

computational mechanisms underlying moral choices' adjustment to descriptive norms

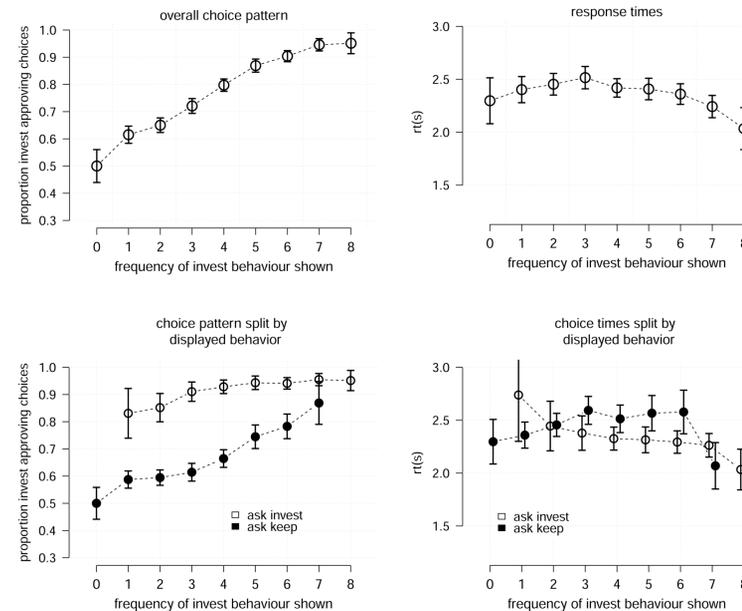
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background & aims

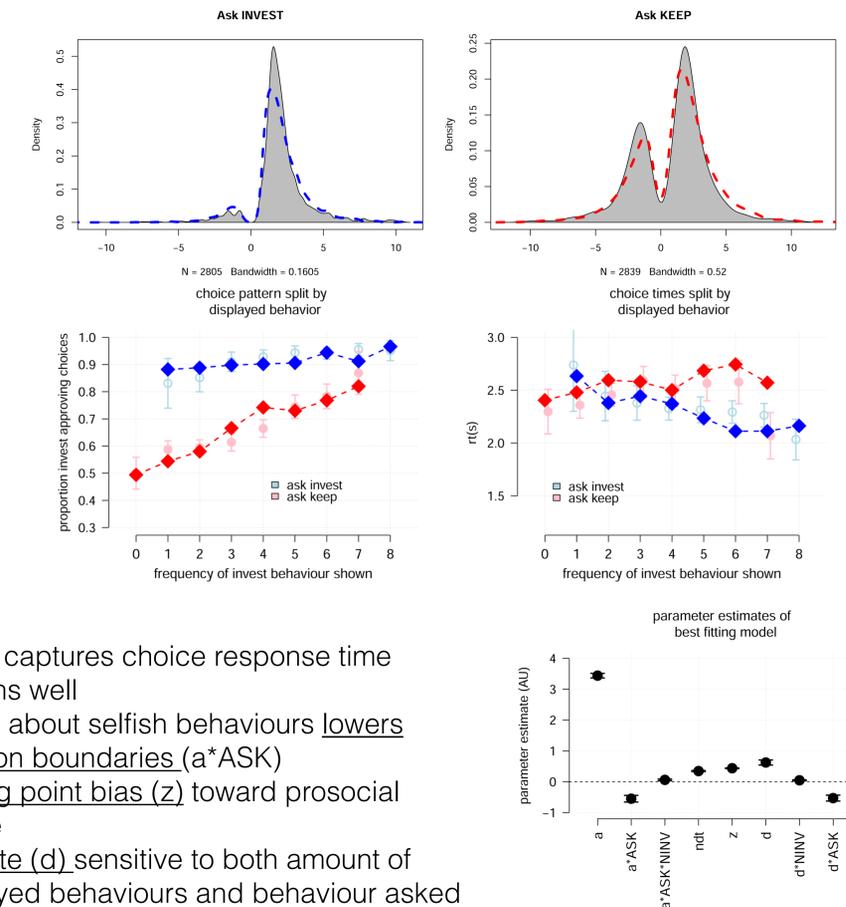
- human moral behaviour follows not only moral preferences and relevant prescriptive norms but are also determined by social context and the prevalent descriptive norms [1]
 - recent findings have shown that participants moral ratings of selfish/pro-social behaviours in a public goods game are affected by the frequency of that behavior in the player group [2]
 - using computational modelling it is possible to decompose task performance onto latent variables mapping to psychological constructs
 - the drift-diffusion model is a widely applied framework for understanding decisions, which has recently been applied to moral choices [3]
- 1) can previous findings on ratings be extended to binary moral judgments?
 - 2) how does the frequency effect translate into computations in a DDM framework?

results - behaviour



- sensitivity to frequency of prosocial behaviour
- framing effect for what behaviour is being asked about: choices when asked about selfish behaviours being more responsive to descriptive norms

results - modelling



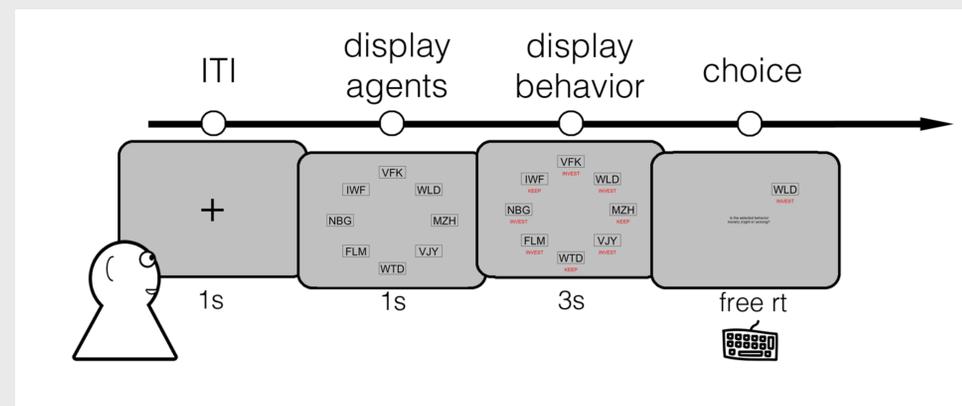
- model captures choice response time patterns well
- asking about selfish behaviours lowers decision boundaries (a^*ASK)
- starting point bias (z) toward prosocial choice
- drift rate (d) sensitive to both amount of displayed behaviours and behaviour asked

method

98 participants recruited through Mturk

procedure

- participants are thoroughly acquainted with the procedure of public goods games (PGG).
- on each trial shown eight agents, identified with non-recurring letter combinations, who are said to be participants from earlier one-shot PGG experiments.
- under each participant their choice in a PGG is displayed: either keep or invest (selfish, prosocial respectively).
- one agent is selected and the participant is asked if she considers the selected behaviour to be morally right or wrong.
- 60 trials per participant



References:

- [1] Cialdini, R.B. et al. (2006) *Soc. Infl.*
- [2] Lindström, B., Jangard, S., Selbing, I. & Olsson, A. A (under review)
- [3] Pärnamets, P., Balkenius, C., & Richardson, D.C. (2014) *Proc. Cog. Sci. Soc.*

conclusions

- moral judgments about pro/antisocial behaviour is contextually sensitive to descriptive norms
- this sensitivity is a complex response captured by drift diffusion model
- selfish approving choices more error prone due to lowered boundaries and changed evidence sensitivity