

The Rewards of Psychological Safety in Design and Construction

Cathy Kraus

Owner's Representative/Senior Project Manager and licensed architect in the state of Washington
DAY CPM, a Division of Otak

INTRODUCTION

When I reflect on what this pandemic has made obvious, three big things rise to the top. One, we are all in the same storm, and we each have different vessels. Two, controlling the future is an illusion (that our brains and egos crave), and we each need to find ways to allow the inherent uncertainty of living (or continue to resist and adjust to that angst). And three, creating psychological safety is essential for building strong relationships and enabling true collaboration, both of which are essential to how we navigate these uncharted waters.

I didn't come to this last lesson directly.

The Rewards of Psychological Safety in Design and Construction

For years I have been exploring combinations of trust and safety, including a decades-long stretch where I thought relating and relationships were based on performing, pleasing, and trying to be perfect—all the techniques one relies on when we don't feel safe to be our authentic selves. Since gaining the awareness of the true interconnection between trust and safety, I have been experimenting with creating more trust in my relationships by being more authentic and transparent and observing how this supports others in feeling safe. When we feel safe, we show more of our true selves and share our thoughts, ideas, and concerns in our relationships, and everyone is enriched.

Psychological safety is defined as "the belief that you won't be punished or humiliated for speaking up with ideas, questions, concerns or mistakes" (Center for Creative Leadership, 2020). Psychological safety at work is defined as the "shared belief held by members of a team that others on the team will not embarrass, reject or punish you for speaking up" (Center for Creative Leadership, 2020).

Abraham Maslow's (1943, 1954, 1962) research, reflected in his "hierarchy of needs," confirms what humans and animals innately understand: Once our physiological needs (air, food, water, shelter) are met, safety and security become our next priorities (Figure 1). To build safety and security on any level, we need trust. And to build trust with others, we need psychological safety, which allows us to soften, to be vulnerable and human.

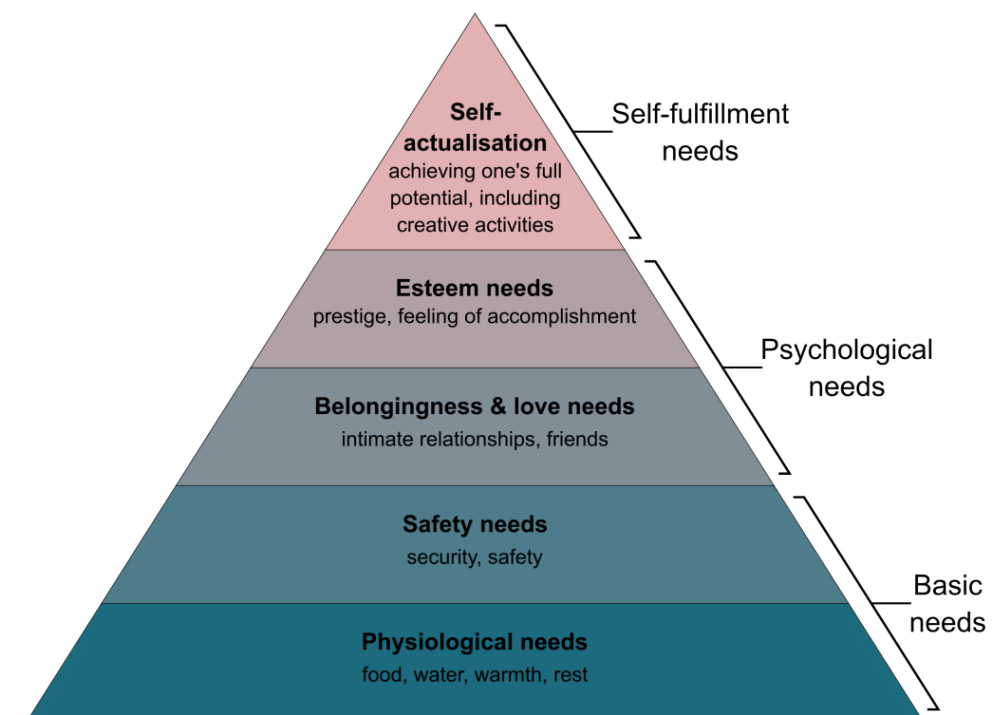


Figure 1. Graphic representation of Maslow's Hierarchy of Needs. Source: Volle, J. (2021, March 12). Maslow's Hierarchy (for creatives): How to be a happier, creative people screw up their own happiness. Retrieved January 4, 2022, from jaredvolle.com/maslows-hierarchy-for-creatives-how-creative-people-screw-up-their-own-happiness.

I have also experienced the impacts of working in environments filled with blame and drama, or that rely on hierarchy to manage who contributes or the perceived value of what people can contribute. I know the mental and emotional energy needed to manage those dynamics (and, truth be told, those egos and those fears) and how I needed to show up: braced, guarded, leery. I also viscerally know how much I held back, what I didn't say, what I didn't contribute, because I didn't feel safe.

There is a psychological toll and functional cost to being in psychologically unsafe environments. We expend energy trying to fit in, staying small and quiet, and tolerating shame and blame. Being braced or guarded for another's attacks or demands keeps us unsteady and undermines our capacity to think clearly and contribute to the greater good (Center for Creative Leadership, 2020). Even small doses of control, forced compliance, and micro-aggressions (some of which we may be culturally acclimated to) erode safety and trust.

Our design and construction industry's conventional approach to projects tends to be more of the dominator style ("teaming" with various levels of demand, command, control, and compliance) than true partnership and collaboration. Fortunately, this is shifting as more witness the ease and benefit of true partnership in working through the complexities of projects, which are only becoming more complex with more systems and new materials and technologies.

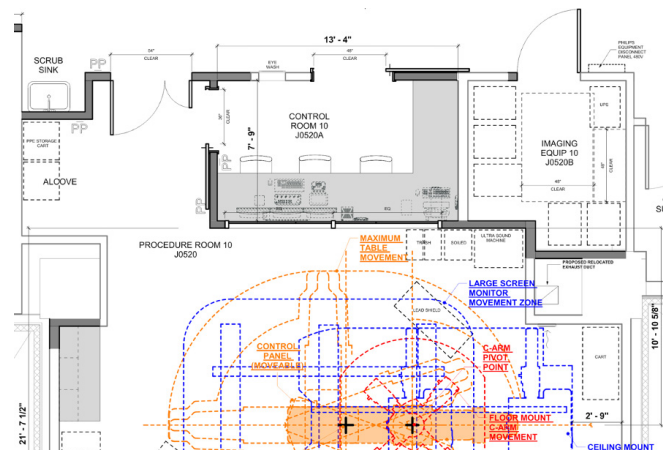


Figure 2 Source: weforum.org/agenda/2016/04/team-psychological-danger-work-performance/

Domination dynamics corrode trust, which erodes team engagement and efficiency, and directly impact true collaboration and teamwork. When energy is spent

appeasing others' egos, demands, and biases rather than serving the project's and team's essential needs to solve problems to progress, it is a sign that domination is consciously or unconsciously prioritized over collaboration.

When the pandemic reduced my work commute to roughly a 10-foot pivot within my kitchen, I found I had more space to more intentionally practice how I showed up and how this impacted the depth and quality of my relationships. Due to fewer outside distractions and interactions, I was better able to reflect on what was/wasn't working, like a 1:1 chemistry project of cause and effect. With deeper awareness, it became obvious how trust is essential for relating and that without trust, there really isn't a safe nor meaningful way to connect or relate, which is the basis of a relationship. I also realized that to establish trust, we need psychological safety, a term I had only learned this past year while trying to reverse engineer two project team experiences that many said were their highest functioning team experiences to date.

High-functioning team experiences

After witnessing how creating a psychologically safe environment positively affected my individual relationships, I wanted to explore how to expand this sense of safety to include an entire team and how this might affect how we work together and what we could accomplish. What would happen if we each felt safe to be ourselves, to ask questions from an honest place, and to contribute (or not) regardless of hierarchy or role? I believed a team culture built with these attributes would allow us to harness the best of our whole team to serve these projects while making the process more humane and friendly.

While serving as the owner's representative/project manager for three new freestanding ambulatory care facilities, I took the opportunity to set the tone for our team engagement. By leaning on my empathic and holistic leadership style, I intentionally deepened our team culture to allow every team member, regardless of their role or position, to feel safe to share their ideas, questions, and concerns without fear of shame, being wrong, or appearing stupid.

I supported this culture by how I showed up: open, curious, and respectful. I spoke with honesty, even if that meant saying that I don't know or I missed something or I don't have anything to contribute and stepping back to allow others (regardless of role or position) who could contribute,

to have a voice in discussing options towards a solution. I didn't demand arbitrary compliance or performative communications or processes; my words and actions supported 'we are all pulling together'. I leaned into deepening our culture of trust and transparency and continued to see team members show up relying on our culture to be productive and efficient. During our early owner-architect-contractor meetings, I felt each team member's unfamiliarity with feeling emotionally safe to be their true selves, to share what was on their minds, and, at the same time, I witnessed each team member demonstrate more comfort and engagement with the team and our current project topics.

I asked questions and sought input from team members who might have an idea, perspective, or experience that

could help us solve our problem at hand. I reinforced a sense of belonging and teamwork where *we* collectively focused on finding the best path forward and did not spend any time blaming, defending, being right or wrong, or trying to fit in. There was no room for egos (and, thankfully, no egos showed up). Our solutions-oriented process invited those who had something to contribute—including creative solutions from trade partners—and did not shame anyone for not contributing or not knowing. This made our interactions straightforward and mentally and emotionally easier, as no one was posing, posturing, or bracing. Every team member was treated with kindness and respect, regardless of role or hierarchy, which fostered more safety and deeper engagement and commitment to the team and project. By demonstrating respect and trust, I discovered I engendered these same things in return.

5-MINUTE PSYCHOLOGICAL SAFETY AUDIT:

- If you make a mistake in this team, will it be held against you?
- Are the members of this team able to bring up problems and tough issues?
- Do people on this team sometimes reject others for being different?
- Is it safe to take a risk on this team?
- Is it difficult to ask other members of this team for help?
- Would anyone on the team deliberately act in a way that undermines efforts?
- Working with member of this team, are unique skills and talents valued and utilised?

Edmondson, A. (1999) Psychological Safety and Learning Behaviour in Work Teams. *Administrative Science Quarterly*, 44: 350-383.

Figure 3. 5-Minute Psychological Safety Audit. Source: Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*.

When we allow each team member, regardless of years of experience or role, to ask questions and share their ideas, observations, or concerns, the team's collective knowledge is leveraged to solve problems and move forward. Safety is essential for creativity, innovation, and engagement to rise without fear of criticism. Amy Edmondson, organizational behavioral scientist and faculty at Harvard

Business School, speaks of psychological safety as a very energizing and candid place and how it is "not about being soft, whining, slacking off, or applauding everything said." Psychological safety is "creating an environment for people to speak up," which Edmondson admits is "Full stop. Easier said than done" (Digital HR Leaders Podcast, 2020).

These projects, completed sequentially over 28 months, confirmed my hypothesis about the benefits of psychological safety for team collaboration and project outcomes. The COVID-19 pandemic was the litmus test for our team culture. We were halfway through our second project's 12-month construction schedule when our region was shut down and every aspect of construction was substantially impacted. The mental and emotional terrain of 2020 required each member of our project team to lean heavily on the deep trust, transparency, and collaboration we had cultivated during our first project.

As each of us traversed unprecedented levels of uncertainty and our related personal challenges, we focused on leveraging team resources and monitoring our team morale (including on-site team members and construction workers) to reach project completion. While most of us transitioned to working remotely, our construction team impressively navigated evolving protocols that impacted every aspect of construction means and methods with an extra lean on-site team. Our culture of deep safety and trust allowed for all challenges to be openly and honestly

discussed and resolved without need or instinct to hide details. Due to statewide quarantining requirements, our team relied on virtual tools for remote project monitoring, team meetings, and project coordination while we collectively focused on clearing obstacles to completion. Later, these virtual tools, in combination with our culture of deep trust and transparency, became tools we relied on for our collective efficiency.

Many members of our project team acknowledged that the uncertainties around COVID-19 zapped any personal capacity to handle any additional complexity beyond direct, honest, respectful, and kind communications and solutions that followed the same formula. As Simon Sinek shares in his book *The Infinite Game*, "When leaders are willing to prioritize trust over performance, performance almost always follows." With the personal and professional demands of COVID-19, our team needed to lean on our deep mutual trust and found that this approach did indeed foster stronger performance from everyone, including tradespeople. While the project circumstances were challenging, individually and collectively we seemed to

hover closer to thriving (than surviving) because we each felt seen, heard, accepted, and respected, and we shared a common mission.

Our outcomes spoke for themselves. Our second project opened five weeks ahead of schedule to meet the owner's mid-summer request for an earlier fall delivery in anticipation of an unpredictable and uncertain COVID-19 and flu season. To achieve this earlier delivery date, we needed finer coordination and relied on clear, open communications among all parts of our team as we compressed the schedule to allow construction and owner installations and preparations to occur simultaneously. This project was also delivered under budget and returned project savings after covering unanticipated COVID-related construction impacts and converting two nearly complete exam rooms to be negatively pressurized for treatment of infectious diseases, such as COVID-19. We did it together, including navigating construction and medical equipment supply chain issues, a week of the worse wildfire smoke conditions our region has ever experienced, the late need to add a building-wide distributed antennae system for emergency responders and basic cellular coverage, the complexities of remote jurisdictional inspections and signoffs, and getting cable connection to an entirely new development inside a former rock quarry weeks before the building was scheduled to open (below).

What creates psychologically safe environments

Per Brene Brown in her book *Dare to Lead* "empathy is the most powerful connecting and trust building tool that we have, and it's the antidote to shame." Compassion and empathy help us accept our shared humanness and allow for psychological safety. Deep down, we each want to feel safe, to contribute, and to belong, which serves teams, projects, and ultimately our clients.

I observed our team dynamics and what we accomplished together. I also received unsolicited feedback from consultants, trade partners, client team members, and senior team members with decades of experience in the industry about how high-functioning our teams were compared to their other project experiences. I frequently heard team members express how they felt seen, heard, respected, and appreciated, while I witnessed a higher level of team engagement. Many noticed how our team culture allowed us to negotiate the most intense season and circumstances any of us had ever faced, together, relatively seamlessly.

Upon hearing these reflections, I started to pay closer attention to what was different. I began asking more questions of other teams that were considered high functioning to understand what was similar and what, if anything, we or they were doing differently. Contractual relationships that defined engagement and encouraged collaboration were often mentioned. I noticed that I didn't hear about deepening trust and transparency or creating a more emotionally safe place to work (i.e., psychologically safe) to intentionally foster an environment for deeper collaboration. It is important to note that contractual terms can support teamwork and collaboration; however, true collaboration and high-functioning teamwork is about how we relate as individuals, beyond how project relationships are contractually set up.

In my research of existing studies and published sources, I discovered that the sense of emotional safety we created is referred to as "psychological safety," and this is what allowed our team to feel safe to fully leverage our collective knowledge, strengths, and experiences to serve our team, project, and our client. Amy Edmondson (2018) and Google (Duhigg, 2016), known for their statistical models and analytics, separately studied and confirmed the importance of psychological safety in teamwork.

In 2015, Google completed a two-year study code-named Project Aristotle (inspired by Aristotle's quote, "The whole is greater than the sum of its parts"). In search of the perfect algorithm for creating high team performance, researchers gathered and analyzed data from 180 high- to low-performing teams, ranging in size from 3-50 individuals, with a median of nine members. Every possible team variable was analyzed, including hundreds of items from Google's employee engagement survey, such as skill sets, education, group dynamics, physical proximity of team members, and combinations of introverts and extroverts, in search for what made teams high functioning.

Google's researchers concluded "that what really mattered was less about who is on the team, and more about how the team worked together" (re:Work, 2015). Further, they determined that the one team attribute that most impacted team effectiveness is psychological safety. Said another way, Google found that psychological safety is the most foundational element upon which all other team attributes are built. "There is no team without trust," said Paul Santagata, head of industry at Google (Delizonna, 2017).



Images 1-4. September 8 and September 14, 2020, before and during the intense wildfire smoke from the Riverside and Beechie Creek fires in Oregon.



Figure 4: The five keys to a successful Google team. Source: Rozovsky, J. (2015, November 17). The five keys to a successful Google team. re:Work. Retrieved September 9, 2021, from rework.withgoogle.com/blog/five-keys-to-a-successful-google-team/.

Google defines psychological safety as:

... an individual's perception of the consequences of taking an interpersonal risk or a belief that a team is safe for risk taking in the face of being seen as ignorant, incompetent, negative, or disruptive. In a team with high psychological safety, teammates feel safe to take risks around their team members. They feel confident that no one on the team will embarrass or punish anyone else for admitting a mistake, asking a question, or offering a new idea (re:Work, 2015).

How to create a psychologically safe environment

Psychological safety may sound simple; however, it is important to notice when we feel unsafe in asking a question and what we feel we are risking for speaking up. Or when we or others go along to get along. Under our hesitation is often the fear of being seen or judged or potentially appearing stupid. And many would rather proceed without getting the clarity they need or sharing their ideas or concerns because it feels safer not to take that interpersonal risk.

In Edmondson's TED Talk on building psychologically safe workspaces (2017), she offers three simple things we can each do to foster psychological safety within our teams:

1. Frame the work as a learning problem, not an execution problem.
2. Acknowledge your own fallibility.
3. Model curiosity and ask lots of questions.

I would add these strategies to Edmondson's list:

4. Create a safe space to allow each team member, regardless of position or hierarchical role, to be seen and heard.
5. Proactively ask team members for their ideas and input. Ask questions from a place of open curiosity, seeking information and solutions.
6. Foster a team culture where it was okay to be human, to have ideas, answers, concerns, or not know.
7. Create an environment of inclusion and belonging for each team member to feel part of something bigger. Reinforce a sense of connection with the team and the team's mission.
8. Do not allow any micro-aggressions.
9. Serve the team and project from a place of "we," not "me." There is no room for anyone's ego in a psychologically safe environment.
10. Be intentionally clear, kind, respectful, and honest with every communication, including what is known and not known. When we are transparent, we earn trust.
11. Practice active listening vs. listening to respond.
12. Define "winning" as what is best for the client/project. Seek to win as an entire team, not as individuals or companies. Focus on shared values and goals.
13. Be solutions-oriented, not problem-oriented (i.e., no blaming or finger-pointing). Giving people a voice in solutions leads to engagement. Discuss issues openly, share wisdom, and treat challenges and failures as learning opportunities.
14. Admit when you don't know and allow team members to admit when they don't know. When we own our unknowing, we make it safe for others to ask questions and share their ideas for the benefit of the collective team (Hagel, 2021).

15. Ask simply and directly for what is needed. When we include our "why," we help others understand how they can help and how this request fits into our shared project goals.
16. Treat everyone with gentleness, kindness, and respect. If we are treated kindly and gently, it allows us to be open to each other, to new ideas, and to working together in deeper ways. It builds trust. Softening into kindness takes practice and intention.
17. Vocally support colleagues and provide specific positive feedback. Regularly, sincerely, and publicly express gratitude for team members' contributions. This allows teammates to feel seen and appreciated.
18. Be accountable to yourself and your team. Seek to be honest in making realistic commitments so that others can plan accordingly.
19. Assume good intentions and communicate from this place.
20. Ask, don't tell. People want to help others. Telling people what to do is dominating; asking is collaborative.
21. Offer grace and practice gratitude. What if we are each doing the best that we can? Demands create more psychological noise and makes it harder to focus.
22. Ask team members and companies what they need to be successful. For us to be collectively successful, we each need to be successful. Success doesn't come from standing on or walking across others.

Additionally, I would highly recommend gathering strengths assessment information from key team members, using a tool such as Gallup's *Strengths Based Leadership: Great Leaders, Teams, and Why People Follow*, to help team members gain self-awareness into their own strengths, approaches, and natural contributions as well as other's strengths, approaches, and natural contributions. Noticing what comes easy to you and to others will build appreciation and erode hierarchy within teams.

In summary

If we each did an honest assessment of our work experiences, how much of our real selves do we feel safe bringing to our projects and teams? And how much of our energy is spent managing drama and feeling unsafe? Can we assess the emotional toll on each of us, as well as the opportunity costs to our project teams, company, and clients, by any one of us withholding our

ideas, concerns, or challenges? Or, as Edmondson said, "what value are you leaving behind?" (Center for Creative Leadership, 2020).

We live in a rapidly changing and complex world that needs our collective gears working together, fueled by our humility and by our curiosity about what each of us can contribute, to solve our evolving problems. We cannot solve these types of problems alone. I am reminded of the 33 Chilean miners who, following a cave collapse, were trapped 2,200 feet underground for an unbelievable 69 days. Rescue ideas came from local government agencies and from individuals and corporations around the world. Many ideas were tried and abandoned. Throughout these 69 days, everyone kept focused on finding a way to get these men out alive.

Meanwhile, those 33 miners had to cope with the uncertainty of survival, the potential duration until their rescue, the intense conditions of surviving in a living room-size refuge deep underground, and how to ration 19 cans of tuna and some milk and biscuits stored for such emergencies (enough to feed roughly two men for 10 days), for an uncertain period of time.

These miners did not hear from the outside world for 18 days. They started receiving food, water, and oxygen through an 8 cm borehole the day after contact was made (Franklin & Tran, 2010). On every level, for both the trapped miners nearly a half mile below sunlight and the rescuers above grade seeking a way to rescue these men, intense levels of collaboration and communication were required to deal with unbelievable levels of complexity and uncertainty. To survive, these trapped men dedicated themselves to a common goal: "You just have to speak the truth and believe in democracy" (Wikipedia).

The simpler days of siloed work are rare. To truly collaborate, we each need to shrug off our egos and our beliefs about competition and scarcity and dig deep into our open honesty so that we can succeed. And we need to create and support psychologically safe environments where we allow each team member to feel safe—to be seen, heard, and to contribute—to support highly interdependent and collaborative work, innovation, and creativity.

When we all feel safe, we can accomplish incredible things together.

References

Center for Creative Leadership. (2020, August 31). What is psychological safety at work? www.ccl.org/articles/leading-effectively-articles/what-is-psychological-safety-at-work/

Delizonna, L. (2017, August 24). High-performing teams need psychological safety. Here's how to create it. *Harvard Business Review*.

Digital HR Leaders Podcast. (2020, July 14). Summer Special: How to Create Psychological Safety at Work with Amy Edmondson.

Duhigg, C. (2016, February 25). What Google learned from its quest to build the perfect team. *New York Times*.

Edmondson, A. (2017, October). How to turn a group of strangers into a team. TED Talk. Retrieved September 9, 2021 from ted.com/talks/amy_edmondson_how_to_turn_a_group_of_strangers_into_a_team?language=en.

Edmondson, A. (2018, December 4). The importance of psychological safety. *HR Magazine*.

Franklin, J., & Tran, M. (2010, August 24). Trapped Chilean miners start receiving food and water. *The Guardian*.

Hagel, J. (2021, January 8). Good leadership is about asking good questions. *Harvard Business Review*.

Interaction Design Foundation. (n.d.). *Safety: Maslow's hierarchy of needs*. interaction-design.org/literature/article/safety-maslow-s-hierarchy-of-needs.

Maslow, A.H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396.

Maslow, A.H. (1954). *Motivation and Personality*. New York: Harper and Row.

Maslow, A.H. (1962). *Toward a Psychology of Being*. Princeton: D. Van Nostrand Company.

re:Work. (2015). (Google's) Guide: Understand Team Effectiveness.

Wikipedia: 2010 Copiapo' mining accident.