



Ministry
of Defence



PSYCHOLOGICAL SAFETY IN MOD MAJOR PROJECTS

Creating the environment for
our projects to succeed

July 2022





COPYRIGHT

The Ministry of Defence (MOD) has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the Department's website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact the MOD.

Ministry of Defence
Whitehall
London
SW1A 2HB
United Kingdom
Telephone 020 7218 9000
Website www.gov.uk/government/organisations/ministry-of-defence

© Crown copyright 2022

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is UK MOD Crown copyright. Material and information contained in this publication may be reproduced, stored in a retrieval system and transmitted for UK government and MOD use only, except where authority for use by other organisations or individuals has been authorised.

FOREWORD

In a learning organisation, people are empowered to experiment, innovate and learn from failures. Teams challenge established and outdated ways of working.

How do we set the conditions for this empowerment?

We know that one condition is psychological safety. Psychological safety is the idea that we can be candid and raise issues without fear of reprisal. Psychologically safe teams are better suited to maximise innovation and expose and manage risks. This study set out to understand the extent to which psychological safety exists in MOD's major projects, along with the factors that inhibit or support it.

The UK Government delivers some of the most complex and innovative projects in the world, with the UK Ministry of Defence delivering the biggest share of Government Major Projects in number and cost. The ambition and scale of projects delivered across Defence has never been greater and we need to constantly improve the Defence project delivery system in order to achieve our ambitions.

We are committed to developing an environment of psychological safety in our major projects, so that we know early if a project is off track and so that every member of the team feels they can fully contribute.

In a portfolio as high-value as ours is, it's irresponsible not to review and improve how we support high performing teams. UK defence and security challenges are only increasing in complexity. The decisions we take have consequences. A learning organisation also does not just learn from what goes wrong. A learning organisation shares knowledge and analyses what went right and seeks to replicate this. A learning organisation has to embed what it has learned and be better for it. We should be encouraging people to speak-up without fear of reprisal or repercussions and trust could be drawn out more. We should be striving to start from a position of trust where people are encouraged and rewarded to speak up, allowed to use their experience and knowledge and where they can set out clear red lines.



Laurence Lee
2nd Permanent Under Secretary

Research Sponsor



AVM Lincoln Taylor (CB, OBE)
COS Capability, Royal Air Force

PA Consulting



Sean McDaniel
Member of PA's Management Group

EXECUTIVE SUMMARY

Psychological safety is a key factor in establishing high performing teams. Yet, creating a workplace environment where psychological safety can prosper takes considerable commitment and skill.

This study set out to understand the extent to which psychological safety exists in MOD major projects, along with the factors that hinder or support it.

This research considered both the environment that projects operate in, and the things projects can do internally to achieve their goals, the findings include but are not limited to:

- the external environment, especially MOD strategy, significantly effects psychological safety, with project leaders experiencing the greatest impact

- the behaviours of project and team leaders in the MOD environment have the greatest influence on psychological safety, which differs from the average workplace environment
- a clear and compelling vision is a key factor in fostering psychological safety for MOD staff.

Practical tips are provided within the report to address these and other key findings.

This report is the second major study from MOD's Learning from Experience service, which was launched in April 2021 to help our projects and professionals constantly improve. The first report focused on Project Initiation: Lessons Learned, read more [here](#).



When people believe they can speak up at work, the learning, innovation and performance of their organisations is greater. Teams and organisations in which people believe that their voices are welcome outperform their counterparts.

Dr Amy Edmondson, Novartis Professor of Leadership and Management at Harvard Business School

240+

surveys completed

£60bn

collective delivery

23

interviews with SROs and programme directors

12 participating major projects



CONTENTS

FOREWORD	4
EXECUTIVE SUMMARY	5
RESEARCH METHOD	7
<hr/>	
SECTION 1: RESEARCH FINDINGS	8
MOD STRATEGY	9
<hr/>	
SECTION 2: THE PROGRAMME ENVIRONMENT	12
LEADING CHANGE	13
SETTING AND COMMUNICATING THE VISION	14
CULTURE AND LEARNING FROM EXPERIENCE	16
DESIGNING AND DELIVERING CAPABILITY	19
DRIVING VALUE	20
<hr/>	
BIBLIOGRAPHY AND EXTRA RESOURCES	22
ACKNOWLEDGEMENT	24

THIS REPORT IS STRUCTURED TO ALLOW PRACTICAL APPLICATION OF THE LESSONS LEARNED THROUGH THIS RESEARCH

Psychological safety is vital to success in environments that are uncertain and interdependent, yet it is in these environments that psychological safety can be most fragile. Given the uncertainty and interdependence that underpins most MOD projects, this research set out to understand the factors that influence psychological safety and how they can be shaped to improve it.

We found an environment that is more safe than unsafe, with pockets of good practice, areas where improvements can be made, and evidence for how to achieve this. We also found that psychological safety is important for both individual wellbeing and the perception of team performance.

This report sets out the current challenges, what we are getting right in MOD, and what we can do to be even better. It does so through consideration of the environment that projects operate in, and the things projects need to do to achieve their goals, in particular:

1. MOD Strategy and the environment external to the project, and
2. The project environment and responsibilities including:

- 2A Leading change
- 2B Setting and communicating the vision
- 2C Culture and learning from experience
- 2D Designing and delivering capability
- 2E Driving value

Part 1 of this report helps to situate the study within the context of the MOD project delivery environment. Part 2 presents the key findings along with a short list of practical recommendations that can be applied to projects to help promote Psychological Safety.

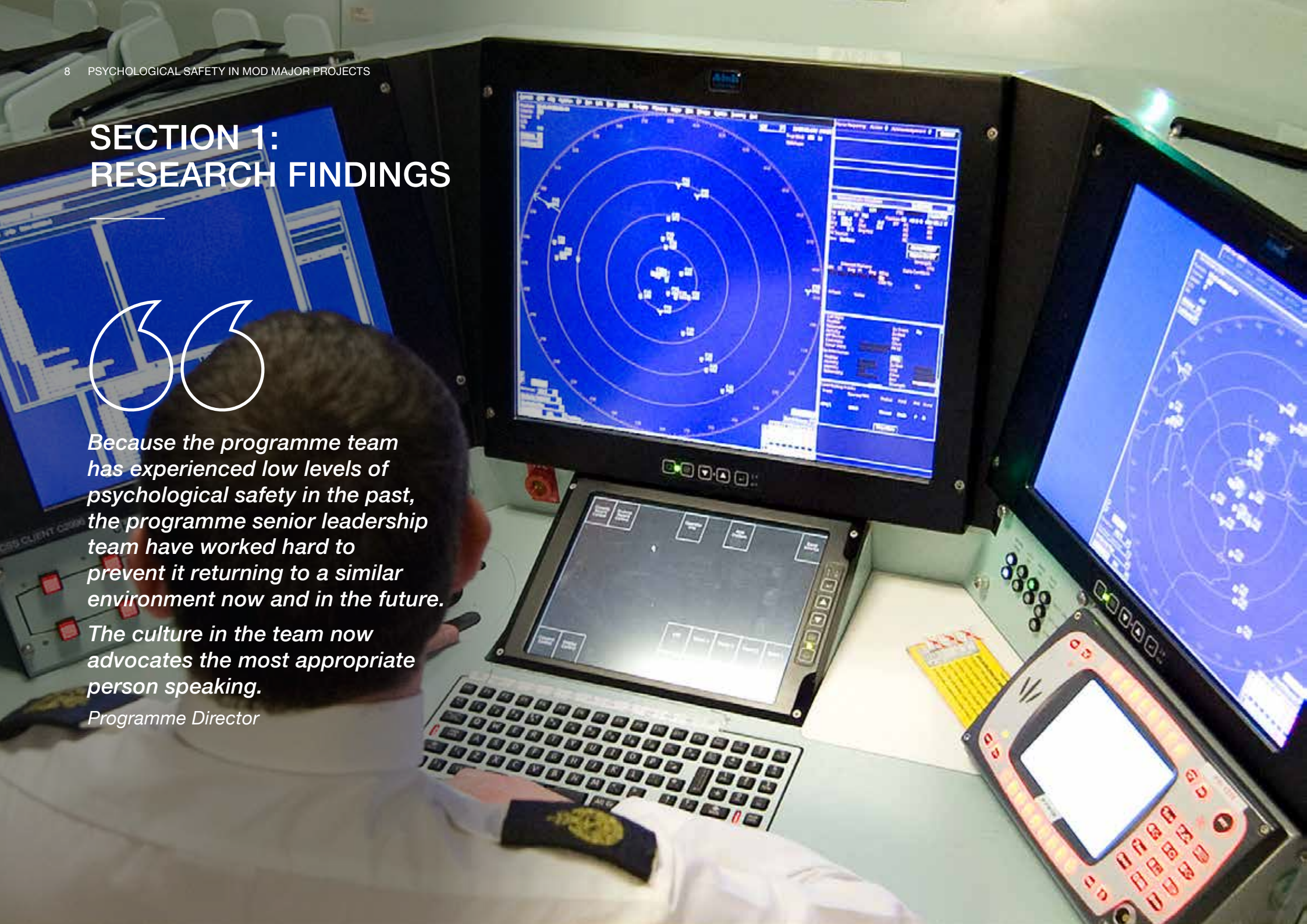
SECTION 1: RESEARCH FINDINGS



Because the programme team has experienced low levels of psychological safety in the past, the programme senior leadership team have worked hard to prevent it returning to a similar environment now and in the future.

The culture in the team now advocates the most appropriate person speaking.

Programme Director





The strategic environment directly influences psychological safety in projects

Projects do not operate in isolation, they are shaped by the external environment. This research found that the external environment, especially MOD strategy, significantly effects psychological safety, with project leaders experiencing the greatest impact. This research identified key factors that are impacting the psychological safety of Senior Responsible Owners and Project Directors. A lack of empowerment, the absence of a challenge culture, and reductions in project funding without consideration of performance or time implications are all key factors that negatively impact psychological safety.



A Senior Responsible Owner (SRO) is accountable but other people can impact the outcome of the programme. Finance can look down the line and take money, but the SRO still has to deliver the same benefits.

SRO

Senior Responsible Owners and Project Directors reflected on the tensions between the ambition for the Project, their personal responsibility for delivering successfully and constrained resources. The role of Senior Responsible Owner or Project Director for a major project in MOD is challenging. MOD work on some of the biggest and most complex projects in the UK and often over long time periods which means our projects can see significant changes in the external context. But we can do more to support our project leaders.

The lack of psychological safety experienced in these roles is avoidable. Managing competing demands is an essential part of managing a portfolio or project. It is unrealistic to expect project constraints to remain static, but when changes are required they should be made cognisant of the impact. The MOD is committed to ensuring that when project parameters need to change e.g. cost, so do the scope, performance or time parameters. We are also supporting SROs to ensure that projects are appropriately costed up front and any requests for efficiencies are reasonable. Our next steps are: first creating environments where Senior Responsible Owners and Project Directors feel able to challenge the expectations placed upon them without fear of ramifications. Second, empowering Senior Responsible Owners so they have the levers to change the approach of their projects when affected by external pressures.



The strategic environment directly influences psychological safety in projects (continued)

For Defence to deliver our ambition we need our teams to work innovatively and effectively. Project leaders who are operating in an environment where they do not feel psychologically safe are unlikely to perform at their best, and are unlikely to be able to get the best from their teams.

Some project leaders are managing to create psychologically safe conditions for their teams, but are likely to be achieving this through an absorption of pressure. This approach is unlikely to be sustainable, particularly in light of the strong links between psychological safety and wellbeing.

Key findings from this research on the external environment and its impact on psychological safety include:

- Psychological safety alone represented 29.4% of the variance in wellbeing scores amongst survey respondents, and the projects in the top quartile for high psychological safety had 47% higher median wellbeing scores than the lower quartile. If MOD seeks to further support and *empower* its people, considerable effort should be invested in creating psychologically safe environments for them to operate in.

- In addition to the impact on wellbeing, psychological safety also explains 37.5% of the variance in team performance scores, aligning with the leading research in this area (by Amy Edmondson^{1,2}) linking psychological safety with team performance. Teams operating in environments where they do not feel psychologically safe are likely to perform less effectively.
- This research has identified that despite general feelings of safety within teams across the projects surveyed, individuals felt least comfortable in the area of taking risk. Taking and managing risks is an essential part of high performing teams and a reluctance to do so will hamper innovation and creativity.

Improvements in the psychological safety of a team environment will have a direct influence on the wellbeing and performance of the team. Further findings of this research and actionable guidance for improving psychological safety can be found in Part 2 of this report.

¹ [The Fearless Organization: Creating Psychological Safety in the Workplace](#), or potential an academic article ([Edmondson A. Psychological Safety and Learning Behavior in Work Teams](#))

² [Administrative Science Quarterly. 1999;44\(2\):350-383. doi:10.2307/2666999](#)

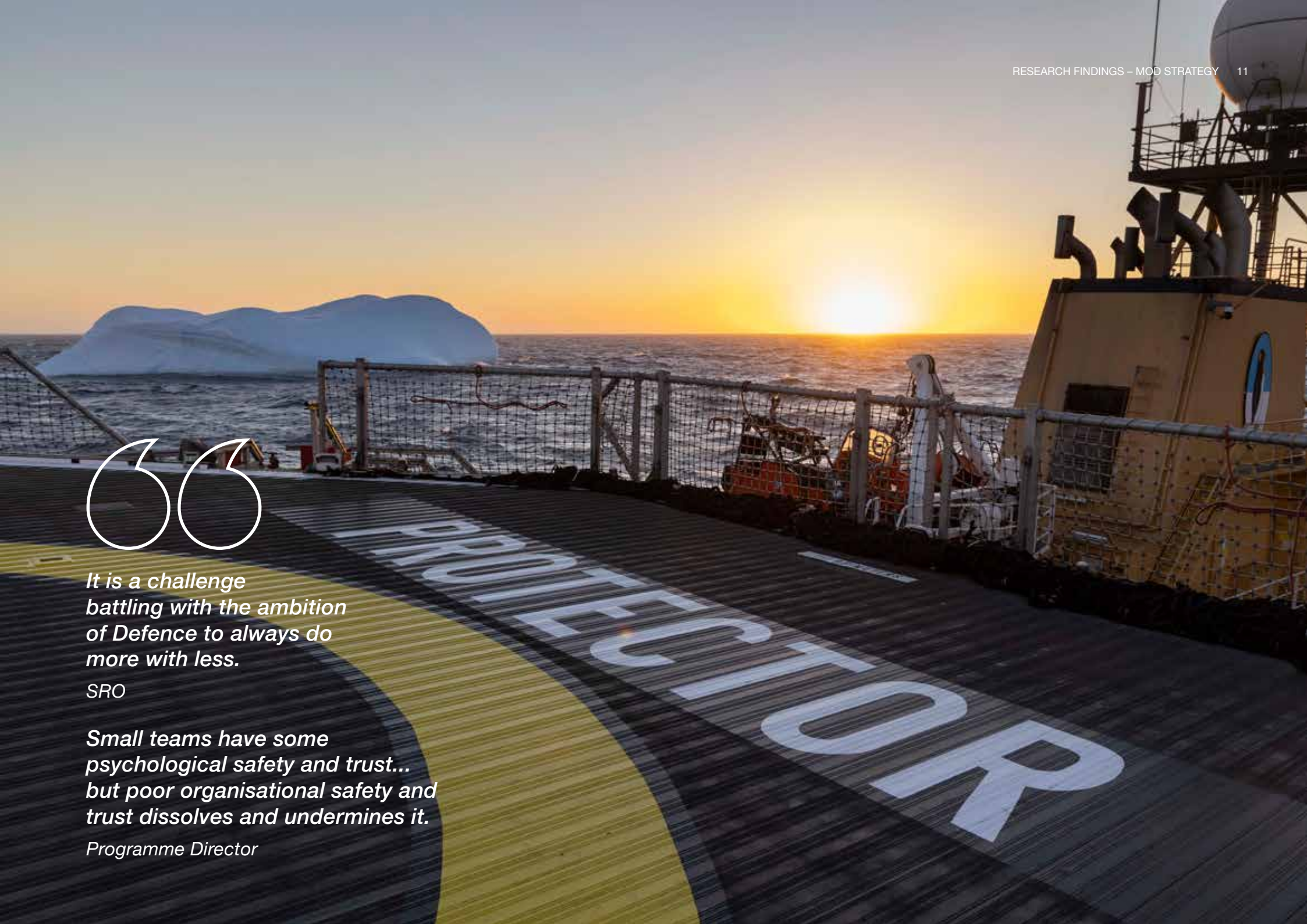


*It is a challenge
battling with the ambition
of Defence to always do
more with less.*

SRO

*Small teams have some
psychological safety and trust...
but poor organisational safety and
trust dissolves and undermines it.*

Programme Director



SECTION 2: THE PROGRAMME ENVIRONMENT



Safety is at a high level and driven by the positive, progressive and engaging behaviours of the leadership team. Mistakes are worked through together and lessons identified.

AVM Lincoln Taylor



Leadership behaviours were found to significantly influence psychological safety

Context

The highest performing teams operate in a psychologically safe environment. This research shows that the behaviour of project leaders is essential for enabling these conditions.

What we found

The behaviours of project and team leaders have been identified by this study as the most important factor in team psychological safety. Broader literature commonly highlights learning behaviours as the key factor and, although learning behaviours were still identified as important contributors by this research, the prominence of leadership behaviour may be a reflection of the hierarchal nature of the MOD project environment.

This study identified examples of good leadership behaviour and found that psychological safety and its impacts on project performance is well understood at the project leadership level. “Safety is at a high level and driven by the positive, progressive and engaging behaviours of the leadership team. Mistakes are worked through together and lessons identified.” AVM Lincoln Taylor draws a comparison with the Duty Holder responsibility – the model in Defence whereby a named individual has personal responsibility for safety in the military with wider organizations directed to support (Duty Holder facing). An SRO in programme delivery should have the same support (SRO-facing) enabling better mental safety in programme delivery.



Application for project leaders

- **Initiate engagements with your team to discuss progress:** proactively create the environment where individuals have the opportunity and feel comfortable to raise issues and concerns.
- **Be available to the team:** ensure your team knows that you are available and open for consultation when needed by them.
- **Provide an ongoing presence:** project leaders should be ever-present in the project environment, providing a constant route for conversation and escalation.



Setting and communicating a compelling vision helps to build psychological safety

Context

The previous report in this series – [Project Initiation: Lessons Learned](#) – highlighted the importance of setting up teams for success. This theme also arose when considering performance through the lens of psychological safety. Setting and communicating a clear vision for a team, including demonstrating how the team’s efforts contribute to the broader strategic direction of the organisation helps to establish a psychologically safe environment.

Combined, leadership behaviours and clear direction constitute almost

50.3%

of variance in psychological safety scores

What we found

This research identified that clarity of direction is the second most important factor, after team leader behaviours, that contributes to high psychological safety. As a construct, clear direction brings together both the time invested in understanding objectives and clarity of what the team needs to accomplish.

Combined, leadership behaviours and clear direction constitute almost 50.3% of variance in psychological safety scores. The projects that have achieved this seemed to face similar issues relating to external influence and interference as those who had not. This suggests that improvements in psychological safety can be achieved despite the external environment.



Application for project leaders

- **Clearly present the hierarchy of goals for your team:** Clarify for your team how the strategic direction of the organisation connects with the work that the team is undertaking and subsequently how their objectives contribute to the delivery of the project.
- **Invest in the objective setting process:** Invest time in setting and understanding objectives across the project ensuring that the goals the team is working towards are both clear and easy to understand and appropriate to their capability.
- **Regularly reaffirm team direction, especially in light of geopolitical changes:** Frequent discussion on team direction inspires a sense of purpose and stability, which we know to be pivotal to individual wellbeing, as well as renewed focus on the ‘art of the possible’ to achieve these important, purposeful outcomes.



Everyone on the team respects each others' diverse backgrounds, experience, knowledge, perspective and roles.

Programme Director

Continuous growth and learning is more than encouraged, it's essential.

Survey respondent



Psychological safety is built in cultures of learning

Context

A supportive culture which encourages learning from experience provides teams with an environment where they can achieve psychological safety and high performance. This desired state materialises when a culture of learning exists both within the team and in the surrounding environment.

What we found

Learning behaviours are thought to mediate the relationship between psychological safety and team performance, and this study identified a strong positive relationship between the frequency with which project teams test assumptions about issues under discussion, perceived team performance and psychological safety.

82.8% of all survey responses disagreed with the question 'it is difficult to ask other members of this team for help', highlighting that team members feel

comfortable seeking support from their immediate colleagues. This research also found that while for many projects psychological safety had been built within teams, relationships between teams, projects and ranks were clearly much more challenging.

The Defence operating model often requires project teams to operate across multiple parts of the organisation to deliver the project. This research identified that the different cultures in each part of Defence can make it harder to work effectively across the organisation. Healthy tension and cognitive diversity are recognised as contributors to an effective working environment, however the differences between the teams was found to be inhibiting activity in this study. Working effectively across boundaries is essential for the successful delivery of projects.



Application for project leaders

- **Proactively establish positive working relationships with contributing teams and organisations:** Project leaders should seek out opportunities to build relationships between teams through establishing an environment of trust and respect, and shared values that unite individuals across boundaries.
- **Defence also has a role to play to enable the right culture:** Defence must break down bureaucratic barriers and unite projects under a common vision, rather than setting them up to fight for limited resource.



Each member of the team knew what each other was delivering and it provided a sense of ownership. It enabled the team to talk to one another supportively.

SRO







The importance of maintaining sight of the capability picture is crucial in Defence projects

Context

Defence projects are designed to connect together to deliver capability. However, these projects often take multiple years, and sometimes decades, to deliver capabilities which are continuously updated and upgraded. The length of these projects is demonstrated by the recruitment approach in some Front Line Commands where individuals are hired to work specifically on a project. This can create an environment where the lines are blurred between the temporary project structure and the business as usual organisation.

What we found

The length, scale and complexity of Defence projects, combined with the constantly changing strategic and financial focus, means that the big picture of how the project contributes to broader capability can fail to resonate clearly in all project areas. This study found some evidence that this may be creating a pattern of ‘learned helplessness’ – i.e., a sustained sense of powerlessness – within some projects, to the detriment of both wellbeing and psychological safety.

To address this, the survey data suggests that clarifying team direction can play a significant role: clarity of direction was the second most important factor for higher psychological safety scores.



Application for project leaders

- **Reaffirm the role and importance of the project in delivering the broader capability:** clearly demonstrate how the project contributes to the broader capability which is essential for a modern UK Defence.
- **Mobilise your teams to see how their work helps to build the big picture:** This challenge is compounded by the post-Covid ways of working, however there is significant value in bringing your teams together with counterparts to demonstrate what is being achieved through their collective efforts.



Unlock purpose and empowerment to drive value

Context

Defence projects operate to deliver some of the UK's most important strategic priorities; this is a mission that inspires and motivates many of our people. By maximising that commitment and empowering our people to deliver, we can achieve increasing value against our goals.

What we found

Belief that 'this work makes a difference', correlates directly with higher psychological safety, aligning with broader findings on the importance of purpose in building high performing teams. A sense of purpose is known to help inspire individuals to perform at their best, whilst also improving individual wellbeing.

In this study, belief that "excellent work pays off in this organisation" also strongly correlated with higher wellbeing scores, further supporting the literature on purpose and its contribution to wellbeing and performance.

Unfortunately, lack of empowerment both in relation to autonomy and resources was a frequent theme in our interviews with SROs and Project Directors, with some evidence that this has filtered through to the wider project teams. This is an area where change can present considerable improvements as it is often the teams that are closest to the point of delivery that are best suited to make decisions over the prioritisation of scarce resources to deliver value.



Application for project leaders

- **Enable your teams to achieve their goals:** Empower teams with both the decision authority, resources and skills they need to make decisions over how to achieve the goals set for them.
- **Celebrate the successes:** Take the time to widely communicate and celebrate the achievement of benefits, or milestones towards these, no matter how busy the team is or the proximity of the next milestone.
- **Recognise individual excellence:** individual contributions towards benefit delivery should be recognised and rewarded.



BIBLIOGRAPHY AND EXTRA RESOURCES

- Amy Edmondson, [The Fearless Organization: Creating Psychological Safety in the Workplace](#)
- Amy Edmondson, [Psychological Safety and Learning Behavior in Work Teams. Administrative Science Quarterly. 1999](#)
- Amy Edmondson, [Teaming: How Organizations Learn, Innovate, and Compete in the Knowledge Economy](#)
- Cabinet Office and Infrastructure and Projects Authority, [Government Functional Standard for Project Delivery \(2018\)](#)
- Cabinet Office and Infrastructure and Projects Authority, [Principles for Project Success \(2019\)](#)
- Cabinet Office and Infrastructure and Projects Authority, [Project Delivery Capability Framework \(2018\)](#)
- Department for Transport and Infrastructure and Projects Authority, [Lessons from Transport for the Sponsorship of Major Projects \(2019\)](#)
- Google's reWork Guide: [Understand team effectiveness](#)
- Infrastructure and Projects Authority, Cabinet Office and HM Treasury, [IPA Annual Report 2019-2020 \(2020\)](#)
- Infrastructure and Projects Authority, [Cost Estimating Guidance \(2021\)](#)
- Infrastructure and Projects Authority, [The Art of Brilliance: A Handbook for SROs of Transformation Programmes \(2019\)](#)
- Infrastructure and Projects Authority, [The Role of the Senior Responsible Owner \(2019\)](#)
- Jay R. Galbraith, [Designing Organisations: An Executive Guide to Strategy, Structure and Process \(2001\)](#)
- John Hagel and Gemma Mortensen, [World Economic Forum, Systems Leadership And Platforms: How to Mobilize People to Transform Systems and Build the Platforms to Scale These Efforts \(2019\)](#)
- Matthew Syed, Rebel Ideas: [The Power of Diverse Thinking \(2020\)](#)
- Ministry of Defence, [Defence Project Delivery Functional Strategy 2021-2023 \(2021\)](#)
- Ministry of Defence, [Project Initiation Report \(2021\)](#)



ACKNOWLEDGEMENTS

This document sets out key lessons learned from studying psychological safety in major projects in Defence.

For initially sponsoring this work and providing the impetus between the MOD Project Delivery Function and PA Consulting, we would like to thank Air Vice Marshal Lincoln Taylor, Royal Air Force.

We would also like to thank several other groups of individuals whose involvement was crucial through research, analysis, writing and production:

- Members of the sponsoring group from the organisations mentioned opposite for providing direction, guidance and review at key points;
- Senior Responsible Owners and Programme/Project Directors from 12 major projects across Defence who were kind enough to share their insights and reflections with us during interviews;
- Programme team members (244) who completed the psychological safety survey, providing feedback on what is working well in their areas and the challenges they face;
- Representatives from the Ministry of Defence who participated in a series of workshops to explore the key insights gathered during interviews and reviewed draft versions of the report;
- Representatives from MOD's Project Delivery function, namely Eleanor Williams and Catherine Poyner, for driving the delivery of this study;
- Representatives from PA Consulting, namely Charlotte Townsend, Sam Sheppard, Marcus Dowdeswell, Chris Cole, Lee McLoughlin, James Rowntree, Alison Gregory and Sean McDaniel, for carrying out the research and analytics;
- Amy Edmondson for her support to this study and the use of her measurement approach.