

The ABCs of Cultivating Psychological Safety for Clinical Learner Growth

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The learning risks inherent to clinical graduate medical education (GME) are great—even without extraneous challenges (FIGURE 1).¹⁻⁵ Despite this, the clinical learning environment (CLE) has often been characterized by power distance, shame, humiliation, mistreatment, and feelings of impotence and fear.⁶⁻⁹ These factors can inhibit growth. Psychological safety—the belief that one can openly take interpersonal risks¹⁰—is likely key in transforming the CLE to better foster GME learner success. This article will provide tangible techniques clinical educators can employ to cultivate psychological safety in spite of barriers common in GME CLEs.

The term “psychological safety” can be found as far back as 1965 when Edgar Schein and Warren Bennis proposed that a perception of interpersonal safety is required for the provisional tries and failures necessary for learning and change.¹¹ The construct undoubtedly predates this neologism, however. Later, William Kahn argued that psychological safety—feeling able to show oneself without fear of damage to self-image, status, or career—was necessary for work engagement.¹² More recently, Amy Edmonson conceptualized psychological safety as a tacit, but shared, belief that a team environment is safe for risk taking and further hypothesized that its presence facilitated learning in teams.¹⁰

The construct of psychological safety will be familiar to those acquainted with the patient safety concept of *just culture*. A just culture emphasizes solutions and improvement over errors and outcomes.¹³ It is patient-centered and goal-oriented.¹³ It seeks to minimize hierarchy and maximize expression without fear of retribution.¹³ Team members are empowered to participate in team goals.¹³ Mistakes are “treated” with coaching, not shame or punishment.¹³ Such a culture fosters innovation, communication, and learning toward a goal of patient safety.¹³ In medical education, this approach has been termed *educational safety* and it is thought to free learners to

“authentically and whole heartedly concentrate on engaging with a learning task without a perceived need to self-monitor their projected image.”² That is, in the same way a just culture fosters patient safety in high reliability organizations, psychological safety may foster learning in GME CLEs.

Despite these positive outcomes from psychological safety, the CLE in GME does not always emphasize it. Psychologically unsafe environments are associated with feelings of anxiety, shame, and inadequacy as well as decreased speaking, participation, expression of needs, and intention to report adverse events.^{2,9,14} Shame and humiliation, specifically, are deleterious in medical education.^{13,14} In such environments, concerns about self-image directly inhibit learning behaviors.¹⁴ Importantly, this effect increases as perceived status decreases.¹⁵ This, of course, is exceedingly relevant for trainees on clinical learning teams. In contrast, psychologically safe environments are associated with increased speaking up, resident well-being, unit performance, nurse/resident team performance, learning from failures, and learning behaviors.¹⁶⁻¹⁸

Supervising physicians wield tremendous control over the psychological safety of the CLE.^{19,20} We must, therefore, recognize our power to exacerbate risks inherent to clinical learning and even introduce additional risks.¹ Of course, minimizing behaviors that decrease psychological safety is insufficient for excellence in managing the GME CLE. Instead, we must actively implement behaviors that increase the psychological safety of the learning team. Luckily, doing so is not as challenging as might be expected (see FIGURE 2).

A. Adjust Frame (Here to Learn, While Providing High-Value Care)

First, explicitly (re)frame expectations to promote a team culture that rewards continual learning, improvement, growth, and personal investment through intentional practice of critical thinking, medical decision-making, and clinical skills while providing introspective,

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Common Barriers				
Urgency	Organization	Environment	Learner	Supervisor
Learning scenarios can be high stakes, time sensitive, and unforgiving.	Organizational culture can be formal, hierarchical, and role oriented.	The learning environment can be complex, unfamiliar, and dynamic.	Learners can be high achievers, perfectionistic, and failure avoidant.	Supervisors can be perceived as unapproachable, “others,” and assessors.

FIGURE 1
Common Barrier to Psychological Safety in Graduate Medical Education

high-value care. Acknowledge, at the outset, the inevitability of mistakes and their value to the team. Words alone will not suffice, however. Demonstrate this focus by normalizing challenging decisions, limitations, and mistakes.¹⁹⁻²³ Discuss personal limitations and model practice-based learning.²³ Openly discuss personal mistakes and what can be learned from them.^{20,21} Conscientiously discuss team mistakes *for the purpose of learning from them*. Do not discuss mistakes for the purpose of shaming learners into avoiding future mistakes.⁷ GME learners do not require this “motivation.” Likewise, accountability through fear is thought to provoke counterproductive results.²⁴ Fortunately, it is possible to maintain patient safety and individual accountability by growing a shared culture of high standards and personal responsibility through, not in spite of, the power of psychological safety.²⁴ Emphasize critical thinking and learning over knowing.²⁵ Explaining the reasoning behind clinical decisions can facilitate this.²⁶ Finally, ask team members

to *give* feedback.^{20,22} This powerfully demonstrates, in a way words cannot, a commitment to learning and improvement over knowledge and perfection.

B. Be Curious (Not Judgmental)

Mistakes will happen. Approach them with curiosity.^{21,22} GME learners will have gaps. Do not highlight knowledge gaps; instead, work to fill them.^{19,22,23} Adopt an approach to teaching and learning that mirrors patient management—patients and learners have entrusted us to facilitate their success. Seek first to understand learning challenges and their causes, then devise interventions to foster learner improvement. Maximize formative evaluation. Minimize summative judgements and fixed-mindset thinking.²⁶ Though challenging, intentionally recognizing human similarities between ourselves and our learners, rather than seeking to distinguish ourselves from others, can help maintain a productive focus.²²

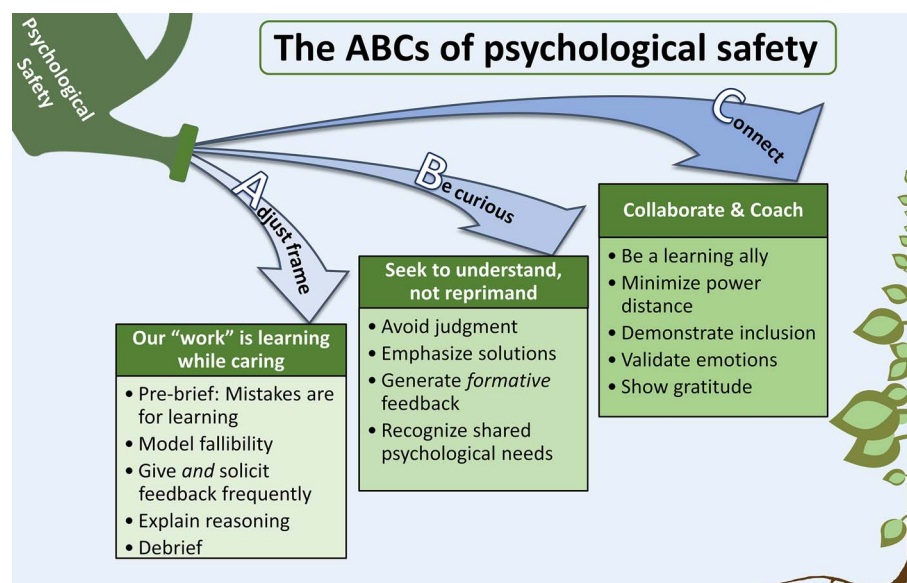


FIGURE 2
The ABCs of Psychological Safety

C. Connect (Collaborate and Coach)

Partner with GME learners toward a shared goal of *their* growth.²² Partnership can be demonstrated by minimizing power distance.^{19,26,27} Exercise intentional inclusivity.²⁷ Solicit input from all members of the learning team.^{20,22,26} Validate differing viewpoints. Whenever possible, *ask* learners for their participation rather than telling them your expectations.²⁸ Show gratitude for the efforts of each team member.^{19,22,27} Provide opportunities for self-direction and autonomy.^{19,22,27} Connection and collaboration foster trust that the team is genuinely invested in learner success. This can amplify formative feedback.²⁹ Loss of trust, on the other hand, is potentially impossible to repair and may compromise the benefits of feedback.³⁰

Providing excellence in GME requires respect for our learners and their cognitive needs. Modern learning strategies derived from these needs (eg, mastery learning and deliberate practice, coaching, team problem-based learning, simulation, critical thinking, etc) seemingly require psychological safety for maximal efficacy. While psychologically unsafe CLEs may neutralize such educational approaches, psychologically safe environments can amplify them and our GME learners' success. *We* carry power to modify the GME CLE. Consider the ABC acronym to help cultivate a CLE that nourishes clinical learner growth.

References

1. Bynum WE, Haque TM. Risky business: psychological safety and the risks of learning medicine. *J Grad Med Educ.* 2016;8(5):780-782. doi:10.4300/JGME-D-16-00549.1
2. Tsuei SH-T, Lee D, Ho C, Regehr G, Nimmon L. Exploring the construct of psychological safety in medical education. *Acad Med.* 2019;94(suppl 11):28-35. doi:10.1097/ACM.0000000000002897
3. Torralba KD, Loo LK, Byrne JM, et al. Does psychological safety impact the clinical learning environment for resident physicians? Results from the VA's Learners' Perceptions Survey. *J Grad Med Educ.* 2016;8(5):699-707. doi:10.4300/JGME-D-15-00719.1
4. Wawersik DM, Boutin ER Jr, Gore T, Palaganas JC. Individual characteristics that promote or prevent psychological safety and error reporting in healthcare: a systematic review. *J Healthc Leadersh.* 2023;15:59-70. doi:10.2147/JHL.S369242
5. Kennedy TJJ, Regehr G, Baker GR, Lingard L. Preserving professional credibility: grounded theory study of medical trainees' requests for clinical support. *BMJ.* 2009;338(7691):399-401. doi:10.1136/bmj.b128
6. Salehi PP, Jacobs D, Suhail-Sindhu T, Judson BL, Azizzadeh B, Lee YH. Consequences of medical hierarchy on medical students, residents, and medical education in otolaryngology. *Otolaryngol Head Neck Surg.* 2020;163(5):906-914. doi:10.1177/0194599820926105
7. Sklar DP. Recognizing and eliminating shame culture in health professions education. *Acad Med.* 2019;94(8):1061-1063. doi:10.1097/ACM.0000000000002770
8. Miles S. Addressing shame: what role does shame play in the formation of a modern medical professional identity? *BJPsych Bull.* 2020;44(1):1-5. doi:10.1192/bjb.2019.49
9. Cheng MY, Neves SL, Rainwater J, et al. Exploration of mistreatment and burnout among resident physicians: a cross-specialty observational study. *Med Sci Educ.* 2020;30(1):315-321. doi:10.1007/s40670-019-00905-z
10. Edmondson A. Psychological safety and learning behavior in work teams. *Admin Sci Quart.* 1999;44(2):350-383.
11. Schein EH, Bennis WG. *Personal and Organizational Change Through Group Methods: The Laboratory Approach.* Wiley; 1965.
12. Kahn WA. Psychological conditions of personal engagement and disengagement at work. *Acad Manag J.* 1990;33(4):692-724.
13. Boysen PG 2nd. Just culture: a foundation for balanced accountability and patient safety. *Ochsner J.* 2013;13(3):400-406.
14. Torralba KD, Puder D. Psychological safety among learners: when connection is more than just communication. *J Grad Med Educ.* 2017;9(4):538-539. doi:10.4300/JGME-D-17-00195.1
15. Edmondson AC, Higgins M, Singer S, Weiner J. Understanding psychological safety in health care and education organizations: a comparative perspective. *Res Human Develop.* 2016;13(1):65-83. doi:10.1080/15427609.2016.1141280
16. Frazier ML, Fainshmidt S, Klinger RL, Pezeshkan A, Vracheva V. Psychological safety: a meta-analytic review and extension. *Personnel Psychol.* 2017;70(1):113-165. doi:10.1111/peps.12183
17. Lyasere CA, Wing J, Martel JN, Healy MG, Park YS, Finn KM. Effect of increased interprofessional familiarity on team performance, communication, and psychological safety on inpatient medical teams: a randomized clinical trial. *JAMA Intern Med.* 2022;182(11):1190-1198. doi:10.1001/jamainternmed.2022.4373
18. Hirak R, Peng AC, Carmeli A, Schaubroeck JM. Linking leader inclusiveness to work unit performance: the importance of psychological safety and learning from failures. *Leader Quart.* 2012;23(1):107-117. doi:10.1016/j.leaqua.2011.11.009
19. McClintock AH, Fainstad TL, Jauregui J. Clinician teacher as leader: creating psychological safety in the clinical learning environment for medical students. *Acad Med.* 2022;97(suppl 11):46-53. doi:10.1097/ACM.0000000000004913

20. Murray JS, Kelly S, Hanover C. Promoting psychological safety in healthcare organizations. *Mil Med.* 2022; 187(7-8):808-810. doi:10.1093/milmed/usac041
21. Devaraj LR, Cooper C, Begin AS. Creating psychological safety on medical teams in times of crisis. *J Hosp Med.* 2020;16(1):47-49. doi:10.12788/jhm.3541
22. Delizonna L. High-performing teams need psychological safety: here's how to create it. *Harvard Business Review.* Published August 24, 2017. Accessed August 7, 2023. <https://hbr.org/2017/08/high-performing-teams-need-psychological-safety-heres-how-to-create-it>
23. McClintock AH, Kim S, Chung EK. Bridging the gap between educator and learner: the role of psychological safety in medical education. *Pediatrics.* 2022;149(1):e2021055028. doi:10.1542/peds.2021-055028
24. Association of American Medical Colleges. Amy Edmondson: Psychological safety is critically important in medicine. Published November 12, 2019. Accessed January 15, 2024. <https://www.aamc.org/news/amy-edmondson-psychological-safety-critically-important-medicine>
25. Hayes MM, Chatterjee S, Schwartzstein RM. Critical thinking in critical care: five strategies to improve teaching and learning in the intensive care unit. *Ann Am Thorac Soc.* 2017;14(4):569-575. doi:10.1513/AnnalsATS.201612-1009AS
26. McClintock AH, Fainstad T. Growth, engagement, and belonging in the clinical learning environment: the role of psychological safety and the work ahead. *J Gen Intern Med.* 2022;37(9):2291-2296. doi:10.1007/s11606-022-07493-6
27. Nembhard IM, Edmondson AC. Making it safe: the effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *J Organ Behav.* 2006;27(7):941-966. doi:10.1002/job.413
28. Goguen K. How and why leaders should ask instead of tell. *Forbes.* Published October 10, 2019. Accessed August 7, 2023. <https://www.forbes.com/sites/theyec/2019/10/10/how-and-why-leaders-should-ask-instead-of-tell/?sh=59a157a6a15d>
29. Johnson CE, Keating JL, Molloy EK. Psychological safety in feedback: what does it look like and how can educators work with learners to foster it? *Med Educ.* 2020;54(6):559-570. doi:10.1111/medu.14154
30. McClintock AH, Fainstad TL, Jauregui J. Creating psychological safety in the learning environment: straightforward answers to a longstanding challenge. *Acad Med.* 2021;96(suppl 11):208-209. doi:10.1097/ACM.0000000000004319



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