

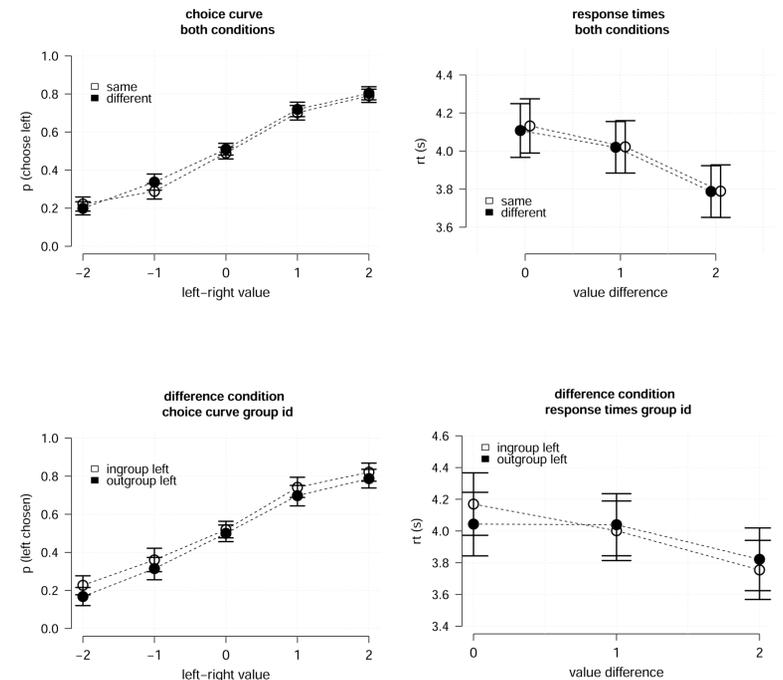
# computational analysis of moral choices between racial in- and outgroup members

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## background & aims

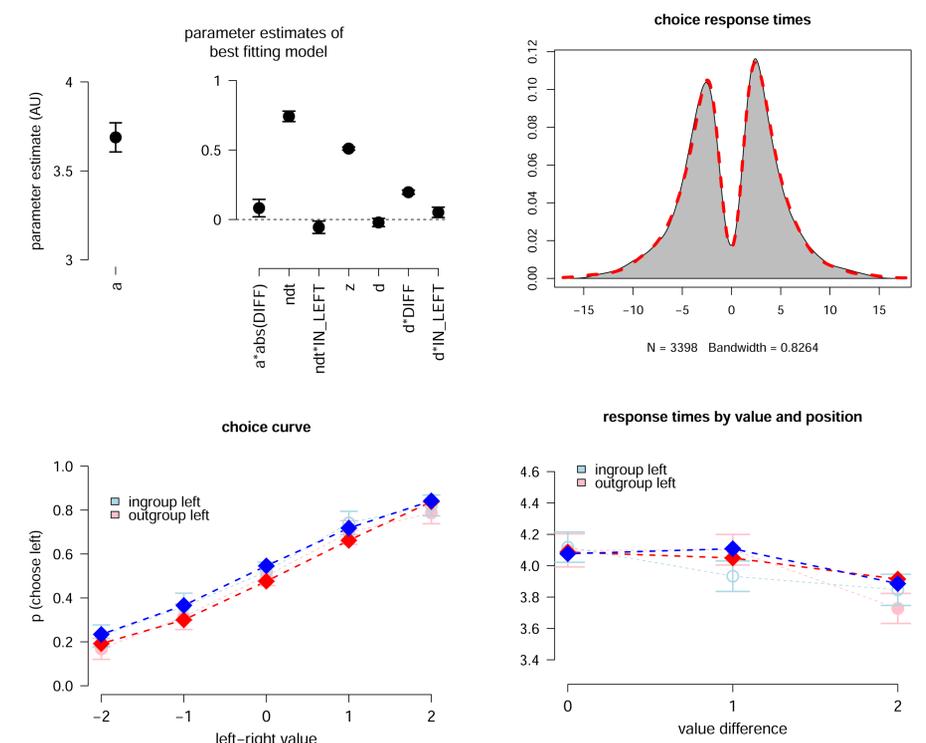
- assigning moral value to an action typically involves evaluating both the action and the agent committing the action
  - agents in the world are categorised by group membership, and evaluation can depend on relative in- and outgroup status
  - evaluations of moral actions (which action is morally worse) exhibit regularities in choice and response times that can be explained using simple computational models of decision-making [1]
- 1) how does the choice process change when choosing who has acted worst depending on agents' relative group belonging?
  - 2) can a drift-diffusion task decomposition capture such changes and explain them?

## results - behaviour



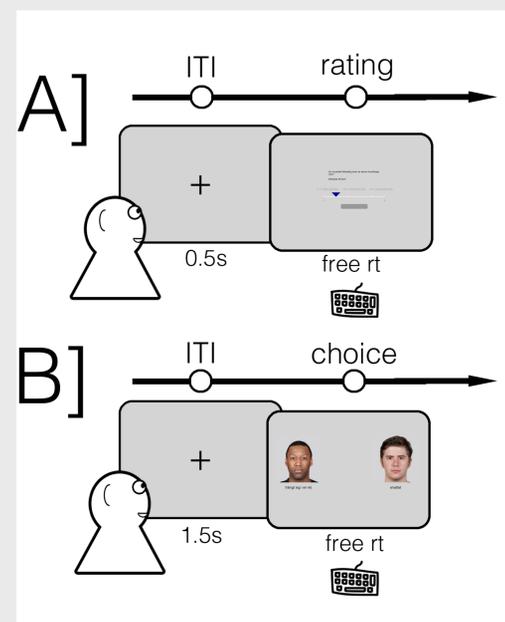
- group id significant main effect on choice (p=.018; mixed-effects logistic regression)

## results - modelling



## method

- value based choice task adapted from neuro-economic literature
- A]
- participants first rate moral transgressions (from [2]) for how morally blameworthy they think they are (scale: 0-8)
- B]
- repeated choices between previously rated transgressions each now paired with face of a moral agent
  - high conflict pairings (0-2 value difference)
  - faces of agents from racial in and outgroup members
  - choose who has performed the morally worst action
  - same condition: agents belong to same group
  - different condition: agents belong to different groups
  - at end of experiment participants asked which group they think others would identify them with



References:  
[1] Pärnamets, P., Balkenius, C., & Richardson, D.C. (2014). *Proc. Cog. Sci. Soc.*  
[2] Van Bavel, J.J., Packer, D.J., Haas, I.J., & Cunningham, W.A. (2012). *PLoS ONE*

## conclusions

- participants favour blaming ingroup agents for high-conflict choice situations
- this is captured:
  - by decreased non-decision times
  - by biased rates of evidence accumulation toward ingroup agents
  - by evidence bounds inversely proportional to value differences
- social identities of agents influence moral evaluation even when no other information about agents is provided