

Psychological Safety in Scrum Teams (Expansion of the SGEP)

An empirical lens on safety as a foundation for learning and high performance in Scrum Teams

Joanna Płaskonka

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Scrum thrives when people are willing to share what they see, even when it is incomplete, inconvenient, or uncomfortable. Speaking up should be the default, not the exception. Psychological safety creates an environment for meaningful inspection and adaptation, which is how Scrum delivers learning and enables high performance.

The fear tax in Scrum Teams

Many Scrum practitioners have observed this: Scrum events that appear to work on the surface but feel empty. Sprint Retrospective that ends with safe, low-impact actions or none at all. No one challenges the goal, work, or assumptions during Sprint Planning, and silence replaces candid disagreement. You might also recognize this in the avoidance of hard questions and crucial conversations. Or in moments where status overrides expertise: a less senior product developer notices a quality risk, but the discussion is dominated by a more senior voice. These are often treated as facilitation or communications issues, but they are early signs of something deeper.

This is common. It is not an exception. Scrum Teams pay a fear tax every Sprint. This cost is invisible at first glance, but it accumulates over time. The fear tax is driven by concerns about blame, embarrassment, appearing incompetent, or losing status or popularity. Fear consumes people's capacity even before the work starts. It shows up in small, everyday choices people make to self-protect: withholding concerns, softening language, delaying bad news, avoiding certain topics, or not asking for help. Each choice seems harmless, and it often feels like the best decision in that moment. Together, those choices create a compounding effect that degrades learning and decreases performance, even though no single moment looks dramatic. Fear delays risk detection

and course correction. Problems do not disappear; they move downstream. Ultimately, the fear tax is often borne by the customer.

Scrum is based on the pillars of transparency, inspection, and adaptation¹. When fear is present, transparency becomes selective, inspection narrows to carefully framed updates, and adaptation remains superficial. Fear constrains empiricism – the ability to learn from what is actually happening.

Psychological safety (as defined by Amy Edmondson²) is a capability Scrum Teams can develop and sustain to support learning and high performance. This work examines how psychological safety shows up in real Scrum work, how it affects learning and outcomes, and how Scrum Teams and leaders strengthen it through deliberate experiments in how they collaborate and learn from experience. For Scrum to be truly effective, it must create a safe space for learning. High performance emerges over time.

What psychological safety is – and what it is not

According to Amy Edmondson, psychological safety is a shared belief that the team is safe for interpersonal risk-taking³. An interpersonal risk is a risk someone takes when interacting with people. It means doing or saying something without knowing how others will react, for example, raising a hand in a meeting to admit you did not understand what was being discussed. Those reactions might range from supportive responses such as curiosity, attentive listening, and a willingness to help, to less supportive responses such as ignoring, blaming, or even assuming incompetence or questioning someone's credibility. Asking a question may be perceived as being uninformed or unprepared. Sharing a new idea may result in its dismissal or mockery rather than serious discussion. Admitting a mistake may lead to blame or shame, rather than to an invitation to explore why it happened. A team that is safe for interpersonal risk-taking is one in which people consistently feel that questions are welcome, ideas are thoughtfully considered, and mistakes are treated as opportunities to learn and improve, rather than as reasons for embarrassment, judgment, or punishment.

The definition of psychological safety is empirical and research-based rather than aspirational. Psychological safety is not an individual trait. It is a team-level condition that forms over time through repeated experience of how others respond in different situations. It is not about comfort, niceness, or artificial harmony. When teams avoid disagreement or suppress difficult topics to preserve harmony, they prioritize comfort over psychological safety. Psychological safety enables constructive conflict, not its absence (see also Lencioni's model in ⁴). It is not a lack of accountability either. High psychological safety combined with high standards enables a learning and high-performance

¹Scrum Guide 2020 (2020) *Scrum Guide*. Available at: <https://scrumguides.org/scrum-guide.html> (Accessed: 7 January 2026).

²Edmondson, A. (1999) 'Psychological safety and learning behavior in work teams', *Administrative Science Quarterly*, 44(2), pp. 350–383.

³Edmondson, A. (1999) 'Psychological safety and learning behavior in work teams', *Administrative Science Quarterly*, 44(2), pp. 350–383.

⁴Lencioni, P.M. (2012) *The five dysfunctions of a team: Team assessment*. Hoboken, NJ: John Wiley & Sons.

zone⁵. In Scrum, high standards are expressed through clear expectations such as Definition of Output Done and Definition of Outcome Done, meaningful Sprint Goals, and accountability for outcomes. Google's Project Aristotle identified psychological safety as a key factor in team effectiveness⁶. The learning zone is where Scrum Teams want to operate, because complex work requires learning.

Signs of psychological safety include:

- If I make a mistake, it will not be used against me.
- Speaking openly is expected.
- I can speak up, offer ideas, another point of view, and ask questions without fear of punishment or embarrassment.

These beliefs are situational; they can vary across situations and over time, even within the same Scrum Team. For example, the Scrum Team might feel safe during Sprint Retrospectives but not during Sprint Reviews.

Psychological safety is created and reinforced through how people interact. It develops through everyday interaction patterns. It is sensitive to how people treat one another in moments of uncertainty. Because it is shaped by experience rather than intention, psychological safety can shift quickly; a single dismissive comment or unresolved incident can have lasting effects on what people feel safe to say. Managers and stakeholders have disproportionate influence because their words, reactions, and decisions signal what is acceptable. When people fear that they will contradict, offend, or disappoint a leader, they may hold back questions or concerns, even when doing so harms the work. This is why leaders should speak last. The influence is not limited to formal roles. Team members also shape safety through their responses to ideas, mistakes, and disagreements.

Psychological safety in the context of Scrum

Voluntary interpersonal risk-taking is a needed core element of Scrum. It reflects openness, courage, and transparency in Scrum by design, because work and decisions are made visible and critiqued within the Scrum Team. People don't come to work to look ignorant, incompetent, or disruptive. Neither do they plan intentional errors. However, when people speak up, ask questions, or admit mistakes, they risk how others perceive them and interpret their intentions. A common response to reduce those risks is silence: don't speak, don't ask questions, don't challenge the status quo, don't offer ideas, and don't admit mistakes. Silence becomes a form of self-protection. This pattern, known as impression management⁷, leads to missed opportunities for learning, innovation, and product and organizational improvement. In Scrum Teams, impression management often entails concealing problems or doubts to appear competent, confident, and in control,

⁵Edmondson, A.C. (2018) *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth*. Hoboken, NJ: John Wiley & Sons.

⁶Google Re:Work (no date) *Understanding team effectiveness*. Available at: <https://rework.withgoogle.com/intl/en/guides/understanding-team-effectiveness> (Accessed: 7 January 2026).

⁷Schlenker, B.R. (1980) *Impression management*. Monterey, CA: Brooks/Cole.

rather than speaking candidly about what is actually happening.

Scrum Teams often face interpersonal risks during formal events, informal meetings, or conversations. Those are the moments when Scrum Team members ask themselves, “Should I speak up or stay silent?” In Scrum, this internal dilemma shows up in concrete, specific situations:

- **Reaction to Mistakes:** When a mistake or quality issue is noticed during the Daily Scrum, Sprint Retrospective, or Sprint Review, the team acknowledges it publicly. Instead of quietly fixing it in the background, they talk about it, understand it, and resolve it. More is the pity, as a focus on reducing errors leads to fewer insights⁸.
- **Dealing with Issues:** When work becomes difficult during the Sprint, and impediments need to be surfaced early in the Daily Scrum rather than hidden to preserve the appearance of progress.
- **Embracing Diversity:** When product assumptions, decisions, or technical approaches are challenged during Sprint Planning or Backlog Refinement, especially when that challenge comes from someone with less formal authority or seniority.
- **Taking Risks:** When Scrum Teams are encouraged to run experiments, technical spikes, or discovery work where outcomes are uncertain, and learning may show up as “no, not this path” rather than visible success.
- **Asking for Help:** Asking for help, pairing, or clarification can expose gaps in understanding to peers or stakeholders.
- **Mutual Support:** When supporting a teammate under pressure means sharing responsibility for outcomes rather than protecting individual credibility.
- **Appreciation:** When contributing expertise or effort that improves long-term product quality or team effectiveness, knowing that this contribution may not be immediately visible or rewarded.

These situations are not edge cases; they are everyday moments where psychological safety is either strengthened or diminished. The seven behavioral patterns named above are consistent with the Team Psychological Safety assessment vocabulary⁹.

Scrum does not remove interpersonal risks. It makes them transparent. Psychological safety determines whether these moments become sources of learning and improved performance or reasons for self-protection. Because Scrum relies on frequent inspection,

⁸Klein, G. (2017) *Seeing What Others Don't: The Remarkable Ways We Gain Insights*. London: John Murray Press.

⁹TeamAsOne (no date) *Psychological safety*. Available at: <https://teamasone.com/psychological-safety/> (Accessed: 7 January 2026).

adaptation, and collective problem-solving, withholding effort directly limits Scrum's effectiveness.

How teams respond to errors is a critical aspect of psychological safety in the context of Scrum. Product Developers are accountable for instilling quality by adhering to a Definition of Output Done¹⁰. People make mistakes for different reasons, especially in complex work. Psychological safety does not mean tolerating repeated avoidable mistakes or reducing professionalism. Instead, it creates an environment in which team members feel safe being transparent about errors, the first step toward learning and improvement. Not all failures are the same, and responding to them requires judgment. Amy Edmondson defines 3 types of failures¹¹:

- **Basic failures:** Knowledge is well developed, and uncertainty is low. For example, misconfiguring a standard deployment pipeline or forgetting to follow a known test procedure.
- **Complex failures:** Knowledge is well-developed, vulnerable to unexpected events, and uncertainty is moderate. For example, a production outage may be caused not by a single mistake but by a chain of smaller issues, or multiple teams may each make the most logical local decision, only to discover later that their choices conflict during integration.
- **Intelligent failures:** Knowledge is limited, and uncertainty is high. For example, running a controlled experiment to validate a hypothesis that turns out to be wrong or attempting a novel technical approach that does not produce the expected performance.

Psychological safety supports open discussion and learning from failures (or errors) that arise from uncertainty and exploration, whereas Scrum Teams openly discuss them and prevent the same avoidable mistakes from recurring. In that sense, the only true failure the Scrum Team faces is failing to learn and apply what was learned. The prime directive for Retrospectives is expressing one of the fundamental elements related to psychological safety – reaction to errors: “Regardless of what we discover, we understand and truly believe that everyone did the best job they could, given what they knew at the time, their skills and abilities, the resources available, and the situation at hand”¹².

Scrum pillars, Scrum values, and psychological safety in practice

When discussing the connection between psychological safety and Scrum, a common question arises: do Scrum values create psychological safety, or does psychological safety enable Scrum values? Do Scrum pillars lead to safety, or does safety enable them? The more useful question is not which comes first (the chicken-or-egg dilemma), but how these elements reinforce or weaken one another over time. As Scrum is an

¹⁰Scrum Expansion (2025) *Scrum Guide Expansion Pack*. Available at: <https://scrumexpansion.org/scrum-guide-expansion-pack/> (Accessed: 7 January 2026).

¹¹Edmondson, A.C. (2023) *Right kind of wrong: The science of failing well*. New York: Simon & Schuster.

¹²Kerth, N.L. (2013) *Project retrospectives: A handbook for team reviews*. Boston, MA: Addison-Wesley.

empirical social system, it is worth examining how these conditions evolve through feedback loops created by Scrum events. This distinction matters because Scrum Teams often try to change behavior without examining how the system itself shapes it.

The empirical Scrum pillars of transparency, inspection, and adaptation¹³ increase visibility and create opportunities for learning in Scrum Teams:

- Transparency exposes work, progress, assumptions, mistakes, and uncertainty.
- Inspection invites questioning, challenge, and evaluation.
- Adaptation requires acknowledging that previous decisions were incomplete or incorrect, not due to fault but to limited information and uncertainty.

From that perspective, each Scrum pillar increases interpersonal risk. Speaking openly, admitting uncertainty, or challenging direction all happen publicly, in front of others. Thus, Scrum, by design, puts people in situations where social exposure is unavoidable. How teams respond to that exposure is where Scrum values come into play.

Scrum as a framework does not create fear. Whenever people work closely with others, interpersonal risk is always present. Scrum reveals how teams respond to interpersonal risk and creates formal opportunities, through Scrum events, to reflect on and improve those responses.

The five Scrum values – commitment, focus, openness, respect, and courage – do not eliminate interpersonal risk-taking. They shape how Scrum Teams respond when it shows up¹⁴:

- **Openness** supports sharing incomplete or uncomfortable information.
- **Respect** reduces the social cost of speaking up and offering diverse perspectives, and curtails bluntness disguised as ‘openness.’
- **Courage** supports challenge and dissent despite uncertainty.
- **Commitment** shifts attention from self-protection to a shared goal.
- **Focus** prevents noise and personal agendas from dominating the discussion.

When these values are lived, interpersonal risk becomes manageable and creates opportunities for learning: what to improve, whether to pivot, and what to do next – about product decisions, quality, and ways of working.

Psychological safety is not a value, a rule, or an intention. It is a belief that forms over time, based on what actually happens when people take interpersonal risks: when

¹³Scrum Guide 2020 (2020) *Scrum Guide*. Available at: <https://scrumguides.org/scrum-guide.html> (Accessed: 7 January 2026).

¹⁴Verheyen, G. (no date) *The Scrum values*. Available at: <https://guntherverheyen.com/library/the-scrum-values/> (Accessed: 7 January 2026).

someone admits a mistake, when assumptions are challenged, and when bad news is delivered early. When the consequences are constructive, psychological safety increases. When the consequences are punitive, dismissive, or humiliating, psychological safety decreases, regardless of declared values. In this sense, psychological safety is an emergent property of how Scrum pillars and values are enacted in practice. Therefore, psychological safety becomes a functional requirement for Scrum to work as intended.

Scrum pillars, values, and psychological safety co-evolve, forming a reinforcing loop:

- Scrum pillars expose interpersonal risk.
- Scrum values shape responses to that risk.
- Those responses form psychological safety.
- Psychological safety determines whether transparency, inspection, and adaptation remain real.

When this loop is reinforcing, Scrum supports sustained learning and enables high-performing Scrum Teams. When it is broken, Scrum degrades, and its benefits are diminished over time through everyday interactions and decisions. This is why psychological safety cannot be treated as a side concern.

Psychological safety as learning infrastructure in Scrum Teams

Scrum was designed to help people, teams, and organizations generate value through adaptive solutions for complex problem domains¹⁵. It operates in conditions of uncertainty, where sustained performance depends on effective continuous learning and shared sense-making rather than perfect execution. Effective learning requires early exposure to uncertainty, incomplete understanding, weak signals, and emerging risks – before they lead to costly decisions made without sufficient insight. Psychological safety enables people to speak up before certainty exists – when learning still has the greatest leverage. When psychological safety supports speaking up, assumptions are challenged early, problems are surfaced while options remain open, and learning happens when change is still relatively inexpensive and course-correction opportunities remain available. Delayed understanding leads to late problem detection, fewer adaptation options, and the accumulation of hidden product, technical, and decision risks that remain out of sight.

High performance in Scrum emerges over time through accurate inspection, timely adaptation, and repeated learning cycles. Psychological safety is not an objective for Scrum Teams; it is an enabling condition for the learning that leads to high performance. In that sense, psychological safety functions as infrastructure for delivering high value in an effective way: it allows learning to be reliable and sustained over time, rather than episodic or accidental. Because psychological safety can be observed and assessed across multiple dimensions, Scrum Teams can see whether this infrastructure

¹⁵Scrum Guide 2020 (2020) *Scrum Guide*. Available at: <https://scrumguides.org/scrum-guide.html> (Accessed: 7 January 2026).

is strengthening or weakening. Like any form of infrastructure, it is rarely noticed when it works well, but when it diminishes, it limits what Scrum Teams can achieve. This infrastructure emerges and evolves through everyday interactions and decisions.

How leadership signals shape psychological safety

Psychological safety is shaped by what the system consistently signals as acceptable more than by what people say they value. In Scrum contexts, this system comprises decision-making structures, feedback loops, incentives, and interaction norms that enable how people raise concerns, challenge assumptions, or acknowledge uncertainty. For example, whether insights from the Sprint Retrospective lead to meaningful decisions and change, or whether missed Sprint Goals trigger reflection or blame.

Managers and stakeholders have disproportionate influence because they control or strongly affect consequences such as approval, recognition, escalation, and how outcomes are interpreted – including what counts as success. How they respond in moments of uncertainty, error, or dissent sends a signal to everyone watching, including those who stay silent. When mistakes are met with curiosity and analysis, people learn they can speak up about them. When challenges are dismissed, ignored, or subtly penalized (such as being excluded from future discussions), people learn to withhold, even when no explicit blame is issued. Silence is often rational or emotional self-protection, not disengagement, because people are paying attention to the system's signals. This effect is amplified by status, hierarchy, seniority, and real or perceived expertise. In collective decision-making settings, lower-influence or less senior roles entail greater interpersonal risk when they question assumptions or raise concerns. If those contributions are consistently dismissed or minimized, expertise is suppressed, and learning degrades over time.

Leadership influence is not limited to formal roles. Experienced Product Developers, Scrum Masters, and Product Owners act as informal leaders through facilitation choices, reactions to tensions, and responses to dissent. Non-intervention is also a signal – often the strongest one. When dismissive behaviour goes unaddressed, the system quietly teaches what is unsafe to say.

Leaders can foster psychological safety, but their work is never done. It is sustained through continual practice. Building and reinforcing the work environment where people can learn, innovate, and grow is an ongoing work¹⁶. Because psychological safety is shaped through everyday interactions, it can be strengthened through deliberate actions rather than cultural slogans. And it starts with small choices.

Inspecting the conditions for learning

Scrum requires transparency to enable inspection and adaptation. If something is not visible, the Scrum Team cannot meaningfully change it. The same principle applies to psychological safety, and the whole team shares responsibility for inspecting it. When

¹⁶Edmondson, A.C. (2018) *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth*. Hoboken, NJ: John Wiley & Sons.

teams assume safety based on intent, values statements, or the absence of visible conflict, they lose the ability to inspect how their system actually behaves.

Scrum events make team behavior visible. Who speaks up during Sprint Planning? What is raised – and what is avoided – in the Daily Scrum? Which assumptions are challenged in Sprint Review discussions? What is named, and what is softened, in the Sprint Retrospective? These are observable signals, not opinions. By treating psychological safety as an inspectable condition rather than a cultural label, Scrum Teams can examine where transparency leads to learning and where it breaks down. Silence, politeness, or quick alignment are not conclusions; they are data points. Interpreted through inspection, they reveal how the team responds to uncertainty, error, disagreement, and risk.

This shift – from assuming safety to inspecting its effects – allows teams to adapt deliberately rather than react implicitly. Psychological safety becomes part of empiricism: something shaped through repeated interactions and outcomes, not declared or assumed, just like product learning.

Psychological safety is not binary. It varies by situation and topic and manifests differently across interpersonal risks. A team may feel safe asking technical questions, yet unsafe challenging Product Backlog ordering, raising strategic risks, or delivering bad news. In such cases, people learn precisely where speaking up is costly and where silence is safer. We can examine psychological safety empirically and measure it, taking its elements into account (such as taking risk, asking for help, or dealing with issues), so Scrum Teams do not rely on intuition alone. Amy Edmondson developed the Psychological Safety Index (PSI)¹⁷. Building on her research and his own¹⁸, Peter Cauwelier created the Team Psychological Safety for Team and the Team Psychological Safety for Leader assessments¹⁹. These tools quantify psychological safety through measurable indicators and identify areas requiring attention and improvement, helping teams and leaders translate insights into concrete next steps. Viewing psychological safety as multidimensional enables Scrum Teams to identify which risks are perceived as unsafe and how this constrains learning, decision-making, and outcomes.

Strengthening psychological safety through deliberate learning practices

Psychological safety does not improve through slogans, motivational pictures on the wall, one-off workshops, or encouragement alone. It is shaped through repeated practice – specifically, how Scrum Teams structure learning in everyday work and how they and their stakeholders respond to the outcomes of that learning.

Key characteristics of such practices include:

¹⁷Fearless Organization Scan (no date) *Understanding the Psychological Safety Index (PSI)*. Available at: <https://fearlessorganizationscan.com/understanding-the-psychological-safety-index-psi> (Accessed: 7 January 2026).

¹⁸Cauwelier, P. (2016) *The influence of team psychological safety on team knowledge creation: A comparative study between Thai, French and American engineering teams*. PhD thesis.

¹⁹TeamAsOne (no date) *Psychological safety*. Available at: <https://teamasone.com/psychological-safety/> (Accessed: 7 January 2026).

- Structured inquiry instead of unstructured discussion. Practices that emphasize questions over statements reduce the interpersonal cost of participation (for instance, Action Learning²⁰²¹). When questioning is built into the format, speaking up becomes part of the process rather than a personal risk.
- Regular, disciplined reflection. Sprint Reviews and Sprint Retrospectives that focus on understanding causes, extracting learning, and acting on insights, rather than assigning blame, reinforce the expectation that mistakes and difficulties are inputs for improvement. Scrum Teams can intentionally structure these conversations using facilitation approaches such as Liberating Structures²².
- Making learning visible. When Scrum Teams explicitly share what they learned (including negative or inconclusive outcomes), learning becomes a recognized form of progress. This reduces pressure to present certainty or success prematurely.
- Normalizing intelligent failure while still aiming at high standards. Small, contained experiments with explicit learning intent clarify which failures are acceptable and why. This protects psychological safety while maintaining professional rigor.
- Consistent responses to voice. How questions, challenges, and concerns are received matters more than how often they are invited. Consistency over time is what turns isolated safe moments into stable expectations.
- Scrum Teams may adopt a simple “red team” code word to invite timeboxed, constructive dissent in events such as Sprint Reviews and Sprint Retrospectives, or “in the moment” (which can also be called “playing devil’s advocate”). When invoked, Scrum Team members actively challenge assumptions and explore alternatives while staying respectful and outcome-focused, which supports psychological safety by signalling that speaking up and questioning the status quo are legitimate and valued. Toxic positivity must be avoided.

Small everyday choices build or erode psychological safety: structured inquiry prevents dominant voices, disciplined reflection focuses on learning, not blame, and transparent experiments – whether successful or not – show that speaking up has an impact. These practices are strengthened when leaders model the behaviours that make learning safe and expected. Amy Edmondson proposes 3 leadership behaviors that support a psychological safety climate²³:

- Frame the work as a learning problem.

²⁰World Institute for Action Learning (no date) *WIAL*. Available at: <https://wial.org/> (Accessed: 7 January 2026).

²¹Marquardt, M. (2011) *Optimizing the power of action learning: Real-time strategies for developing leaders, building teams and transforming organizations*. London: Nicholas Brealey.

²²Liberating Structures (no date) *Liberating Structures*. Available at: <https://www.liberatingstructures.com/> (Accessed: 7 January 2026).

²³YouTube (2020) *Amy Edmondson: The Fearless Organization* [Video]. Available at: <https://www.youtube.com/watch?v=LhoLuu9gX8> (Accessed: 7 January 2026).

- Acknowledge your own fallibility.

- Model curiosity.

A variety of additional leader practices and tools can complement these behaviours²⁴.

Over time, these practices shift the Scrum Team's work climate toward one in which learning is expected and shared. Strengthening psychological safety helps Scrum Teams learn from experience, adapt deliberately, and improve performance over time.

Summary

Scrum exposes uncertainty and invites learning, but effective learning only happens when people feel safe to take interpersonal risks. Psychological safety is a practical, inspectable condition shaped by how teams speak, decide, respond to errors, and challenge assumptions every day. When managers, stakeholders, and Scrum Teams reinforce behaviours that make voice safe, transparency becomes real, inspection becomes honest, and adaptation becomes meaningful. When they do not, Scrum devolves into empty mechanics and hidden risk. Strengthening psychological safety is therefore inseparable from improving empirical process control and achieving high performance in Scrum.

References

²⁴Helbig, K. and Norman, M. (2023) *The Psychological Safety Playbook: Lead More Powerfully by Being More Human*. Vancouver: Page Two Press.