

# Revisiting Individual differences in Rationality

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## Individual differences in Rationality

- Rationality (and irrationality) in JDM relative to optimum defined by a normative model
- Systematic differences in deviations from norms present a case for normative models
- However, differences in IQ dissociate with differences in deviations from the norm!
- If not differences in intelligence, then?

### Dispositions!

### Method

- **Sample**
  - University student sample controlled for Fluid Intelligence and Crystallized Intelligence
  - Cognitive Reflection Test (CRT) suggested that more than 90% of sample were System 2 thinkers!
- **Measures**

Rationality: *Adult Decision Making Competence*

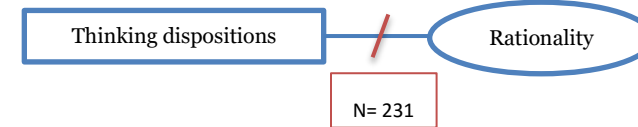
Thinking dispositions: *Need for cognition, Actively Open Minded Thinking*

Emotion regulation: *Emotion Regulation Questionnaire*

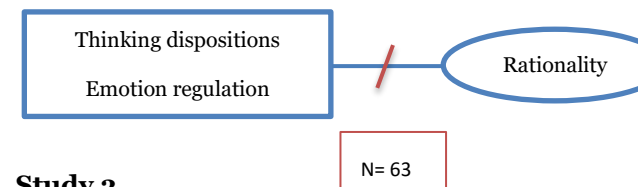
General Personality: *BIG Five Personality*
- **Assumptions**
  - No range restriction as measures of dispositions dissociate with IQ
  - No multicollinearity among dispositional measures

## Null Results

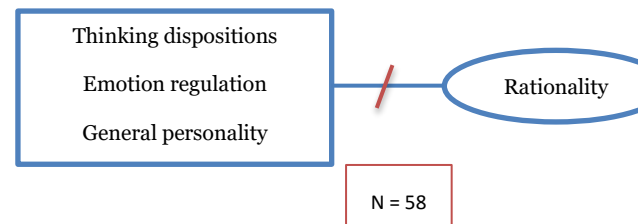
### Study 1



### Study 2



### Study 3



## Paradox

- *Intelligence and dispositions underlie mental states however they are not related to quality of those mental states!*
- Is this a result of how we conceive rationality or intelligence and dispositions?

## Nature of Rationality

- **Rationality 1**  
Thinking in a way that is generally reliable and efficient for achieving one's goals - instrumental
- **Rationality 2**  
Thinking in a way as sanctioned by a normative theory - theoretical

## Instrumental Rationality



## Individual differences in Instrumental Rationality



## References

- Evans, J. St. B. T., & Over, D. E. (1996). *Rationality and reasoning*. Hove, England: Psychology Press.
- Stanovich, K. E. (2012). On the distinction between rationality and intelligence: Implications for understanding individual differences in reasoning. In K. Holyoak & R. Morrison (Eds.) (pp. 343-365), *The Oxford handbook of thinking and reasoning*. New York: Oxford University Press.