

Psychological Safety and Team Science Success

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Workshop Objective

This workshop will help you cultivate a psychologically safe culture for your interdisciplinary research collaborations to improve performance and maximize research impact



Introductions

- Name
- Organization
- Research focus

2023 CAIRIBU Initiative: Best Practices in Collaborative Science



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After completing this workshop, you will be better prepared to

- Understand the impact of psychological safety on team performance in interdisciplinary research teams
- Assess the psychological safety of an interdisciplinary research collaboration
- Identify strategies to strengthen team culture by creating a psychologically safe environment





Ground Rules

- Microphones off (when not speaking)
- Videos on (to generate community)
- Stay focused; avoid distractions
- Everyone participates; no one dominates
- Come with an open mind; learn from each other
- Honor confidentiality (Share lessons, not stories)
- Critique ideas, not people
- Take care of self

Forming Successful Teams Step by Step

- Clarify and articulate project mission and goals
- Determine your team's essential roles
 - Expertise
 - Cognitive diversity
 - Other roles
- Create your definition of a good collaborator
- Identify candidates mindfully
- **Get to know** your new collaborators
 - Perspectives
 - Priorities



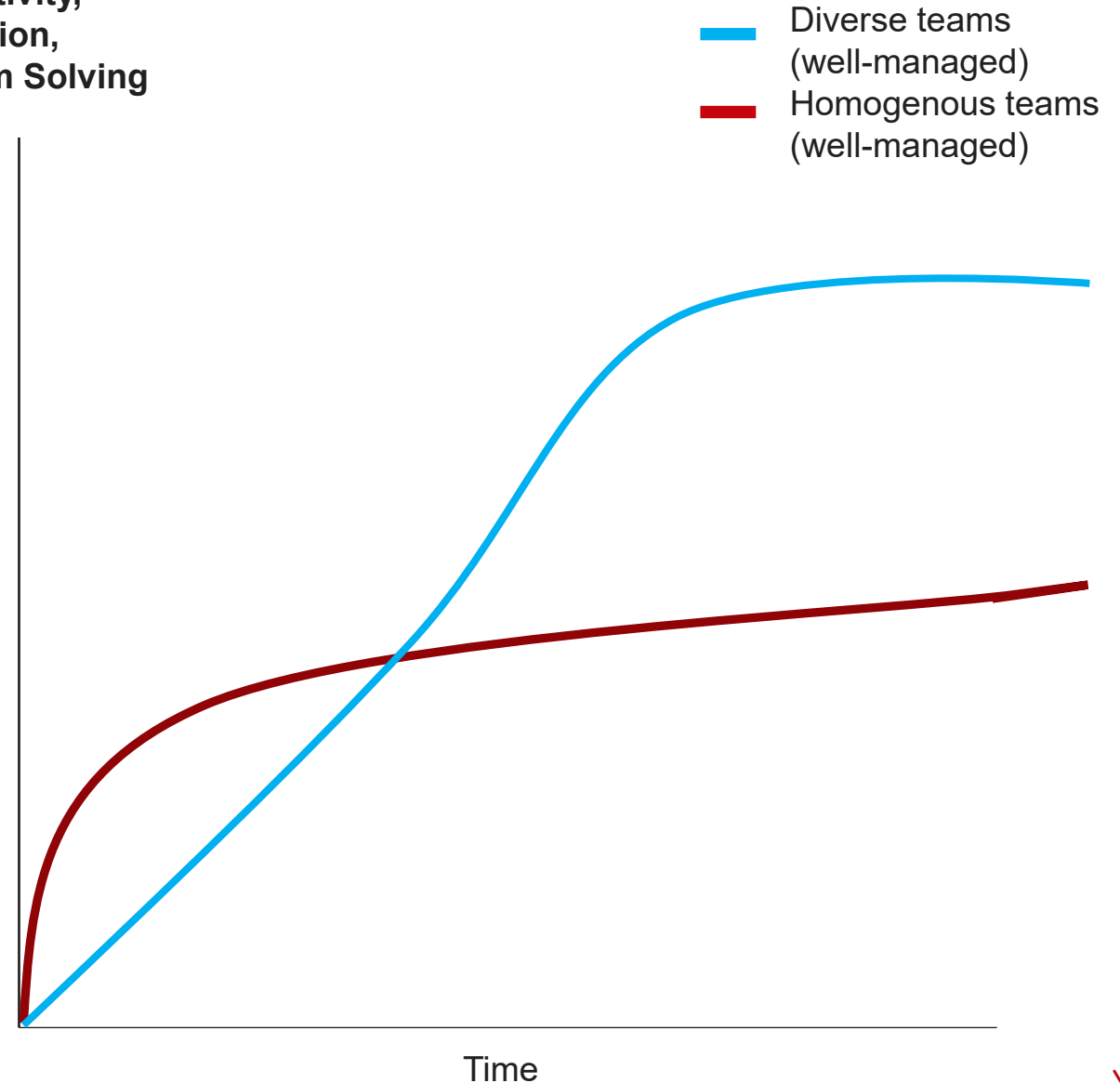


Perspectives & Priorities

Cognitive Diversity

- Refers to differences in perspective or information processing styles -- how individuals engage with uncertain and complex situations.
- Leads to greater innovation and expedited problem solving
- Is less visible and requires targeted assessment

Productivity,
Innovation,
Problem Solving

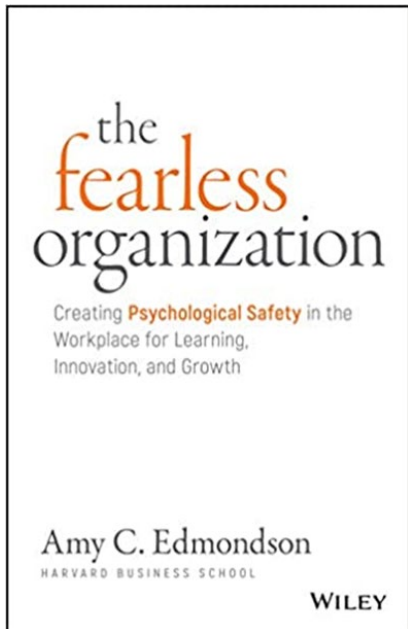


This figure synthesizes the work on the performance of diverse versus homogenous teams adapted from Katherine W. Philips (October 2014).





Psychological Safety



- “...a belief that one will not be punished or humiliated for speaking up with ideas, questions, concerns, or mistakes and that the team is safe for interpersonal risk-taking.” ~ Amy Edmondson
- The single greatest predictor of team performance is Psychological Safety.
- Psychological Safety mediates the advantage seen in diverse teams



Measuring Psychological Safety

Think about a team you participate in, and rate your agreement with each statement

1 (Strongly disagree) 2 (Disagree) 3 (Neutral) 4 (Agree) 5 (Strongly Agree)

1. If you make a mistake on this team, it is often held against you.
2. Members of this team can bring up problems and tough issues.
3. People on this team sometimes reject others for being different.
4. It is safe to take a risk on this team.
5. It is difficult to ask other members of this team for help.
6. No one on this team would deliberately act in a way that undermines my efforts.
7. Working with members of this team, my unique skills and talents are valued and utilized.

Edmondson, 2018
Figure 1.2 A Survey Measure of Psychological Safety [p. 20]

Four Stages of Psychological Safety

Timothy Clark (2020)

Inclusion Safety

Do I feel included?

- ☐ We feel accepted
- ☐ We feel part of the team

Learner Safety

Am I developing?

- ☐ It is safe to ask questions
- ☐ It is safe to make mistakes

Contributor Safety

Does my work matter?

- ☐ Full engagement is encouraged
 - ☐ There is energy and enthusiasm

Challenger Safety

Am I safe to challenge the status quo?

- ☐ It is safe to dissent
- ☐ It is safe to innovate



Four Stages of Psychological Safety

Timothy Clark (2020)



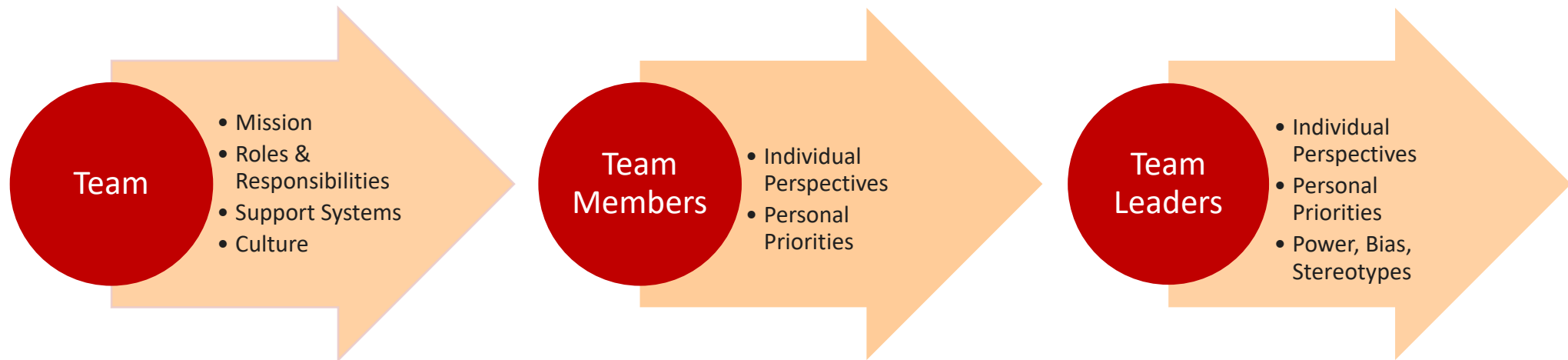
Inclusion Safety

- Cultivate Awareness
- Practice Civility





Levels of Awareness





Unconscious Bias

- **Affinity Bias** – We tend to gravitate toward people who are similar to us
- **Confirmation Bias** – We tend to seek out, interpret, favor, and recall information in a way that confirms our own beliefs
- **In-Group Bias** – We tend to give preferential treatment to others who are in our in-group

Awareness is the best defense against unconscious bias

Are you making decisions based on **Facts** or **Feelings**?



Team Building Activities

- **Go below the surface** and get to know your team members
- **Be strategically inclusive** when you select activities
- **Start small** and take incremental steps





Uncivil Behavior

Overt hostile behavior (e.g., belittling in front of others) or more subtle slights (e.g., teasing in ways that sting)

Uncivil behavior becomes an emotional contagion

- 98% of employees report experiencing uncivil behavior
- 48% of employees decrease work effort or lower work quality
- 80% lost time worrying about the incident
- 78% said their commitment to the organization declined
- 12% left their job



Assessing Team Civility

What are the top breaches of civility in your experience?



Top Breaches of Civility

- Publicly embarrassing a team member
- Inappropriate comments
- Sending an angry email (ALL CAPS)
- Inexperience with techniques or scientific ideas
- Not understanding religious beliefs
- Commentary about work commitment after having a baby
- Extremes of behavior
- Flying off the handle
- Teasing
- Bullying
- Harassment
- Micro-aggression
- Exclusion from abstracts/manuscripts
- Scapegoating
- Accused of being a "harasser" when asking question
- Not responding to emails
- Requiring me to ALWAYS circle back to him (micromanagement)
- Physical violence/abuse
- emotional violence/abuse



Cycle to Civility





Four Stages of Psychological Safety

Timothy Clark (2020)

Inclusion Safety

- Cultivate Awareness
- Practice Civility

Learner Safety

Am I developing?

- Reframe failure as a learning opportunity





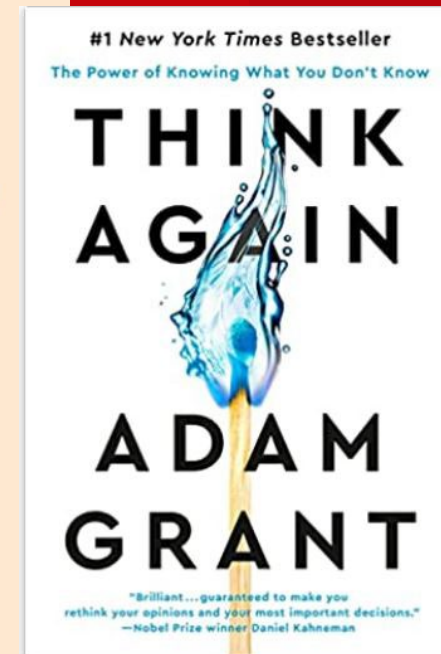
Adam Grant ✓

@AdamMGrant

The point of reviewing your mistakes isn't to shame your past self. It's to educate your future self.

Rumination is recycling old thoughts about what went wrong. Reflection is looking for new insights on how to do better.

You can't undo last year. You can improve this one.



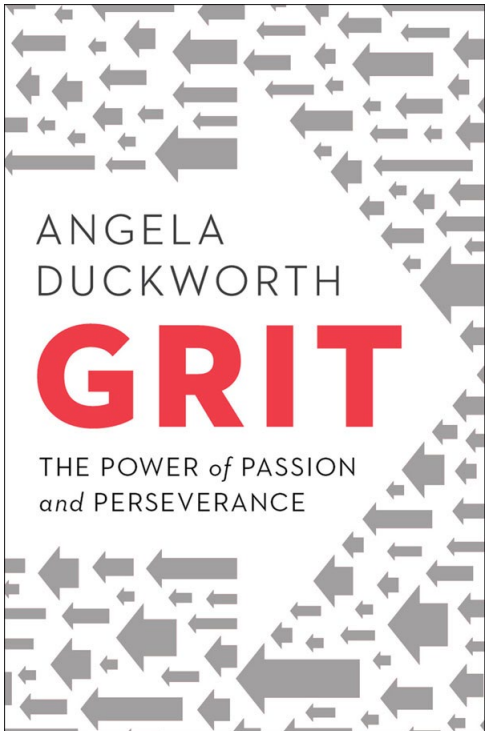
UW-ICTR



TEAM SCIENCE



Changing Our Mindset



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Fixed Mindset

- Goal: to look smart
- Avoid failure
- Avoid challenges
- Failure defines your identity
- Feedback and criticism are personal

Growth Mindset

- Goal: to learn
- Confront uncertainty
- Embrace challenges
- Failure provides information
- Feedback is about current capabilities (which can be expanded!)

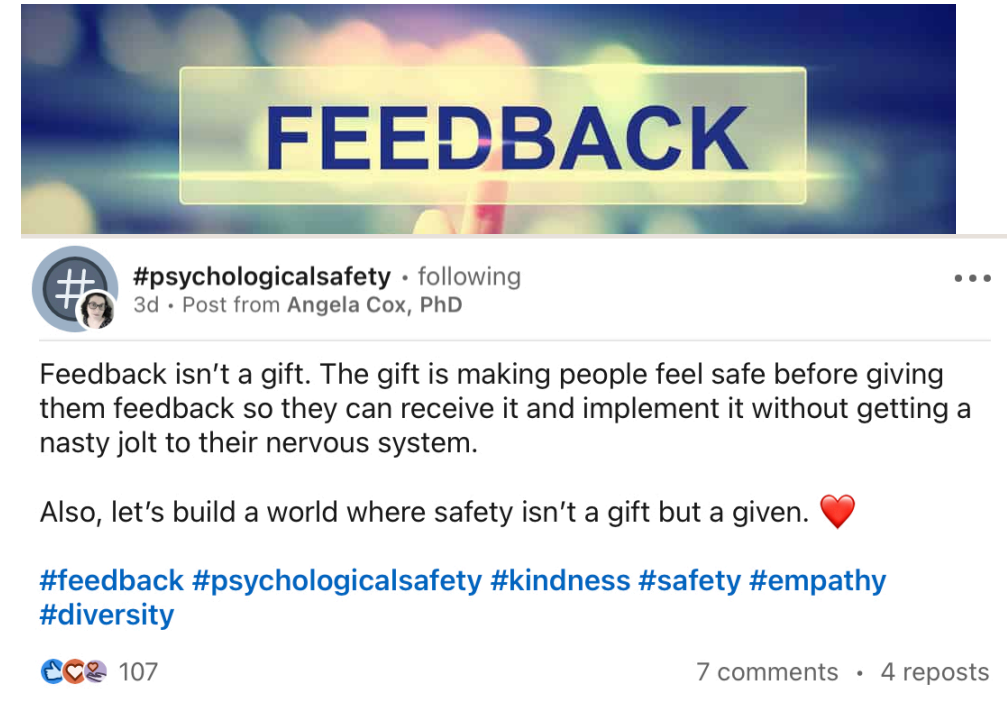
Growth Mindset



What is Feedback?

- Advice, criticism, or information about how good or useful something or somebody's work is (OED)
- The transmission of evaluative or corrective information about an action, event, or process to the original or controlling source (MW)
- Information about reactions to a product, a person's task performance, etc.

used as a basis for improvement.



Radical or Compassionate Candor
~Kim Scott (2018)

Implementation of Feedback

- Present feedback in the context of the skills that will allow for improvement and change.
- Provide clear messages with specific details.
- Explain how the information will help the team and team members achieve their goals.
- Convey gratitude, empathy, and support
- Be sure that there are opportunities to implement or incorporate new feedback.





Activity

A junior team member recently completed a manuscript draft describing the research on which their team has been working. The draft is rough, and the team member clearly does not fully understand parts of the work. Imagine that you are the lead on this project. Given our covered material, how would you approach your next conversation with this person? What would you say? How would you say it?

What did you learn from these conversations?



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Contributor Safety

Does my work matter?

- Create space for all voices
- Express gratitude and humility



Create Space for All Voices

- “This is new territory for us. So, I am going to need everyone’s input.”
- “Okay, that is one side. Let’s hear some dissent. Who’s got something to add?”
- “Whitney, you look concerned. What is on your mind?”
- “Giles, you haven’t said much?”
- “If you’ve got something to add, you can share it now or we can talk privately later.”
- “I appreciate you bringing this to me. I am sure it wasn’t easy.”



Edmondson, 2018



Promote Team Voice with Gratitude and Humility



- Expressing **gratitude** and **humility** fosters cultures where members are
 - Less defensive,
 - More open to learning,
 - More likely to demonstrate appreciation for others, and
 - More comfortable sharing their perspectives and opinions.



Oyer, 2015; McCullough et al., 2002; Li et al 2020

Cultivate Gratitude and Humility

- To cultivate gratitude and humility
 - Establish a personal gratitude practice
 - Express gratitude for both the person and the work
 - Foster awareness of self and others



Oyer, 2015; McCullough et al., 2002; Li et al 2020

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Challenger Safety

Am I safe to challenge the status quo?

- Share responsibility for meetings and training
- Assign dissent (and kudos) early





Promote Innovation with Shared Responsibility

- Enlist all team members to lead meetings
- Encourage junior team members to train others
- Assign the role of dissenter
- Celebrate “wild” ideas
- Create spaces for experimentation

Clark, 2020





“Whoever we are, when we are at our best,
it is encounters with those who bring
different perspectives to our personal and
work lives that allow us to grow, personally
and professionally.”

~Amy Edmondson's foreword
LaTonya Wilkins', *Leading Below the Surface*, 2021

Fostering Psychological Safety

Step by Step

- Inclusion Safety
 - Cultivate awareness
 - Practice civility
- Learner Safety
 - Reframe mistakes as learning opportunities
 - Practice compassionate feedback
- Contributor Safety
 - Create space for all voices
 - Practice gratitude and humility
- Challenger Safety
 - Share responsibility for meetings and training
 - Assign dissent (and kudos) early



**What is one “next step”
you can take to create
psychological safety?**





We value your feedback!





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Resources

- [Christine Porath TED Talk](#)
- Collaboration Planning (teamscience@ictr.wisc.edu)
- The Greater Good Science Center (<https://greatergood.berkeley.edu/>)
- HBR Article: [The Price of Incivility](#) by Christine Porath and Christine Pearson
- Fearless Organization Scan (<https://amycedmondson.com/psychological-safety/>)



Community of Practice: April 17, 2023

- Optional (virtual) adjunct to the first CAIRIBU Collaborative Science workshop
- Explore how to cultivate psychological safety on your teams through an informal discussion of case studies and participant examples
- You will enjoy this session most if you come prepared to share your
 - Successes
 - Questions
 - Problems
- Preparation is NOT required. All are welcome to join us and learn together.
- Drop in any time during the 60-minute session!

Future Sessions

- **Successful Team Communication**
 - **Workshop:** May 1
 - **Community of Practice:** May 15
- **Setting Your Science Team Up for (Measuring) Success**
 - **Workshop:** June 5
 - **Community of Practice:** June 19
- **Leading Your Team to Success**
 - **Workshop:** July 10
 - **Community of Practice:** July 31
- All sessions will be recorded and available 1-2 days following the live session