

Transformative Experiences, Cognitive Modelling and Affective Forecasting

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Problem

- Imagine your favorite team will win the championship
- Imagine you get diagnosed with a terminal illness
- How happy will you be in both cases?
- Your predictions will likely be imprecise
- **Are predictions more accurate if one has had the respective experience before?**
- L.A. Paul (2014) suggests that decision makers have unique problems with cognitively modelling (mentally simulating) when facing transformative experiences
- An experience is transformative if one has never had this experience before (epistemically transformative) and if it changes one's core preferences (personally transformative) – e.g. becoming a parent for the first time
- This paper empirically challenges Paul's claim

Methods

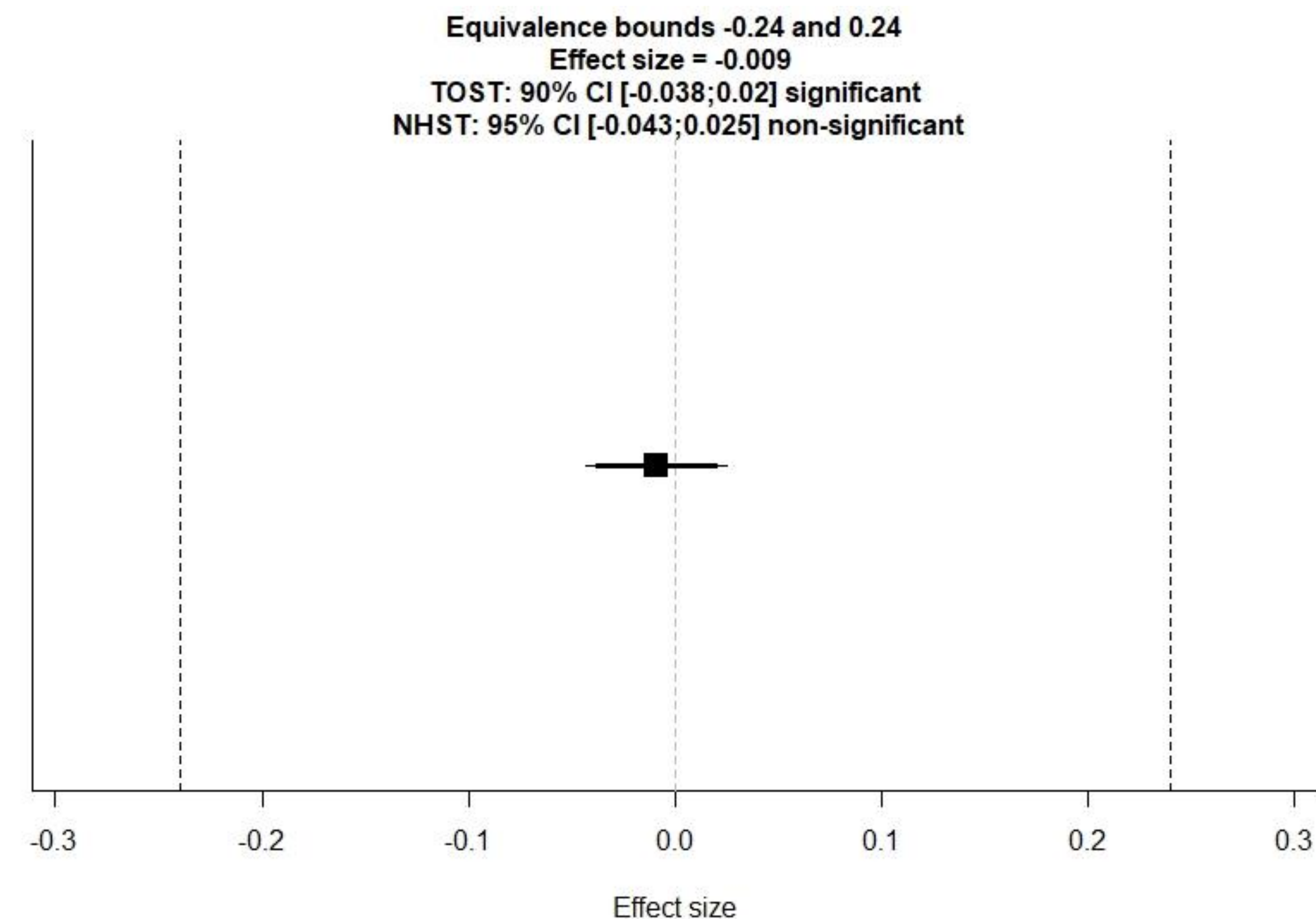
- In this paper the ability to cognitively model is operationalized as affective forecasting
- 84 studies on affective forecasting were categorized into studies on transformative and non-transformative experiences
- Using a two-tailed Welch's t-test, we compared the weighted means of the effect sizes (Hedges's g) in the categories transformative and non-transformative experiences
- An equivalence test - the equivalence test for meta-analyses (TOSTmeta) - was subsequently run (Lakens, 2017)

Analysis

Results were analyzed in light of the following, jointly incompatible, premises:

- (i) Problems with cognitive modelling manifest in the accuracy of predictions in affective forecasting surveys
 - (ii) It is the transformative nature of transformative experiences that creates the problems with cognitive modelling
 - (iii) Transformative and non-transformative experiences do not differ systematically from each other except for the transformative nature
 - (iv) Affective forecasts concerning transformative and non-transformative experiences are equally (in)accurate
- At least one premise has to be rejected

Results



- The weighted average effect sizes of studies on non-transformative experiences ($g=0.696$) and studies on transformative experiences ($g=0.705$) do not significantly differ from each other ($t(2367)=0.696$, $p=0.486$). People overpredict the influence of both transformative and non-transformative experiences on their happiness
- Effect sizes fall within the equivalence bounds of -0.24 and 0.24 and thus are practically equivalent

Conclusion

- **People are equally (in)accurate in cognitively modelling transformative and non-transformative experiences**
- Premise (ii) is to be rejected

Discussion

- Why do people not differ in their ability to cognitively model transformative and non-transformative experiences?
 - a) Transformative and non-transformative decisions both are subject to the same cognitive biases
 - b) The memory one has of non-transformative experiences does not guarantee accurate cognitive modelling as the memory itself will be inaccurate

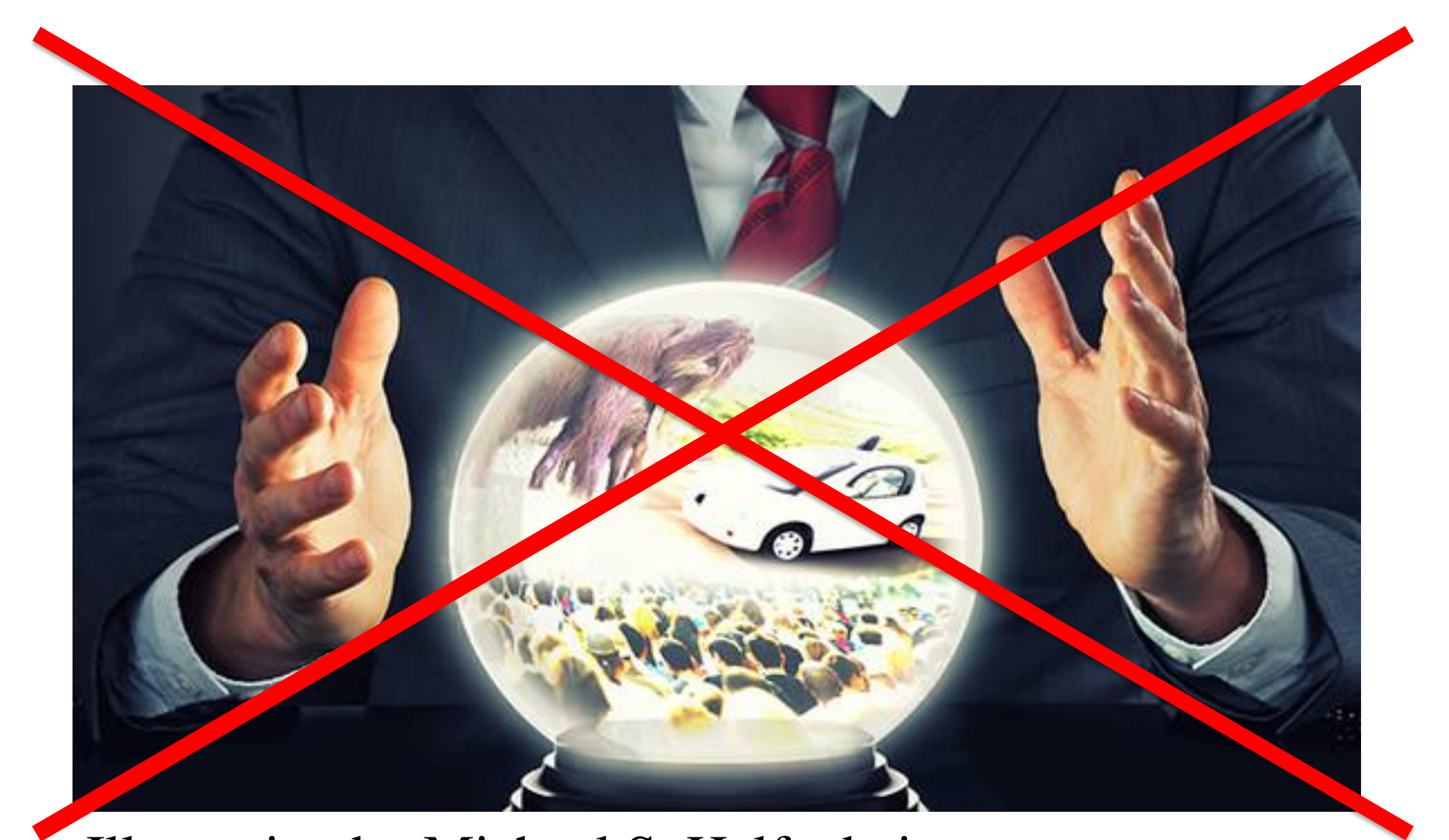


Illustration by Michael S. Helfenbein

References

- Paul, L. A. (2014). Transformative Experience. Oxford: Oxford University Press.
- Lakens, D. (2017). Equivalence Tests: A Practical Primer for t Tests, Correlations, and Meta-Analyses. Social Psychological and Personality Science, 8(4), 355-362. doi:10.1177/1948550617697177.