A Bayesian Multilevel Analysis of Belief Alignment Effect Predicting Human Moral Intuitions of Artificial Intelligence Judgements

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Introduction

Political Identity
Partisanship, Polarisation, Motivated Info Processing

Moral Judgements
Intuitions, Heuristics, Biases

HCI and Perceptions of AI
Inconsistent Evidence

Do people view AI as a neutral external viewpoint?

Research Question

Do people hold strong moral intuitions about AI generally, or do their judgements about AI vary systematically with their underlying politico-moral intuitions regarding the domain where the AI is deployed?

Hypotheses

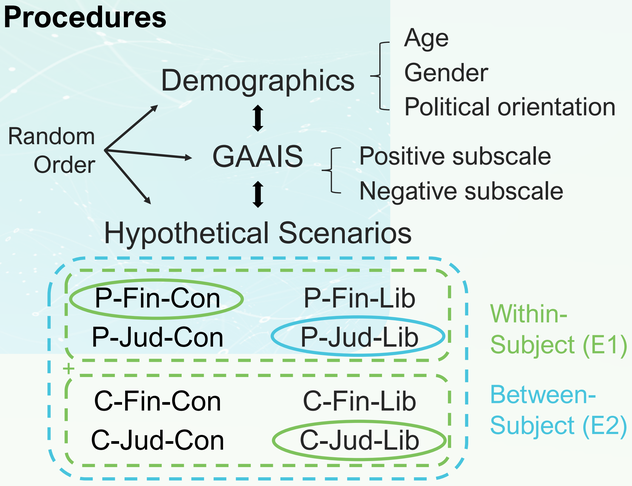
1. Belief alignment effects: when AI verdict aligns with politico-moral intuitions, participants will be more willing to act on its verdicts, trust it more, and perceive it as fairer;
2. Belief alignment effects will be stronger than/survive controlling for general AI attitudes;
3. Conservative/right-wing participants will show a stronger belief alignment effect than liberal/left-wing participants.

Methods

Participants

Native English-speaking adults in the UK
Recruited on Prolific Academic
E1: 202 (M_{age}= 36.7 yrs, SD_{age}= 13.36 yrs)
E2: 302 (M_{age}= 37.66 yrs, SD_{age}= 14.09 yrs)

Procedures



Key variables

- Main Predictors: Participant political orientation; Moral intuitive context
- Covariates: General attitudes towards AI; Age (nuisance)
- Outcome Variables: Willingness to act on AI verdict; Trust in AI; Perceived fairness of AI

Results & Discussion

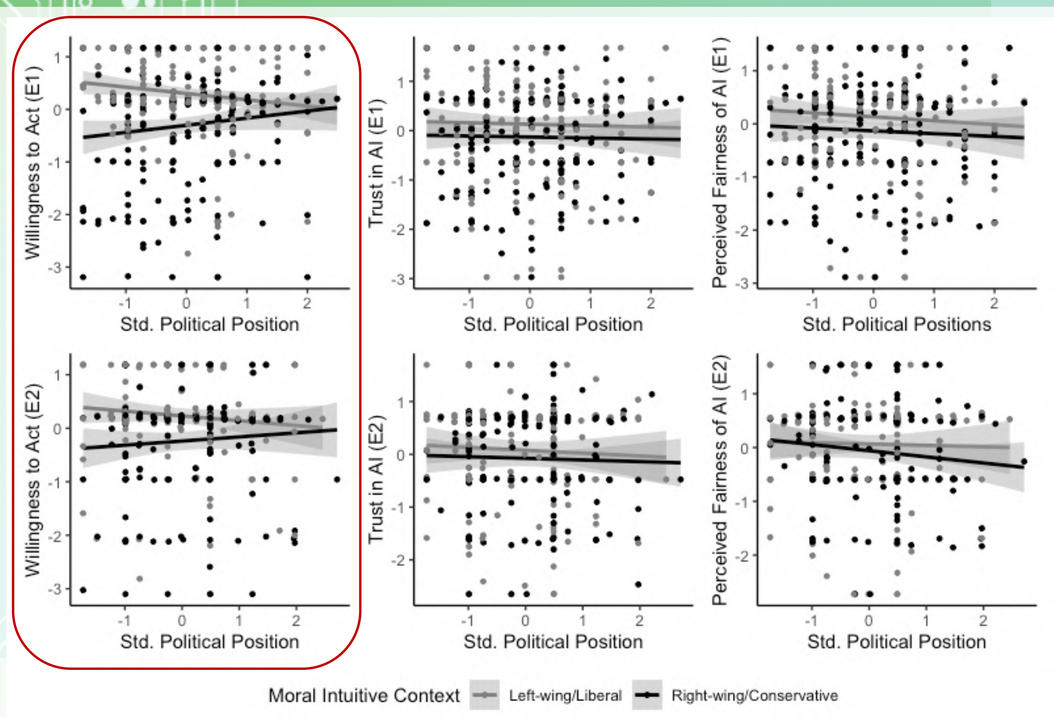


Figure 1: Belief alignment effect in E1 & E2 for Willingness to Act based on AI verdicts, but not for Trust in or Perceived Fairness of AI. Higher standardised scores on political position correspond to increasing conservatism.

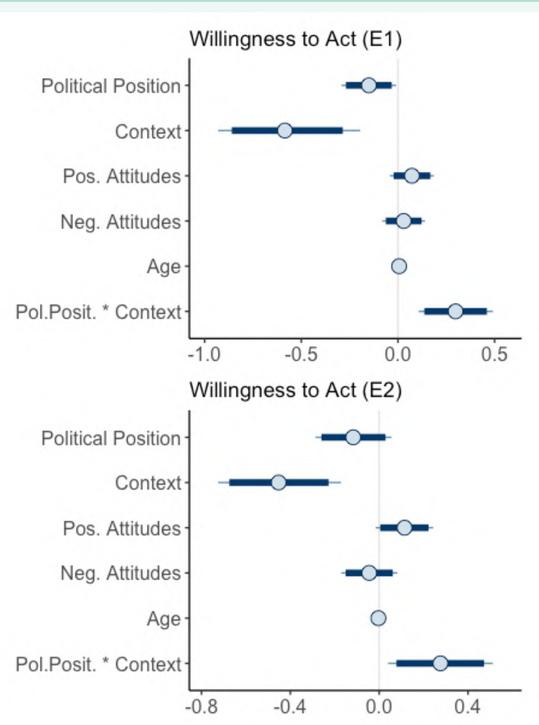


Figure 2: Posterior distributions with medians and 95% CIs for Willingness to Act based on AI verdicts in E1 & E2.

Judgements towards AI's detection of potential moral transgression seem to be at least partially driven by a compatibility between underlying values of AI verdicts and participants' own politico-moral beliefs, suggesting the malleability in framing the context of AI usage. This belief compatibility, however, did not increase trust or fairness perception of AI.

But… Measurement/sampling? Ideological coherence? Scenario complexity? Relevance of AI?