



Cognitive Biases Across the Mindgle Inquiry Journey

Stage 1: Observing Reality

Biases That Influence What We Notice

1. Availability Bias



Definition

Availability Bias is the tendency to judge how common or important something is based on how easily examples come to mind rather than on objective evidence.

Why it matters

Recent, emotional, or memorable events can make us believe they happen more often than they actually do.

Example

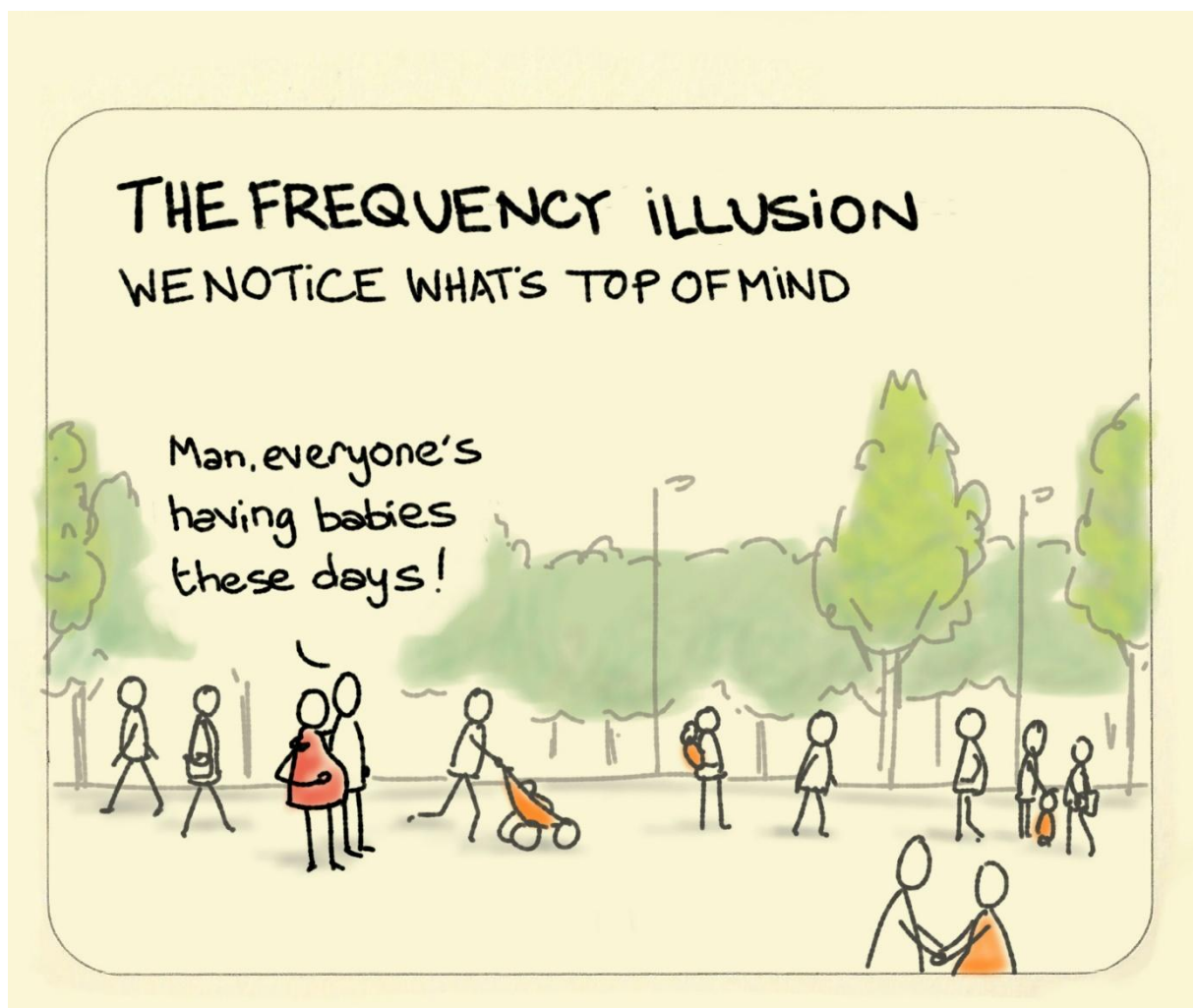


After seeing several news reports about cyberbullying, a learner assumes it is the biggest challenge faced by every teenager.

Mindgleian Prompt

Am I noticing this because it is truly important, or simply because it is easier to remember?

2. Baader–Meinhof Phenomenon (Frequency Illusion)



Definition

The Baader–Meinhof Phenomenon is the tendency to believe something has suddenly become more common simply because we have recently learned about or noticed it.



Why it matters

Learners may mistake increased awareness for increased frequency.

Example

After learning about climate migration, a learner suddenly notices articles about it everywhere and believes it has only recently become a global issue.

Mindgleian Prompt

Am I seeing this more often because it is actually increasing, or because I have only just started noticing it?

3. Salience Bias



Definition



Salience Bias is the tendency to focus on information that is dramatic, unusual, colourful, or emotionally striking while overlooking information that may be more important but less noticeable.

Why it matters

Attention can be captured by what is eye-catching rather than by what is most relevant.

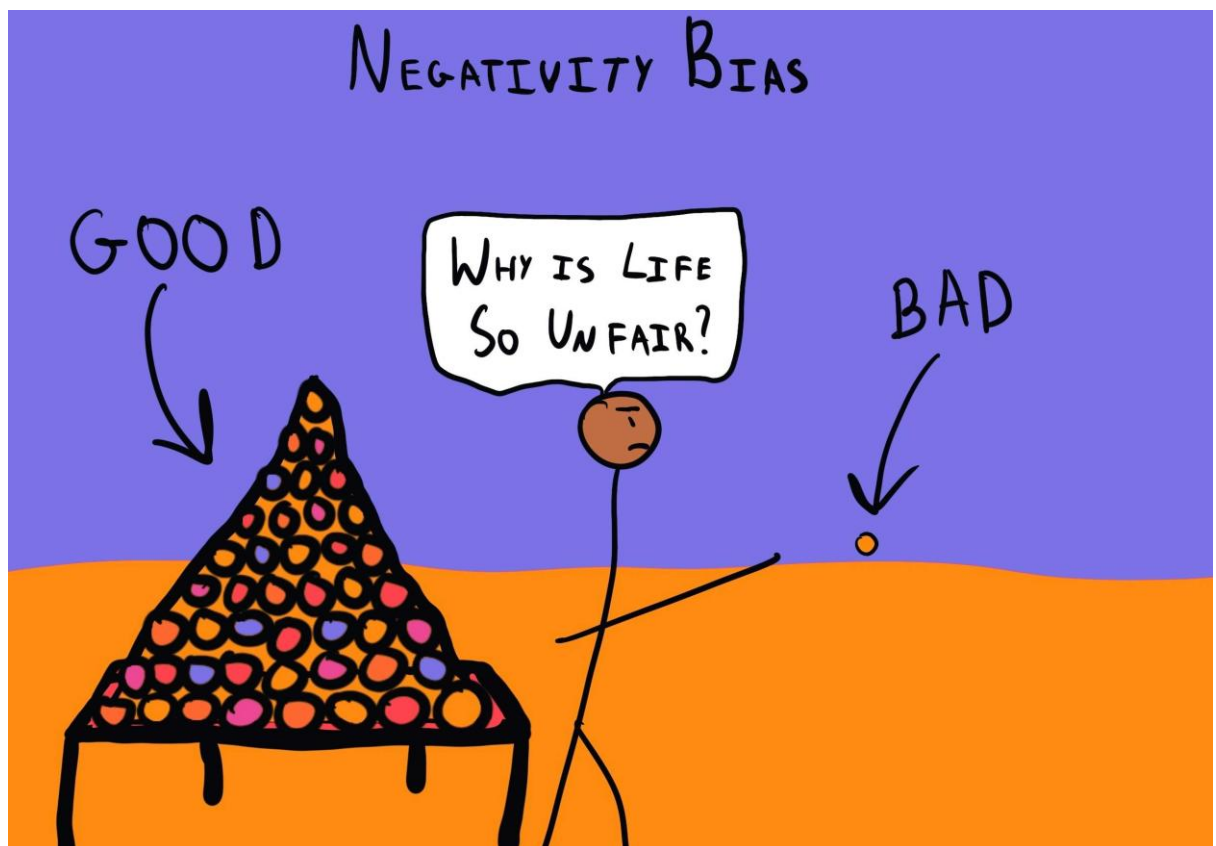
Example

A learner focuses on one shocking statistic in a report but ignores the broader findings.

Mindgleian Prompt

Am I paying attention to what stands out, or to what truly matters?

4. Negativity Bias



Definition



Negativity Bias is the tendency to give greater attention and importance to negative experiences or information than to positive or neutral evidence.

Why it matters

Negative information can dominate our thinking and create an unbalanced understanding of reality.

Example

A learner receives ten positive comments on a project but focuses only on one criticism.

Mindgleian Prompt

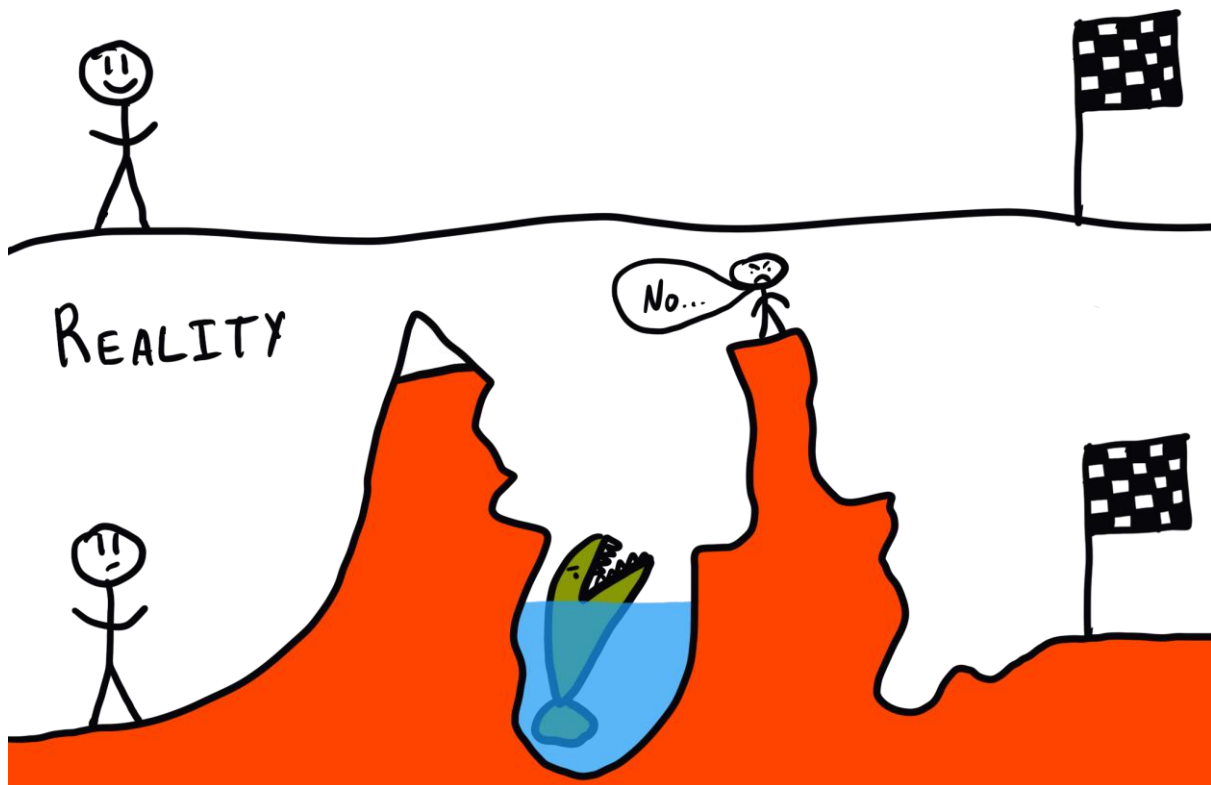
Am I giving too much weight to negative evidence while overlooking the complete picture?

5. Optimism Bias



OPTIMISM BIAS

EXPECTATION



Definition

Optimism Bias is the tendency to believe that positive outcomes are more likely for ourselves than the evidence suggests.

Why it matters

Overconfidence can reduce careful planning, evidence gathering, and critical thinking.

Example

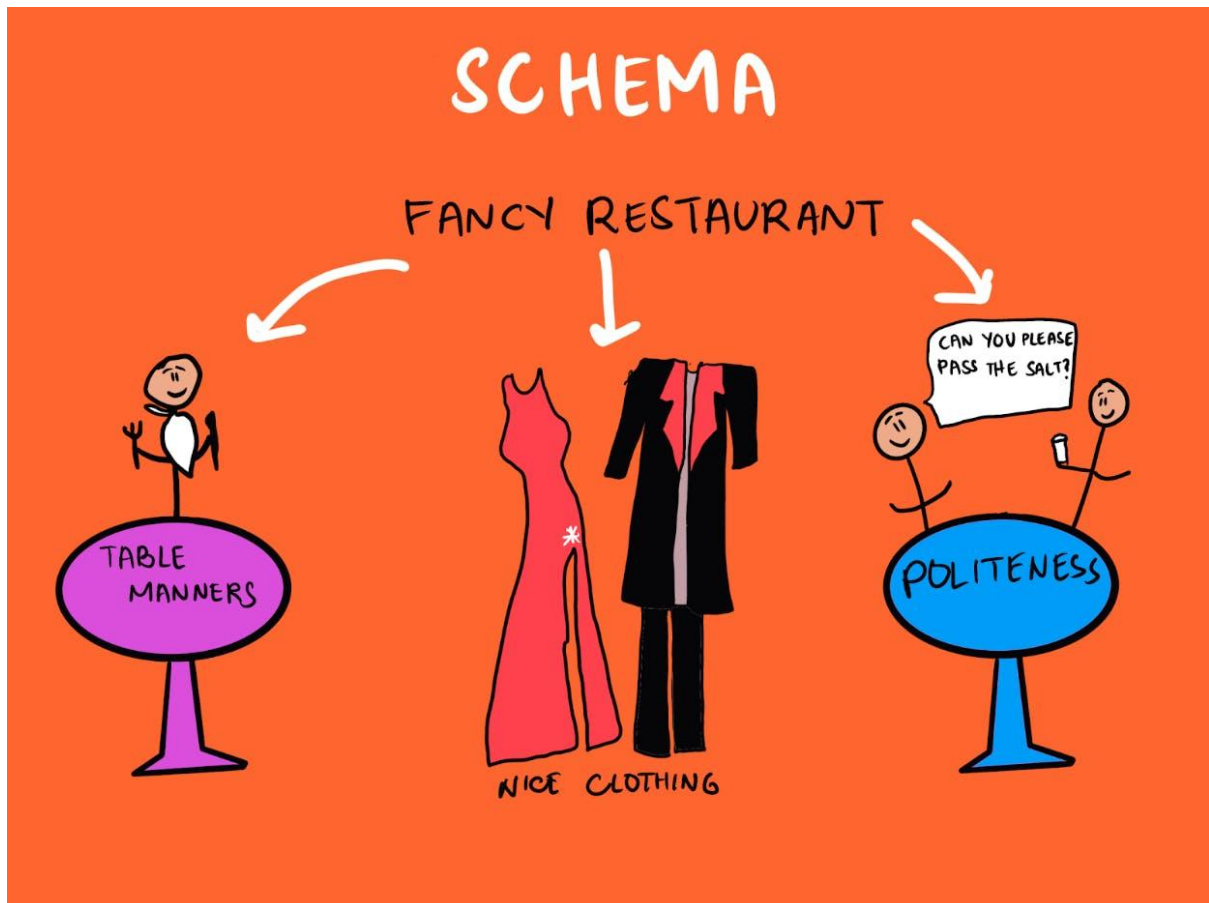
A learner believes they will perform well in an exam without revising because they have always managed before.



Mindgleian Prompt

Am I being guided by evidence or by wishful thinking?

6. Attentional Bias



Definition

Attentional Bias is the tendency to notice information that matches our interests, emotions, or concerns while ignoring other relevant information.

Why it matters

Selective attention can narrow inquiry and prevent learners from seeing the whole picture.

Example



A learner interested in technology notices only technological causes of climate change while overlooking economic, political, and social factors.

Mindgleian Prompt

What important information might I be overlooking because my attention is focused elsewhere?

Mindgle Reflection

Observation is never completely objective. Before inquiry begins, our minds naturally decide what to notice and what to ignore. A Mindgleian Inquirer pauses to recognise these thinking traps and asks whether attention is being guided by evidence or by bias. The goal is not simply to observe more—but to observe more objectively, more consciously, and more completely.

Stage 2: Becoming Curious

Biases That Influence Why We Become Curious

Curiosity does not arise in a completely objective way. It is often shaped by our emotions, personal experiences, assumptions, beliefs, and first impressions. These biases influence which questions we choose to explore and which questions we ignore. A Mindgleian Inquirer learns to recognise these thinking traps before allowing them to shape the direction of inquiry.

1. Personalisation



Definition

Personalisation is the tendency to assume that events are mainly about us or that we are personally responsible for situations without sufficient evidence.

Why it matters

It narrows inquiry by making us overlook other possible explanations.

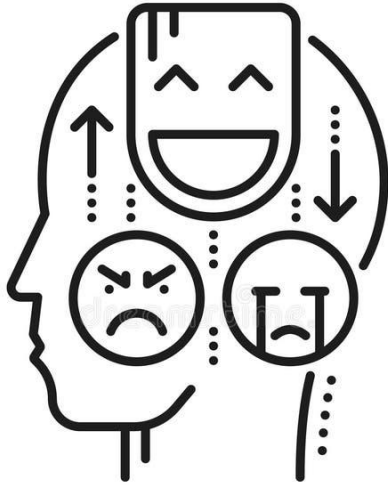
Example

"My teacher looked disappointed today. It must be because of me."

Mindgleian Prompt

Am I making this issue about myself, or could there be other explanations?

2. Emotional Reasoning



EMOTIONS

Definition

Emotional Reasoning is the tendency to believe something is true simply because it feels true.

Why it matters

Emotions are valuable signals, but they are not evidence.

Example

"I feel unsafe, so this place must be dangerous."

Mindgleian Prompt

Am I following evidence, or am I letting my emotions decide what is true?

3. Catastrophizing



Definition

Catastrophizing is the tendency to imagine the worst possible outcome before there is enough evidence.

Why it matters

Fear can discourage curiosity and prevent learners from exploring issues objectively.

Example

"I failed one test. I'll never succeed in this subject."

Mindgleian Prompt

Am I expecting the worst without enough evidence?

4. Overgeneralisation



Definition

Overgeneralisation is the tendency to draw broad conclusions from one or a few experiences.

Why it matters

A small experience may not represent the whole reality.

Example

"My friend disliked online learning, so online learning doesn't work."

Mindgleian Prompt

Am I drawing a big conclusion from too little evidence?

5. Hasty Generalisation



Definition

Hasty Generalisation is the tendency to reach a conclusion before gathering enough evidence.

Why it matters

Inquiry becomes weak when conclusions are formed too quickly.

Example

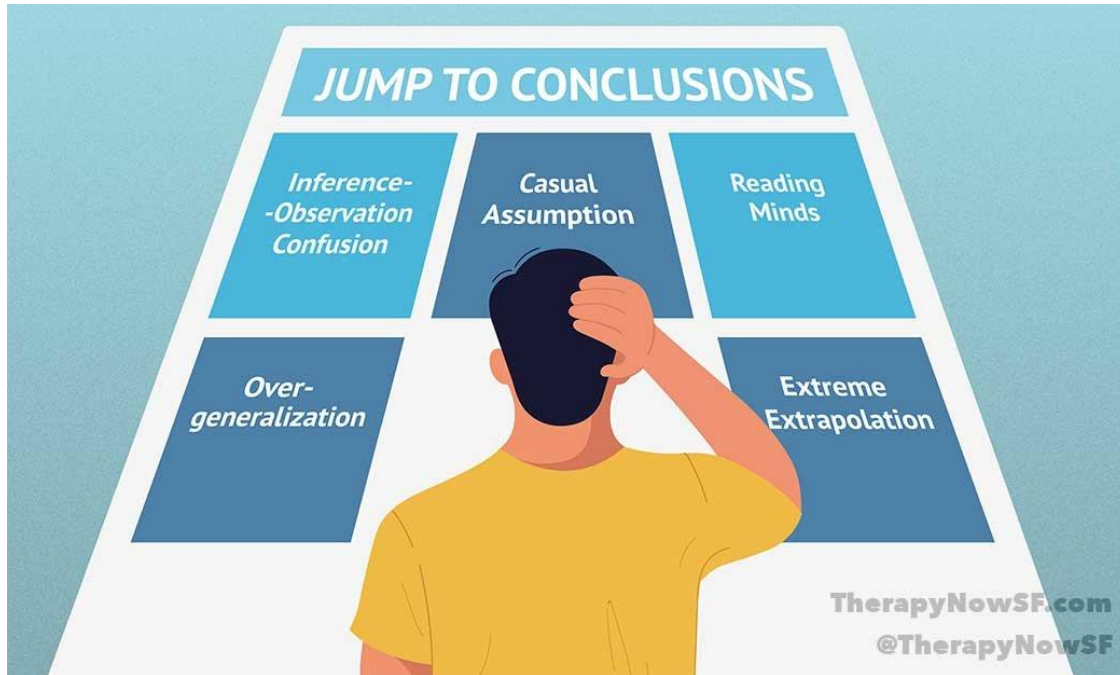
"Two students cheated, so students today are dishonest."

Mindgleian Prompt

Have I collected enough evidence before reaching this conclusion?

6. Jumping to Conclusions

Copyright © 2026, All Right Reserved Mindgle, an educational product of ThinkBeanz



Definition

Jumping to Conclusions is the tendency to make decisions or assumptions without sufficient information.

Why it matters

Good inquiry begins with questions, not quick answers.

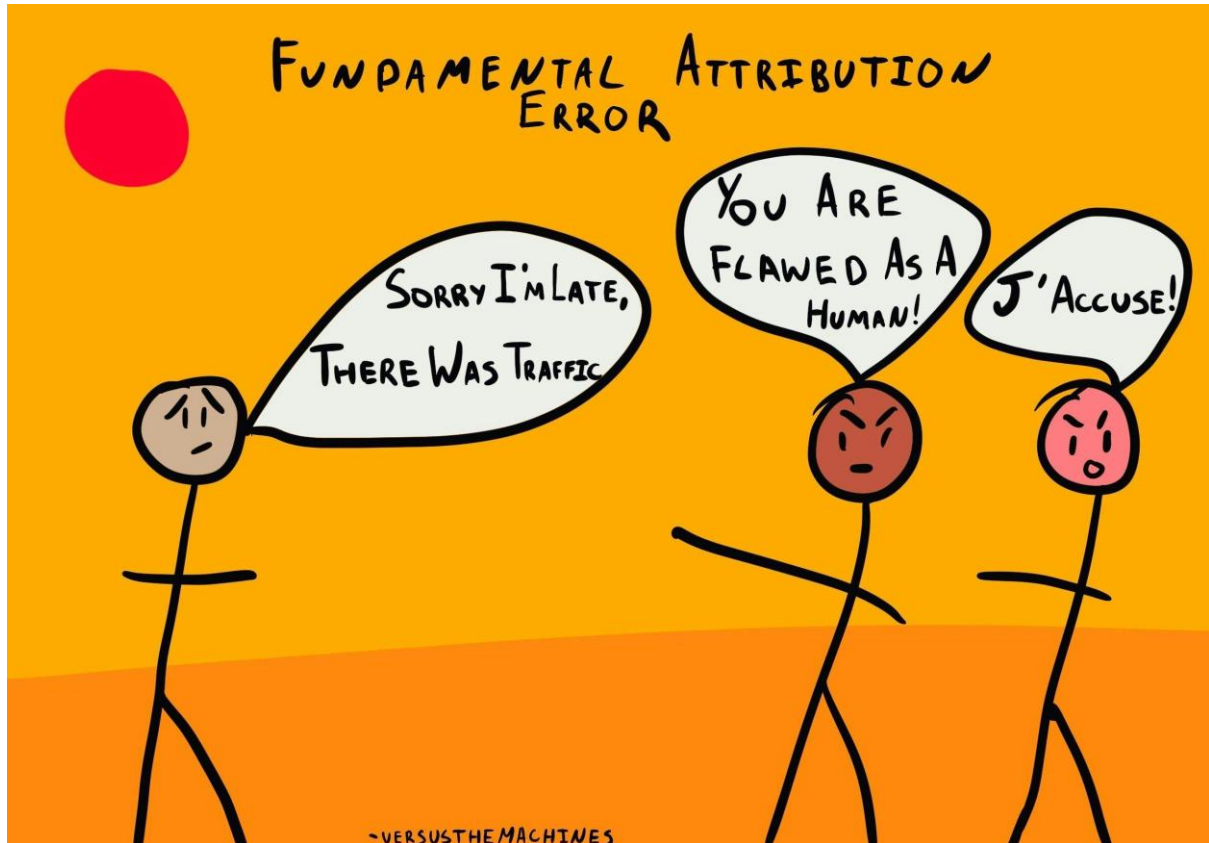
Example

"My friend didn't reply to my message. They must be upset with me."

Mindgleian Prompt

What evidence do I actually have, and what am I only assuming?

7. Fundamental Attribution Error



Definition

Fundamental Attribution Error is the tendency to explain another person's behaviour by blaming their personality while ignoring the situation they may be facing.

Why it matters

Learners may judge people too quickly instead of exploring the circumstances.

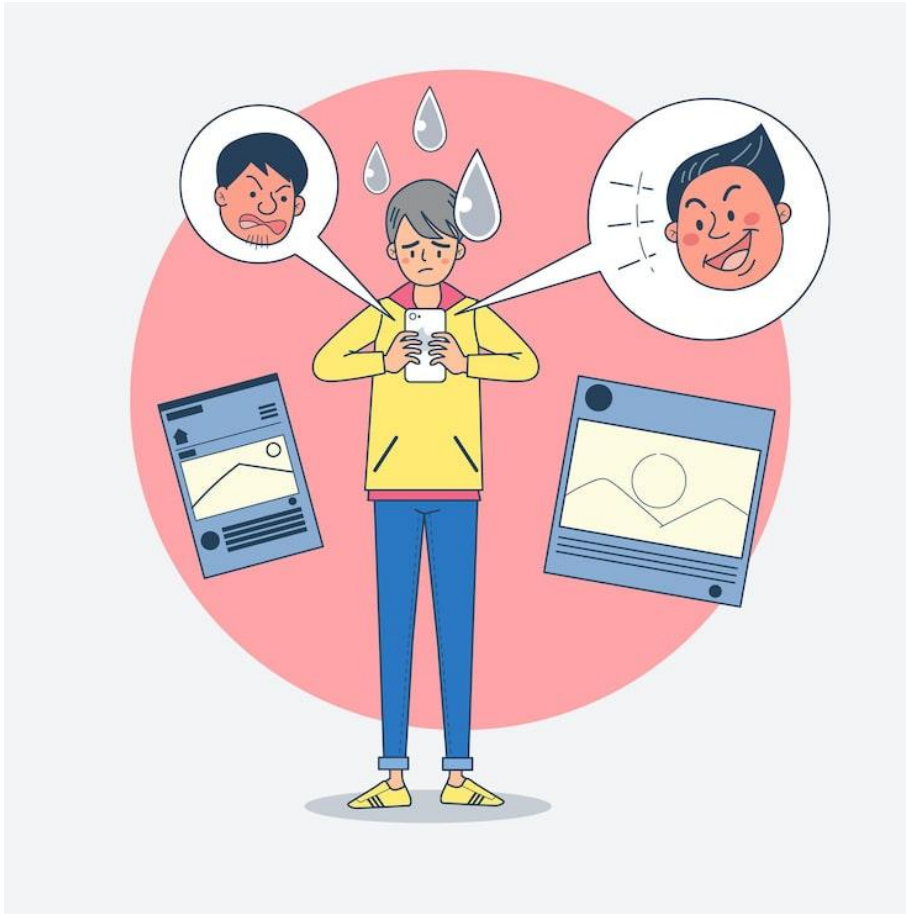
Example

"He failed because he's lazy," without considering illness, stress, or family responsibilities.

Mindgleian Prompt

Am I judging the person instead of understanding their situation?

8. Social Comparison Bias



Definition

Social Comparison Bias is the tendency to judge ourselves by constantly comparing our abilities, achievements, or ideas with those of others.

Why it matters

Comparison can distract learners from developing their own curiosity and inquiry.

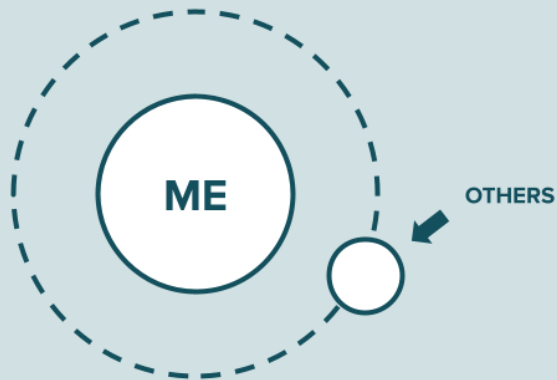
Example

"My friend's research question sounds much better than mine."

Mindgleian Prompt

Am I trying to improve my thinking, or simply comparing myself with others?

9. Egocentric Bias



Definition

Egocentric Bias is the tendency to view situations mainly from our own experiences while giving less attention to other people's perspectives.

Why it matters

Inquiry becomes richer when multiple viewpoints are considered.

Example

"I don't find homework stressful, so nobody else should either."

Mindgleian Prompt

Whose perspective might be different from mine?

10. False Cause (Post Hoc Fallacy)



Post Hoc Fallacy

Event **B** immediately happens after event **A**.

Therefore, event **A** is the cause of event **B**.

Definition

False Cause is the tendency to assume that because one event happened before another, it must have caused it.

Why it matters

Correlation does not always mean causation.

Example

"I carried my lucky pen and scored well, so the pen caused my success."

Mindgleian Prompt

Do I have evidence that one thing actually caused the other, or am I only noticing that they happened together?

Mindgle Reflection



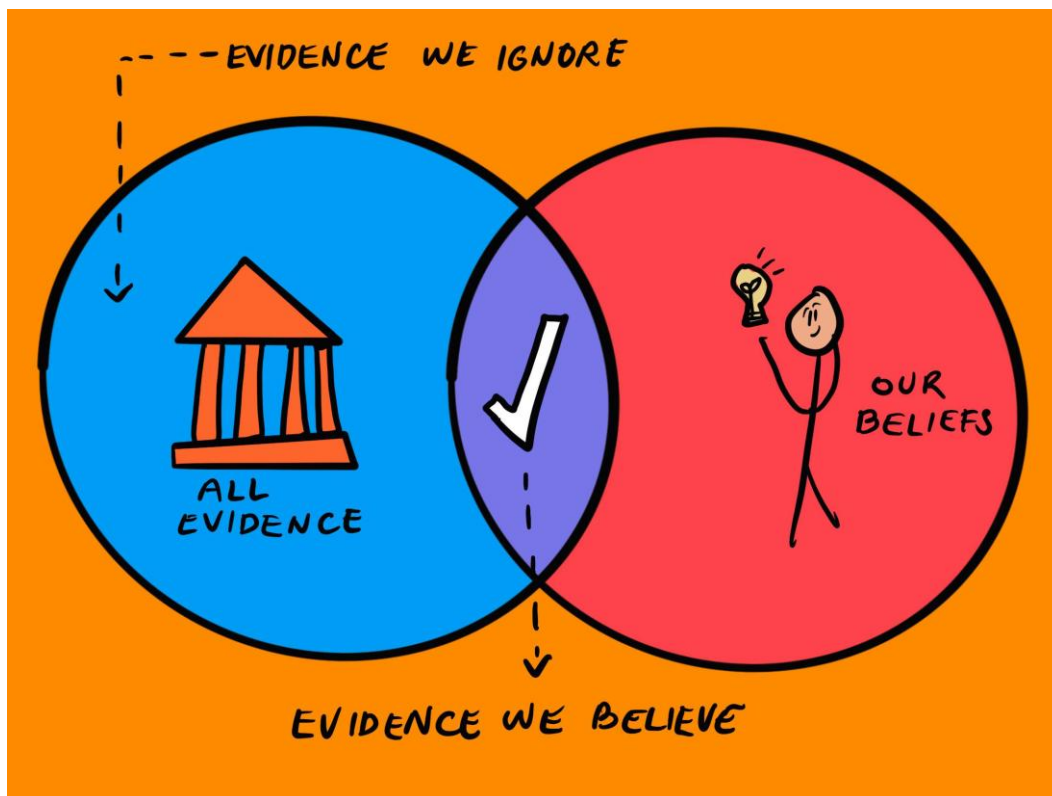
Curiosity is the spark of inquiry, but it is not always objective. Our emotions, experiences, assumptions, and first impressions naturally influence what we choose to investigate. A Mindgleian Inquirer pauses before following curiosity, asking whether the question is being driven by evidence, thoughtful reflection, and openness, or by unconscious thinking traps. True inquiry begins when curiosity is guided by objectivity rather than bias.

Stage 3: Framing the Inquiry Question

Biases That Influence How We Ask Questions

The way a question is framed shapes the entire direction of inquiry. A poorly framed question may unknowingly seek to confirm existing beliefs, while a well-framed question remains open, balanced, and genuinely curious. A Mindgleian Inquirer learns to recognise these thinking traps before transforming curiosity into a purposeful Mindgleian Research Question.

1. Confirmation Bias





Definition

Confirmation Bias is the tendency to frame questions or seek information that supports what we already believe while ignoring evidence that may challenge our thinking.

Why it matters

Inquiry becomes a search for agreement instead of a search for understanding.

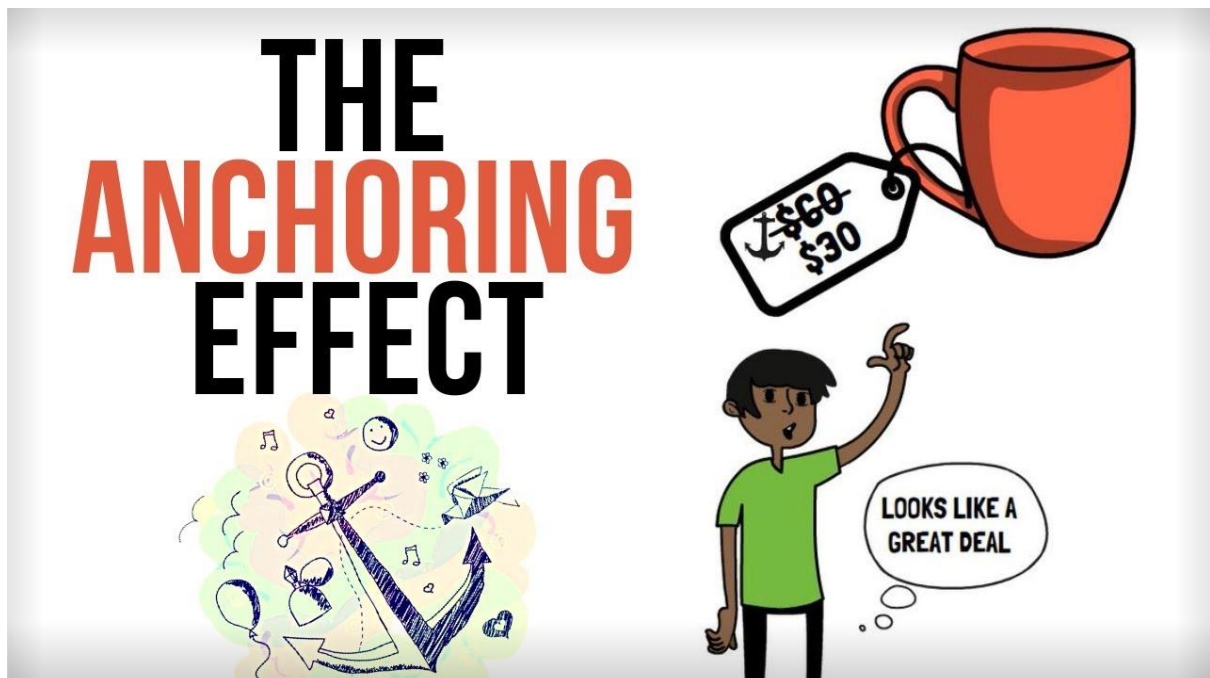
Example

Instead of asking, *"How does social media affect mental health?"*, a learner asks, *"Why is social media harmful to mental health?"*

Mindgleian Prompt

Am I asking an open question, or am I trying to prove what I already believe?

2. Anchoring Bias



Definition

Anchoring Bias is the tendency to rely too heavily on the first idea, explanation, or piece of information encountered when framing an inquiry.

Copyright © 2026, All Right Reserved Mindgle, an educational product of ThinkBeanz



Why it matters

The first explanation may limit curiosity and prevent learners from exploring other possibilities.

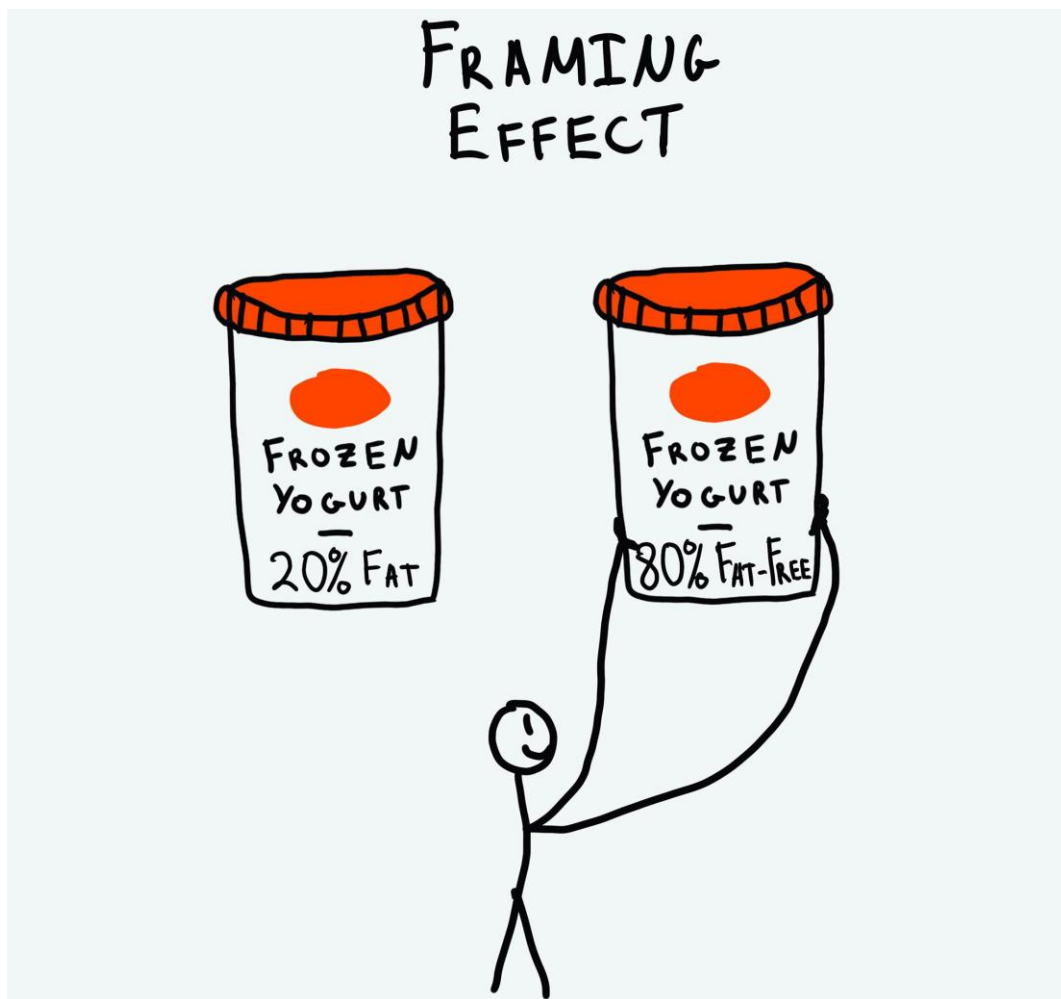
Example

After reading one article claiming AI will replace teachers, a learner frames the inquiry only around that idea.

Mindgleian Prompt

Am I relying too much on my first impression, or have I explored other possibilities?

3. Framing Bias





Definition

Framing Bias is the tendency to be influenced by how a question or issue is presented rather than by the evidence itself.

Why it matters

The wording of a question can unintentionally lead the inquiry toward a particular conclusion.

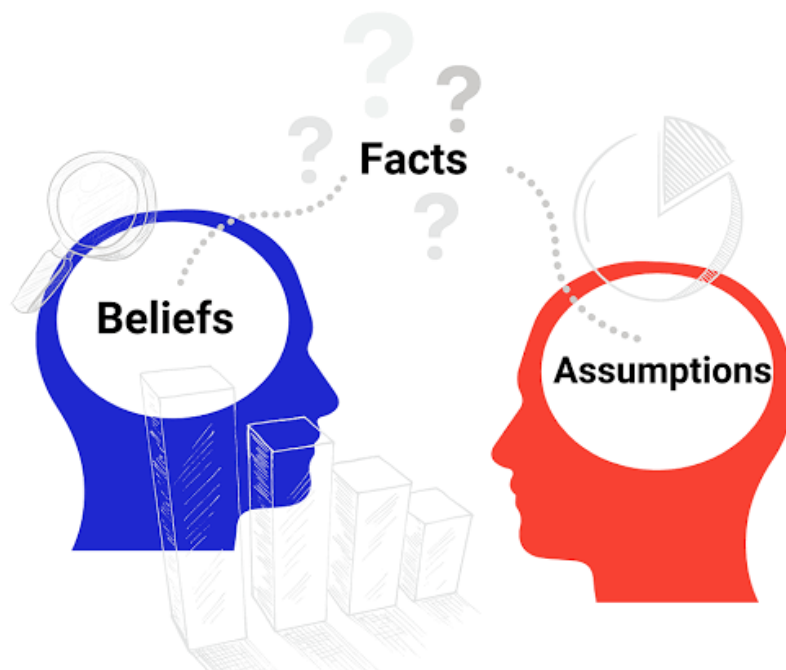
Example

"Should schools ban mobile phones?" encourages a different inquiry from *"How do mobile phones influence learning in schools?"*

Mindgleian Prompt

Is my question neutral, or does its wording already suggest an answer?

4. Assumption Bias



Definition



Assumption Bias is the tendency to build an inquiry on ideas that have not yet been tested or supported by evidence.

Why it matters

Untested assumptions can weaken the entire inquiry from the very beginning.

Example

"Why are teenagers addicted to technology?" assumes all teenagers are addicted before investigating whether that is true.

Mindgleian Prompt

What assumptions am I making, and have I tested them?

5. False Dilemma (Black-and-White Thinking)



Definition

False Dilemma is the tendency to believe there are only two possible answers when many alternatives may exist.

Why it matters

Real-world issues are often more complex than simple either-or choices.

Example



"Is AI good or bad?" ignores the many ways AI can have both positive and negative impacts depending on its use.

Mindgleian Prompt

Am I limiting my inquiry to only two possibilities when there may be many?

6. Naïve Realism

Naïve Realism

Naive realism is a concept in social psychology that refers to a cognitive bias whereby individuals believe that they see the world "as it truly is."

In other words, people tend to assume that their perceptions, interpretations, and beliefs are objective, unbiased, and grounded in reality.

Ψ MAIN ASSUMPTIONS Ψ

Consequently, they also assume that anyone who sees things differently must be **uninformed, irrational, or driven by personal bias.**

Definition

Naïve Realism is the tendency to believe that our own view of reality is completely objective and that people who disagree are simply mistaken or biased.

Why it matters

Copyright © 2026, All Right Reserved Mindgle, an educational product of ThinkBeanz



It discourages learners from considering alternative perspectives.

Example

"Anyone who disagrees with me clearly doesn't understand the issue."

Mindgleian Prompt

Could someone with different experiences see this issue differently?

7. Belief Bias

BELIEF BIAS

Belief bias refers to the tendency to assess information in a way that aligns with our existing views.

OVERVIEW	EXAMPLE
Evans, Barston, and Pollard define belief bias as: "the tendency to judge the validity of an argument based on the believability of its conclusion rather than the quality of its reasoning" (1983). In other words, we overlook the logic behind the argument and simply judge it based on its believability: if it goes with our beliefs, we accept it; if it does not, then we reject it.	Political Candidates: Supporters of a particular candidate may dismiss or downplay valid controversies surrounding a candidate because they want to believe that people from that political party wouldn't behave that way. This bias may lead them to rationalize or ignore objective information that should morally disqualify a candidate (e.g. scandals of Bill Clinton and Donald Trump).

Definition

Belief Bias is the tendency to judge an idea as correct simply because it agrees with our existing beliefs rather than because it is supported by strong evidence.

Why it matters

Learners may reject good evidence or accept weak evidence based on what they already believe.

Copyright © 2026, All Right Reserved Mindgle, an educational product of ThinkBeanz



Example

A learner accepts an argument because it matches their opinion, even though the evidence is weak.

Mindgleian Prompt

Am I evaluating the evidence, or simply agreeing because it matches my beliefs?

Mindgle Reflection

A powerful inquiry begins with a powerful question. The quality of an inquiry depends not only on what learners ask, but also on how they ask it. A Mindgleian Inquirer frames questions with curiosity rather than certainty, allowing evidence—not assumptions, beliefs, or first impressions—to shape the direction of inquiry. Before searching for answers, they first ask:

"Is my question genuinely inviting discovery, or is it quietly trying to confirm what I already think?"

Stage 4: Searching for Information

Biases That Influence What Information We Choose to See

Searching for information is not always objective. The words we type into a search engine, the websites we visit, the AI tools we use, and the content recommended by algorithms can all shape what we discover. A Mindgleian Inquirer recognises that finding information is not the same as finding the whole truth. They actively seek diverse, reliable, and balanced sources before constructing knowledge.

1. Filter Bubble



Definition

A Filter Bubble is created when search engines, social media platforms, or AI systems repeatedly show information that matches your previous searches, interests, or online behaviour.

Why it matters

It limits exposure to different perspectives and creates the illusion that everyone thinks the same way.

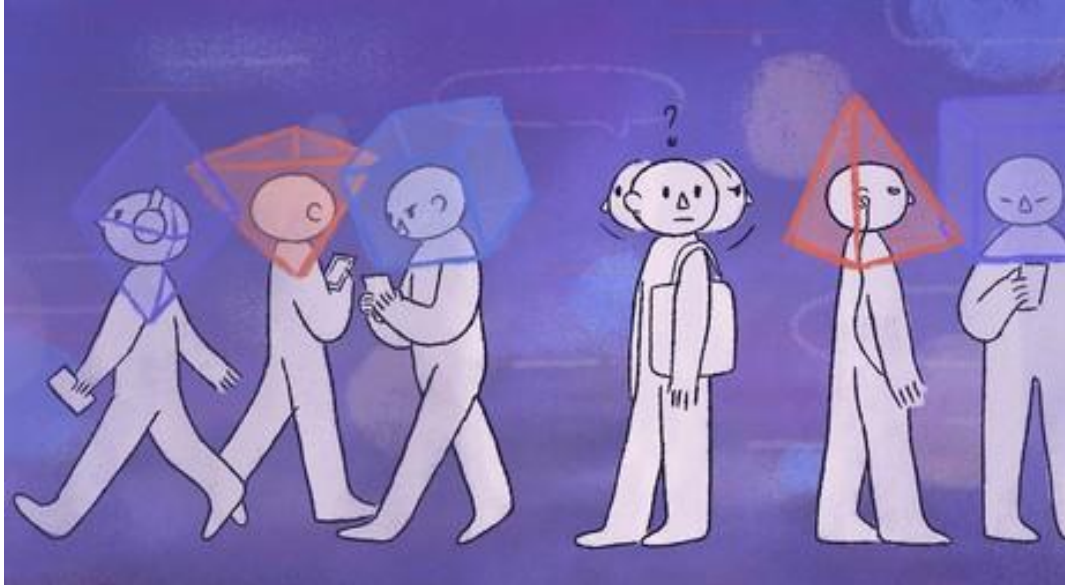
Example

After searching for the benefits of AI, most future recommendations show only positive articles.

Mindgleian Prompt

Am I seeing a balanced range of viewpoints, or only information chosen for me by algorithms?

2. Echo Chamber



Definition

An Echo Chamber occurs when learners repeatedly hear the same opinions from people or sources that already agree with them.

Why it matters

Repeated opinions may begin to feel like unquestionable facts.

Example

Following only creators who share the same views about climate change.

Mindgleian Prompt

Am I hearing different voices, or only opinions that agree with mine?

3. Authority Bias



Definition

Authority Bias is the tendency to accept information simply because it comes from an expert, teacher, celebrity, influencer, or AI without evaluating the supporting evidence.

Why it matters

Even experts and AI can make mistakes.

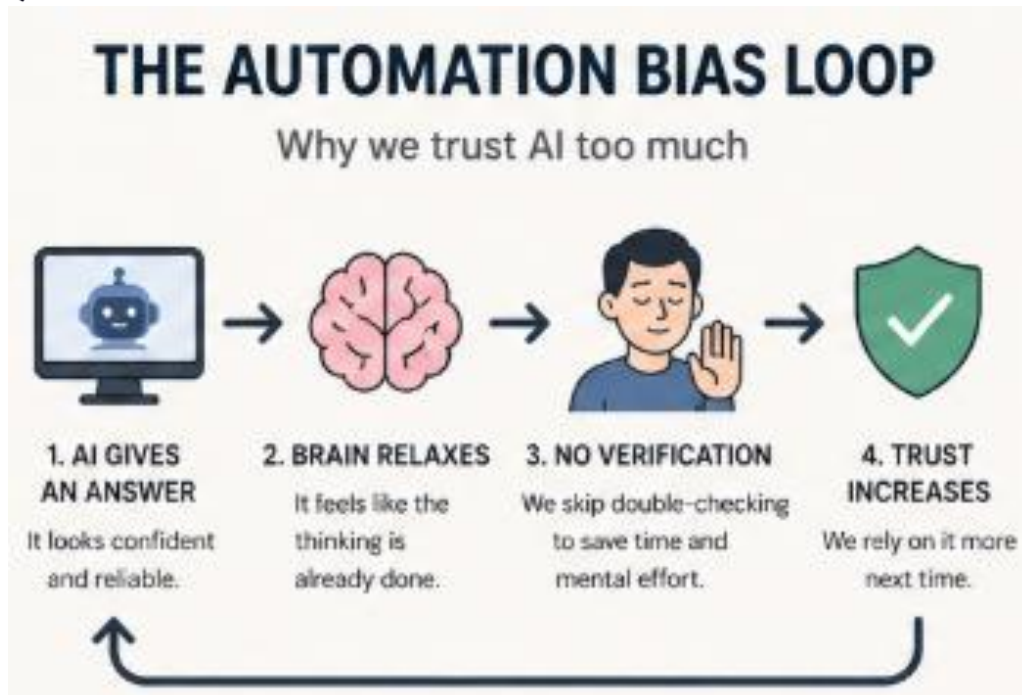
Example

"It must be true because ChatGPT said so."

Mindgleian Prompt

Am I trusting the evidence, or only trusting the source?

4. AI Automation Bias



Definition

AI Automation Bias is the tendency to accept AI-generated answers without questioning, verifying, or checking their accuracy.

Why it matters

AI can generate incomplete, outdated, or incorrect information.

Example

Copying an AI response directly into a project without checking any sources.

Mindgleian Prompt

Have I verified this information, or am I accepting it simply because AI generated it?

5. Algorithmic Bias



What are Algorithmic biases?

The lack of fairness in the output generated by an algorithm. These biases may include age discrimination, gender bias, and racial bias.



Definition

Algorithmic Bias occurs when search engines, recommendation systems, or AI models prioritise certain information over others because of the way they are designed or trained.

Why it matters

The most visible information is not always the most accurate or complete.

Example

A search engine ranks popular websites first while valuable but less popular research remains difficult to find.

Mindgleian Prompt

Could the algorithm be influencing what I am seeing and what I am missing?

5. Source Credibility Bias



Definition

Source Credibility Bias is the tendency to trust or distrust information based mainly on the appearance, popularity, or reputation of the source instead of carefully evaluating the evidence.

Why it matters

Professional-looking websites and famous creators are not automatically correct, and lesser-known sources are not automatically wrong.

Example

Believing a beautifully designed website without checking its evidence or references.

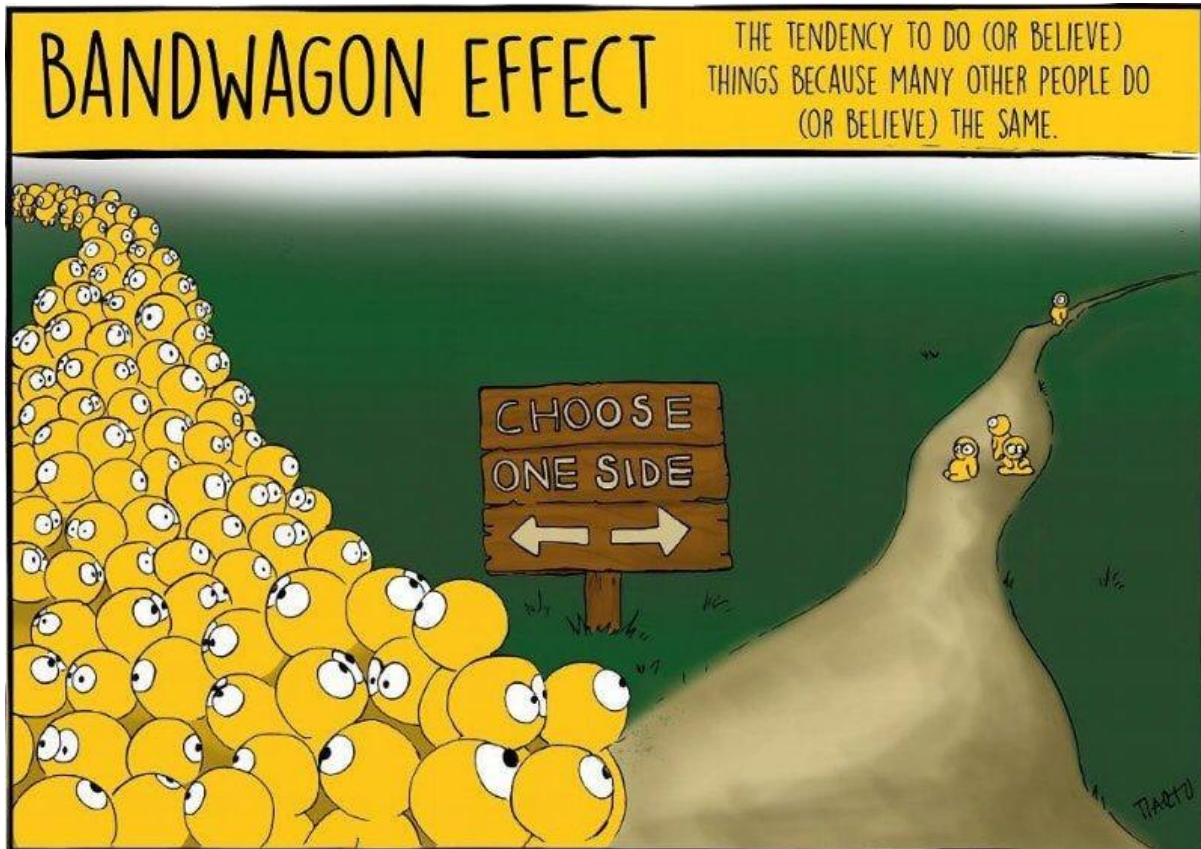
Mindgleian Prompt

Copyright © 2026, All Right Reserved Mindgle, an educational product of ThinkBeanz



Am I judging the quality of the evidence or simply the appearance of the source?

6. Bandwagon Bias



Definition

Bandwagon Bias is the tendency to believe information because many people believe, share, or support it.

Why it matters

Popularity is not evidence.

Example

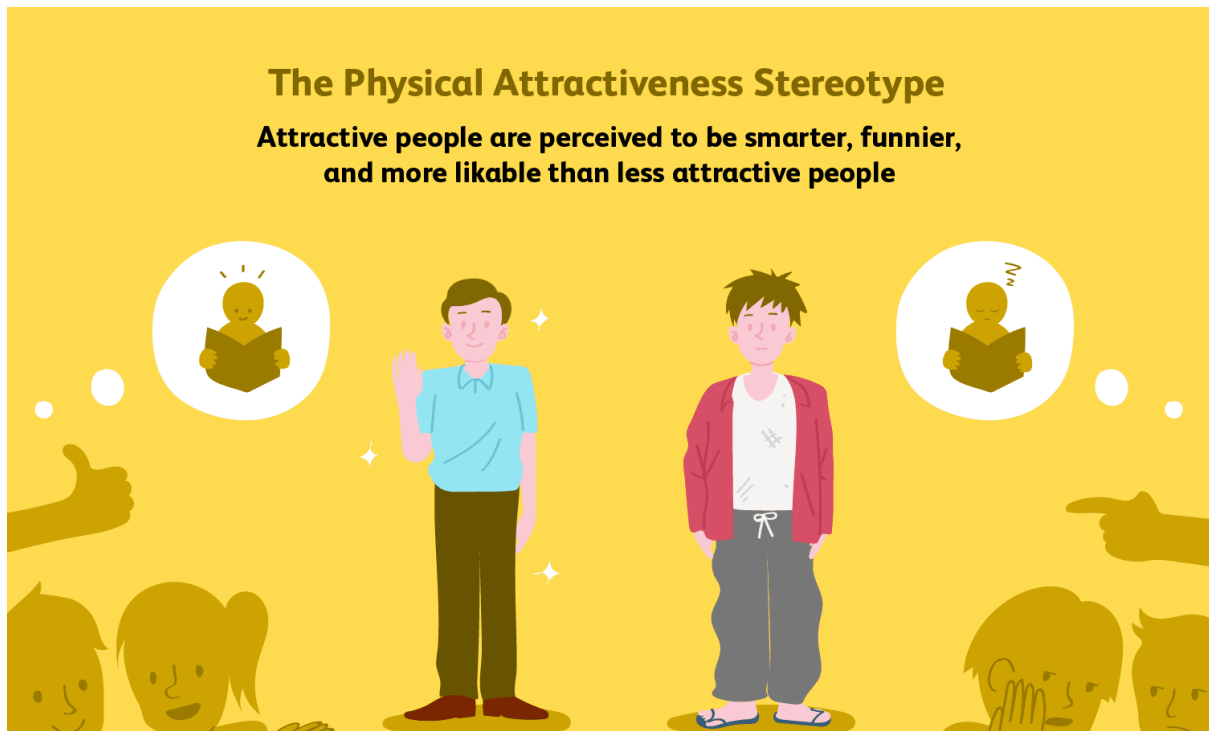
Assuming a viral post must be true because millions of people have liked or shared it.

Mindgleian Prompt

Am I believing this because it is popular, or because it is supported by strong evidence?



7. Halo Effect



Definition

The Halo Effect is the tendency to believe all the information from a person or source because they are respected or have been correct in another area.

Why it matters

Being an expert in one field does not guarantee expertise in every field.

Example

Trusting a famous athlete's health advice without checking scientific evidence.

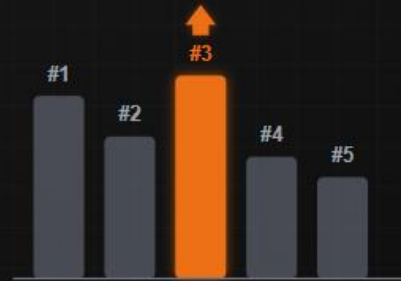
Mindgleian Prompt

Am I evaluating this specific claim, or am I being influenced by the person's reputation?

8. Ranking Bias



Bias Prevention: Keep Your Rankings Trustworthy



Definition

Ranking Bias is the tendency to believe that the first search result is automatically the most accurate or trustworthy.

Why it matters

Search rankings are influenced by many factors, not just quality.

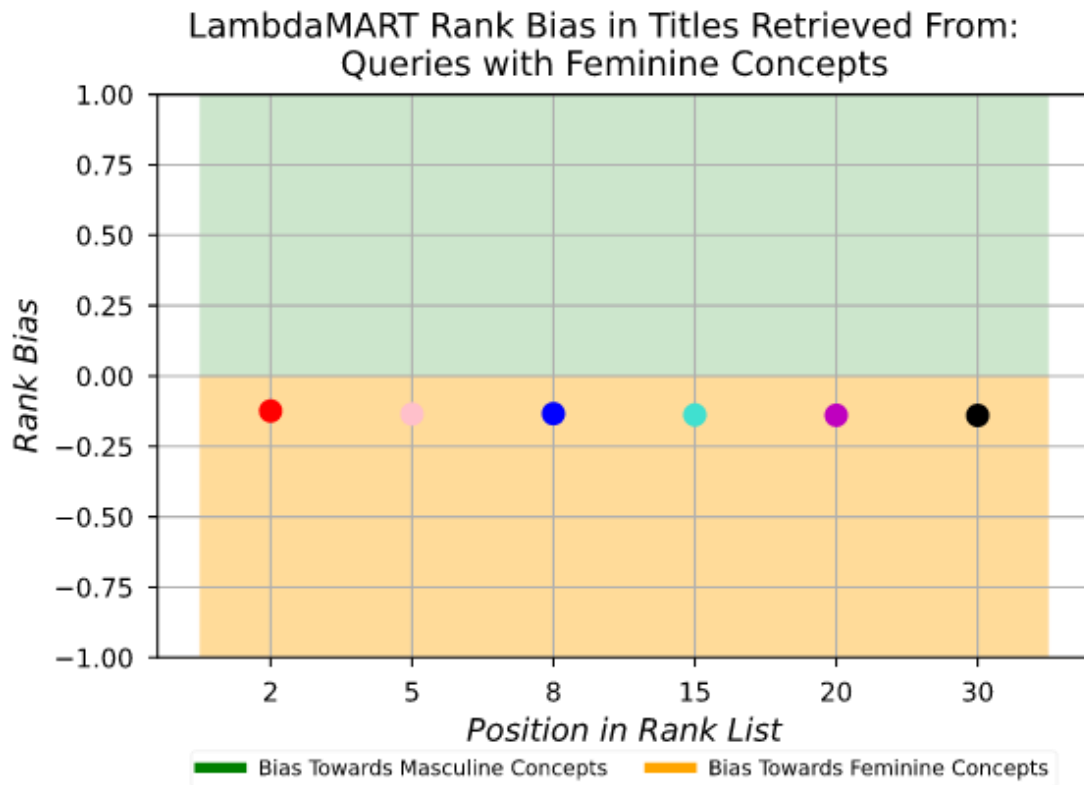
Example

Clicking only the first Google result and ignoring all other sources.

Mindgleian Prompt

Have I explored multiple reliable sources, or only the first result I found?

9. Search Bias



Definition

Search Bias occurs when the words we use while searching already assume a particular answer or point of view.

Why it matters

Biased search terms can limit the information we discover.

Example

Searching "Why video games are harmful" instead of "How do video games affect young people?"

Mindgleian Prompt

Are my search terms open and objective, or are they leading me toward a particular conclusion?

Mindgle Reflection



Searching is not simply about finding information—it is about finding balanced, trustworthy, and diverse information. A Mindgleian Inquirer understands that algorithms, AI, popularity, and personal search habits can all influence what appears on the screen. Instead of accepting the first answer, they deliberately explore multiple perspectives, verify evidence, and remain open to information that challenges their initial thinking.

A good search finds information. A great search finds understanding.

Stage 5: Evaluating Evidence

Biases That Influence How We Judge Evidence

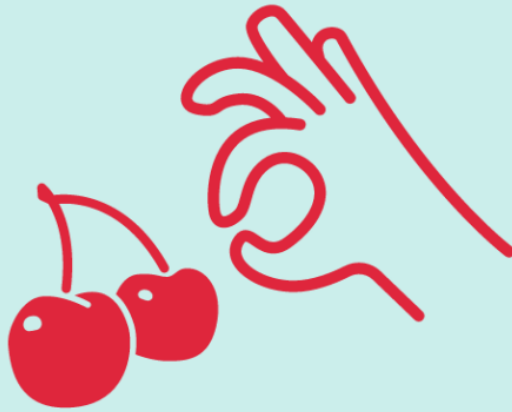
Finding information is only the beginning of inquiry. A Mindgleian Inquirer must now decide which evidence is trustworthy, relevant, balanced, and convincing. This stage requires objectivity because our personal beliefs, preferences, and first impressions can easily influence how we judge evidence. Instead of asking, *"Do I agree with this?"*, learners ask, *"Does the evidence support this?"*

1. Cherry-Picking



Cherry picking

Cherry picking is a cognitive bias that occurs when individuals or organizations selectively choose and present information, data, or evidence to support a preconceived idea, argument, or agenda, while ignoring or suppressing contradictory information. It is akin to the act of picking ripe cherries from a tree while leaving the unripe or spoiled ones behind.



Definition

Cherry-Picking is the tendency to select only the evidence that supports our ideas while ignoring evidence that challenges them.

Why it matters

Balanced inquiry considers all relevant evidence, not just the evidence we like.

Example

Using only studies that show social media is harmful while ignoring studies showing its educational benefits.

Mindgleian Prompt

Am I considering all the relevant evidence or only the evidence that supports my view?

2. Survivorship Bias



OUR GLORIOUS STUDENTS...

SURVIVORSHIP BIAS



WHERE DO THEY PUT PICTURES OF THOSE THAT DIDN'T MAKE IT TO TOPPER'S LIST?



WHAT IS IT?

WHEN TRIUMPH IS MADE MORE VISIBLE THAN FAILURE, WE SYSTEMATICALLY OVERESTIMATE OUR CHANCES OF SUCCESS

THOSE WHO TRIED

THOSE WHO MADE IT

A LOGICAL ERROR THAT IMPACTS HOW WE DECIDE AND CHOOSE

HOW TO OVERCOME IT?

STUDY FAILURES
NOT JUST SUCCESSES



Actively seek out cases, stories, and data on failures too.

ASK "WHAT'S MISSING?"



Check what might be left out...

YOUR SKILLS, EFFORT and INTENT

YOUR RESULTS

YOUR UNIQUE CONTEXT

NORMALIZE TALKING ABOUT SETBACKS

HERE'S WHAT I LEARNED

Reduces stigma and helps others learn from mistakes

NOTICE TRENDS and DATA

Rely on broad trends, not just outliers

BALANCE INSPIRATION WITH SKEPTICISM

Helps you plan Practically

Definition



Survivorship Bias is the tendency to focus only on successful or visible examples while ignoring those that failed or were never noticed.

Why it matters

Ignoring unseen evidence can create misleading conclusions.

Example

Studying only successful entrepreneurs who left school while ignoring thousands who did not succeed.

Mindgleian Prompt

Whose stories or evidence might be missing from my inquiry?

3. Ad Hominem Bias



Definition

Ad Hominem Bias is the tendency to judge an idea based on the person presenting it rather than on the quality of the evidence.



Why it matters

Good evidence should be evaluated on its own merits.

Example

Rejecting a student's idea because they usually perform poorly in class.

Mindgleian Prompt

Am I evaluating the evidence or judging the person presenting it?

4. Authority Bias

Authority Bias

People tend to listen to those who are in a position of authority. Authority bias is the tendency to attribute greater accuracy to the opinion of a person who is an authority figure. People are then more influenced by that “authority” opinion because it is coming from a person who is perceived to have that additional authority. Just because a person has a prestigious title does not mean they necessarily know more than others.

The infographic features a light blue background with the title 'Authority Bias' in bold blue text. Below the title is a paragraph explaining the concept. At the bottom right, there is an illustration of a woman with dark hair sitting at a desk with a laptop, and a man with dark hair sitting next to her, looking at the laptop screen.

Definition

Authority Bias is the tendency to believe evidence simply because it comes from an expert, teacher, influencer, or AI without examining the supporting evidence.

Why it matters

Expert opinions should be supported by evidence, not accepted blindly.

Copyright © 2026, All Right Reserved Mindgle, an educational product of ThinkBeanz



Example

Accepting a health claim simply because it was made by a famous doctor without checking the research.

Mindgleian Prompt

Does the evidence support the claim, or am I trusting the authority alone?

5. Halo Effect and Horn Effect

Definition

The Halo Effect is the tendency to believe all claims made by someone because they are respected or successful in another area.

Why it matters

Expertise in one field does not guarantee expertise in another.

Example

Trusting a celebrity's scientific opinion simply because they are famous.

Mindgleian Prompt

Am I evaluating this claim independently, or am I being influenced by reputation?

Horn Effect



Halo



Positive trait, rosy view

For example: A candidate excels in the technical portion of their interview. The interviewer is so impressed, they assume the candidate must also possess strong communication and interpersonal skills, even without any evidence to support it.

Horn



One flaw, dark judgment

For example: A job interview candidate arrives a few minutes late due to an unexpected traffic jam. The interviewer, predisposed to valuing punctuality highly, interprets this tardiness as a sign of carelessness or disrespect.

Definition

The Horn Effect is the tendency to judge a person, idea, product, or source negatively overall because of one negative characteristic, mistake, or first impression.

Why it matters

One weakness does not mean everything else is poor. The Horn Effect prevents objective evaluation by allowing a single negative feature to overshadow all other evidence.

Example

A learner dismisses an entire research article because it contains one grammatical error, even though the evidence and methodology are strong.

Or:

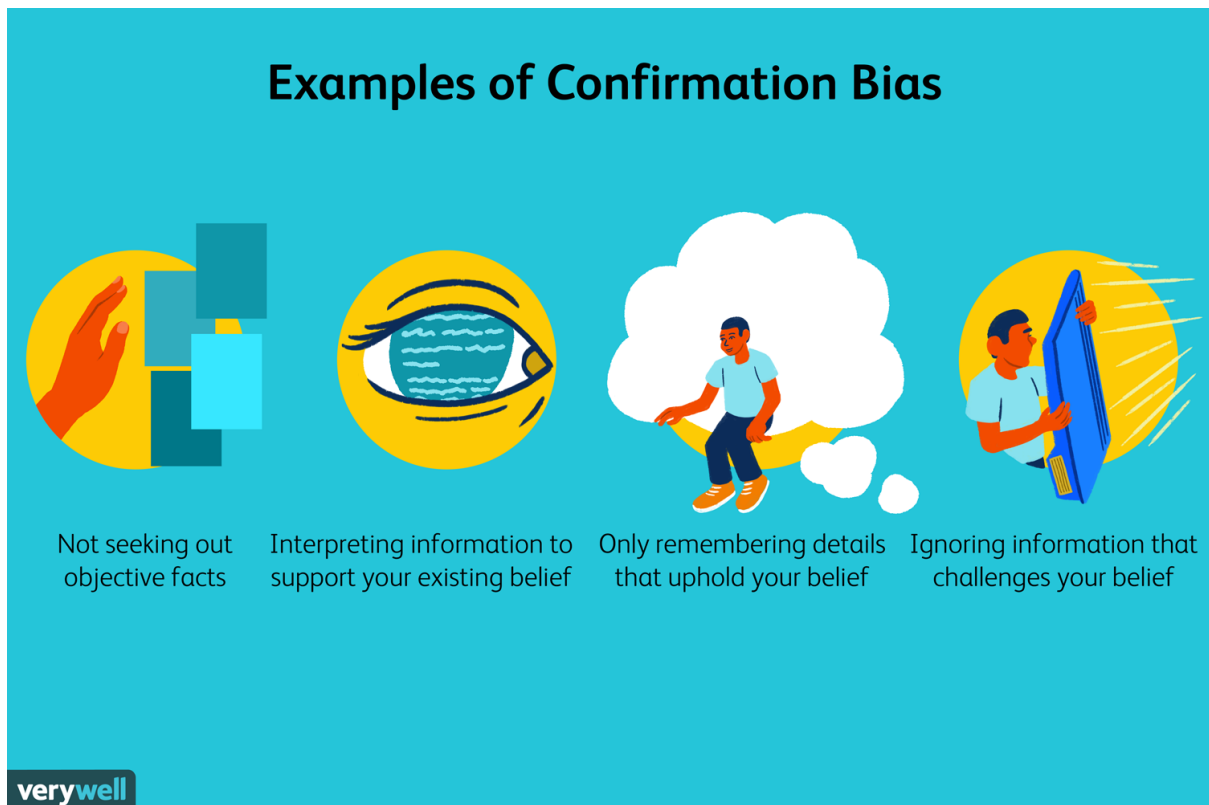
A student assumes a classmate's ideas are unreliable because the classmate performed poorly in one previous assignment.

Mindgleian Prompt

Am I judging the entire person, source, or idea because of one weakness, or am I evaluating each piece of evidence fairly?



5. Confirmation Bias



Definition

Confirmation Bias is the tendency to give greater importance to evidence that supports existing beliefs while dismissing evidence that disagrees.

Why it matters

Strong inquiry requires learners to examine both supporting and opposing evidence.

Example

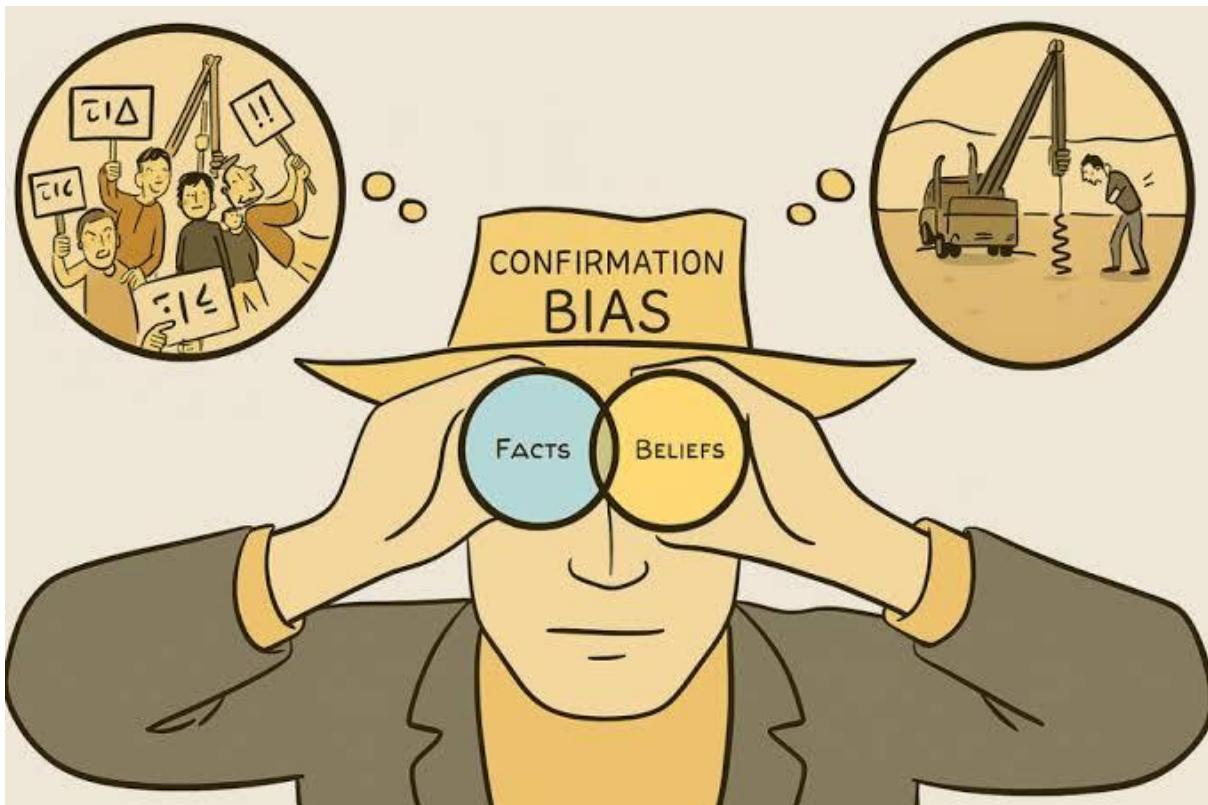
Reading only articles that agree with your opinion about artificial intelligence.

Mindgleian Prompt

What evidence challenges my current thinking?



6. Belief Bias



Definition

Belief Bias is the tendency to judge evidence as convincing simply because it agrees with our personal beliefs.

Why it matters

Evidence should be judged by its quality, not by whether we agree with it.

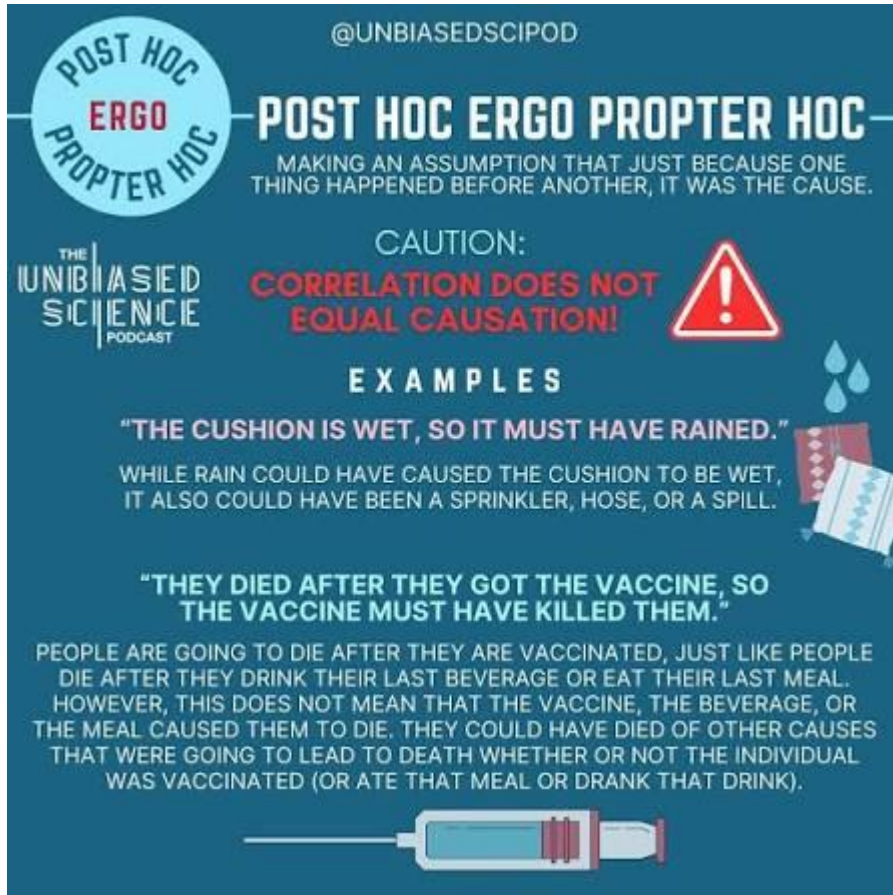
Example

Accepting weak evidence because it matches your opinion.

Mindgleian Prompt

Am I evaluating the strength of the evidence or simply agreeing with the conclusion?

8. Post Hoc Ergo Propter Hoc (False Cause)



Definition

Post Hoc Ergo Propter Hoc is the tendency to assume that because one event happened before another, the first event caused the second.

Why it matters

Sequence does not automatically prove causation.

Example

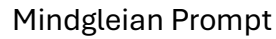
A school introduces tablets in January.

Exam scores improve in June.

The learner concludes:

"The tablets caused the improvement."

Other factors may have contributed.



10. Source Credibility Bias



Why it matters

Example

Rejecting a well-researched article because it comes from a lesser-known university.



Mindgleian Prompt

Am I evaluating the evidence itself, or only the source behind it?

11. Bandwagon Bias



Definition

Bandwagon Bias is the tendency to believe evidence simply because many people accept or share it.

Why it matters

Scientific and scholarly evidence is not determined by popularity.

Example

Assuming a claim is true because millions of people have shared it online.

Mindgleian Prompt

Is this claim supported by evidence, or simply by popular opinion?

Mindgle Reflection

Evidence should never be judged by popularity, emotion, authority, or personal preference. A Mindgleian Inquirer evaluates every piece of evidence with fairness,



objectivity, and intellectual honesty. Rather than asking, "Do I agree with this?", they ask:

"How strong, reliable, relevant, and balanced is the evidence supporting this claim?"

Only through careful evaluation can evidence become the foundation of meaningful knowledge.

11. Red Herring bias



something that is intended to be misleading or distracting



The report conveyed an unclear message that was a **red herring**.
It did not direct the public to the important issues.

Definition

A Red Herring is the tendency to introduce irrelevant information that distracts attention from the real question or evidence.

Why it matters

Inquiry loses focus when irrelevant issues replace the original problem.



Example

Research Question:

"Should schools reduce homework?"

Argument:

"Our school has excellent sports facilities."

The sports facilities have nothing to do with homework.

Mindgleian Prompt

Is this information directly helping answer my inquiry question, or is it distracting me from the real issue?

12. Straw Person (Straw Man Fallacy)



THE STRAWMAN FALLACY

Instead of addressing the real argument, a strawman misrepresents it to make it easier to attack.



Example:

Evolution explains the diversity of life.



Oh, so you think we came from monkeys?!



→ Don't let people swap your argument for a distorted caricature. Call it out—then return to your original point.

Follow this page for more insights into logical fallacies

Definition

The Straw Person Fallacy is the tendency to misrepresent or oversimplify another person's argument so that it becomes easier to criticise or reject.

Why it matters

Good inquiry requires understanding arguments accurately before evaluating them.

Example

Person A: "Schools should teach responsible AI use."

Person B: "So you're saying teachers should let AI do all the learning."

Copyright © 2026, All Right Reserved Mindgle, an educational product of ThinkBeanz



The original argument has been distorted.

Mindgleian Prompt

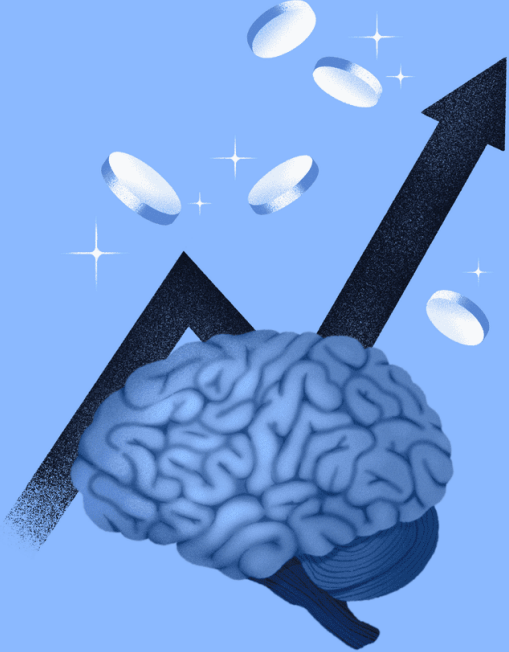
Am I evaluating the actual argument, or a simplified version that is easier to attack?

Stage 6: Constructing Knowledge

Biases That Influence How We Build Knowledge

Constructing knowledge is more than collecting information—it is about connecting evidence, comparing perspectives, revising ideas, and forming well-justified conclusions. At this stage, learners naturally develop an Initial Knowledge Claim, but they must remain open to refinement. A Mindgleian Inquirer understands that strong knowledge is not built by defending ideas—it is built by continuously improving them.

1. Endowment Effect



Endowment Effect

[in-'daü-mənt i-'fekt]

An emotional bias that causes individuals to value an owned object higher, often irrationally, than its market value.



Definition

The Endowment Effect is the tendency to value our own ideas, explanations, or conclusions more highly simply because they are ours.

Why it matters

Learners may become emotionally attached to their own knowledge claims and resist improving them.

Example

A learner refuses to revise their explanation even after stronger evidence is presented.

Mindgleian Prompt

Am I defending my idea because it is well supported, or simply because it is mine?

2. Sunk Cost Fallacy



The Sunk Cost Fallacy

A behavior where we continue to do something harmful based on how many resources we've already invested.

*Like staying in toxic/ abusive relationships based on how many years you've already put in

Definition

The Sunk Cost Fallacy is the tendency to continue defending an idea because we have already invested significant time, effort, or emotion into it.

Why it matters

Past effort should not prevent learners from improving their understanding.

Example

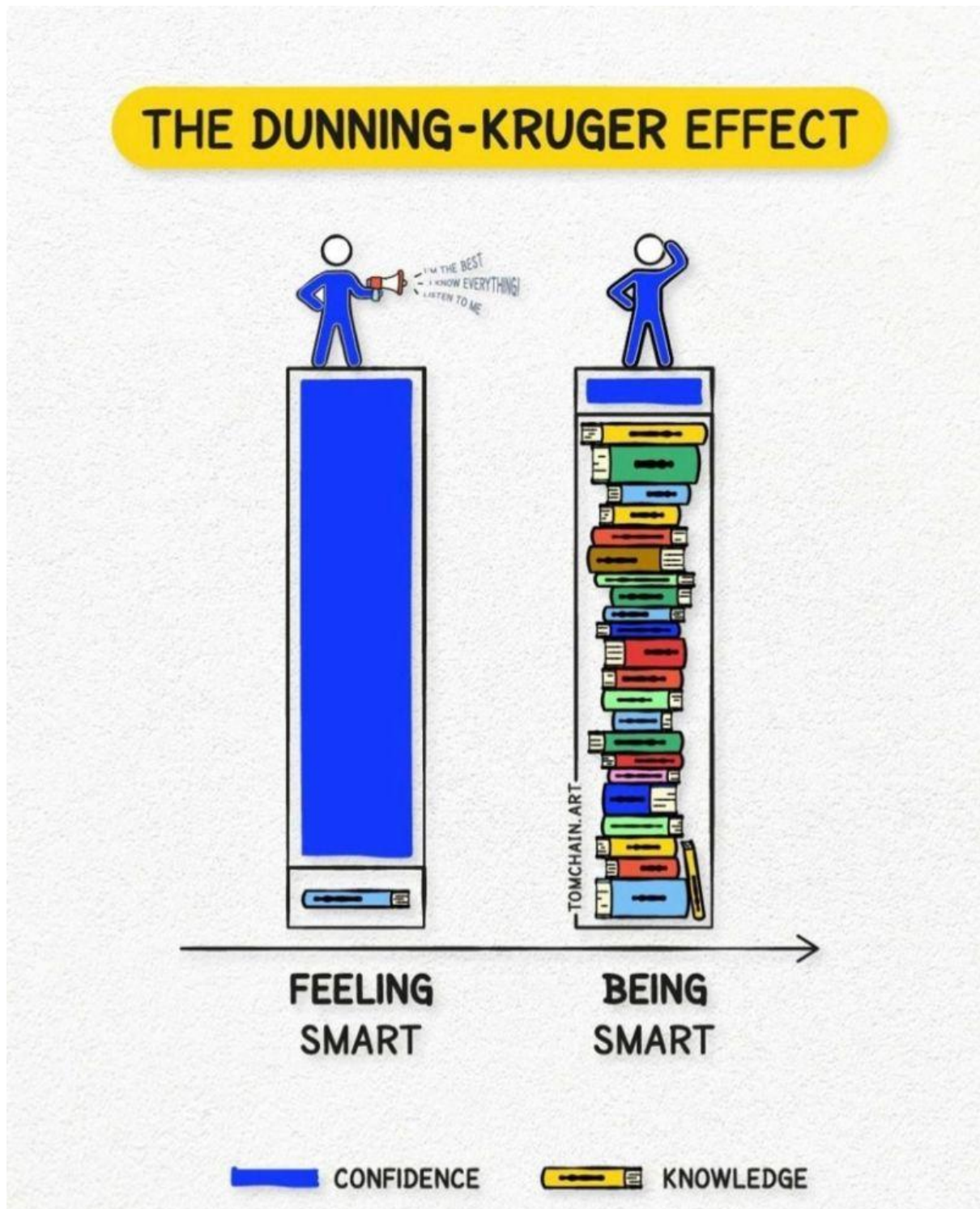
A learner continues using a weak explanation because they have already spent hours researching it.

Mindgleian Prompt

Am I holding on to this idea because it is the strongest explanation, or because I have already invested so much in it?



3. Dunning-Kruger Effect



Definition



The Dunning–Kruger Effect is the tendency to overestimate our understanding or ability when our knowledge is still limited.

Why it matters

Overconfidence can stop learners from asking deeper questions or seeking better evidence.

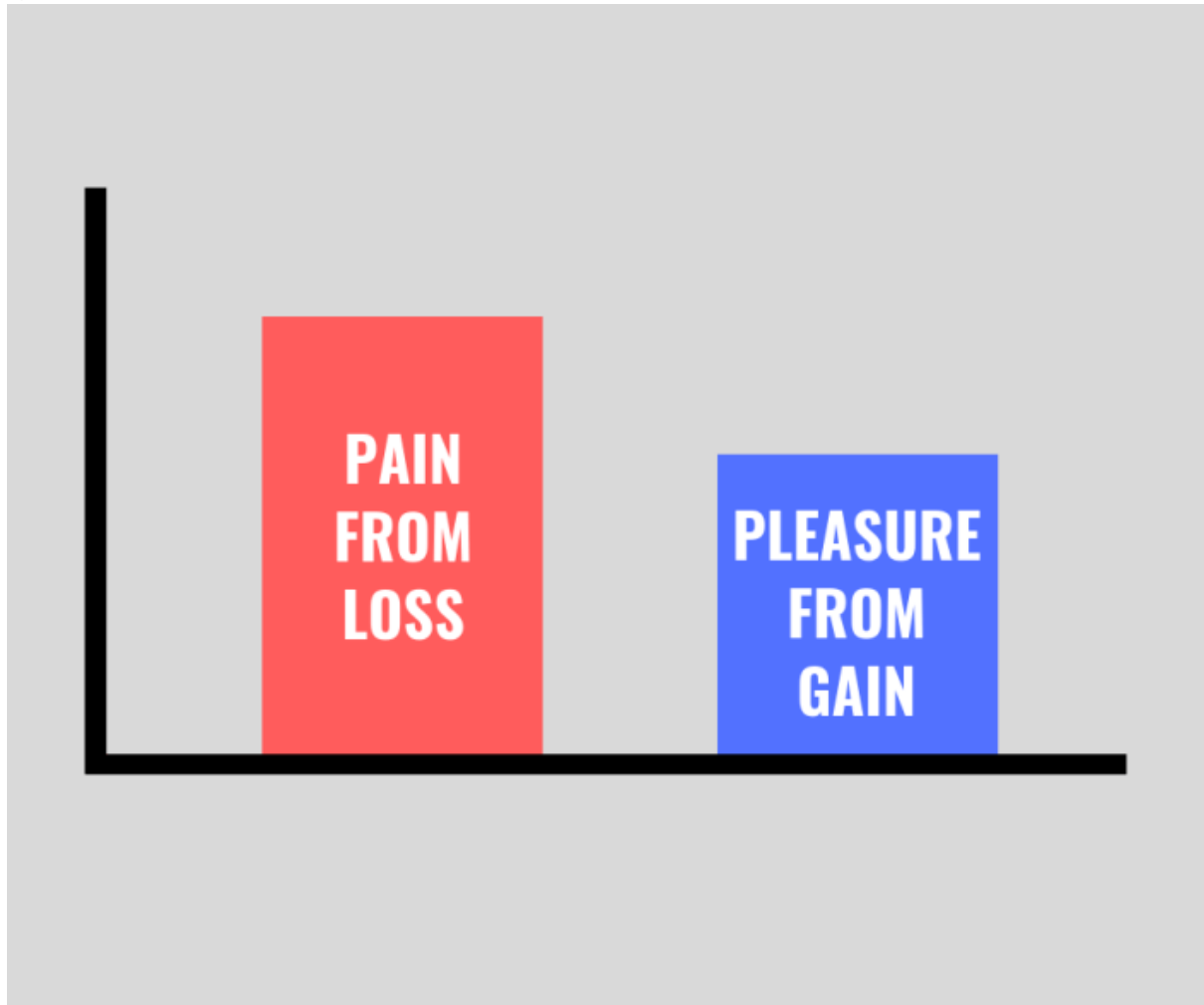
Example

After reading one article, a learner believes they fully understand climate economics.

Mindgleian Prompt

Do I truly understand this topic deeply, or have I only begun exploring it?

4. Loss Aversion



Definition

Loss Aversion is the tendency to avoid giving up existing ideas because losing them feels more uncomfortable than gaining better understanding.

Why it matters

Learners may cling to familiar explanations instead of accepting stronger evidence.

Example

A learner rejects new evidence because it challenges a long-held belief.

Mindgleian Prompt

Am I resisting a better explanation because it requires me to let go of an older one?



5. Groupthink



Definition

Groupthink is the tendency for members of a group to agree with the majority in order to maintain harmony rather than critically evaluating different ideas.

Why it matters

Knowledge becomes weaker when disagreement and questioning disappear.

Example

A project team accepts the first explanation without anyone questioning it.

Mindgleian Prompt

Am I agreeing because the evidence is convincing, or because everyone else agrees?

Copyright © 2026, All Right Reserved Mindgle, an educational product of ThinkBeanz



6. Belief Perseverance



Definition

Belief Perseverance is the tendency to continue believing something even after strong evidence has shown it to be inaccurate.

Why it matters

Good inquiry requires learners to revise knowledge when better evidence becomes available.

Example

A learner continues believing a myth after reading multiple reliable studies disproving it.

Mindgleian Prompt

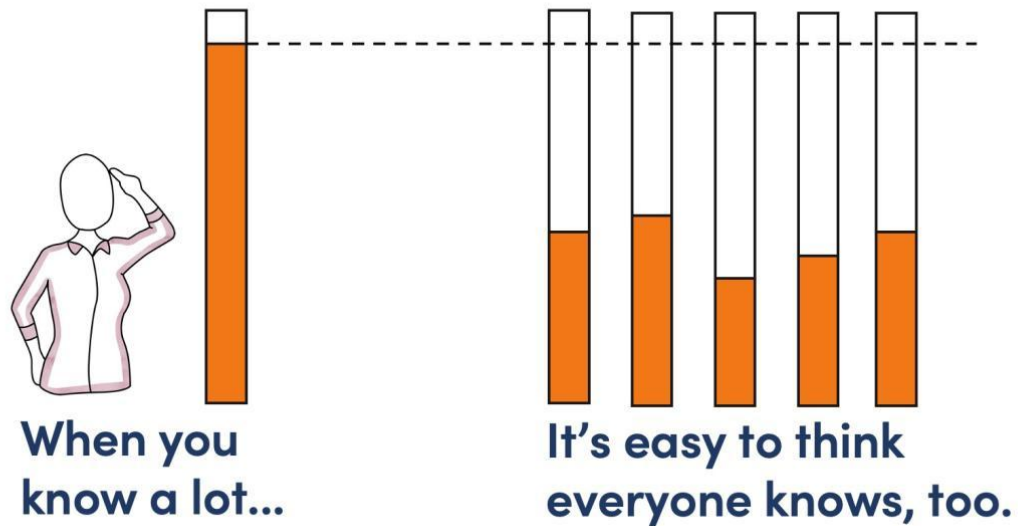
Am I willing to revise my thinking when stronger evidence emerges?

Copyright © 2026, All Right Reserved Mindgle, an educational product of ThinkBeanz



7. Curse of Knowledge

Curse of Knowledge



Definition

The Curse of Knowledge is the tendency to assume that others know what we know, making it difficult to explain ideas clearly.

Why it matters

Knowledge should be understandable, not just correct.

Example

A learner uses technical terms without explaining them because they seem obvious.

Mindgleian Prompt

Can someone with no prior knowledge understand my explanation?

8. Status Quo Bias



status Quo Bias



In the context of patient care, healthcare providers may prefer treatments they are familiar with over more effective alternatives due to:

- Engrained habits
- Fear of uncertainty
- The desire to avoid change-related risks



Status quo bias is when people stick with what they know, even when trying something new could lead to better outcomes.

Definition

Status Quo Bias is the tendency to prefer existing explanations or familiar ways of thinking simply because they are comfortable.

Why it matters

Innovation and deeper understanding require openness to change.

Example

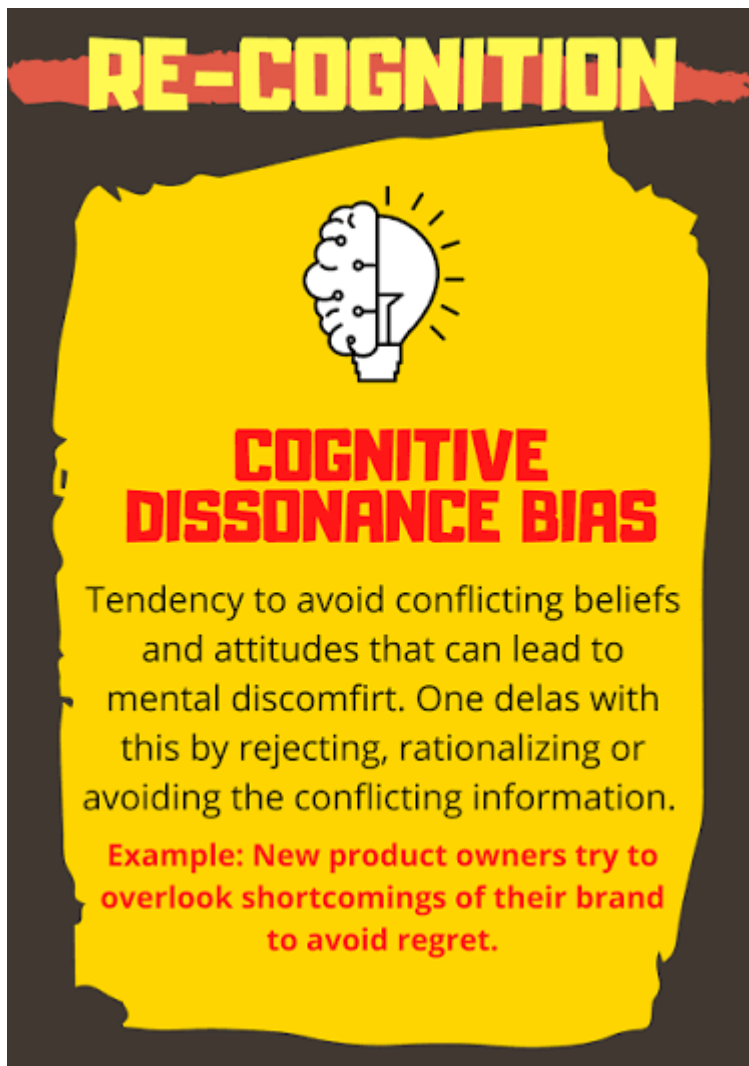
Rejecting a new scientific explanation simply because the older explanation feels more familiar.

Mindgleian Prompt

Am I choosing this explanation because it is the strongest, or simply because it is familiar?



9. Cognitive Dissonance



Definition

Cognitive Dissonance is the mental discomfort we experience when new evidence conflicts with our existing beliefs, often leading us to reject or ignore the new evidence.

Why it matters

Discomfort can become an opportunity for deeper learning rather than a reason to avoid change.

Example

A learner dismisses reliable evidence because it challenges what they have always believed.



Mindgleian Prompt

What new evidence is making me uncomfortable, and what can I learn from it?

10. Psychological Reactance

Psychological Reactance

Psychological Reactance is a psychological phenomenon that occurs when individuals perceive their freedom or autonomy is being threatened or restricted. In response, they may react with resistance or opposition to regain their sense of control.



Definition

Psychological Reactance is the tendency to reject ideas simply because we feel our freedom to think or choose is being threatened.

Why it matters

Learners may dismiss valuable evidence simply because they feel pressured to accept it.

Example

A student rejects a teacher's explanation without evaluating the evidence because they dislike being told what to think.

Copyright © 2026, All Right Reserved Mindgle, an educational product of ThinkBeanz



Mindgleian Prompt

Am I rejecting this idea because the evidence is weak, or because I dislike being persuaded?

11. Fallacy of Change

Definition

The Fallacy of Change is the tendency to believe that other people, systems, or circumstances must change before our own understanding or behaviour can change.

Why it matters

Knowledge construction begins with a willingness to reflect on and revise our own thinking.

Example

A learner says, "I'll rethink my opinion only when everyone else changes theirs."

Mindgleian Prompt

Am I waiting for others to change before I am willing to rethink my own understanding?

Mindgle Reflection

Knowledge is not something we collect—it is something we continuously refine. A Mindgleian Inquirer understands that changing one's mind in response to stronger evidence is not a weakness but a sign of intellectual growth. Rather than protecting existing beliefs, they actively test, revise, and strengthen their knowledge claims.

The strongest thinkers are not those who never change their minds, but those who willingly refine their thinking whenever better evidence, deeper reasoning, or broader perspectives emerge.

Stage 7: Reflection & Metacognition



Recognising the Biases That Shaped My Inquiry

Reflection is where learners step outside their thinking and examine how they thought, not just what they concluded. A Mindgleian Inquirer understands that every inquiry is influenced by assumptions, emotions, experiences, and cognitive biases. Rather than pretending to be completely unbiased, they develop the habit of recognising, questioning, and reducing the influence of bias in future inquiry.

1. Blind Spot Bias

Blind Spot Bias

Blind spot bias happens when we see ourselves as less biased than others. Also, we are displaying blind spot bias when we eagerly point out cognitive biases in others, rather than acknowledging bias in ourselves.

The key thing to know here is that everyone is affected by blind spot bias. In UX, knowing that this bias exists with everyone can help you interpret information you hear or see when you are conducting research.

Definition

Blind Spot Bias is the tendency to recognise biases in other people's thinking while believing that our own thinking is objective.

Why it matters

The greatest barrier to improving our thinking is believing that we have no biases.

Example

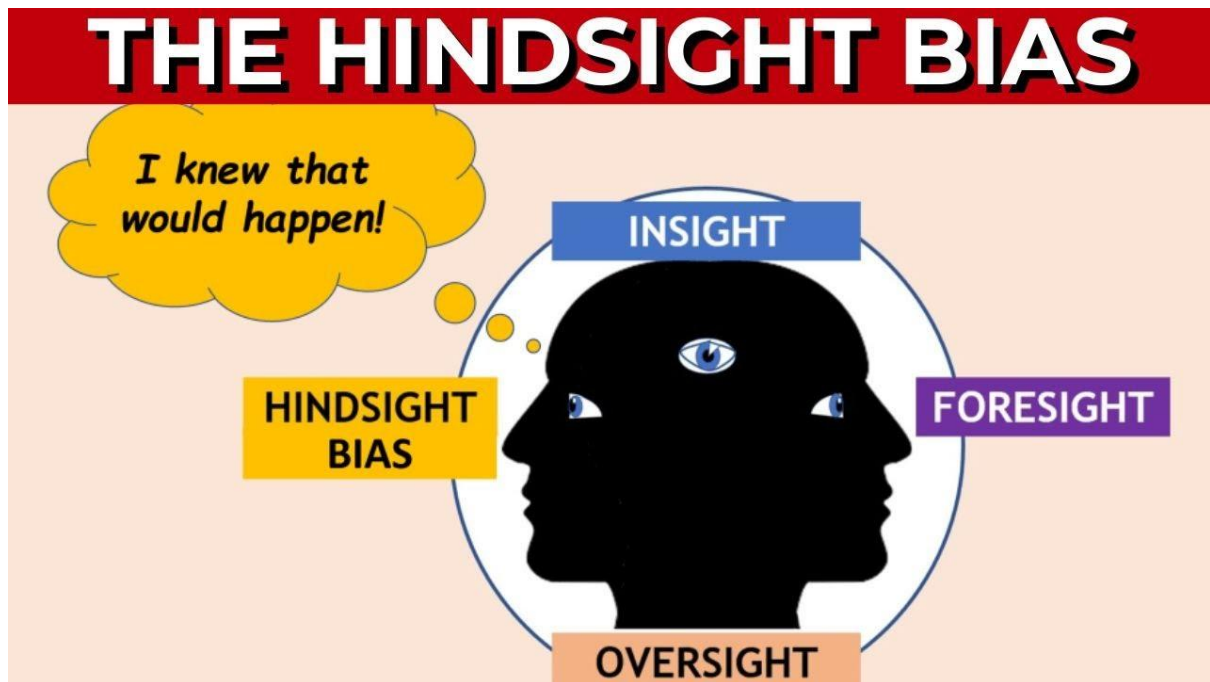
A learner easily identifies confirmation bias in a classmate's project but never considers whether it influenced their own inquiry.

Mindgleian Prompt



Have I examined my own thinking as carefully as I examine the thinking of others?

2. Hindsight Bias



Definition

Hindsight Bias is the tendency to believe that an outcome was obvious or predictable after it has already happened.

Why it matters

It can make learners underestimate the uncertainty that existed during the inquiry.

Example

After completing a project, a learner says, "I knew that all along," even though they had explored several different possibilities.

Mindgleian Prompt

Am I remembering my inquiry accurately, or does the final answer make it seem more obvious than it really was?



3. Self-Serving Bias

SELF-SERVING BIAS

DEFINITION

Self-serving bias is the tendency for individuals to attribute positive events to their own character or actions, but attribute negative events to external factors. It's a cognitive bias that helps maintain a positive self-image and protect one's self-esteem.

EXAMPLES

- **Good Grades vs. Bad Grades:** A student believes they got an A because they're smart and hardworking, but they got a C because the teacher is unfair.
- **Winning vs. Losing in Sports:** A basketball player thinks they won the game due to their skill, but believes they lost because the referees made poor calls.

Definition

Self-Serving Bias is the tendency to credit successes to our own abilities while blaming failures on external factors.

Why it matters

Honest reflection requires recognising both strengths and areas for improvement.

Example

"I succeeded because I'm intelligent, but my mistakes happened because the resources were poor."

Mindgleian Prompt

Am I taking balanced responsibility for both my successes and my mistakes?

4. Outcome Bias



The Outcome Bias In A Nutshell

Outcome bias describes a tendency to evaluate a decision based on its outcome and not on the process by which the decision was reached. In other words, the quality of a decision is only determined once the outcome is known. Outcome bias occurs when a decision is based on the outcome of previous events without regard for how those events developed.



Definition

Outcome Bias is the tendency to judge the quality of our thinking solely by the final result rather than by the reasoning process used to reach it.

Why it matters

A correct answer can result from poor reasoning, and a thoughtful inquiry can sometimes lead to an incorrect conclusion that is later refined.

Example

A learner assumes their inquiry process was excellent simply because their conclusion turned out to be correct.

Mindgleian Prompt

Am I evaluating my thinking process, or only the final answer?

5. Reflection Avoidance Bias

Definition



Reflection Avoidance Bias is the tendency to avoid examining our own mistakes, assumptions, or weaknesses because doing so feels uncomfortable.

Why it matters

Growth begins when learners are willing to critically examine their own thinking.

Example

A learner immediately starts a new project without reviewing what went well or what could have been improved.

Mindgleian Prompt

What have I learned about the way I think, not just about the topic I investigated?

Mindgle Reflection

A Mindgleian Inquirer does not aim to become completely free of bias—that is impossible. Instead, they strive to become bias-aware. Every inquiry leaves behind a record of assumptions, decisions, strengths, mistakes, and moments of growth. Reflection transforms these experiences into wisdom by asking not only, "What did I learn?" but also "How did I learn, where was I biased, and how can I think more objectively next time?"

The highest form of inquiry is not knowing more—it is understanding your own thinking well enough to keep improving it.

This makes Stage 7 a true metacognitive stage. It closes the Mindgle inquiry cycle by helping learners recognise and refine the thinking habits that shaped every earlier stage, preparing them to begin their next inquiry with greater self-awareness, objectivity, and intellectual humility.