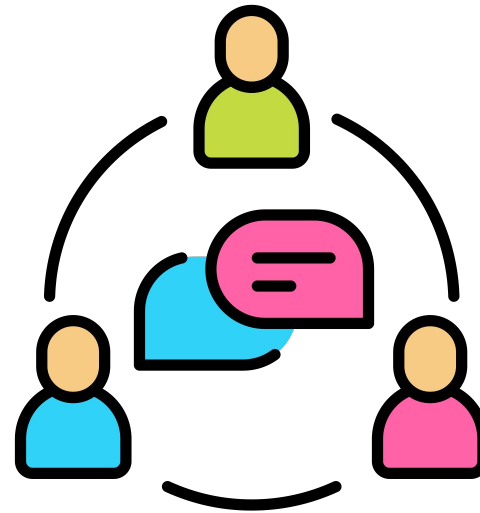


2.3

Social Group and Information-processing Mechanisms

Note

- Interactive symbol: tasks for groups



Psychological factors in believing and spreading misinfo

- **Information Deficit Model**

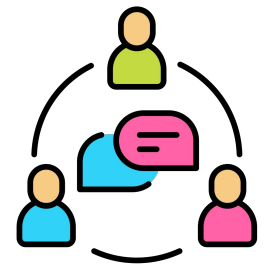
- Traditional view assuming that a deficit in public understanding of scientific facts and scientific processes is accountable for the prevalence of false beliefs in the public
- Remedy: better science communication as a transfer of knowledge (Siciliani et al., 2020; Suldovsky, 2016)

- **However:**

- People are rather mis- or disinformed, and, in the worst case, manipulated to be science sceptic, engaged in relativism, or adherents of the post-truth belief that there are only opinions. This diagnosis leads us to the topic of “Cognitive Biases”

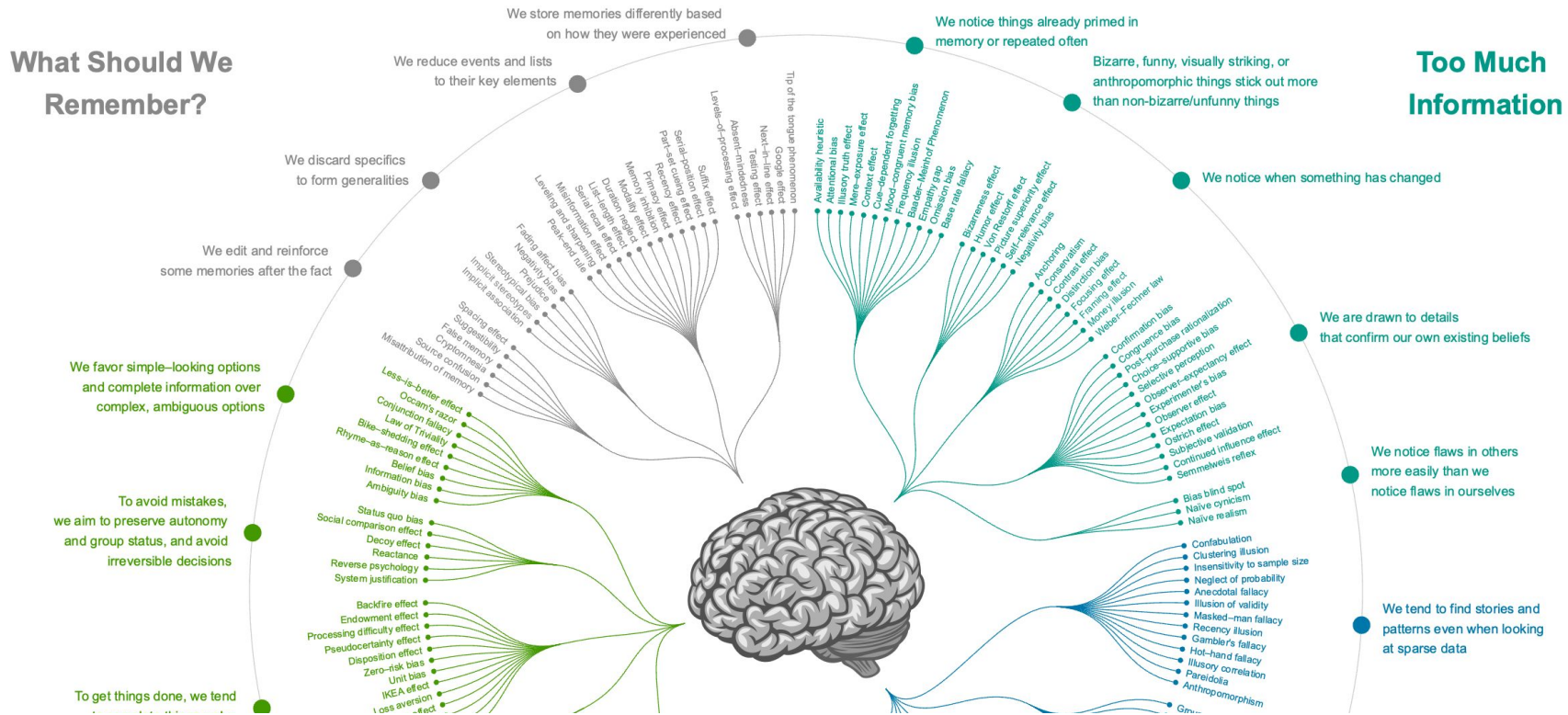
“Cognitive Biases”

- Build groups: What are cognitive biases? Do you have any explanation why they exist?



“Cognitive Biases”

THE COGNITIVE BIAS CODEX



Source: Benson, 2018

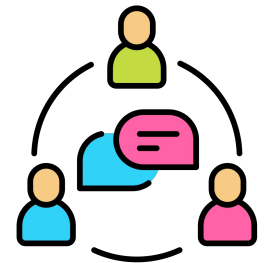
“Cognitive Biases”

- **Definition**

- From the perspective of evolutionary psychology, cognitive biases are evolutionary adaptations (i. e. design features; cognitive traits) that developed to fulfil some purpose in the lives of human ancestors but have downsides and are evaluated as flaws in modern societies. E. g. *heuristics*: Facing life-or-death situations under information processing constraints led to the development of mental shortcuts in decision making that were accurate in many cases but open a door for manipulations (Haselton et al., 2015)

“Cognitive Biases”

- In your group: Which cognitive biases do you know? If you do not know the exact name of a bias, describe an example or everyday experience of yours.



“Cognitive Biases”

- **Backfire effects** in communicating public health messages (Siciliani et al., 2020)
 - **Familiarity:** Repeated exposure to false information leads to the assumption that it is true
 - **Attitude polarisation:** Tendency to selectively recall arguments that oppose information clashing with beliefs
 - **Overkill:** True but complex and therefore cognitively taxing arguments are rejected, lead to a favour of simpler albeit false and misleading explanations for events
 - **Group directed threat:** Arguments are rejected when they (seem to) criticise a group the recipient feels affiliated to, as such an attack strengthens group identity

“Cognitive Biases”

- In your group: Why is the term “cognitive bias” perhaps not the best term to capture all of the above phenomena?

(Further) Social Group and Information-processing mechanisms

- **Types**

- **Social group mechanisms:** psychic phenomena related to social interaction and group affiliation
- **information-processing mechanisms:** psychic phenomena related to the perception and processing of information

(Further) Social Group and Information-processing mechanisms

- **Social group mechanisms**

- **Bandwagon effect:** People believe certain information or support certain causes because others (esp. close social ties or opinion leaders) do (thedecisionlab.com)
- **Authority bias:** Authority figures (e. g. political leaders, celebrities, experts, etc.) exert greater influence on others with their opinions and judgments (thedecisionlab.com)
- **Group directed threat:** Arguments are rejected when they (seem to) criticise a group the recipient feels affiliated to, as such an attack strengthens group identity (Siciliani et al., 2020)

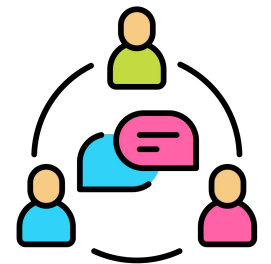
(Further) Social Group and Information-processing mechanisms

- **Information-processing mechanisms**

- **Belief perseverance:** Tendency to maintain and defend preexisting beliefs, even in face of counterevidence (thededisionlab.com)
- **Confirmation bias:** Tendency to focus on and seek information confirming preexisting beliefs (thededisionlab.com)
- **Belief bias:** the reliance on prior knowledge and beliefs rather than objectively considering arguments when making a judgement or decision (scribbr.com)
- **Illusory truth effect:** The repeated exposure to false information leads people to believe the information is true (thededisionlab.com)

(Further) Social Group and Information-processing mechanisms

- In your group: If your group was hired to professionally manipulate the public on a certain issue (e. g., migration, climate change, war etc.), how would you exploit the social and information-processing mechanisms introduced above? Chose one of the mechanisms from the list above and explain how you would try to exploit it in manipulative communications.



Literature

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