Module 8: Biases - Confirmation bias

The next bias that I want to talk about is the confirmation bias. This refers to the tendency of people, you and me, to seek out information that supports the views we already hold. In turn, this leads us to interpret evidence in ways that support our pre-existing beliefs expectations or hypotheses. People easily accept new information that is consistent with their beliefs but are skeptical of information that contradicts their beliefs. In one study teachers were told that certain students were very promising and held great potential. even though the students were really chosen at random. However, this false belief led teachers to praise these students more and give them more attention. The performance of these students improved significantly because of the teacher's expectations of them. In other words, the confirmation bias creates self-fulfilling prophecies and leads people to prove themselves right. For example, when physicians have an inkling about a patient's diagnosis, they may focus on evidence that supports their theory while either disregarding or undervaluing evidence that supports an equally plausible alternative diagnosis. Likewise, police officers who adhere to stereotypes linking religion or race to crime may gather and process clues in a one-sided way when investigating a crime with these classes of suspects. As Daniel Kahneman warns, even scientists who commit to a theory tend to disregard inconsistent facts concluding that the facts are wrong not the theory. So the confirmation bias can easily lead us to reach inaccurate and even unethical conclusions. It's essential to recognize our vulnerability to confirmation bias and actively guard against it by being open to evidence that is not consistent with our beliefs and theories.

Confirmation bias contributes to another important bias that bedevils decision-making, the overconfidence bias. Kahneman calls this proclivity of ours to underestimate the likelihood that our beliefs are erroneous or rather, overestimate our skills and abilities and accuracy of our beliefs as “the most significant of cognitive biases”. Indeed, we often judge ourselves as better than others to a degree that violates the laws of Math. About 75% of fund managers report that they are above average in terms of analytical skills. 93 percent of American drivers claim to be better than the median. When software engineers at two companies were asked to rate their performance, 32% of the engineers at one company and 42% at the other put themselves in the top 5%. A substantial majority of people believe they are more likely to be able to afford to own a house relative to their peers and are more accurate eyewitnesses than most other people. Heck, in one study, more people thought that they stood a stronger chance of going to heaven than Mother Teresa did. Other individuals surveyed reported that they were twice as likely as other people to follow the Ten Commendments.

Overconfidence has many adverse consequences. For example, consider that successful business executives and leaders who transform small obscure companies into economic powerhouses may gain a sense of invulnerability through their successes. In turn, their minds underplay any role that luck or chance had in their success and overplay the role of their competence and abilities. Not surprisingly, a 2012 empirical study by Catherine Schrand and Sarah Zechman found that Overconfident executives are more likely to exhibit an optimistic bias and thus, are more likely to go down a slippery slope of growing intentional misstatements or financial reporting fraud. That is, they are more likely to get themselves into predicaments, where committing fraud sems to to be the only way to deliver on their promises.

overconfidence has been implicated in several adverse events with substantive and pervasive impact, including the sinking of the Titanic, the subprime mortgage crisis of 2008 and the great recession that followed it, the Deepwater Horizon oil spill in the Gulf of Mexico, political outcomes in this country and others and country responses to the pandemic. Overconfidence may contribute to excessive rates of trading in the stock market, high rates of entrepreneurial failure, legal disputes, political partisanship, and even war.

What is particularly interesting, however, is the distribution of illusory superiority and overconfidence. People with the least abilities or skills tend to show the highest overestimations of their performance, midrange performers show less overestimation, and the best performers tend to slightly underestimate themselves. This phenomenon is known as the Dunning-Kruger Effect (DKE). It has been the focus of much research in the social sciences. All of us are vulnerable to this delusion but why so? Psychologists Dunning and Kruger, who first described this effect om 1999, argued that that people lacking knowledge and skills in particular areas suffer a double whammy. First, they make mistakes and effect poor or ineffective decisions. Second, the same knowledge gaps that lead them to mistakes also prevent them from assessing their abilities and addressing their errors. In other words, poor performers lack the very expertise needed to recognize how badly they are doing. For example, when the researchers studied participants in a college debate tournament, the bottom 25% of teams in preliminary rounds lost nearly four out of every five matches. But they thought they were winning almost 60%. Without a strong grasp of the rules of debate, the students simply couldn't recognize when or how often their arguments were fallacious or broken.

We may think all of this is an outcome of ego. That nobody wants to think they are below average, therefore, they tend to increase their self-assessment of abilities and performance. But that’s not completely true. People usually do admit their skills and performance gaps once they can identify them. In one study, students who had initially done badly on a logic quiz and then took a mini course on logic were quite willing to label their original performances as bad. This awareness likely explains why people with a moderate amount of experience or expertise often have less confidence in their abilities. They know enough to know that there's a lot they don't know. Meanwhile, experts , who tend to be aware of how knowledgeable they are, often make a different mistake: they assume that everyone else is knowledgeable, too. The result is that people, whether they're inept or highly skilled, are often caught in a bubble of inaccurate self-perception. When they're unskilled, they can't see their own faults. When they're exceptionally competent, they don't perceive how unusual their abilities are So, where do we go from here? Knowing how competent we are and how our skills stack up against other people is more than a self-esteem boost. It helps us know when we can forge ahead on our own decisions and when we need to seek advice. In turn, we can make effective decisions that improve our learning and performance.

However, if our overconfidence and overestimation of our abilities is invisible to us, what can we do to address it? In the next module, we will close with critical thinking strategies to address our biases, in general to make better decisions and judgments.