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Belief Bias: The Role of Analytic Thinking and Epistemic Values

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INTRODUCTION

- We often believe stupid things¹.
- Can thinking better and being motivated to form beliefs based on logic and evidence improve our reasoning when information is inconsistent with our prior beliefs?²
- Can we reach valid conclusions even if our prior beliefs are politically motivated?³

Hypothesis

- Analytic thinking should predict less belief bias.
- Valuing epistemic rationality should predict **less** belief bias.
- Valuing epistemic rationality should moderate the relationship between analytic thinking and belief bias.

METHODOLOGY

Epistemic Values = Importance of Rationality Scale (IRS⁴) **Analytic Thinking (AT)** = CRT1-2⁵⁶ **Syllogism Task** –Belief Bias

Prior Beliefs = Political Ideology (Study 2) = Participant's agreement with the items (Study 3)

DV: Assuming the two premises are true, does the conclusion necessarily follow from those premises? YES/NO

Study 1



Premise 1. All flowers need light,

Premise 2. Roses need light,

Conclusion. Therefore, roses are flowers.

Study 2-3



Premise 1. All heterosexuals can have healthy marriages. Premise 2. Homosexuals are not heterosexuals. Conclusion. Homosexuals cannot have healthy marriages.

PRE-REGISTRATIONS



RESULTS

Study 2

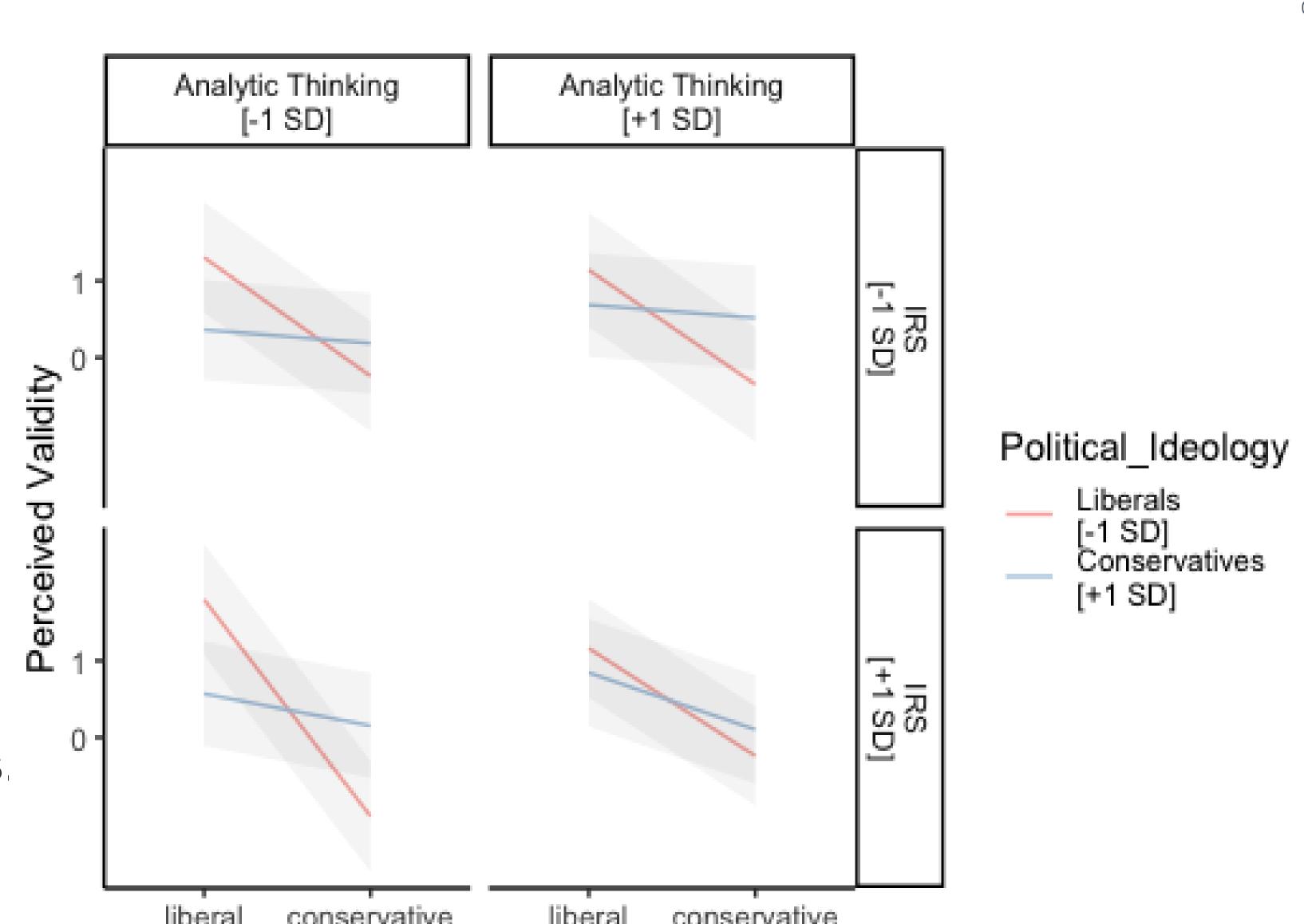


- People exhibit belief bias, p < .0001
- Neither AT nor IRS predicts less belief bias.

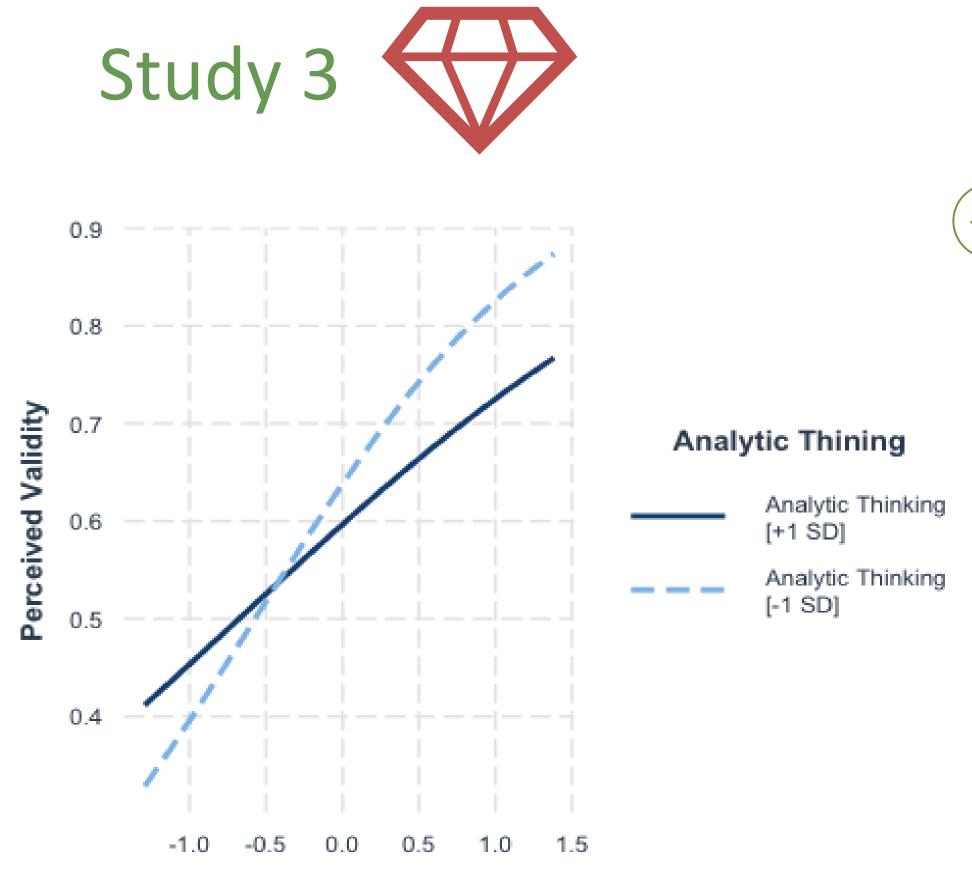
Study 2



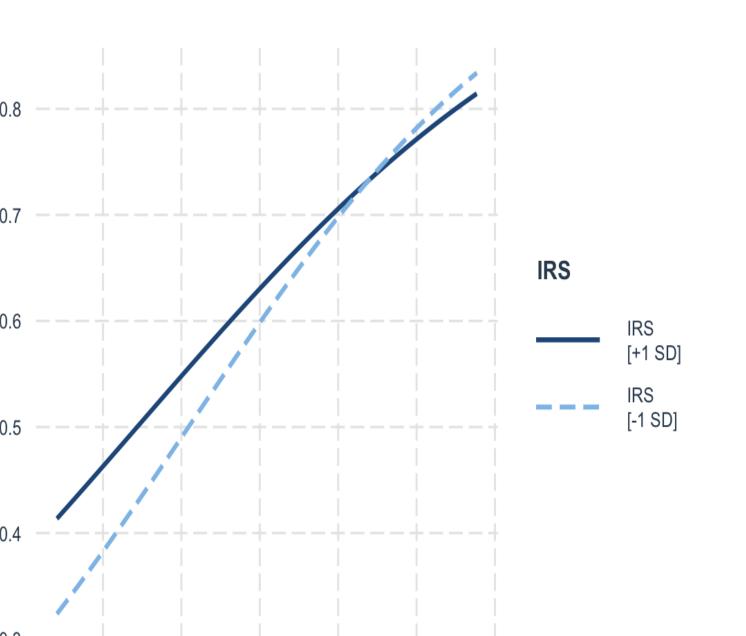
- Political belief bias among liberals, p < .0001.
- Political belief bias was less pronounced among high analytic thinkers (+1 AT), p = .001.
- Valuing rationality *moderates* the relationship between analytic thinking and political belief bias, p = .003.



Conclusion

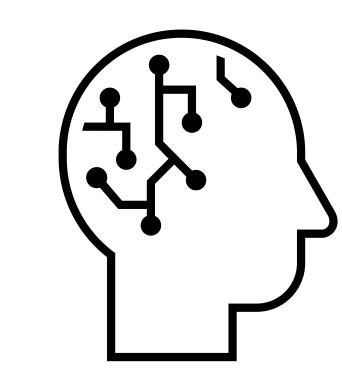


Analytic thinking is associated with less belief bias, p<.001



Valuing rationality is associated with less belief bias, p<.001





- Analytic thinking and valuing rationality reduce belief bias, especially for politically relevant content.
- Promoting these skills may help reduce biased reasoning.