Cognitive Biases - A Quick Guide

Cognitive biases, or cognitive errors, pervade human interactions, taking different forms from one culture to another. Human beings tend to assume the best in ourselves, and the worst in others; to judge ourselves by our intent, and others only by their actions. This guide presents the most common cognitive biases: what they are, how to spot them, and how to resist them. And first, it underscores the importance of accepting that each of us is susceptible, no matter how self-aware we feel we are.

You Are More At Risk Than You Might Realize

- It is easy to think that you would never fall prey to errors of logic and cognition, that such a guide is only useful for the "uninitiated." This in itself is a known bias.
- In fact, educated people can be especially prone to these traps, as they have skills to rationalize why a particular situation is an exception to what might be appropriate otherwise.
- As you take on increased responsibilities of leadership, external pressures can cause you to make decisions driven by faulty logic or reasoning.
- Cognitive biases are themselves totally unbiased. They affect all people of all races and cultures. They affect people with bad intentions and good. If you are committed to mitigating their effects, accepting that you have them is an important first step.

Common Cognitive Biases

Bias description	Example
Confirmation bias: seeking only the information that supports your existing beliefs, and rejecting data that goes against them; or, parsing only that information.	You don't think the new Dean is doing a good job; you notice and remark on each of his failures, and never comment on or discuss the successes.
Egocentrism bias: the tendency to think you are right, that others agree, and that you have had more to do with the success of a venture than others.	When you win an award, it's a recognition of your hard work and insights; when someone you don't like wins an award, you attribute the recognition to politics.
Sinister attribution bias: the tendency to assume someone else's mistake or tardiness was due to their personal failures or lack of caring, rather than possible external forces.	You don't like Alex as much as Chiu; when Alex is late, you imagine him dismissively looking at the clock and shrugging his shoulders; when Chiu is late, you envisage heavy traffic or a sick child at home.
Gambler's fallacy: the tendency to let your knowledge of past events influence your expectations of the future.	A coin flip has resulted in heads six times in a row, and you think "surely the next one must be tails," even though it is the same 50/50 chance as every other flip.
Fundamental attribution error: the tendency to credit ourselves for success and blame environmental factors for failure, while doing the opposite for others.	In a car accident caused by someone else, you are more likely to think the person is simply an inept driver; while in a car accident that was your fault, you are more likely to blame poor road layout or confusing signage.
Gain-Loss aversion: the tendency for people to take greater measures in order to avoid losses than to achieve gains. This is particularly pertinent to academics in established positions.	You keep the job you have rather than taking a cut in income to pursue a degree program that might give you a better job.

Motivated blindness: the tendency to overlook bad news when it suits us, or a systemic failure to notice unethical behavior in others when it is not in our interest to do so.	A co-author limits the data points on a chart you are going to use in your article. You know this is the plan and do nothing to prevent it.
Anchoring bias: the tendency to let your first impression or information gathered early-on in the process influence your final decision unfairly	The initial salary offered for a position sets the tone for rest of the negotiation, such that any number higher than the original one offered seems "more generous" even if it is still lower than what the applicant was hoping for. The pressure to make a "quick decision" about a critical situation can easily lead to anchoring bias—making your judgment based on a first impression or early, easily available information.

Arm Yourself with Knowledge to Avoid Cognitive Errors

- One of the simplest and easiest ways to avoid cognitive bias is to ask questions and raise challenges to yourself and to others. Sometimes this means surrounding yourself with people you know will challenge you. Having someone on your team who can play “Devil’s Advocate” can ensure you make strong decisions by having considered a wide range of factors and elements.
- Make as few assumptions as possible. Ask questions to confirm that the information you have is accurate and valuable, rather than assuming it is.
- The more information you have available to you, the better equipped you are to identify and choose the path you *should* take, rather than the one you *want* to take.
- Understanding the biases that can affect you the most is an on-going process of self-evaluation and assessment that will continue throughout your career.
- While critical self reflection may help us to recognize these processes at work, they never go away entirely. Complacency, thinking you are immune to their effects, can lure you into cognitive error.