



Overcoming Public Speaking Anxiety in Project Management: Strategies for Building Confidence and Delivering Effective Presentations

Erik Jurado* and Amit Grinvald

UNYP - University of New York in Prague, Czech Republic

Citation: Erik Jurado, Amit Grinvald (2026) *Overcoming Public Speaking Anxiety in Project Management: Strategies for Building Confidence and Delivering Effective Presentations*. *J of Eco and Soc Dynamics* 2(6), 1-17. WMJ/JESD-156

Abstract

This study uses a mixed-methods design to examine the prevalence, impact, and management of public speaking anxiety (PSA) among project managers. Drawing on a survey of 41 project management professionals and a semi-structured interview with experienced communications trainer Amit Grinvald, the research found that PSA is a genuine and common challenge in this profession. Anxiety levels were moderate on average, with a mean score of 3.17 on a 5-point Likert scale, and reported symptoms included difficulty concentrating, nervousness, and various physiological reactions. Common triggers in project management contexts were presenting to senior executives and delivering high-stakes project updates. The interview shed light on some of the more distinctive pressures project managers face in communication, particularly having to convey complex technical information to widely different audiences, often under time pressure. This study also explored how PSA affects team dynamics, project outcomes, and career progression. Rehearsal and peer feedback were the most commonly reported coping mechanisms, though the findings made clear that more targeted, tailored interventions are still needed. Grinvald introduced a four-dimensional framework for managing PSA, centred around aligning thoughts, actions, knowledge, and feelings. Drawing on the established project management competencies such as planning and risk management, combined with supportive environment creation and emerging technologies considerations, provide useful ways forward that will reduce PSA and enable project managers to be confident and effective communicators.

***Corresponding author:** Erik Jurado, UNYP - University of New York in Prague, Czech Republic.

Submitted: 16.05.2026

Accepted: 20.05.2026

Published: 05.06.2026

Keywords: Public Speaking Anxiety, Project Management, Communication, Leadership, Coping Strategies, Anxiety Triggers, Public Speaking

Introduction

For project managers, the ability to speak confidently in front of others is not optional, it is core to the job. Whether presenting updates to executives, negotiating with clients, or rallying a team behind a decision, communication sits at the heart of effective project management, as recognised by Project Management Institute. We need to have in mind that the principles and practices of project management are highly pervasive, far beyond formally designated project management roles. This is well reflected in a variety of industries and job descriptions, driven by the increasingly project based nature of contemporary work [1].

Public speaking anxiety affects a large proportion of the population, and project managers are no exception [2]. This anxiety, characterized by symptoms such as nervousness, fear of judgment, and physiological stress, can undermine a project manager's ability to communicate effectively, jeopardizing both individual performance and overall project outcomes [3].

Despite how common PSA is, surprisingly little research has examined how it plays out specifically in project management. Most existing studies focus on general populations or public speakers, without engaging with pressures that are particular to this role, like navigating conflicting stakeholder expectations or communicating at critical project milestones [4]. The strategies proposed for managing PSA also tend to be generic, and few have been adapted to the collaborative, fast-moving environments that project managers typically work in [5].

This research sets out to address that gap. By looking at how widespread PSA is among project managers, what tends to trigger it, and what actually helps, the study combines survey data with expert interview findings to offer practical, context-specific recommendations. The aim is to contribute meaningfully to what we know about professional communication and to give project managers a clearer sense of how to develop stronger public speaking skills in their day-to-day work.

Literature Review

Public Speaking Anxiety: An Overview

PSA is well established as a widespread issue. McCroskey was among the first to formalise communication apprehension as a field of study, and

a substantial body of research has developed since. Symptoms can be psychological, such as fear of judgment or worry about being evaluated negatively, and also physical, including sweating, shaking, and dry mouth. While much of the research relating to PSA is focused on general populations, there are significant implications for professional settings, especially regarding leadership positions that require effective communication [2,6].

Public Speaking Anxiety in Project Management

Project managers routinely present complex technical information to stakeholders with very different levels of expertise, making strong communication skills essential to the role. Ineffective communication is a major contributor to project failure [4]. However, public speaking anxiety can hinder a project manager's ability to clearly and confidently convey messages, ultimately affecting project outcomes (Smith, 2020). Project managers are tasked with leading discussions, providing updates, and navigating high-stakes situations, all of which require strong public speaking skills. Despite this, PSA can reduce clarity and diminish effectiveness, particularly when under pressure. Research looking specifically at PSA within project management remains sparse. Effective communication is crucial for managing stakeholder expectations and facilitating sound decision making in project management [4]. For example, public speaking anxiety can prevent the project manager from confidently presenting solutions or updates, which are extremely important in gaining the trust and support of the stakeholders.

Psychological and Physiological Effects of PSA

On the psychological side, PSA often brings with it self-doubt and a persistent worry about how others will judge you, both of which erode confidence [7]. Physically, it can mean dry mouth, sweating, and a racing heart, none of which make it easier to speak clearly [8]. These symptoms do not just affect the speaker internally. They can change how an audience reads a presentation, and in professional settings, that can damage credibility.

The cognitive effects are also worth noting. Anxiety under pressure can interfere with thinking clearly, making it harder to respond well when things do not go as planned [9]. For project managers who routinely need to explain technical details in high-pressure meetings or to sceptical audiences, this is a real problem.

Triggers of Public Speaking Anxiety in Project Management

PSA triggers vary, but some of the most commonly reported include fear of negative judgment, lack of preparation, and uncertainty about how the audience will respond [10]. In project management, these familiar triggers get compounded by stakeholder complexity. Communicating clearly across groups with very different technical backgrounds takes careful calibration, and getting that calibration wrong carries real consequences [1]. That additional layer of pressure can meaningfully heighten anxiety.

Fear of making mistakes in front of clients or senior leadership is another significant driver. Presenting to top executives or negotiating with clients are high-stakes activities by nature, and that pressure tends to make PSA worse [11]. The need to perform well in these critical situations may raise the level of vulnerability, thus increasing the chances of anxiety.

Overcoming Public Speaking Anxiety: Strategies

Several approaches have been studied for managing PSA. Cognitive-behavioral therapy (CBT) is probably the most extensively researched, and its core mechanism, helping people challenge and reframe negative thoughts, has shown genuine results in reducing anxiety [11]. For professionals like project managers, where anxiety is often tied to performance pressure, CBT offers a structured way to address the problem at its source.

Mindfulness-based approaches offer another route. Techniques focused on present-moment awareness and controlled breathing have been shown to ease the physical symptoms of anxiety, helping speakers stay grounded rather than getting caught up in worries about how they are coming across [12].

Apart from psychological and mindfulness-based techniques, physical approaches like deep breathing and progressive muscle relaxation have also been found to reduce the physiological symptoms of anxiety. These techniques can be helpful in managing the physiological symptoms of anxiety by promoting relaxation and, therefore, allowing speakers to regain control and present more effectively [13].

The strategies have to be adapted to the particular professional context. Rehearsal and feedback are

effective techniques for reducing anxiety levels [14]. This may include the practitioner presenting in a friendly, supportive environment followed by feedback from fellow peers allowing them to adapt their presentation and make further changes. Preparation in a controlled environment and practice in a low-level risk setting will allow project managers to feel comfortable in high-level environments.

Recent Innovations in PSA Interventions

Virtual reality has emerged as a promising tool for public speaking practice. VR creates realistic, low-risk environments where speakers can practise repeatedly, and research suggests this kind of repeated exposure helps to desensitise people to anxiety-inducing scenarios [15]. For project managers, that might mean rehearsing a major stakeholder presentation in a virtual boardroom before the real thing.

Equally, technological innovations such as AI-powered feedback tools have been used in efforts to improve one's public speaking. AI-powered feedback tools analyze speech patterns, tone, body language, and content delivery, creating unique feedback for each user that may reduce anxiety and enhance performance. AI-powered feedback can improve the public speaking of professionals by providing specific areas for improvement.

Methodology Research Design

This is a mixed-methods approach in which quantitative data is collected from the questionnaire items, while an interview with an expert serves for qualitative insight into the prevalence, impacts, and strategies for coping with public speaking anxiety within project management. It also offers a holistic approach to the research phenomenon by tying statistical analysis to in-depth experts' views.

The quantitative section of the study targeted project managers, team leads, program managers, and other management roles which had been in the profession for a period of time. The participants were recruited through professional networks, industry groups, and an online platform: LinkedIn. All the participants were above the age of 18 years. Participation was voluntary, and informed consent was obtained from all the respondents.

In addition to the survey group, an in-depth interview

was conducted with a professional public speaking coach and communication trainer, Amit Grinvald. The expert's rich experience of working with team members and top-level executives across organizations brings important context and insight into the challenges and strategies with regard to overcoming public speaking anxiety.

Data collection for quantitative data was done through a web-based questionnaire on the frequency of public speaking engagements, intensity of anxiety experienced, what it triggers, impact on career development, and coping strategies adopted. The tool had close-ended questions: Likert-scale and multiple-choice, as well as open-ended questions.

Qualitative data were gathered from the expert through a semi-structured interview. The interview questions were framed based on the important themes identified from the questionnaire, which would allow for direct comparison and further probing into the quantitative findings.

Questionnaire Design

The questionnaire was divided into the following sections:

Demographics: Questions about the participants' roles, years of experience, and industry.

Frequency of Public Speaking: Questions about how often participants give presentations.

Public Speaking Anxiety: Likert-scale questions assessing the severity of anxiety, common symptoms, and specific scenarios that trigger anxiety.

Impact on Career: Questions exploring whether public speaking anxiety has affected career progression.

Triggers: Open-ended and scale-based questions identifying specific anxiety triggers.

Coping Strategies: Multiple-choice and open-ended questions to determine strategies participants have used to reduce anxiety and their perceived effectiveness.

General Feedback: Open-ended questions inviting advice and additional experiences.

Data Analysis

Quantitative Data: Responses to close-ended questions and Likert-scale items were analyzed using statistical methods to identify trends, correlations, and key patterns.

Qualitative Data: The open-ended questions of the questionnaire and interview data were subjected to a thematic analysis, which focused on recurring themes, patterns, and unique insights into project management public speaking anxiety. Interview data were specifically utilized to add context, elaborate on quantitative findings, and provide expert perspectives on what works well for effective coping strategies.

Ethical Considerations

Ethical approval was obtained for the study, and participant anonymity was ensured. The data collected were stored securely and used solely for research purposes.

The complete questionnaire used for data collection is provided in Appendix A.

Results

Survey Findings

Introduction

The 41 participants, age 18+, represented diverse roles within project management (Project Manager: 29.3%, Team Lead: 26.8%, Program Manager, Marketing Director, CTO, Digital Account Manager, Financial Analyst, etc.), varying experience levels (34.1% 3-5 years, 26.8% +11 years, 24.4% 6-10 years, and 14.6% 0-2 years), and a range of industries (Marketing, Advertising, Automotive, Energy, Finance, Manufacturing, Sales, etc.).

Presentation frequency varied, with 39% presenting weekly, 31.7% monthly, 17.1% daily, and 12.2% rarely.

Public Speaking Anxiety

The average self-reported anxiety level was 3.17, on a 1 (least) - 5 (most) likert scale, indicating moderate anxiety. 40% of respondents rated their anxiety at level 3, while 22.5% at level 4 and 12.5% at level 5. Only 5% rated their anxiety as level 1, and 20% as level 2. Common symptoms included: difficulty focusing/forgetting content (82.9%), nervousness/fear (65.9%), accelerated heart rate (48.8%), sweating/shaking (26.8%), and dry mouth/difficulty speaking (22%). Some participants also reported feeling awkward,

talking fast, or experiencing a combination of these symptoms.

68.3% of participants reported avoiding or delaying speaking opportunities due to anxiety, while 31.7% have not.

14.6% believed anxiety had impacted their career progression, 41.5% were uncertain, and 43.9% felt it had not.

Nearly 30% of respondents identified speaking in front of large groups or at conferences as their biggest public speaking anxiety trigger, followed by presenting to senior executives (22%), high-stakes project updates (17%), and negotiating with clients (15%). Almost 10% experience anxiety in all scenarios, and 7% are most anxious leading team meetings.

Triggers

The effect of public speaking anxiety on one's ability to communicate effectively is mixed when we asked our participants. Responses:

- **Preparation and Practice:** Some of the respondents mentioned the need for heavy preparations in order to handle anxiety; others would avoid eye contact, while others mentioned practice as a remedy that soothes the nerves.
- **Speech Patterns:** The common problems include speaking either too fast or too softly, stuttering, stumbling over words, and generally the use of filler words such as "umm," which helps little in clarity and confidence.
- **Memory and Focus:** Many reported forgetting key points and losing their train of thought; thus, one could not present information accurately and with confidence.
- **Physiological Manifestations:** Sweat, trembling, and turning red; if this happens in front of the audience, then it might be perceived poorly.
- **Confidence and Assertiveness:** With anxiety, there is less confidence, hence one cannot be assertive, which comes in quite handy when pitching to investors or partners.
- **Opportunities and Participation:** Some respondents also reported their anxiety to make them not want to take advantage of opportunities or participate as much in discussion for fear of judgment or negative evaluation.

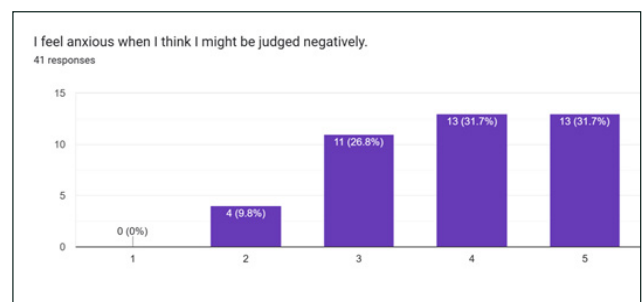
Moreover, we asked the respondents to reflect on how they feel anxiety linked to public speaking affects them. Responses:

- **Perception and Authority:** Respondents feel anxiety might make them come off as less confident or authoritative, thus threatening their leadership status in the perceptions of employees and stakeholders.
- **Communication:** Anxiety impinges on confident presentations of project updates or proposals regarding the seriousness of information provided by the stakeholders concerned.
- **Leadership/Team Dynamics:** For some, over time spent in speaking within a team should result in some disappearance of anxieties; and yet for other members, speaking leads to team misunderstandings resulting from unclear direction.
- **Personal Development:** A few of them state that there is a continued process of trying to handle anxiety, and over time, when acquiring more experience and focus on themselves, their fear will be reduced while their confidence will increase.
- **Delegation and Coping Strategies:** The project managers either delegate speaking publicly to avoid anxiety or make a significant effort to keep it from affecting their performance.
- **Mixed:** Some of the respondents feel that anxiety does not affect their job much, especially as experience builds up and confidence grows.

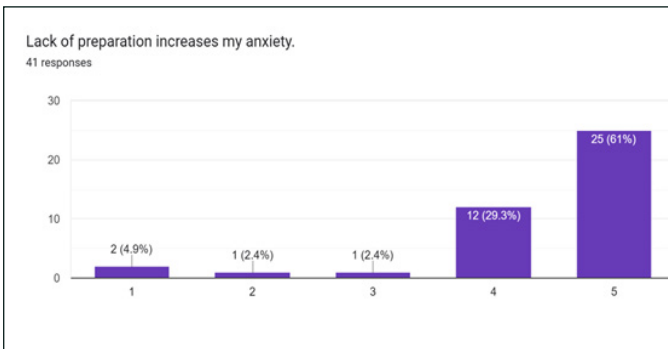
Presence of High-Ranking Stakeholders: Increased anxiety on an average rating of 3.32, measured on a 1 (least) - 5 (most) likert scale. 39% of respondents rated their anxiety at level 4, 36.6% rated it at level 3, 12.2% rated it level 2, 7.3% rated it level 5, 4.9% rated it level 1.

Context

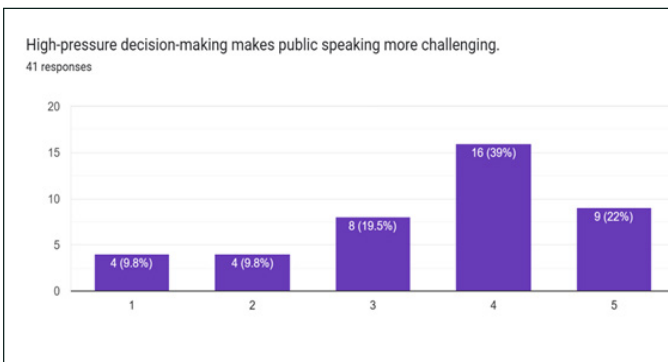
Rating method: 1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree
 Anticipation of Negative Judgment: High anxiety (average rating: 3.85).



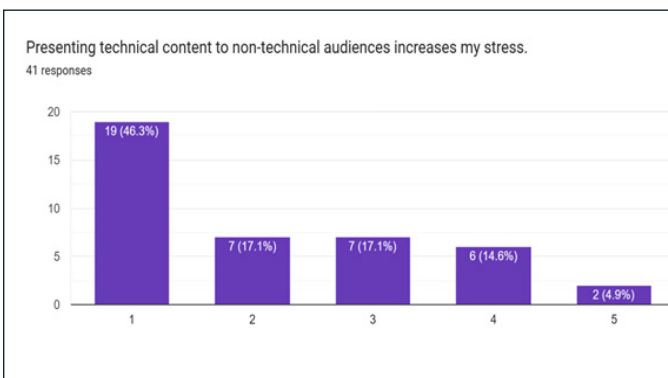
Lack of Preparation: Strong correlation with increased anxiety (average rating: 4.39).



High-Pressure Decision-Making: Moderate exacerbation of anxiety (average rating: 3.54).



Presenting Technical Information: Relatively low stress (average rating: 2.15).



Coping Strategies and Interventions

90.2% had tried strategies to manage anxiety. Common Strategies: Practice/rehearsal (85.4%), peer feedback/role-playing (56.1%), deep breathing exercises (46.3%), cognitive-behavioral techniques (41.5%), and technology use (VR/AI) (34.1%).

Mindfulness/meditation was used by 29.3%, and formal classes by 2.4%.

Effectiveness of Strategies: High perceived effectiveness (average rating: 4.00, 1 being the minimum and 5 being the maximum). 46.3% rated

level 5, 26.8% rated level 4, 14.6% rated level 3, 7.3% rated level 1, and 4.9% rated level 2.

When asked about further strategies, participants expressed a need for mentorship/coaching, more practice opportunities, mindset training (ignoring negative thoughts, logical approaches), therapy, peer support (sharing experiences, advice), and structured classes with exercises. Some unconventional suggestions (e.g., using alcohol) were also mentioned.

General Feedback and Recommendations

Respondents' advice to others: Key recommendations included practice, content mastery, use of supporting materials (notes, slides), relaxation techniques (deep breathing), accepting nervousness as normal, repeated exposure ("just do it" approach), seeking mentorship, considering professional coaching, and utilizing AI tools for presentation improvement.

Personal experiences: Responses confirmed the commonality of public speaking anxiety in project management. Practice and preparation were highlighted as key coping mechanisms. Respondents described overcoming significant anxiety through diligent preparation, support, and mentorship.

Interview

To further place into perspective problems and effective management strategies regarding the anxiety associated with public speaking, a semi-structured interview was held with Amit Grinvald: an accomplished Communication Trainer, and Speaker Coach. The manifold experience of Mr. Grinvald includes working with quite a diversity of groups of speakers: from entrepreneurs and Olympic medalists through scientists to top executives.

With over 1,000 speakers under his work umbrella, including top leaders from organizations like Google, Microsoft, Rolls Royce, Deloitte, and the University of Cambridge, Amit Grinvald is an experienced communications trainer, speaker coach, and event manager. Empowering people to communicate with pride and authenticity, he brings his expertise in transformative event design and storytelling to the fore.

Questions and Answers

Understanding the Challenge

Q1: From your perspective, what sets apart public

speaking anxiety in project managers from anxieties of other professionals, say salespeople or performers? Furthermore, to what extent do you believe project management is present in many diverse roles with a different job description?

A1: Public speaking anxiety in project managers is distinct from the anxieties experienced by other professionals, such as salespeople or specialized roles like trainers and facilitators, due to the unique demands of their role. Project managers are often tasked with presenting complex technical information to diverse audiences, including executives, clients, and cross-functional teams, each with varying levels of expertise. This diversity adds significant pressure, as they must adapt their communication style to meet the expectations of different stakeholders while balancing clarity, confidence, and accuracy. Unlike salespeople, who are often trained to be persuasive in high-pressure situations, or trainers and facilitators who regularly engage with audiences as part of their core responsibilities, project managers may lack formal public speaking training. This gap, combined with the high-stakes nature of their presentations—such as securing approvals, managing risks, or addressing critical milestones—further amplifies anxiety and can undermine their confidence.

Additionally, project managers frequently operate under tight deadlines and significant pressure to deliver results, making effective communication critical to project success. Their presentations are often directly tied to key outcomes, such as gaining stakeholder buy-in, securing project funding, or ensuring team alignment, which creates a heightened sense of responsibility and an acute fear of failure. In contrast, other professionals, such as corporate trainers or facilitators, may have more opportunities to rehearse or refine their delivery in lower-stakes environments, giving them greater control over their performance. For project managers, however, the fear of being misunderstood or judged—especially by senior leaders or clients—further exacerbates their public speaking anxiety.

As project management responsibilities increasingly span diverse industries and roles, public speaking has evolved into an essential competency. To address these challenges, project managers can benefit from targeted interventions, including training in audience

analysis to understand stakeholder needs, confidence-building strategies tailored to high-pressure situations, and techniques for simplifying complex technical concepts into accessible narratives. These strategies must also account for individual differences in anxiety triggers and address the growing demand for effective communication in global, cross-cultural, and remote environments. A tailored, context-specific approach is essential, as one-size-fits-all solutions often fail to meet the nuanced needs of project managers operating in dynamic and high-stakes professional settings.

Q2: Apart from the usual symptoms, are there any less obvious ways public speaking anxiety manifests in a project manager, influencing either decision-making or leadership style?

A2: Public speaking anxiety in project managers can manifest in subtle ways that go beyond the typical physiological and psychological symptoms, often influencing their decision-making and leadership style. One less obvious manifestation is an over-reliance on written communication, such as emails or reports, to avoid presenting or speaking in meetings. While this approach may seem practical, it can hinder real-time collaboration and the opportunity to build rapport with stakeholders, ultimately affecting trust and team dynamics.

Another subtle impact is a tendency to micromanage or overly script team interactions. A project manager struggling with public speaking anxiety may feel the need to control every detail to avoid the possibility of being caught off guard in a discussion. This can lead to reduced delegation and a leadership style that stifles creativity or innovation within the team. Additionally, project managers may deliberately avoid high-stakes situations where they are required to speak in front of senior stakeholders, delegating these responsibilities to others or downplaying the importance of such interactions. Over time, this can limit their visibility and career progression.

Decision-making can also be indirectly influenced, as anxious project managers may take longer to act due to fear of judgment or criticism. They might second-guess their decisions, delaying updates or recommendations that are critical for project momentum. This hesitation can frustrate stakeholders and lead to a perception of indecisiveness, even if the manager possesses strong

technical expertise.

Project Dynamics and Outcomes

Q3: Please try to describe any circumstance you may have witnessed where you believed public speaking anxiety either significantly derailed a project or caused great friction within the project team. What did you learn from that?

A3: A project manager leading a major event faced challenges due to public speaking anxiety, particularly when it came to real-time verbal communication. Lacking confidence in speaking assertively during live discussions, the manager avoided direct calls or in-person conversations with key collaborators, opting instead for email communication. This reliance on written communication caused delays, as important details and clarifications required multiple back-and-forth exchanges.

For instance, when an issue arose with an essential aspect of the event setup, the manager hesitated to have a direct conversation to address the matter promptly.

The delayed communication led to misunderstandings, pushing timelines closer to the event date and leaving insufficient room to resolve the issue fully. The team became increasingly frustrated as they felt the delays could have been avoided with more proactive and assertive leadership.

This situation highlights how public speaking anxiety can subtly impact decision-making and project momentum in ways that may not be immediately apparent. The reluctance to engage in direct communication or assert leadership in time-sensitive moments can disrupt workflows, create unnecessary friction, and undermine trust within the team. Addressing this requires building confidence in verbal communication, practicing real-time problem-solving, and developing strategies for managing high-pressure interactions. By improving these skills, project managers can ensure smoother collaboration and maintain momentum in critical projects.

Q4: Beyond individual performance, how does a project manager's public speaking anxiety impact team morale, collaboration, and overall project success?

A4: A project manager's public speaking anxiety

can have significant ripple effects on team morale, collaboration, and overall project success. When a project manager struggles to communicate confidently, it can lead to unclear instructions, misaligned expectations, and a lack of direction for the team. Team members may feel confused or unsupported, especially if the manager avoids addressing issues in real-time or hesitates to provide clear feedback. This uncertainty can erode trust in the manager's leadership, reducing motivation and team cohesion.

Additionally, public speaking anxiety often results in the manager avoiding high-visibility moments, such as team meetings or stakeholder presentations. This reluctance can make the team feel disconnected from the project's goals or progress, as the manager fails to inspire or convey a sense of purpose. Without a strong communicative presence, team members may lack the confidence to ask questions, share concerns, or provide input, leading to missed opportunities for collaboration and innovation.

The anxiety may also cause the project manager to shy away from addressing conflicts or delivering difficult messages, such as project setbacks or constructive feedback. When unresolved, these issues can escalate into deeper tensions within the team, further impacting morale and productivity. Ultimately, the inability to communicate effectively can slow decision-making, derail timelines, and reduce the quality of project outcomes, as the team operates without clear guidance or alignment.

To mitigate these impacts, project managers can benefit from targeted communication training that focuses on team dynamics, such as fostering open dialogue, providing clear and consistent updates, and practicing assertiveness in conflict resolution. By building confidence and refining their public speaking skills, project managers can strengthen their leadership presence, boost team morale, and create a collaborative environment that drives project success.

Q5: How can organizations quantify the tangible impact of public speaking anxiety on project outcomes such as budget adherence, timeline management, and stakeholder satisfaction?

A5: Quantifying the impact of public speaking anxiety on project outcomes like budget adherence,

timeline management, and stakeholder satisfaction is undoubtedly challenging, as these effects are often indirect and influenced by multiple factors. However, organizations can begin to measure this by examining communication-related inefficiencies and their correlation with project performance metrics. For example, delays in decision-making or misalignment among stakeholders—often linked to unclear or hesitant communication—can be tracked and analysed alongside missed deadlines or cost overruns.

To assess budget adherence, organizations could identify instances where a lack of assertiveness or clarity in communication during negotiations or scope discussions resulted in unexpected cost increases. Similarly, delays in timeline management could be reviewed for patterns tied to ineffective communication, such as late identification of risks or a failure to secure stakeholder buy-in for key decisions. While these connections are complex, patterns of communication-related delays can provide valuable insights into how public speaking anxiety might influence outcomes.

Stakeholder satisfaction is another area where the impact of public speaking anxiety can be measured, albeit indirectly. Surveys or interviews conducted post-project could include questions focused on the perceived clarity, confidence, and effectiveness of the project manager's communication. Stakeholder feedback can reveal whether communication challenges affected trust, collaboration, or overall satisfaction with the project.

Although it is difficult to isolate the specific impact of public speaking anxiety, identifying communication-related trends across projects can offer actionable insights and highlight the importance of addressing this challenge.

Triggers and the Project Management Context:

Q6: Is there any particular project management methodology, such as Agile or Waterfall, that tends to trigger or dampen public speaking anxiety? Why?

A6: Public speaking anxiety can be influenced by the project management methodology in use, as each framework creates unique communication dynamics and expectations that may either trigger or alleviate anxiety. Agile, for instance, tends to emphasize frequent, real-time communication through

practices like daily stand-ups, sprint reviews, and retrospectives.

While this regular interaction can build confidence over time, it can also heighten anxiety for project managers who struggle with impromptu speaking or fear constant judgment in front of peers and stakeholders. The iterative nature of Agile also means that communication is ongoing and visible, making it harder for those with anxiety to avoid public-facing roles.

On the other hand, Waterfall's linear structure may reduce the frequency of public speaking requirements, as communication tends to be concentrated during key milestones, such as project kick-off meetings, progress reviews, and final presentations. This can provide a sense of predictability and allow more time for preparation, which may dampen anxiety. However, the high stakes of these fewer but more formal presentations can also intensify pressure, as there's often less room for adjustment after major deliverables are presented.

Ultimately, no methodology inherently triggers or alleviates public speaking anxiety; the effect depends on how communication is structured, the specific demands of the project, and the individual project manager's comfort level with the required style of interaction. Organizations can help mitigate these triggers by providing training tailored to the communication styles emphasized by their chosen methodology, such as teaching improvisation for Agile or creating frameworks for simplifying technical presentations in more formal methodologies.

Q7: How does the increasing use of virtual communication tools, such as video conferencing, impact public speaking anxiety in project management? Does it create new challenges or opportunities?

A7: The increasing use of virtual communication tools, such as video conferencing, has significantly impacted public speaking anxiety in project management, presenting unique challenges and opportunities. Virtual settings often heighten anxiety due to the absence of in-person feedback, making it harder for project managers to read audience reactions or assess engagement. The technical aspects of virtual presentations, such as managing screen sharing, ensuring good audio-visual quality, and handling potential interruptions, can add another layer of stress. Additionally, engaging

remote audiences requires distinct strategies, such as leveraging interactive tools or maintaining eye contact with the camera, which differ from in-person presentations.

In my training and coaching, I distinguish between preparing for virtual and in-person presentations, as the contexts require different approaches. For example, in virtual presentations, maintaining energy and engagement through vocal modulation and interactive elements like polls or chat features becomes crucial, while in-person settings demand a stronger focus on body language and physical presence. While some elements, such as clarity of messaging and audience analysis, are shared, the techniques to achieve these goals are often adapted to the medium.

Despite these challenges, virtual tools also create opportunities for managing public speaking anxiety. Features like screen sharing can shift focus from the speaker to the content, and the ability to use discreet notes off-camera can provide additional confidence. Moreover, the physical distance of virtual settings often feels less intimidating, as it removes the immediate proximity of the audience. By mastering platform-specific skills and understanding how to tailor their approach to virtual contexts, project managers can reduce anxiety and use these tools to enhance collaboration and stakeholder engagement.

Q8: Beyond formal presentations, how does anxiety about everyday communication—for example, leading meetings and giving feedback—affect a project manager's leadership effectiveness?

A8: Anxiety about everyday communication, such as leading meetings or giving feedback, can significantly undermine a project manager's leadership effectiveness by eroding trust, clarity, and team morale. Unlike formal presentations, these interactions are often spontaneous and occur regularly, making them a core part of a project manager's role. When anxiety is present, it can manifest as hesitancy, avoidance, or overly cautious communication, which can lead to misaligned expectations, delayed decision-making, and missed opportunities for meaningful engagement with the team.

For example, a project manager who feels anxious about leading meetings may rush through agendas,

avoid addressing complex issues, or fail to facilitate open discussions, leaving team members feeling unheard or disconnected. Similarly, reluctance to give direct feedback—whether positive or constructive—can result in a lack of recognition for good work or unaddressed performance issues, ultimately affecting team productivity and morale. Over time, this hesitancy can create an environment where team members feel unsupported or unsure about their roles and expectations.

Effective leadership relies on clear, confident, and empathetic communication, particularly in everyday interactions where relationships and collaboration are built. Anxiety can make a project manager appear less approachable or authoritative, which can diminish their ability to inspire confidence and foster a culture of transparency and accountability.

Addressing this requires targeted support to help project managers develop confidence in routine communication. Techniques such as practicing active listening, preparing for common scenarios, and using structured approaches to feedback can help them engage more effectively. Building these skills not only reduces anxiety but also strengthens the project manager's ability to lead with clarity and empathy, creating a more cohesive and motivated team.

Tailored Strategies and Support Systems

Q9: What are some unconventional or less-discussed strategies you've found particularly effective in helping project managers overcome public speaking anxiety?

A9: A strategy I've developed and found uniquely effective for helping project managers tackle public speaking anxiety is my 4-dimensional approach. This framework views anxiety as a result of misalignment among four key dimensions: thoughts, actions, knowing, and feelings. Unlike traditional approaches that focus solely on managing anxiety symptoms, this method targets its root causes. The idea is that feelings, such as anxiety, can't be changed directly through willpower. Instead, they shift naturally when we align our mindset (thinking), intentional behaviours (acting), and a deep sense of clarity and self-worth (knowing). When these dimensions are in harmony, the emotional response—*anxiety*—gives way to a sense of calm and focus, enabling confidence to emerge.

This approach emerged from my years of experience

as a TEDx organizer and speaker coach, working with individuals ranging from business leaders to Olympic athletes through high-pressure speaking situations. For project managers, it's particularly effective because it addresses not just the surface-level symptoms of anxiety but the underlying thoughts and behaviours that fuel it. By helping managers challenge limiting beliefs, take intentional steps to build trust in their abilities, and connect with their unique purpose, this approach creates a lasting foundation of confidence that goes far beyond the quick fixes commonly discussed. It's a comprehensive, sustainable method for overcoming anxiety and thriving as communicators and leaders.

Q10: How might project managers apply their current project management skills-such as planning and risk management-to the effective management of their public speaking anxiety?

A10: Project managers are uniquely positioned to manage their public speaking anxiety by leveraging the very skills they use daily in their roles, such as planning, risk management, and iterative improvement. For example, they can treat their public speaking engagements like a project, breaking the process into manageable phases-preparation, execution, and review. Just as they would meticulously plan a project timeline, they can create a structured plan for their presentation, including rehearsals, refining key messages, and building familiarity with their audience and setting. This step-by-step approach reduces uncertainty and allows them to feel more in control.

Risk management, another core project management skill, can also be applied. Project managers are accustomed to identifying potential risks, creating contingency plans, and mitigating issues before they arise. Similarly, they can identify their anxiety triggers-such as fear of forgetting their content or being judged-and develop strategies to address these proactively. For example, if the risk is losing track during a presentation, they might prepare detailed notes, practice transitions, or use visual cues to stay on track. By framing these triggers as manageable risks rather than insurmountable obstacles, they can approach anxiety with the same problem-solving mindset they apply to projects.

Finally, the concept of iterative improvement, a

cornerstone of methodologies like Agile, can be applied to public speaking. Rather than striving for perfection in every presentation, project managers can treat each speaking opportunity as a sprint, learning from feedback and gradually improving over time. This perspective reduces pressure and fosters a growth mindset, helping them build confidence through action and reflection.

By applying these familiar skills to public speaking anxiety, project managers can approach it as a challenge they are well-equipped to manage, turning their professional expertise into a powerful tool for personal growth.

Q11: What is the role of mentors, coaches, and supportive colleagues in helping project managers develop their public speaking confidence? What specific advice would you give to these support figures?

A11: Mentors, coaches, and supportive colleagues play an invaluable role in helping project managers overcome public speaking anxiety, and the foundation of that support lies in creating a safe and encouraging environment. Personally, I always focus on building this kind of space with the people I work with because it's essential for fostering trust, openness, and the willingness to take risks. When someone feels safe, they're more likely to experiment, make mistakes, and learn without fear of judgment. This is particularly important for tackling anxiety, as it often stems from the fear of failure or negative evaluation. An encouraging environment shifts the focus from avoiding mistakes to embracing growth.

Equally important is modelling vulnerability and growth. I've found that sharing my own experiences with public speaking nerves and how I've worked through them can make a huge difference. It normalizes the anxiety many people feel and shows that even seasoned professionals weren't born confident-they built their skills over time. Normalizing these experiences helps reduce shame around anxiety, empowering project managers to view it as a challenge they can tackle rather than a reflection of their capabilities.

It's also vital to recognize that tackling anxiety is never a one-size-fits-all approach. Different individuals experience anxiety for different reasons-fear of judgment, perfectionism, lack of preparation, or even past negative experiences. For example, one

person might struggle with impromptu speaking, while another might feel anxious about presenting to senior stakeholders. Identifying these unique roots is critical to applying personalized strategies that address the specific triggers of each individual. This tailored approach makes the process more effective and meaningful.

Finally, there's an art to balancing challenge and support. I tend to challenge the conventional idea of stepping outside one's comfort zone. Instead, I frame it as stretching the comfort zone-like training flexibility. Just as you wouldn't force someone to do the splits on their first try, I don't think it's necessarily useful to push someone into a high-stakes situation without proper preparation and gradual exposure. By encouraging manageable steps—such as speaking in smaller team meetings or rehearsing in front of trusted peers—people can stretch their limits without feeling overwhelmed. This approach fosters sustainable growth while reinforcing the belief that it's okay to stumble and learn along the way.

By creating a supportive environment, normalizing anxiety, personalizing strategies, and encouraging gradual growth, mentors, coaches, and colleagues can play an instrumental role in helping project managers not just overcome their public speaking anxiety but thrive as confident, authentic communicators.

Q12: How might organizations incorporate public speaking training and support into their project management development programs? What are some best practices?

A12: Organizations can integrate public speaking training and support into their project management development programs by embedding communication skills as a core competency alongside technical and leadership training. This ensures that project managers view effective communication, including public speaking, as an integral part of their role rather than an optional skill. By normalizing the importance of these skills within project management, organizations can create a culture that values and actively fosters confident communication.

Best practices include starting with tailored, context-specific training. For example, workshops or courses can focus on real-world scenarios project managers

encounter, such as presenting project updates to executives, negotiating with stakeholders, or facilitating team meetings. Role-playing these scenarios allows project managers to practice in a safe environment and gain actionable feedback.

Another key practice is incorporating mentorship or coaching programs. Pairing project managers with experienced mentors or public speaking coaches provides ongoing support and personalized guidance, helping individuals address specific anxiety triggers and refine their skills over time. Offering one-on-one coaching for high-stakes situations, such as critical presentations or pitches, can significantly boost confidence.

Embedding public speaking into performance reviews and development plans ensures accountability and continuous improvement. Organizations can encourage employees to set communication-related goals and recognize their progress, reinforcing the value of these skills in career advancement.

By integrating public speaking training into broader project management development programs and creating a supportive ecosystem for growth, organizations can help project managers become more confident and effective communicators, leading to stronger project outcomes and leadership capabilities.

Q13: Besides VR and AI, what do you see as up-and-coming technologies or approaches that have the potential to radically alter the ways we address Public Speaking Anxiety into the future?

A13: While I haven't personally experimented extensively with AI and VR in addressing public speaking anxiety, I see significant potential in several up-and-coming technologies and approaches that could revolutionize how we tackle this challenge in the future. Tools like biometric feedback devices, which track physiological responses such as heart rate or breathing patterns, could provide real-time insights during practice sessions, allowing speakers to identify anxiety triggers and practice calming techniques. Similarly, augmented reality (AR) offers exciting possibilities for blending real-world settings with interactive audience simulations, enabling speakers to practice in dynamic, semi-realistic environments.

Even without direct experience with all these technologies, I recognize their potential to complement traditional approaches. They have the potential to provide more tailored, interactive, and accessible ways to help individuals overcome anxiety and build confidence in a way that feels modern, innovative, and safe.

The Larger Perspective and The Future Direction:

Q14: Which are the most important skills or attitudes a project manager should seek to develop in order to be an effective communicator and leader in today's complex world?

A14: To be an effective communicator and leader in today's complex world, a project manager should focus on developing a few key skills and attitudes that directly enhance their ability to connect with others and deliver impactful communication.

Empathy is foundational for meaningful communication. By understanding their audience on a deeper level-whether it's their team, stakeholders, or clients-project managers can tailor their messages to resonate with the emotions, concerns, and perspectives of others.

This connection fosters trust and ensures the audience feels heard and valued, making every interaction more impactful and collaborative.

Clarity and simplicity are essential in cutting through today's information overload. Project managers often deal with complex technical information, but their ability to distill these details into clear, concise, and actionable messages can make the difference between confusion and alignment. By simplifying communication, project managers ensure that their audience not only understands the message but also knows how to act on it.

Confidence coupled with humility creates a powerful dynamic in communication.

Confidence allows project managers to convey their ideas with authority, instilling trust in their leadership. However, pairing it with humility-being open to feedback, admitting mistakes, and valuing input from others-fosters collaboration and mutual respect. This balance ensures communication feels authentic and inclusive.

Storytelling is a vital tool for project managers to inspire and influence. Facts and data are important, but wrapping them in a compelling narrative makes them relatable and memorable. A well-told story connects the project's goals to a greater purpose, helping audiences see the human impact and motivating them to engage fully.

Cultural awareness is increasingly critical in today's globalized workplace. Effective communication requires sensitivity to cultural nuances and a commitment to inclusivity. By adapting their communication style to different cultural contexts, project managers can avoid misunderstandings, build stronger connections, and create an environment where everyone feels respected and valued.

By focusing on these skills-empathy, clarity, confidence with humility, storytelling, and cultural awareness-project managers can become exceptional communicators who inspire trust, foster collaboration, and lead with impact.

Q15: Which areas of research show the most promise for helping us better understand and deal with the challenges of public speaking anxiety in the context of project management?

A15: Research on public speaking anxiety within the specific context of project management is limited, but neuroscience and physiological studies offer exciting potential for new insights. One particularly fascinating area is the shared physiological symptoms between anxiety and excitement, such as increased heart rate, butterflies in the stomach, and rapid breathing. Emerging research in this area could help project managers reframe their limiting beliefs by understanding that these physical sensations don't have to signal fear-they can also signal anticipation and readiness. Educating individuals on this overlap can empower them to shift their mindset from "I'm nervous" to "I'm excited," transforming their relationship with anxiety.

Behavioural psychology provides a complementary lens to expand on this reframing. Research on cognitive-behavioural techniques, such as identifying and challenging negative thought patterns, can build on the physiological understanding by providing actionable strategies for project managers to reframe their internal dialogue and develop healthier mental

habits. Combining these psychological approaches with the physiological perspective creates a powerful framework for managing anxiety.

Mindfulness-based approaches are also gaining traction, with research showing the effectiveness of practices like meditation and grounding exercises in reducing anxiety and improving focus. These strategies are particularly relevant in project management, where the ability to remain calm and present during high-pressure situations is critical for clear communication and decision-making.

Finally, the rapid advancements in technology-assisted learning are particularly exciting. Virtual reality simulations and AI-powered tools are creating opportunities for project managers to practice public speaking in realistic, low-stakes environments, complete with personalized feedback. Further research and innovation in this space could revolutionize how individuals build confidence and overcome anxiety.

Discussion

Taken together, the findings from this study paint a clear picture: PSA is a real and meaningful challenge for project managers, not something on the margins of the profession. The combined data, from our survey of 41 professionals and the expert interview with Amit Grinvald, confirmed that anxiety around public speaking is widespread in this domain, consistent with the broader research literature on the topic [2]. The average anxiety rating of 3.17 on a 5-point scale indicates a moderate level across the group, but with 35% of respondents rating themselves at 4 or 5, a significant minority are dealing with quite high levels of anxiety. That alone suggests a genuine need for targeted, profession-specific support.

The interview data added real texture to what the survey showed. Grinvald's perspective made clear that project managers do not just experience generic PSA, the specific demands of the role create something more distinct. Translating complex information for very different audiences, while remaining accountable for results, produces an anxiety profile that differs from other professional contexts. Communication quality in these environments has direct consequences for decision-making and project delivery [16]. In addition, Grinvald's observation of project managers over relying on written communication or avoiding

high-stakes presentations echoes the survey results, where 68.3% of the members say they avoid or delay opportunities to speak due to anxiety. According to Grinvald, this also inadvertently prohibits career growth and limits leadership potential.

The common triggers extracted from the survey were presenting to senior executives, delivering high-stake project updates, and negotiation with the clients. These results are in line with the available literature on the triggers of PSA, such as fear of adverse judgment and unpreparedness, by Dwyer & Davidson, and place those within the specific pressures that project managers face, as identified by Cardon et al. Qualitative data provided more insight into how PSA influences team dynamic and project performance [17,18]. Grinvald's story of a project manager who insisted on communicating using email and created delays and friction reinforces the potential for PSA to cause projects to run off the rails and erode team morale. This certainly emphasizes why addressing PSA for individual well-being and overall project success has to be important.

Effective implementation to address PSA incorporates multiple facets. Some key findings in our study include:

1. **Skills-Based Training:** Public speaking and communication skills training should feature in the development programs for project management. In particular, this training should be targeted toward meeting the demands made on project management for clear, concise presentation of technical information, managing Q&A sessions, and style adjustments according to the audience. Role-playing and simulations are two of the most effective ways of training people for this purpose.
2. **Cognitive and Behavioural Techniques:** Encouraging the use of cognitive-behavioral techniques facilitates project managers to recognize and dispute negative thought patterns associated with public speaking. This might include reframing anxious thoughts, positive self-talk practices, and the building of coping mechanisms to address that instant anxiety. Mindfulness and meditation practices could also act as useful tools for stress reduction and focused concentration.
3. **Application of Project Management Skills:** Grinvald pointed out that project managers already have many of the skills needed to manage PSA, they just need to apply them differently. Planning, risk management, and iterative improvement are all

relevant here. Breaking a presentation down into stages, identifying where things could go wrong and preparing for that, and treating each speaking opportunity as something to learn from rather than perfect, can all help reduce the pressure significantly.

4. Building supportive environments involves creating a supportive and encouraging environment within teams and organizations. It is about building up opportunities for practice in low-stakes settings, providing opportunities for constructive feedback, and normalizing conversations with regard to PSA. Mentorship programs can prove very effective, pairing experienced project managers with those who struggle with anxiety.
5. Although emergent technologies are still at their infancy, VR and AI have started showing tremendous promise toward the development of PSA. That is where the application of VR in simulations would create realistic situations for practice, and AI-driven feedback tools would guarantee personalized advice on improvements.
6. 90.2% of respondents had tried strategies to manage their PSA, with practice, rehearsal, and peer feedback being the most common.

That is encouraging. But both the survey findings and the interview with Grinvald pointed to a gap: generic strategies are not always enough, and what many project managers need is something more tailored and holistic. Grinvald's four-dimensional framework, which focuses on aligning thoughts, actions, knowledge, and feelings, offers a structured approach that targets root causes rather than just symptoms. This sits alongside the growing body of research on mindfulness and CBT-based interventions for PSA management [19]. Crucially, Grinvald's model draws on skills project managers already have, like planning and risk management, which makes it practical and relatively straightforward to apply.

Future Research

This study represents a snapshot in time regarding PSA in project management, but the nature of the field requires that research be continually updated. Future research should further investigate the following areas to truly prepare project managers to become confident communicators:

The PSA Trajectory: How does PSA develop during

a project manager's career?

Longitudinal studies can track the trajectory of anxiety, identifying pivotal moments where interventions are most effective. This study could also examine the interrelationship between experience, confidence, and anxiety to see if experienced project managers develop distinctive coping mechanisms or if there is a particular stage in their careers when they are most vulnerable to PSA.

Methodologies and Communication Ecologies: Grinvald's insights establish an interesting linkage between project management methodologies and styles of communication. Comparative studies might analyse how Agile, Waterfall, and hybrid approaches shape communication patterns and influence PSA. This may reveal the specific "communication ecologies" that exist within each methodology and hence help in devising training programs for specific needs.

The Mind-Body Connection: There is a need to unravel the complex interplay between the physiological and psychological dimensions of PSA. Further, in the light of Grinvald's suggestion, the neuroscience of anxiety and excitement might be a new direction toward intervention in helping project managers reframe their physical responses. Biofeedback studies could empower people to gain more control over physiological reactions and change anxiety into energized anticipation.

Anxiety is not a monolithic experience; it is an individual mosaic. Future research should study the individual mosaic of anxiety, taking into consideration personality traits, coping styles, and past experiences. This personalized approach could lead to tailored interventions that resonate with individual needs and address specific triggers.

Navigating the Global Communication Landscape: As project teams become increasingly global and diverse, cultural sensitivity in communication becomes paramount. Cross-cultural studies can light up how cultural norms and styles of communication influence PSA and inform the development of inclusive communication practices. This study might also look at the challenges and opportunities regarding the issue of communicating across cultural boundaries in virtual environments.

Tapping into the Power of Technology: Most of the potential of emerging technologies such as VR, AR, AI, and biofeedback has not been fully realized. More rigorous studies are required to assess their effectiveness in mitigating PSA and to determine how best to integrate these technologies into training programs. This research could also investigate the ethical considerations of using these technologies and ensure responsible implementation.

The Dynamics of Virtual Communication: With the rise of virtual work, the very way in which people communicate has shifted. Of particular note is how specific challenges and opportunities regarding PSA management in virtual environments have to be discovered through further research—for instance, how best to use virtual rehearsal platforms, how nonverbal communication works in virtual presentations, and how digital fatigue impacts effective communication.

Conclusion

This research has brought into the limelight one important, yet ignored issue in project management—public speaking anxiety. We wove together quantitative data to qualitative insights, showing how PSA impacts individual project managers, team dynamics, and project outcomes at large. The findings clearly call for urgent interventions, focused and supportive environments that will help project managers communicate with confidence and clarity.

The wisdom shared by Amit Grinvald, an experienced communication expert, acts like a compass to navigate through the complexities of PSA. With his holistic approach, focusing on the alignment of thoughts, actions, knowing, and feelings, he offers a potent framework for lasting change. His pragmatic suggestions on how to utilize already acquired project management skills, develop supportive colleagues, and investigate new technologies point out the way to confident communication.

This study is not just about identifying a problem; it is a call to take it seriously. Organisations that want to get the best out of their project managers need to invest in communication development and create environments where people feel safe to practise and improve. Confident communication is not a soft skill at the margins; it is directly tied to project success, team cohesion, and individual careers. The research

directions we have outlined here offer meaningful opportunities to build on what this study has started, and to better equip project managers for the communication demands of today's complex, fast-moving work environments [20-29].

References

1. Project Management Institute (2021) Pulse of the profession 2021. Project Management Institute, Newtown Square, PA.
2. McCroskey JC (1970) The effects of evidence as an inhibitor of counter-persuasion. *Speech Monographs* 37: 188-194.
3. Bodie GD (2010) A racing heart, rattling knees, and ruminative thoughts: Defining, explaining, and treating public speaking anxiety. *Communication Education* 59: 70-105.
4. Project Management Institute (2021) A guide to the project management body of knowledge (PMBOK guide) - Seventh edition and the standard for project management (7th ed). Project Management Institute.
5. O'Hair D, Rubenstein H, Stewart R A (2018) A pocket guide to public speaking (6th ed). Bedford/St. Martin's.
6. Behnke RR, Sawyer CR (2001) Anticipatory anxiety and public speaking state anxiety: A test of the emotional intensity model. *Communication Education* 50: 169-184.
7. Richmond VP, McCroskey JC (1992) Communication: Apprehension, avoidance, and effectiveness. Gorsuch Scarisbrick, Scottsdale, AZ.
8. Witt PL, Brown BB, Roberts JA, Mann S (2006) The influence of communication apprehension on verbal immediacy and credibility. *Communication Quarterly* 54: 168-186.
9. Schoofs L, Preuß N, Lutterbach K (2013) The interplay of public speaking anxiety and cognitive performance: The role of working memory capacity. *Anxiety, Stress, & Coping* 26: 410-423.
10. Gallo C (2014) Talk like TED: The 9 public-speaking secrets of the world's top minds. St. Martin's Griffin.
11. Hofmann SG, Sawyer AT, Witt AA, Oh D (2010) The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology* 78: 169-183.
12. Kabat-Zinn J (2013) Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness. Bantam Books.

13. Andrews G, Crino R, Hunt C, Lampe L, Page A (2003) The treatment of anxiety disorders: Clinician guides and patient manuals. Cambridge University Press.
14. Mottet TP, Richmond VP, McCroskey JC, Payne SK (2006) An examination of the effects of public speaking trait anxiety and practice on students' self-perceived public speaking competency. *Communication Education* 55: 389-398.
15. Anderson PL, Price M, Edwards SM, Obasaju MA, Schmertz SK, Zimand E, et al. (2013) Virtual reality exposure therapy for social anxiety disorder: A randomized controlled trial. *Journal of Consulting and Clinical Psychology* 81: 751-760.
16. Müller R, Turner JR (2010) Leadership competency profiles of successful project managers. *International Journal of Project Management* 28: 437-448.
17. Dwyer KK, Davidson MM (2012) Is public speaking really more feared than death? *Communication Research Reports* 29: 99-107.
18. Cardon P, Okoro E A, Priest R, Patton G (2023) Communication apprehension in the workplace: Focusing on inclusion. *Business and Professional Communication Quarterly* 86: 5-32.
19. Hedman E, Andersson G, Ljótsson B, Andersson E, Rück C, et al. (2011) Internet-based cognitive behavior therapy vs cognitive behavioral group therapy for social anxiety disorder: A randomized controlled non-inferiority trial. *PLoS ONE* 6: 18001.
20. Galante J, Friedrich C, Dawson A F, Modrego-Alarcón M, Gebbing P, et al. (2021) Mindfulness-based programmes for mental health promotion in adults in nonclinical settings: A systematic review and meta-analysis of randomised controlled trials. *PLOS Medicine* 18: 1003481.
21. Hofmann SG, Sawyer AT, Fang A (2012) The efficacy of cognitive behavioral therapy: A review of meta-analyses. *Cognitive Therapy and Research* 36: 427-440.
22. Iivari M, Kinnula M, Molin-Juustila T, Takatalo J (2024) Artificial intelligence as a feedback provider in practicing public speaking. *Communication Education* 73: 327-347.
23. Finn AN, Sawyer CR, Behnke RR (2009) A model of anxious arousal for public speaking. *Communication Education* 58: 417-432.
24. Kampmann IL, Emmelkamp PMG, Morina N (2016) Meta-analysis of technology-assisted interventions for social anxiety disorder. *Journal of Anxiety Disorders* 42: 71-84.
25. Marcel M (2019) Communication apprehension across the career span. *Business and Professional Communication Quarterly* 82: 410-431.
26. Saylor KM, Behnke RR, Caughlin J P (2006) The communicative effects of public speaking anxiety. *Communication Research Reports* 23: 81-89.
27. Dwyer KK (2012) Conquer your speech anxiety: Learn how to overcome your nervousness about public speaking. Wadsworth.
28. Stein MB, Walker JR, Forde DR (2012) Public speaking anxiety. *Journal of Anxiety Disorders* 26: 1-6.
29. Sarpourian F, Samad-Soltani T, Moulaei K, Bahaadinbeigy K (2022) The effect of virtual reality therapy and counseling on students' public speaking anxiety. *Health Science Reports* 5: e816.