goals, roles and execution plans clear?
- **Meaning of the work** – are we working on something that is personally important?
- **Impact of work** – do we fundamentally believe that the work we are doing matters?

"Project Aristotle demonstrated that, of these five dimensions, psychological safety stands head and shoulders above the rest – it is a pre-requisite for the other four."

Psychological safety is the key enabler for building a high-performance culture. It is not soft or about being nice. It is about creating a climate that is characterised by trust and respect so that people feel safe to take interpersonal risks.

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Risk management gets lots of attention in projects. But its main focus is on risks 'out there'. How much time do you spend talking, or even explicitly thinking, about personal risk? I'm not alluding to the risk appetite of key stakeholders (even though that is important). I'm talking about what each of us personally sees, and experiences, as risky in our dealings with others. For example, what do you do with that momentary thought – 'dare I push back?' – when the finance director challenges your figures at a project board meeting? Do you stop to consider possibilities, or do you rule it out immediately?

I want to divert the discussion for a moment away from psychological safety (a group phenomenon) to focus on your attitude to personal risk. Whatever your answer to the question, 'dare I push back?', I suspect you'll gain additional insight through considering your response in the context of the next section on mindsets.

### The growth mindset

The term 'growth mindset' was coined by psychologist Carol Dweck to explain why some children love learning and readily embrace new challenges, while others, those with a 'fixed mindset', are wary of new challenges and actively avoid them. Her subsequent research showed that these two terms apply to people at large.

At its simplest, people with a fixed mindset believe that human qualities such as intellectual skills are carved in stone and not open to change: you either have them or you don't. This belief brings "an urgency to prove yourself... it simply wouldn't do to look or feel deficient". People with a fixed mindset tend to evaluate every situation with questions like:

## EIGHT KEY TAKEAWAYS

**1** Groups and team environments amplify emotions.

**2** Our innate need to belong increases complexity.

**3** Excess stress can trigger a cycle that plays out across the wider project system and adversely impacts delivery.

**4** We need leaders who, despite the overload and stress, can slow down, rather than becoming more transactional and process-driven. Those who don't run the risk of creating a toxic environment where high performance is impossible to achieve.

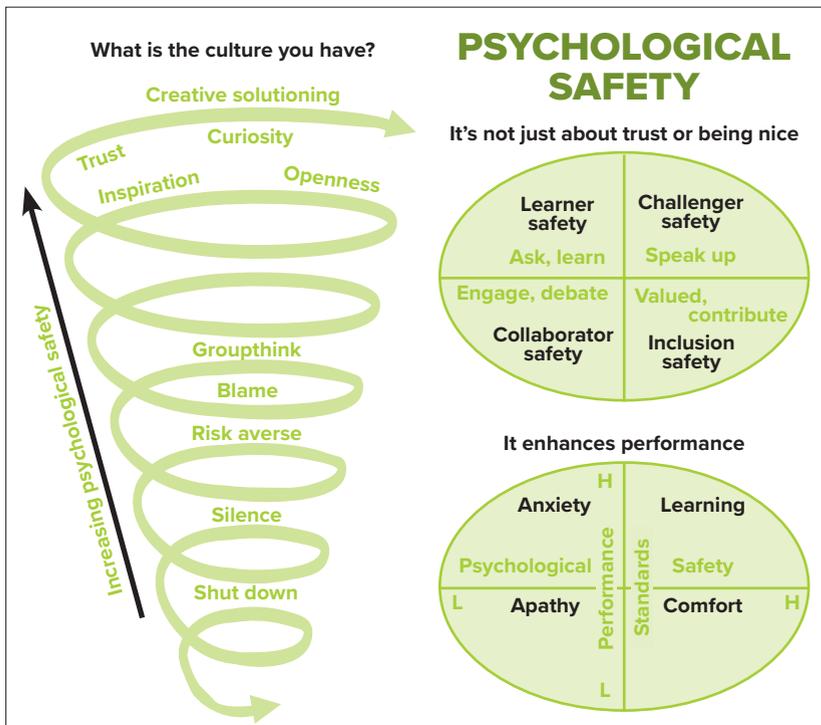
**5** Individuals with a growth mindset believe everyone can change and grow, failure is something you learn from and new challenges are to be embraced. The opposite is true for those with a fixed mindset.

**6** Creating a high-performance culture means actively nurturing psychological safety to

support interpersonal risk-taking/a growth mindset culture.

**7** If you're not intentionally cultivating psychological safety, you will be adding to complexity by making a VUCA world more VUCA – and reducing the chances of successful delivery.

**8** We all need the skills to counteract this pull to complexity.



The figure on this page shows psychological safety is a pre-requisite for creativity, collaboration and learning. Without it, we inadvertently trigger avoidance behaviours and add to the complexity of delivery. Psychological safety is dynamic and emergent – it depends very much on what is going on in the external environment, who is in the team and what is happening for them. We cannot assume that, just because psychological safety was high six weeks ago, we will stay at the top of the spiral.

**The growth mindset culture**

The Neuroleadership Institute puts a slightly different spin on the same terrain. It speaks about the need for a growth mindset culture where “most, if not all, employees hold the dual belief that improvement is both possible and the purpose of the work employees do... They uplift one another, welcome new

ideas and strive to get better. They do not point fingers, shut people down or assert themselves as geniuses.” It doesn’t matter whether we are talking about psychological safety or a growth mindset culture – both need deliberate fostering.

When we understand how the human brain works, it becomes obvious that creating and nurturing psychological safety, ie a fear-free environment, is key to successful project delivery – no matter your job title. This means learning to recognise and contain your emotions in order to: be better able to contain the emotions of those you interact with directly and indirectly (your customers, team, sponsors, stakeholders and suppliers); be better equipped to read the situation clearly or less likely to trigger a threat response in others; and be able to respond flexibly to retrieve the situation on the occasions when you do.

Emotions are contagious, and stress can quickly force things to get out of hand. Put all this together and the bottom line is clear. If you’re not intentionally nurturing psychological safety, the way the human brain works means that you will unwittingly be making a VUCA world more VUCA (volatile, uncertain, complex and ambiguous), reducing the chances of successful delivery. Whatever your role, you need the skills to counter the pull to complexity.

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will I succeed or fail? Will I be accepted or rejected? They are fearful of new challenges because of the inherent risk: if I make a mistake, I’ll show my shortcomings and that would be a bad thing.

People with a growth mindset believe that human qualities are things to be cultivated through effort, strategies and help from others. Yes, people start in different places, but everyone can change and grow through application and experience. This brings a completely different attitude to success and failure. Success is about growing and developing. Failure is something you learn from – it’s vital for future growth. New challenges are to be embraced, not avoided.

Think about yourself for a moment – at work, at home, with your family, with hobbies. Where do you have a growth mindset and where do you have a fixed mindset? What is, or was, encouraged? What impact has that had? Now think about your projects. What is encouraged and what are you encouraging? Can you see how that relates to psychological safety? I said earlier that psychological safety is a group phenomenon. We need to actively cultivate it.

**Carole Osterweil’s new book, Neuroscience for Project Success: Why people behave as they do, will be published by APM in June 2022. To buy a copy, go to [apm.org.uk](http://apm.org.uk)**