O'Reilly Safari Learning

Fundamentals of Cognitive Biases

What are cognitive biases?

Systematic differences between **what is objectively true** and **how our brains perceive** that reality.

They allow for faster decision-making and help us make sense of the world.

They also nudge us towards acting irrationally.

They underlie behaviors like these…

- Jumping to conclusions

- Stereotyping

- Saving face

- Only seeing what we want to see

- "If your friend jumped off a cliff, would you do it too?"

Cognitive biases make us bad at predicting
what we'll use • what we'll love • how we'll react

I am hoping to learn how to do…

I am hoping to use these skills when…

I am hoping to prevent situations like…

Hindsight bias

We tend to think 'we knew it all along...'

(ignoring the changes, pivots, and mistakes along the way)

Hindsight bias at work:

Coworker: "Customer satisfaction scores look good, and we're only making small changes, so we don't need to do user testing."

You (thinking): But we had a ton of support tickets filed in the week after our last change – people are only happy now because we all scrambled to fix those issues in production.

Document your starting assumptions

Examples:
- We believe this will take [time duration]

- We expect it to be easy/medium/hard to get needed [resource]

- We anticipate [dependency] to be resolved by [date]
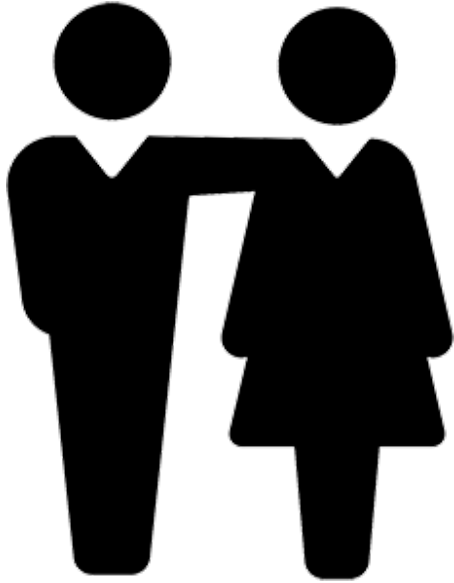
- We will confirm [uncertainty] by [date]

Set a recurring reminder to check them!

(Gently) challenge assumptions

Your coworker remembers "everything turning out fine"
You know that the initial release was painful and you don't want to go through that again!

What questions might you ask to disrupt the project manager's hindsight bias?

Share assumptions
with a partner

(Another person will hold you
more accountable)

Anchoring

The first piece of information we see irrationally biases our judgment/opinions

Don't show the solution first

What is the problem the other person needs to solve?

What's their level of urgency?

What similar products/services/behaviors have worked for them in the past?

How much variability are you expecting?

Projection Bias

We predict that our future selves will share the same preferences, motivations, emotions as our current selves

"This event was so successful!
We should plan another one
for next quarter!"

How will future you be different?

"Books are about $15 each on Amazon, right? So how much more could textbooks cost?"

"I woke up early last weekend and I got SO much done – so I made my auto mechanic appointment for 7am tomorrow…"

"We didn't do a lot of planning for that last event and it turned out great – let's just improvise again for this next one…"

5-minute break

What does your brain do when an idea threatens your sense of self?

Cognitive Dissonance

The uncomfortable feeling of holding two conflicting ideas in our heads - often, one of those ideas reflects negatively on our self

Cognitive dissonance at work:

You: "Ben, your team hasn't delivered that data we need yet."
Ben: "It's not our fault – your requirements were poorly written and unclear!"

Result: Ben is angry and you still don't have your data

Defusing cognitive dissonance

Remove threat to your/person's identity

Identify the situation, don't assume permanence

Agree and expand

Write an 'escape hatch'

Ben's team hasn't delivered that data yet.
Ben thinks of his team as being responsible and prompt.

How can you ask for the data and give Ben an 'escape hatch' for his cognitive dissonance?

Confirmation Bias

Looking for evidence to prove our ideas/opinions right

(and ignoring/forgetting information that would contradict us)

Confirmation bias at work:

Coworker 1: "We need to improve performance of our mobile app – look at these 1-star reviews in the App Store!"
Coworker 2: "I did a few quick customer calls and customers agree we should speed up our app"

Result: You spend 2 months on performance tweaks; meanwhile your competitor adds a feature that users really love.

Disrupting confirmation bias

Avoid yes/no questions

Ask for more detail, for explanations

Argue the opposite side as a team

Ask 'non-confirming' questions

Coworkers 1 and 2 are convinced that improving mobile app importance is top priority, based on what they've seen and heard.

What questions can you ask to push beyond your coworkers' confirmation bias?

2   4   8

https://www.nytimes.com/interactive/2015/07/03/upshot/a-quick-puzzle-to-test-your-problem-solving.html

Social desirability

We say things that make us look good, rather than what is accurate

(Sometimes deliberately; often we don't realize it!)

Don't ask questions that will be perceived like this!

Decreasing social cost of answers

Don't condemn person to absolutes

Ask about the past, not the present/future

Assume everyone does this undesirable behavior sometimes

Offer social proof/'peer pressure'

What do you really need to know?
How will you use the answers?

Rewrite to allow more honest responses

Do you ever check in code without testing it?

Is everyone on your team performing up to expected standards?

Would you pay $100 for this service that makes you a more effective manager?

 How do you handle high-stress situations?

Does your team value diversity and inclusion?

"That gate agent was such a jerk! I can't believe he wouldn't let me on the flight 3 minutes before the doors closed – I just lost it at him."

"Of course I would never park in a handicapped space, not even for a minute! What kind of selfish person would do that?"

"See, every customer we asked said they'd probably use the deluxe setting! We should definitely invest the extra 2 months in building it."

I am hoping to learn how to do…

I am hoping to use these skills when…

I am hoping to prevent situations like…

I'd love to answer questions or hear how this course worked for you and your team:
cindy@cindyalvarez.com

@cindyalvarez - https://www.cindyalvarez.com