Cognitive Diversity Thinking

Idea In Short

Leaders often hope that a team with varied backgrounds will think more broadly. The evidence is more interesting than that hope. Researchers Alison Reynolds and David Lewis ran a strategic execution exercise with more than a hundred teams over twelve years and found no link between performance and the usual markers of diversity, such as gender, ethnicity, and age. What did matter was a less visible difference: how people think about new, uncertain, and complex situations. This article explains cognitive diversity, what the research suggests, why psychological safety decides whether it pays off, how to see it in your own team, and how to tune it to the stage of a project.

Two teams of similar executives faced the same strategic challenge. One failed to finish. The other finished quickly. Observers who studied the difference found that the winners did not look more varied on the surface, yet they approached the problem in more varied ways.

What cognitive diversity is

Reynolds and Lewis, writing in Harvard Business Review and on the Thinkers50 site, define cognitive diversity as differences in perspective or information processing styles. They note that it is not predicted by factors such as gender, ethnicity, or age, and that it is less visible than those.1

A Stanford Graduate School of Business article gives a similar definition: a variety of thinking, problem-solving, and creative perspectives. It calls cognitive diversity a critical component of a team's success, like other kinds of diversity.2

The key word is how. The concept concerns the way people think, not the labels that describe them.

The research evidence

Reynolds and Lewis used a strategic execution exercise with executive teams. In a Thinkers50 summary, they report running it more than a hundred times over twelve years and finding no correlation between demographic diversity and performance.

They then measured cognitive diversity with a tool and looked at six teams. They report a significant correlation between high cognitive diversity and high performance, and they call their findings indicative, with research continuing on a larger sample.

A Belbin article describes the work in similar terms: more than 100 teams followed over 12 years, with success not significantly linked to age, gender, or ethnicity but with high cognitive diversity consistently performing better, particularly in complex situations.3

Note the caution. The exercise was a specific task, and the sample of measured teams was small. The findings suggest a direction and do not settle the question for every kind of work.

Thinkversity and new situations

Reynolds and Lewis focus on one aspect of cognitive diversity: how individuals think about and engage with new, uncertain, and complex situations. They call it thinkversity.

That focus matters for business. Routine tasks may not need much variety of approach. A new market, a crisis, or a strategic shift does, because nobody holds a ready answer.

When you form a team for novel work, ask how candidates approach the unknown. Some people want to gather data first, others want to act and learn, others want to map the whole system. A mix covers more ground.

Why psychological safety decides the outcome

Variety of thought has value only if people share it. In a follow-up article, Reynolds and Lewis observe that in under-performing teams a smaller percentage of the group contributed, intervals between testing ideas grew longer, and the same mistakes repeated.

They conclude that without behaviors that create and maintain psychological safety, people do not fully contribute, and the power of cognitive diversity goes unrealized. Their survey of 150 senior executives found that adaptability correlated highly with both cognitive diversity

and psychological safety.

A leader's job, therefore, has two parts. Assemble varied thinkers, and then make it safe for each to speak. The second part is often the harder one.

What speed looked like

A summary on the Engagedly blog describes the same experiment in practical terms. The researchers used a model to measure differences in how people approach change, and teams with more variety in thinking styles finished the challenges more quickly than teams with less variety.4

Speed is a useful measure because it shows up in real costs. A team that solves a hard problem sooner saves time, money, and the opportunity cost of delay.

Keep the claim modest. The exercise rewarded fast, coordinated problem solving, and other tasks may reward other traits. Match your team design to the kind of work you do.

Cognitive diversity and individual ability

A Psychology Today article cites a study in the Proceedings of the National Academy of Sciences which reports that, in group problem solving, a team's cognitive diversity matters more than the individual abilities of its members. The same piece cites Harvard Business Review research showing that cognitive diversity accelerates problem solving.5

Treat that as a prompt for reflection and not a rule. It does not mean that skill is unimportant. It suggests that adding a strong thinker who resembles the existing members may help less than adding a competent thinker who sees the problem differently.

The article also warns that cognitive diversity is often overlooked, because it does not necessarily correlate with other types of diversity, which can leave teams in which everybody thinks alike despite looking different.

Tuning diversity to the project phase

Stanford's article describes research by Goldberg and colleagues showing that teams can

modulate their variety or consistency of thought according to the phase of the project or task they are working on. The key, it says, is helping a team adjust its level of thought diversity at the right times.

Early on, when the team explores options, wide variety helps. Invite unusual angles and delay judgment. Later, when the team must execute, tighter alignment saves time. Narrow the options, agree on a plan, and coordinate.

A leader can signal the phase out loud. Say that the next hour is for exploring, and that the following session is for deciding. The signal helps people shift their behavior.

Seeing cognitive diversity in your team

Because cognitive diversity is hard to see, use tools. Belbin's team roles provide a practical framework for identifying and using cognitive diversity in teams, according to its article. Other instruments exist as well, including the one that Reynolds and Lewis used.

Informal observation helps too. Notice who asks about risks, who proposes bold moves, who sketches the whole system, and who checks details. If one pattern dominates, the team has a gap.

Ask directly. At the start of a project, ask each member how they would approach it and why. The differences in answers show where perspectives vary.

Running a meeting that uses the variety

A varied team can still waste its variety in a poorly run meeting. The loudest or most senior voice sets the frame, and others adapt to it.

Ask people to write their view before anyone speaks. Collect the views, group them, and discuss the differences. Writing first protects the quieter thinkers, and it shows the real spread of approaches.

Rotate who opens the discussion. A person who thinks in stories may start one week, and a person who thinks in numbers may start the next. Rotation signals that every style has a place.

Close each meeting by asking what perspective is missing. The question reminds the team that the goal is a complete view, not agreement for its own sake.

A hypothetical example

Imagine a hypothetical bank team that has a long record of sound analysis and slow decisions. All of its members trained in the same discipline and prefer to study problems before acting. The head of strategy adds two colleagues, one from operations who likes to run small experiments and one from customer service who thinks in terms of stories.

At first, discussions feel messier. The head sets rules: exploration in the first meeting, decision in the second, and a round where each person must state a concern. Within a few months, the team tests ideas faster and spots customer issues that its analysis missed. The bank is invented, but the example shows how mixing styles and managing phases can change results.

Cautions

Do not treat cognitive diversity as a license to ignore other forms of diversity. Fair access and inclusion matter in their own right, and cognitive differences often grow when teams draw on varied backgrounds.

Avoid stereotyping. Do not assume that a person thinks a certain way because of a label. Learn how each person approaches problems from what they do.

Finally, remember that variety has costs. Teams with very different styles can clash or move slowly. Plan for facilitation, shared goals, and time to build trust.

- 1Teams solve problems faster when they're more cognitively diverse, Thinkers50
- 2Cognitive diversity: know how to harness it, Stanford GSB
- 3Is your team missing cognitive diversity, Belbin
- 4High cognitive diversity is key to better teamwork, Engagedly
- 5How to encourage diverse perspectives in your team, Psychology Today

Summary

Cognitive diversity thinking means building teams and discussions that draw on different ways of perceiving and processing problems. Reynolds and Lewis found no correlation between demographic diversity and results in their execution exercise, but they found a strong link with differences in how people approach new and uncertain situations. Their later work shows that psychological safety is needed for people to contribute, so the diversity is not wasted. Leaders can tune diversity across project phases, using wide variety to explore and tighter alignment to execute. This week, ask each member how they would approach your current problem, and note where the answers differ.