

Cognitive biases and distortions common in Collaborative Problem-Solving

Last updated: 4/15/2026

Overview

Cognitive biases are patterns of thinking that are largely automatic and result in errors in how we interpret situations and make decisions. These “mental shortcuts” often show up in social situations. None of us are immune to cognitive biases. They can affect the thinking of families and work colleagues, well-formed groups and new collaborators, and novices and experts alike.

There are dozens of cognitive biases. The biases listed below can be common in situations like collaborative problem-solving, where people on different sides of an issue may have little or inaccurate information about each other or be motivated to ignore nuances in ideas from the “other side.”

Most cognitive biases lead to sub-optimal decisions. But some biases – like framing, listed below – can also be used to better understand a conflict and bring parties to resolution.

Cognitive Bias	Description	Resources
Anchoring bias	Anchoring bias describes a tendency to over-rely on the first information they hear on a topic, or on information presented immediately before being asked to make a decision or prediction, even if the information is irrelevant information to the topic.	Don't Let Your Anchoring Bias Weigh You Down
Availability heuristic	The tendency to believe that if we can think about something easily, it means it must happen frequently.	Availability Heuristic: Definition, Examples, & Bias
Black-sheep effect	The tendency to judge a disliked or disreputable person more negatively when they belong to one own's group rather than another group.	2023 research on the black-sheep effect
Category error	The tendency to mis-assign a category to a person or event.	How Category Errors Make Conflict Harder to Resolve

Confirmation bias	The tendency to search for, interpret, favor, and recall information in a way that confirms or supports one's prior beliefs or values.	Talking With and Listening to People on the Other Side
Framing bias	The tendency to let our thinking be led by the way an issue is framed or presented.	Top Ten Cognitive Biases and Distortions in Mediation
Fundamental Attribution Error	The tendency to assume innate personality or character traits explain the behavior of others, while attributing your own same behaviors to factors out of your control.	The Fundamental Attribution Error: What It Is & How To Avoid It
Illusion of Explanatory Depth (IOED)	The tendency to believe we know more about a topic than we actually do.	The Illusion Of Understanding
Motive attribution asymmetry	In a conflict, the tendency for both sides believe they are motivated by love, but the other side is motivated by hate.	Our Culture of Contempt
Out-group homogeneity effect	The out-group homogeneity effect is the perception that out-group members are more similar to one another than are in-group members, e.g. "they are alike; we are diverse."	Understanding Prejudice Course: The Psychology of Prejudice
Reactive devaluation bias	The tendency to disparage or devalue proposals or ideas made by someone we view as negative or antagonistic (the other sides, the "enemy").	The Decision Lab: Reactive Devaluation
Knobe effect	The tendency to judge side effects with negative outcomes as intentional and those with positive outcomes as unintentional.	Explaining the Knobe Effect

Additional resources

- <https://www.calstate.edu/csu-system/administration/business-finance/systemwide-risk-management/Documents/ftpt-2019-presentations/Psychology-of-Risk-Cognitive-Bias-Handout.pdf>
- <https://thedeclarationlab.com/biases>
- <https://www.masterclass.com/articles/how-to-identify-cognitive-bias#4AH7GXGWCN7FE3LKhueUs>
- <https://www.cambridge.org/core/journals/think/article/abs/cognitive-bias/5579F9E367C96F57E7B0EA376B825DA9>
- <https://mediate.com/top-ten-cognitive-biases-and-distortions-in-mediation/>