

Judgment Heuristics

- Making judgments
- Judgment Heuristics

Judgment

- Often we must make predictions when making decisions
 - How likely is a particular option to work out?
 - How often does an event occur.



Judgment heuristics

- There are a number of heuristics we use to make judgments
- These heuristics enable use to make good decisions without a lot of effort
 - They can lead to errors
 - They are useful, because they generally lead to the correct answer.

Availability

- Are there more words that start with *t* or more words that start with *k*?
- Are there more words that end with *-ing* or more words that end with *-_n_*?
- Most people pick the first answer in each case
 - More words starting with *t* come to mind than words starting with *k*.
 - More words ending in *-ing* come to mind than ending in *-_n_*.
 - The latter is the superset of the former, though.

Representativeness

- People use similarity of an item to a class as the basis of judgment likelihood.

Linda is 28 years old. She is active in a number of women's rights groups. She volunteers in a shelter for battered women, and often participates in marches for abortion rights.

What is the probability that Linda is a bank teller?

What is the probability that Linda is a bank teller who is also a feminist?

People often suggest the second probability is higher than the first.

The second probability *cannot* be higher than the first.

Gambler's Fallacy

- Representativeness may lead to other errors.
- Which sequence of coin flips seems more random?
 - HTTHTHTH
 - HHHHHHHH
- Both sequences are equally likely.
- Casinos and Roulette
 - Casinos often post the last 20 numbers that occurred.
 - People try to use this information to make their bets
 - They might expect that a number is "due" to come up.
 - There are no patterns in roulette, however.

Anchoring and adjustment

- How do people make numerical predictions?
 - They typically start by anchoring on some salient number and then adjusting that number.

Imagine that you are a reporter for a sports magazine and you have to make a prediction for a player's batting average in his 10th season.

Here are his first 9 seasons averages.

.288 .276 .274 .281 .263 .272 .261 .260 .255

Causal Schemas

- Confidence in a conclusion is higher if you can construct a causal scenario that leads from one to the other.

Which prediction would be more accurate:

Predicting a boy's height from his father's height or predicting a father's height from his son's height?

- Also occurs in jury decision making
 - Judgments of guilt and innocence are often based on juror's ease of constructing a coherent story from the evidence.

Norm Theory

- People may develop a norm (or basis for comparison) from a situation itself.

Two businesspeople, John and Jill are sharing a cab to the airport, where they intend to take separate flights, each of which is scheduled to leave at 11am. Traffic is very heavy, and the cab arrives at 11:30am. Both miss their flights. Jill finds out that her flight left on time. John finds out that his flight left at 11:25am. Which traveler experiences more regret?

Most people say John experiences more regret than Jill

There are more possible worlds that would have enabled John to make his flight than Jill.

Summary

- Many heuristics used to make judgments
- These heuristics are often correlated with causal factors
 - Availability based on frequency of encounter
 - Frequency of encounter is correlated with frequency in the world.
- These heuristics are often correct, but they may lead to errors in some cases.
