Individual Differences in Decision Making

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Our decisions are not always rational
Psychologists divide personality into five broad domains:
- Openness
- Conscientiousness
- Extraversion
- Agreeableness
- Neuroticism

NEO-PIR is the gold standard for measuring the personality parameters but researchers prefer TIPI for experiments.
Objective

• To demonstrate that anchoring is quite prevalent in our decision making process.

• To observe the effect of the personality traits on our decision making process with regards to the response to the anchoring cues

Motivation

• The literature is not unanimous on the extent to which a personality trait affects the individual’s response to anchoring cues.

• Different groups have reported different results.

• Understanding this will shed light our decision making process
Methodology

i) Anchoring Demonstration

Q 1) Is the height of the Eiffel Tower greater than or lesser than 840 feet?
Answer -

Q 2) Estimate the height (in feet) of the Eiffel Tower
Answer -

• 4 different cues were provided to random participants resulting in formation of 4 groups each having a different anchor.

ii) Observing the effect of personality traits on the response to anchoring cues

• Participants were asked to fill the Ten Item Personality Inventory Form post filling the initial part of the form shown on the left.
Results

i) Anchoring Demonstration

Participants depended heavily on the anchor while estimating the height of the Eiffel Tower.
ii) Observing the effect of personality traits on the response to anchoring cues

a) Openness

b) Agreeableness
Conclusions

• The anchoring bias was successfully demonstrated in the experiment. The Pearson Correlation coefficient was 0.744 and this was statistically significant.
• It is also seen that out of the 5 personality traits, Openness to Experience and Agreeableness seemed to affect the response.
• It is observed that individuals scoring high on these 2 traits were least affected by the Anchoring Cue.
• The data set for the second part of the experiment, however, is too small for the result to be significant.

Further Work

• The 2nd objective of the experiment could not be successfully pursued due to the unavailability of a large data set. We should target a data set of around 200 students so as to get statistically significant data.
• We can perform multiple regression analysis, once the data set is large, and observe how much variation in response is governed by the 5 traits as a whole and what is the individual contribution of each trait, if any.
References

• Predictably Irrational by Dan Ariely