

9. E.G., VIDEO PROJECTION AND ANALYSIS

Methodological tool Code and Title	MT2.1_3
Competence Code and Title	SCIENCE & TECHNOLOGY
Learning Outcomes covered by the Methodological tool	
Methodological tool Aim	
Hints and tips for the trainer to use the Methodological tool	
Attachment/s to use the Methodological tool	Provided in the activity template below (if applicable).

<i>Methodological Tool Title</i>
<i>MT2.2_4</i>
<i>Video Title (if different from the MT Title)</i>
<i>The science behind decision making</i>
<i>Video Source (e.g., URL)</i>
https://www.youtube.com/watch?v=WiW4IITEfZw
<i>Video Creator (Person/Organisation/Authority)</i>

<i>CSIRO's Data61</i>
<i>Video Duration (if a segment of the video should be projected, please indicate also start and end time)</i>
9:40
<i>Estimated Duration (of the Activity) (broken down into steps, if necessary)</i>
30 Minutes
<i>General Guidelines (for the trainer)</i>
<p>The video "The Science Behind Decision Making" explores the intricate processes that govern our choices, emphasizing the interplay between the prefrontal cortex and the limbic system. The prefrontal cortex is responsible for rational analysis and logical reasoning, while the limbic system drives our emotional responses. This dynamic between logic and emotion significantly influences our decisions. The video also highlights common cognitive biases, such as confirmation bias—the tendency to favor information that aligns with our existing beliefs—and the availability heuristic, where recent or easily recalled information disproportionately impacts our judgments.</p> <p>Additionally, the video examines how external factors like stress and fatigue can impair decision-making abilities. Under stress, the body's fight-or-flight response can overshadow rational thinking, leading to impulsive choices. Similarly, fatigue diminishes cognitive function, making it challenging to evaluate options effectively. By recognizing these influences, individuals can develop strategies to mitigate their effects, such as ensuring adequate rest and managing stress levels, thereby enhancing the quality of their decisions.</p>
<i>Instructions (for the participants)</i>
<i>Please review the following video and answer the following questions.</i>
<i>Debriefing Questions</i>
Which part of the brain is primarily responsible for rational analysis and logical reasoning in decision-making?

- A. Limbic system
- B. Prefrontal cortex
- C. Cerebellum

What is confirmation bias?

- A. The tendency to seek out information that contradicts our existing beliefs
- B. The tendency to favor information that aligns with our existing beliefs
- C. The tendency to ignore all information when making decisions

How does stress typically affect decision-making?

- A. It enhances rational thinking and leads to better choices
- B. It has no significant impact on decision-making
- C. It can overshadow rational thinking, leading to more impulsive choices

What is the availability heuristic?

- A. Making decisions based on the most readily available information
- B. Making decisions based on thorough and comprehensive data analysis
- C. Making decisions by ignoring recent information

Remarks by the Trainer



1. **Answers:**
2. **B. Prefrontal cortex**
3. **B. The tendency to favor information that aligns with our existing beliefs**
4. **C. It can overshadow rational thinking, leading to more impulsive choices**
5. **A. Making decisions based on the most readily available information**

Adaptation of the Methodological Tool for Asynchronous Learning (what to change) (if applicable)

Attachment/s (if applicable)

[Please copy and paste the relevant file/s: documents, worksheets, etc. here, and then delete this.]

