

Identifying and mitigating cognitive bias

WORKSHEET

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For those of us working in the public policy realm, there are certain solutions that seem like “common sense.” But those solutions can be fraught, says Dr. Nathan Connolly, professor of history at Johns Hopkins University, who researches racism and politics in the 19th and 20th centuries. Those “common sense” solutions can offer a self-congratulatory justification for ignoring or even exacerbating the deeper societal issue of inequality.

The problem with “common sense” solutions is that every person’s “common sense” is steeped in bias. Bias can be explicit – a conscious preference, attitude or belief that shapes our behavior for a social category. It can also be implicit, or outside of our awareness.

Racial bias is particularly pervasive and problematic in policymaking. The historical legacy of policies like redlining and the war on drugs means that some of the inputs that decision makers rely on today are *already steeped in racial bias*. Consider [a program](#) that attempts to predict the likelihood that people will commit violent crimes. If those predictions are predicated only on flawed data, it’s possible that neighborhoods that have historically been over-policed will continue to be targeted by law enforcement.

Cognitive biases are flaws in how information is processed and interpreted by the human mind. Many of these biases can fall along racial lines. Building policy based on “common sense” or gut feelings can introduce cognitive bias into the decision-making process – thinking explicitly about strategies for preventing cognitive bias can help mitigate its effects.



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Types of bias

There are dozens of types of bias, or ways that the brain makes cognitive errors. The first step in mitigating bias is acknowledging that it exists. Other strategies include prioritizing diversity and taking a deliberate look at the way decisions are made. By identifying types of bias and where they show up in your work, you can take a step toward ensuring that your conversations and decisions are informed by real-world conditions rather than assumptions. Below are some of the most common forms of bias:

1. CONFIRMATION BIAS

Definition: We form an opinion or understanding, and then over time only see the evidence that confirms it. Discounting information that contradicts what we believe.

Example: Based on previous experience, we think that transit provides better service on the west side of town compared to the east side. Whenever we are on the east side and notice a problem, this adds to our conviction; we do not take note of positive experiences on the east side, taking them for granted.

2. AVAILABILITY/RECENCY BIAS

Definition: We place more value on events that are more available to the memory because they are remarkable or recent.

Example: A controversial statement about a proposed new bus route gets media attention, but our previous community engagement efforts show that this is not a commonly held opinion.

3. GAMBLER'S FALLACY BIAS

Definition: In random data, we think we notice patterns and can predict what will come next. Instead, we must undertake a systematic analysis. Moreover, if the analysis is inconclusive or suggests no relationship, we have to restrain our impulse to speculate or generate hunches.

Example: In examining transit ridership data, we think we see a relationship between late buses and the day of the week. However, we do not perform a formal analysis. Instead, we take our hunch to be true and use it to make decisions.

4. AFFINITY BIAS

Definition: We tend to gravitate toward, develop relationships with and invest in people who remind us of ourselves.

Example: City planning department staff all drive to work, so they focus most of their time and effort on traffic mitigation instead of pedestrian improvements.

5. FUNDAMENTAL ATTRIBUTION ERROR

Definition: In judging others' behavior, we tend to overemphasize personal attributes and ignore situational factors that led to the behavior.

Example: We assume that low test scores in a school are because the children have lower than average intelligence while ignoring external factors like family life and food insecurity.

Test yourself

Use the definitions on page 2 to determine and discuss with your peers the cognitive bias that you believe corresponds to each scenario.

Ever since two libraries burned down after lightning strikes, the city council refuses to fund new libraries because they are convinced that any new building would just get struck again.

CONFIRMATION BIAS

There has been a recent rash of break-ins in a neighborhood with a lot of white, college-educated residents. City staff, who are also largely white and college-educated, take their concerns seriously and direct police to spend more time patrolling the area, while ignoring similar concerns in the neighborhood next door.

**AVAILABILITY/
RECENCY BIAS**

Earlier this year there was a tragic car crash that got a lot of media attention. Now, the director of transportation is determined to tear up and re-engineer the intersection where it occurred, despite the fact that last year the department had rated the intersection as "low risk" in their regular review.

**GAMBLER'S FALLACY
BIAS**

The director of the housing department notices that people with housing assistance vouchers tend to rent in low-income neighborhoods with poorly performing schools. She assumes the result is because the voucher holders feel more comfortable in those neighborhoods and choose to live there.

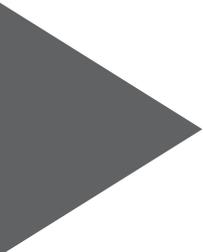
AFFINITY BIAS

Councilman Smith hears from residents that buses on the south side of town are running less often than those in the north. Now, every time the councilman is on the south side and sees a long line at the bus stop, he calls the transportation department. He never calls about short lines, or regarding the north side.

**FUNDAMENTAL
ATTRIBUTION ERROR**

Your turn

In the space below, list some examples from your own work where bias might be at play. Be sure to keep the focus on your own bias - this exercise is not about finger pointing or placing blame! For each example, be sure to identify the type(s) of bias and ideas for how you could have approached the problem differently.



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