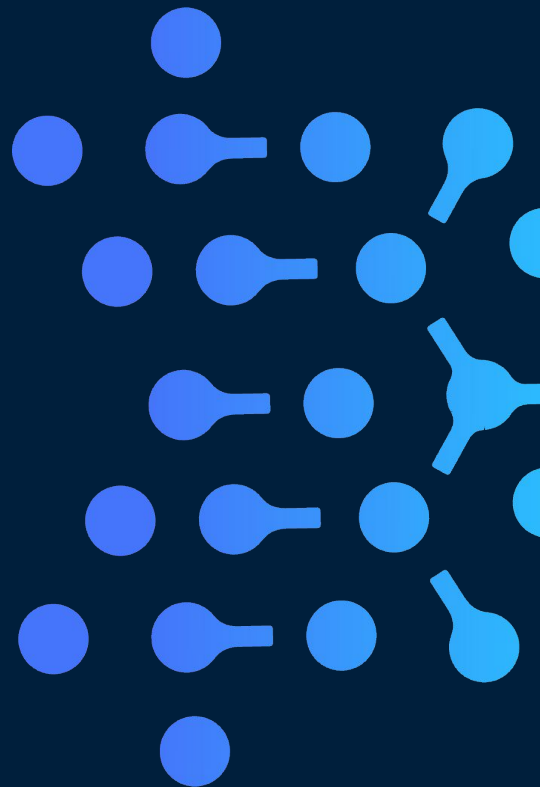
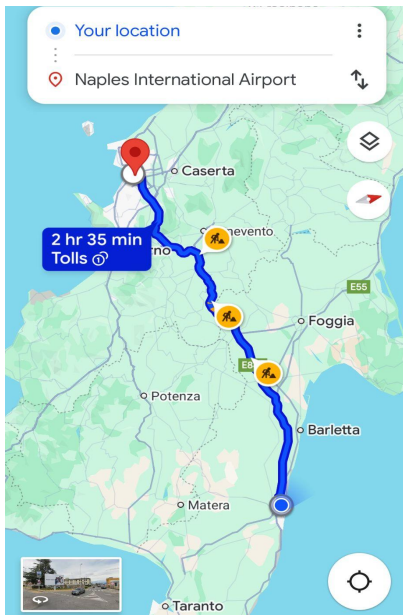




Postgres and People: The neuroscience and psychology of why we stick around

Ellyne Phneah





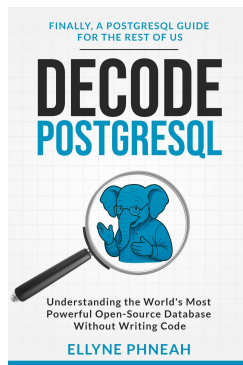


Belonging



Who am I?

- Ellyne Phneah
- Marketing at DBtune
- 14+ years in journalism, PR, marketing, comms
- Organizer, Malmo PostgreSQL user group
- Author of Decode PostgreSQL



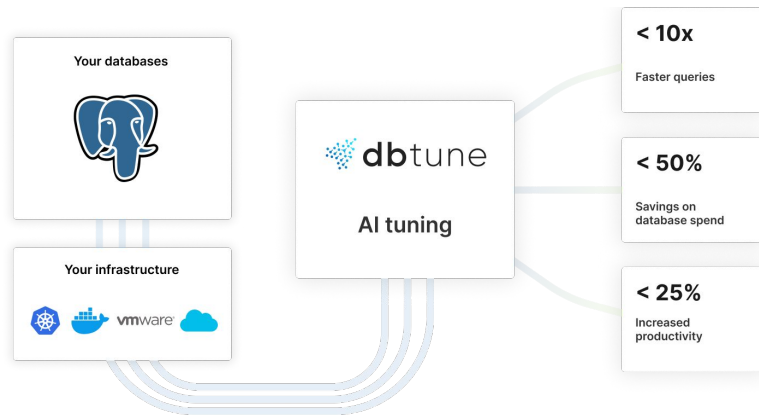
More about Decode
PostgreSQL





About DBtune

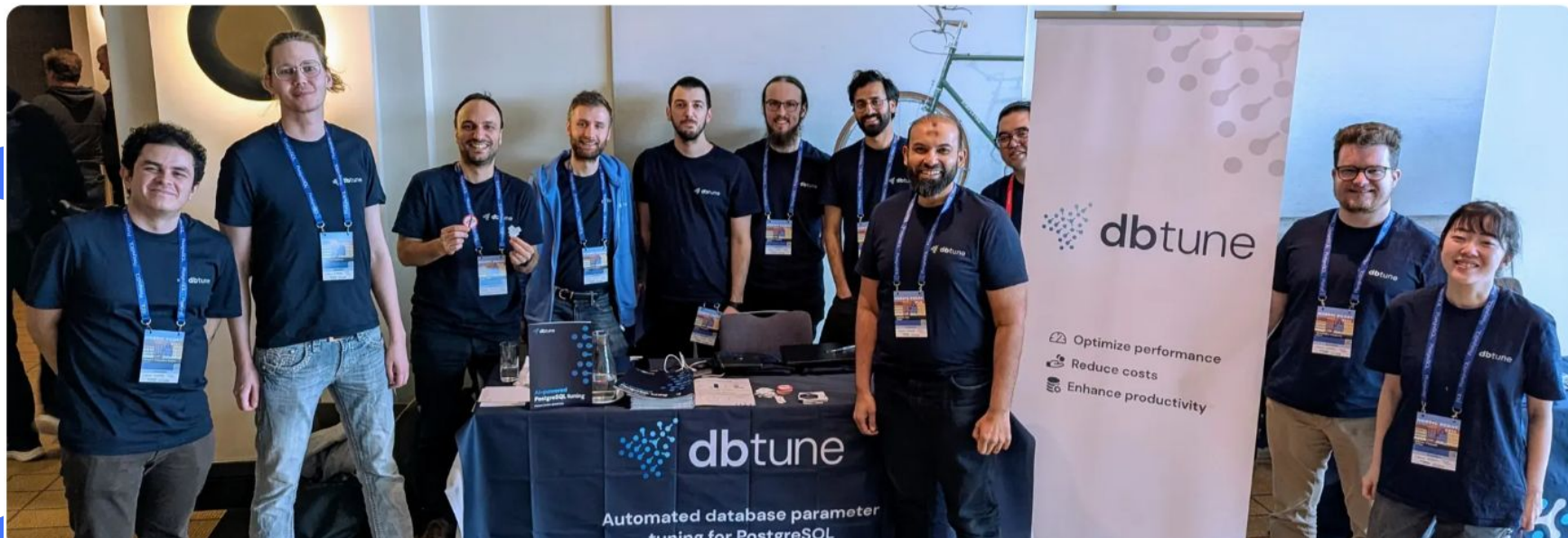
- AI-powered PostgreSQL server parameter tuning service
- Autonomously optimizes server parameters through machine learning
- Observes, iterates and adapts until converging and delivering optimal settings for any individual workload, use case and machine.



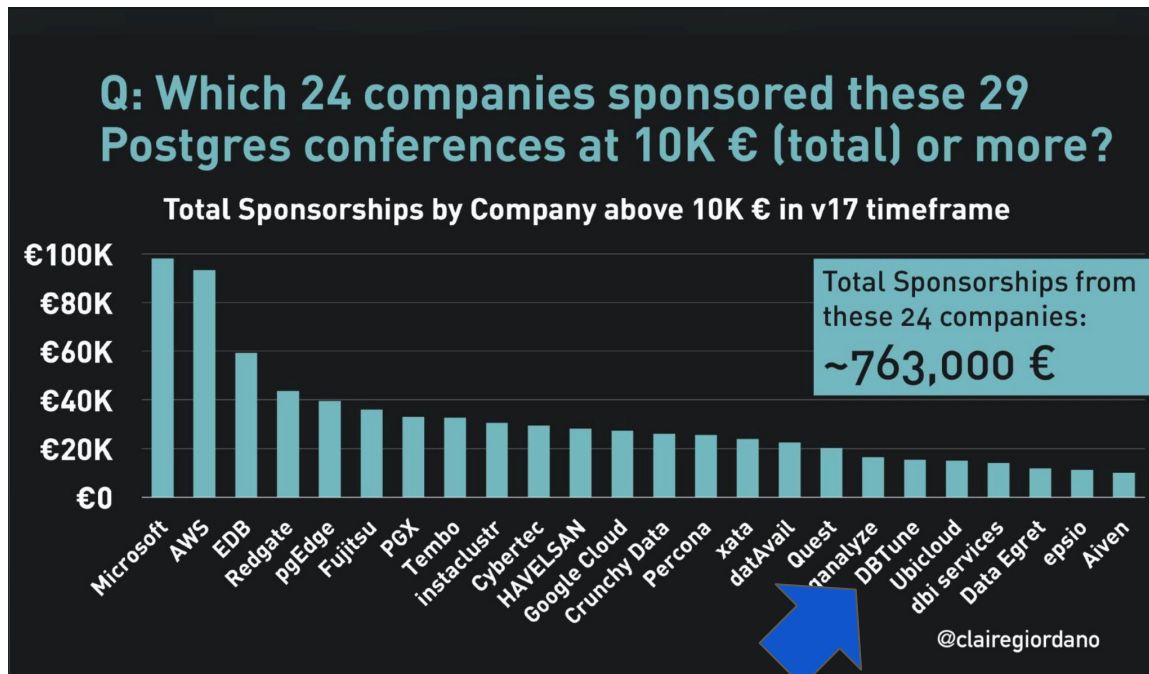
Visit our website



DBtune: Our social code in action



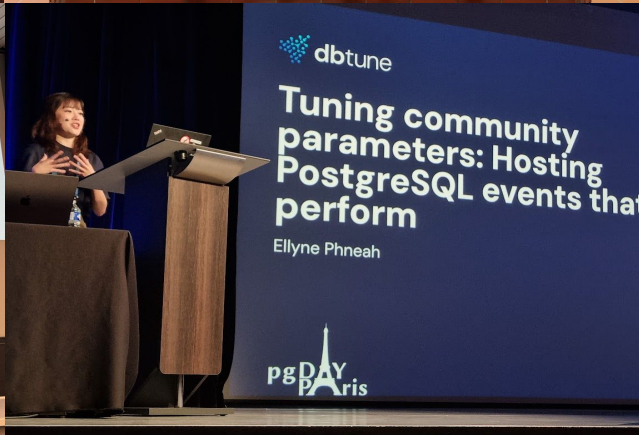
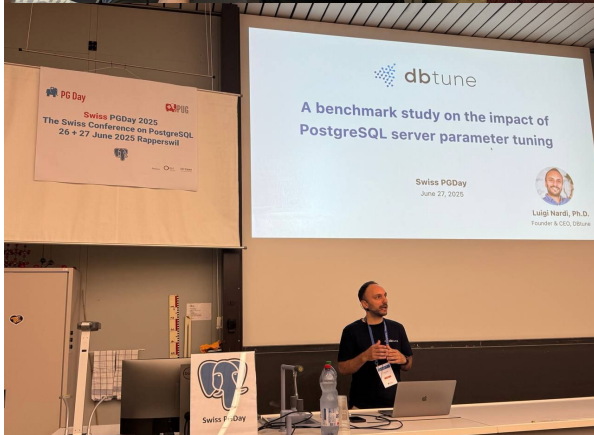
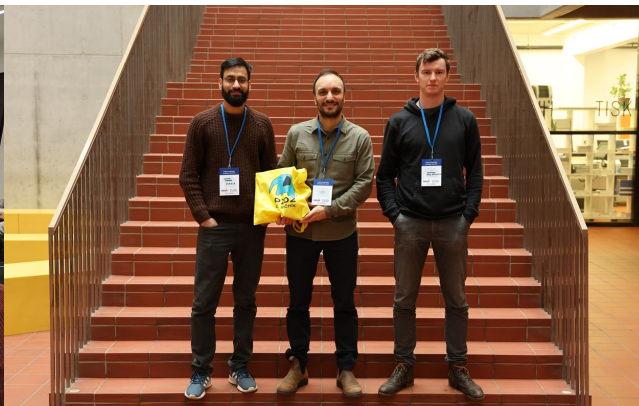
DBtune is the top 20 PostgreSQL sponsors



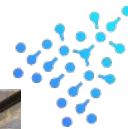
Source: [Claire Giordano, PostgreSQL Conference Europe 2024, Athens](#)



Community trainings and presentations



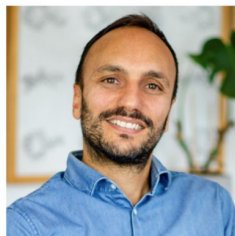
Malmo PostgreSQL User Group (M-PUG)



M-PUG organizers



Ellyne Phneah
DBtune



Dr. Luigi Nardi
DBtune



Daniel Gustafsson
Microsoft



Dennis Rilorin
Redpill Linpro



Join M-PUG

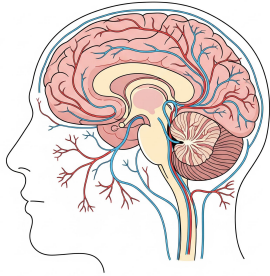




The science of belonging



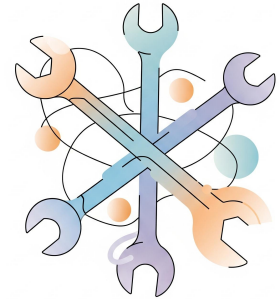
Agenda



The Science



The Community



The Toolkit



The third place



A “place on the corner” where people gather inexpensive and regularly to connect over a shared interest or activity

- Fulfills **fundamental need for social connection** and **supports psychological wellbeing**.
- Offers a place for "solitude without loneliness"
- Members often feel a sense of identity and belonging.

Source: [What is a third place?](#)



A throwback to the tribal world



The neuroscience of connection



Social Connection is a Primal Need, Not a "Nice-to-Have"



Dopamine



Oxytocin



Social pain is real pain

Why rejection literally hurts, evidence from the lab

Does rejection hurt? An fMRI study of social exclusion

Naomi I Eisenberger¹, Matthew D Lieberman, Kipling D Williams

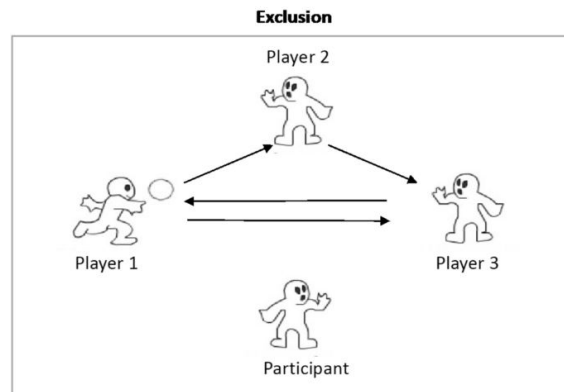
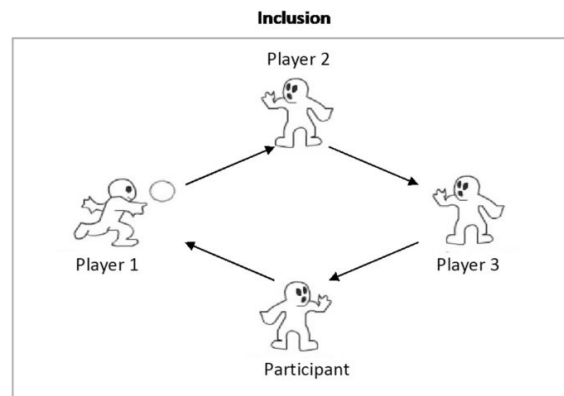
Affiliations + expand

PMID: 14551436 DOI: [10.1126/science.1089134](https://doi.org/10.1126/science.1089134)

Abstract

A neuroimaging study examined the neural correlates of social exclusion and tested the hypothesis that the brain bases of social pain are similar to those of physical pain. Participants were scanned while playing a virtual ball-tossing game in which they were ultimately excluded. Paralleling results from physical pain studies, the anterior cingulate cortex (ACC) was more active during exclusion than during inclusion and correlated positively with self-reported distress. Right ventral prefrontal cortex (RVPPFC) was active during exclusion and correlated negatively with self-reported distress. ACC changes mediated the RVPPFC-distress correlation, suggesting that RVPPFC regulates the distress of social exclusion by disrupting ACC activity.

[PubMed Disclaimer](#)

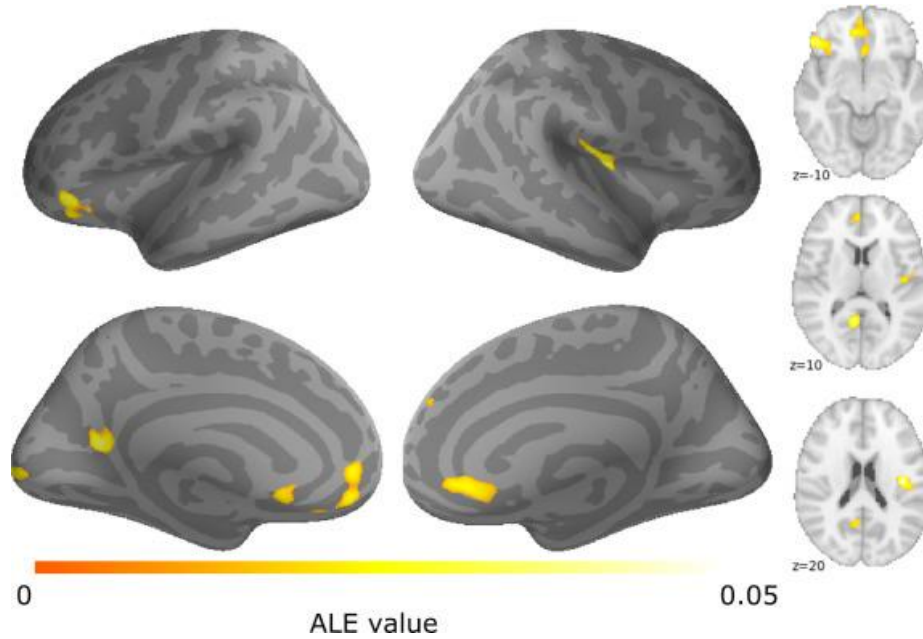


[Source](#)



Social pain is real pain

Why rejection literally hurts, evidence from the lab

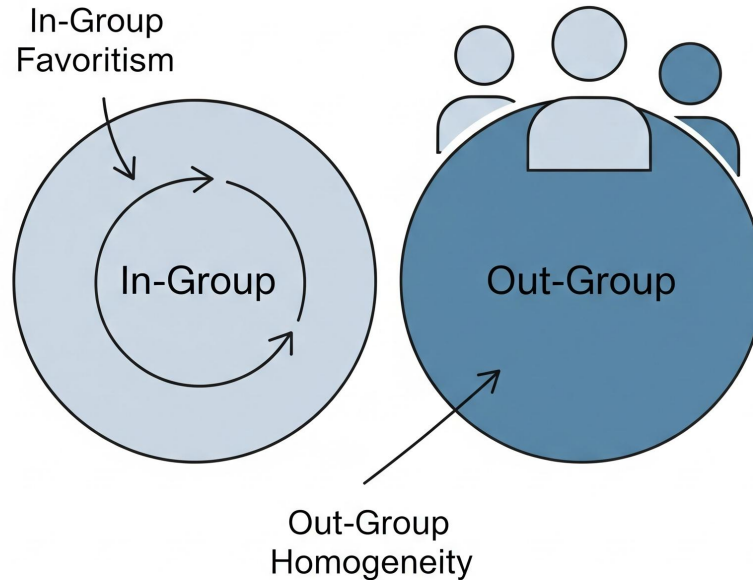


Source: [Mwilambwe-Tshilobo & Spreng \(2020\)](#)

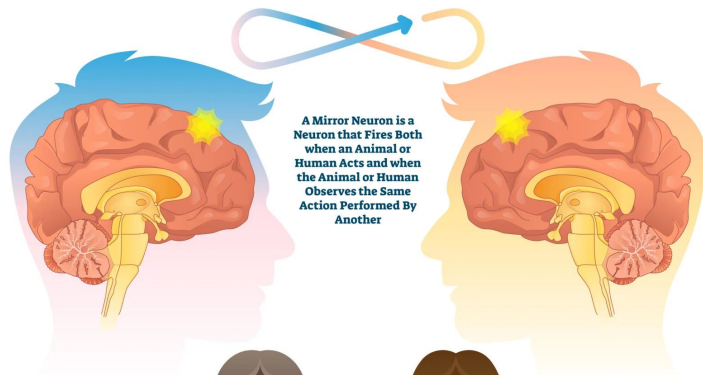
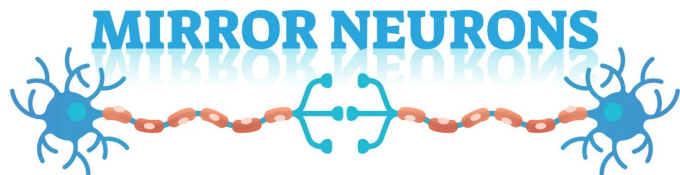


The “Us” vs “Them” instinct

The double edged sword of group dynamics



The culture we mirror



Source: [Mirror Neurons & Their Functions](#)



The culture we mirror

Neurons that fire when you do and when you see



Review > [Annu Rev Neurosci. 2004;27:169-92. doi: 10.1146/annurev.neuro.27.070203.144230.](#)

The mirror-neuron system

Giacomo Rizzolatti ¹, Laila Craighero

Affiliations + expand

PMID: 15217330 DOI: [10.1146/annurev.neuro.27.070203.144230](#)

Abstract

A category of stimuli of great importance for primates, humans in particular, is that formed by actions done by other individuals. If we want to survive, we must understand the actions of others. Furthermore, without action understanding, social organization is impossible. In the case of humans, there is another faculty that depends on the observation of others' actions: imitation learning. Unlike

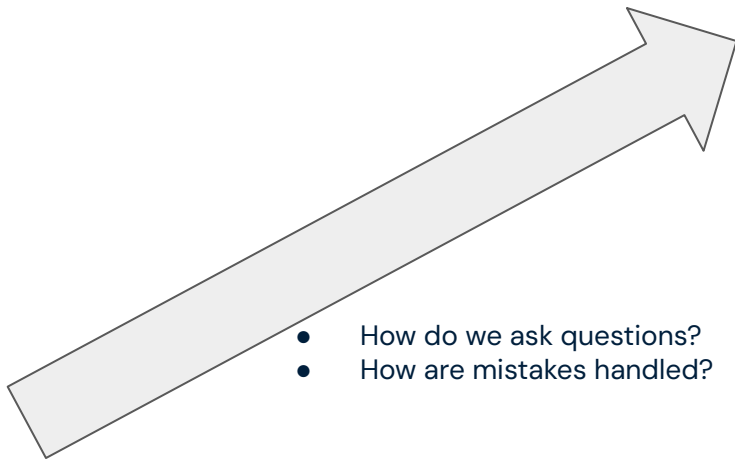


[Image source](#)



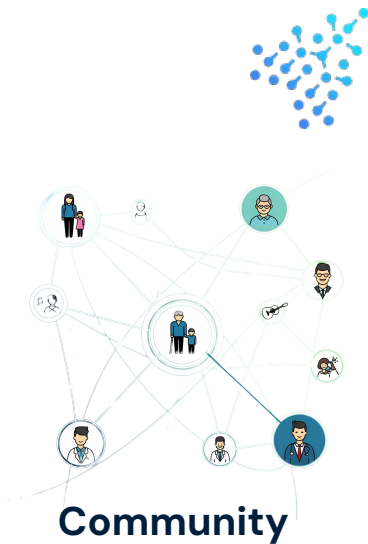
We follow the footprints we see

Senior member models the way



- How do we ask questions?
- How are mistakes handled?

Newcomer mirrors and learns



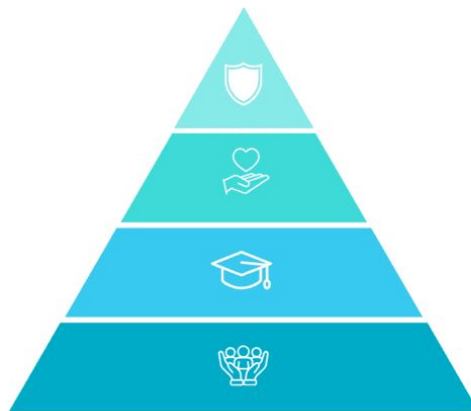
Psychological safety: The foundation for motivation



Can you ask a "stupid" question? Can you make a mistake?

4 stages of psychological safety

- 4 Challenger safety
- 3 Contributor safety
- 2 Learner safety
- 1 Inclusion safety



RELATEDNESS

Source: [People Insight](#)



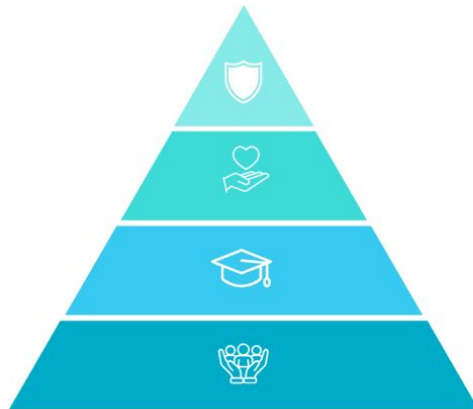
Psychological safety: The foundation for motivation



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**SELF
DETERMINISM**

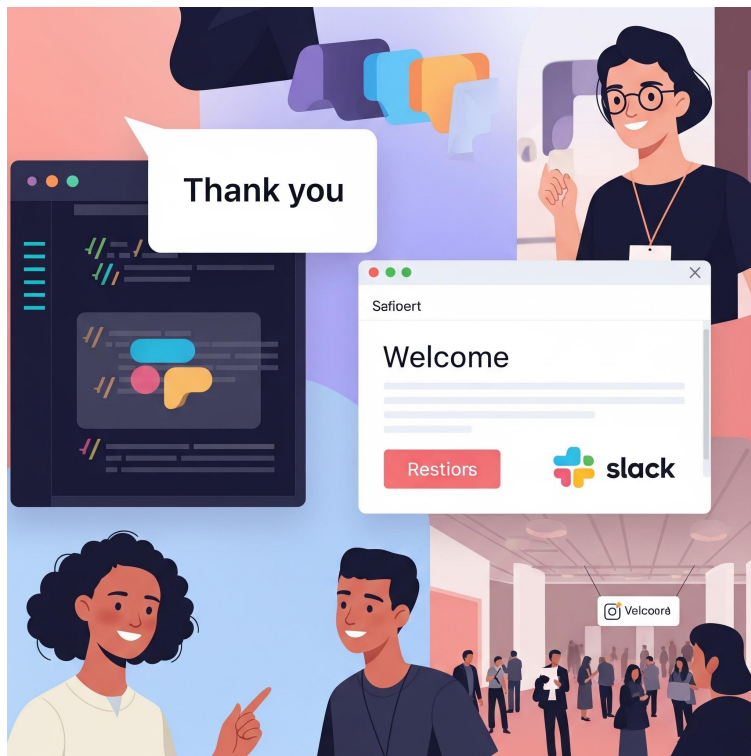
RELATEDNESS

Source: [People Insight](#)



The small moments that matter the most

Belonging is built in micro-interactions





The community experience



Who took our survey? A highly invested core



55

individuals

GENDER DISTRIBUTION



74% Man

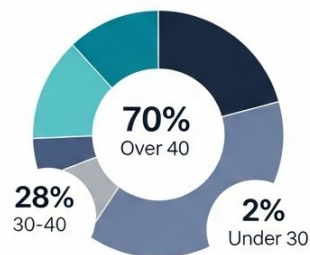


24% Woman



2% Non-bineay

AGE DISTRIBUTION



EXPERIENCE LEVEL



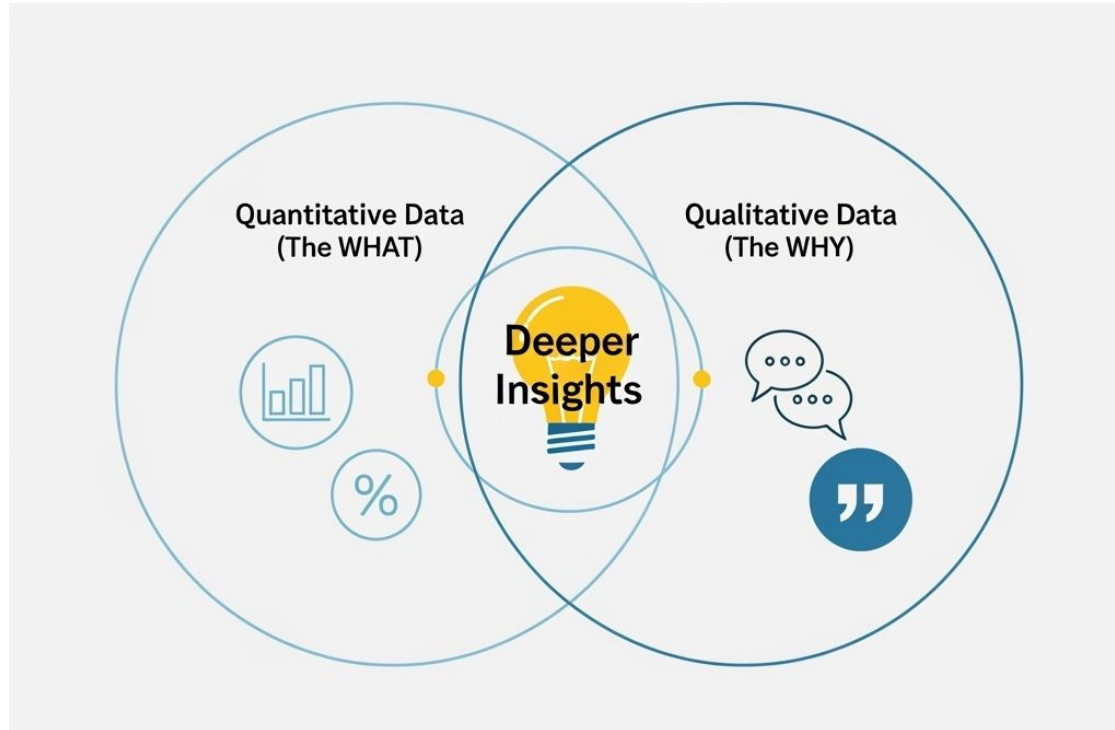
67%
Over 5 years



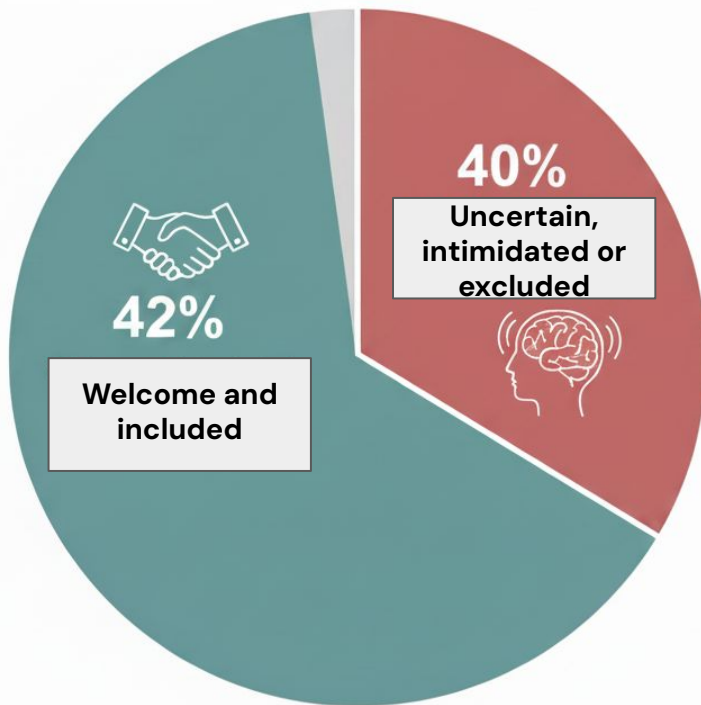
69% Active
Contributors/Core Team



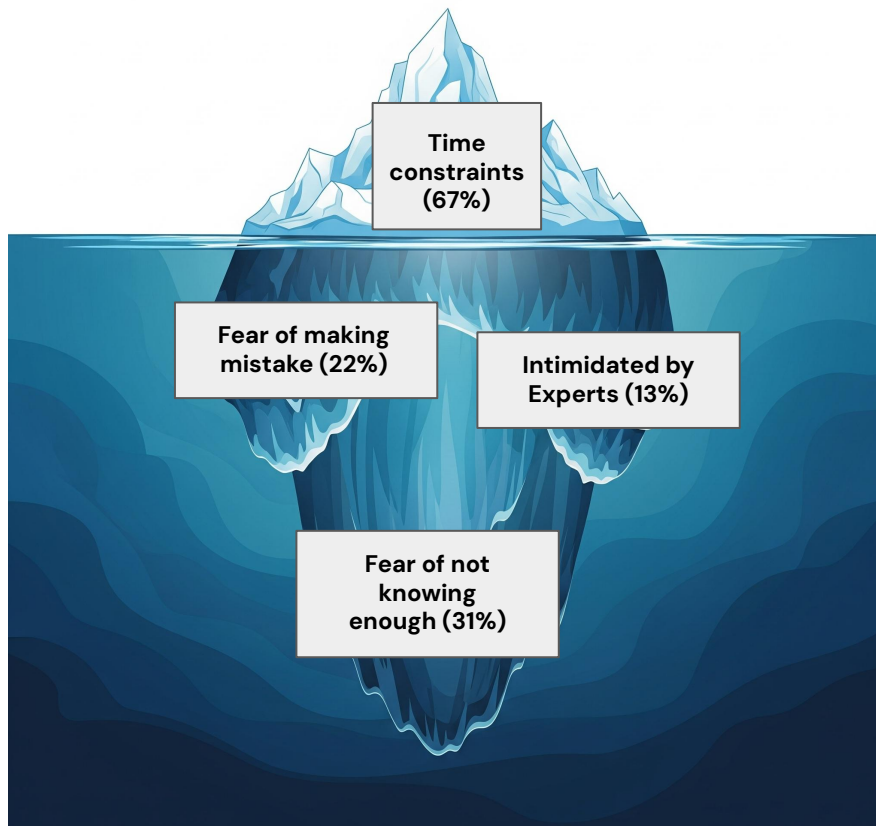
Listening and learning with mixed methods research



First impressions: A mixed welcome



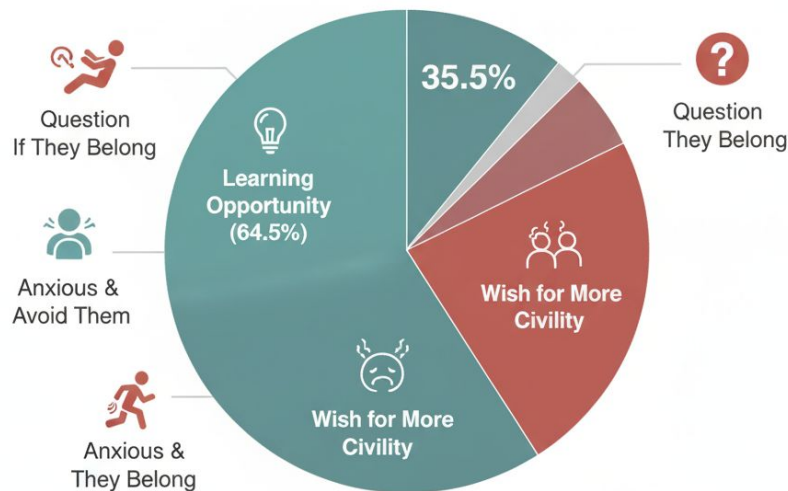
The biggest barrier isn't time—it's lack of safety.



Heated debates: Healthy challenge or hostile conflict?



One debate, many realities



The "In-Group" Perspective:

- Healthy Learning Experience

The "Out-Group" Perspective:

- Threat Signal (22.2%)



We mirror the behavior we see



The ripple effect of negativity

Tone down the occasional negativity
from some of the senior contributors

I wish some people would be kinder
on Slack/IRC/Reddit/SO.

Mansplaining, gatekeeping behavior,
actively ignoring.





Newcomers are nearly 3x more likely to feel intimidated.

Intimidation by Experience Level



Less than 5 Years Experience



More than 5 Years Experience

"I didn't want to look stupid"



A clear mandate: Build a community wired for belonging



A mandate for a better social code

Challenge if tenure should be the thing that keeps the same people in leadership positions.

Being less tolerant of toxic people

More diversity (and understanding of the associated issues) at a leadership level.





The Toolkit

How we rewire our social code





Mixed-Method Research



Social Science & Actionable Steps



The Micro-Inclusion Toolkit



A data-driven guide to building belonging

Reference their work

The #1 most impactful gesture, according to our survey. It shows you see and remember their contributions.

Thank them publicly

A top-ranked action that provides the visible recognition many contributors feel is missing.

Answer the newbie question

Directly fights the #1 barrier to participation: the fear of "looking stupid".

Give constructive feedback

Turns a potentially negative interaction ("-1 from me") into a positive, high-impact gesture of growth.

Invite collaboration

A powerful way to break down the "cliqueness" some members experience and signal true inclusion.

Value all contributors

Our community explicitly asked for more recognition for the non-code work that holds us together.

Moderate Toxic Behaviour

A direct call from our survey to create a safer space for everyone.



The Micro-Inclusion Toolkit



Micro-Action	Scientific Benefit
Answer the Newbie Question	Provides Learner Safety; fights social pain of feeling stupid.
Reference Their Work	Builds Relatedness; provides dopamine reward; #1 impactful gesture.
Thank Them Publicly	Fosters recognition; boosts Self-Determination; shows valued work.
Give Constructive Feedback	Creates Learner Safety (not social pain); promotes growth.
Invite Collaboration	Breaks "Us vs. Them" barriers; signals "in-group" acceptance.
Moderate Toxic Behavior	Stops negative Mirror Neuron spread; essential for psychological safety.
Value All Contributions	Expands the "in-group"; fosters Relatedness beyond just code.



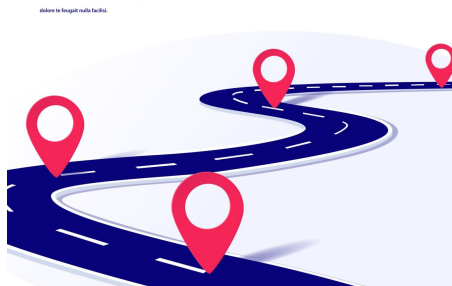
Building the future: What people are asking for



A clear mandate for growth



**More recognition for
non-code contributions**



**Clearer contribution
guidelines**



More local regional events



More structured mentorship



Better beginner resources



**More diverse
leadership**





The one thing pledge





The future of PostgreSQL isn't just in our source code; it's in our social code. It's in the quality of our connections.



Thank you



Ellyne Phneah

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 [Ellyne Phneah](#)

