

# Intergroup Cognitive Biases Predispose Opinion Polarization

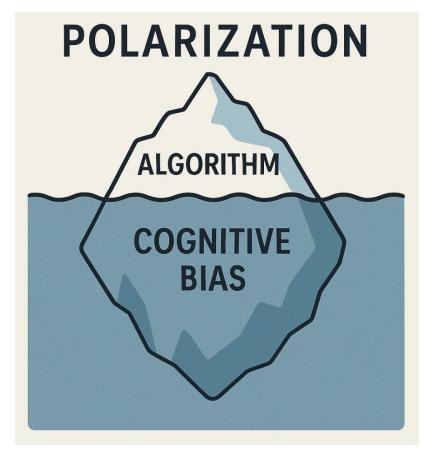
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#### **SUMMARY**

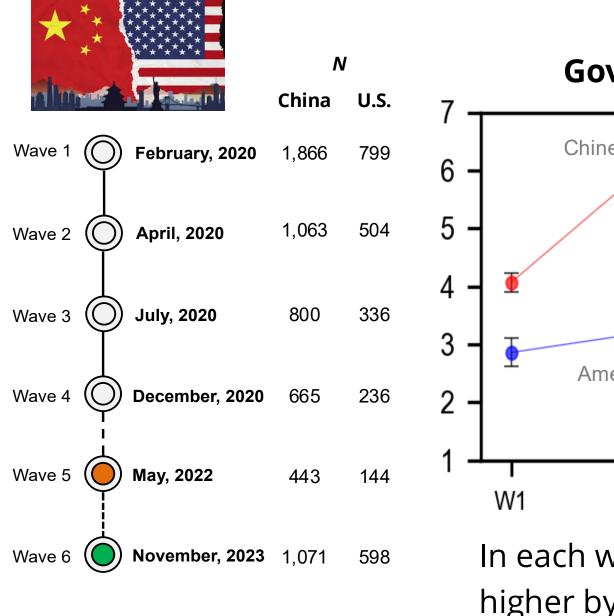


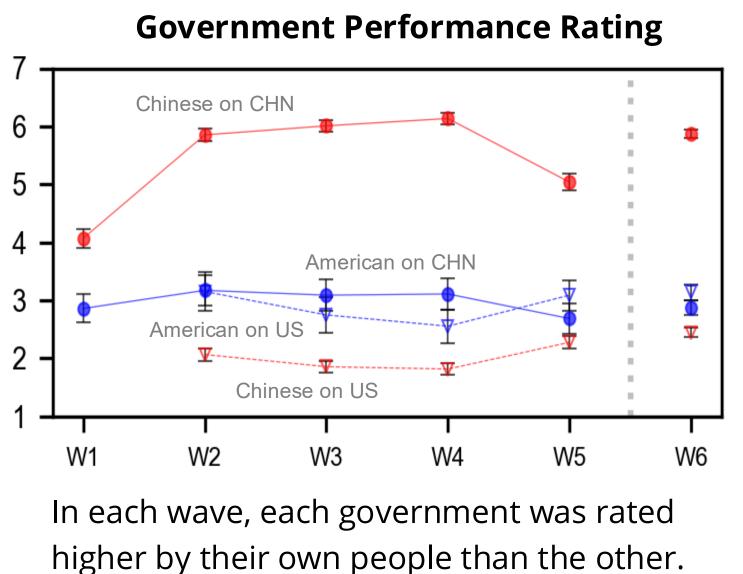
Although recommender algorithms are often blamed for opinion polarization, our findings suggest that humans' intergroup cognitive biases might actually be the main culprit.

Through three studies, we show that :

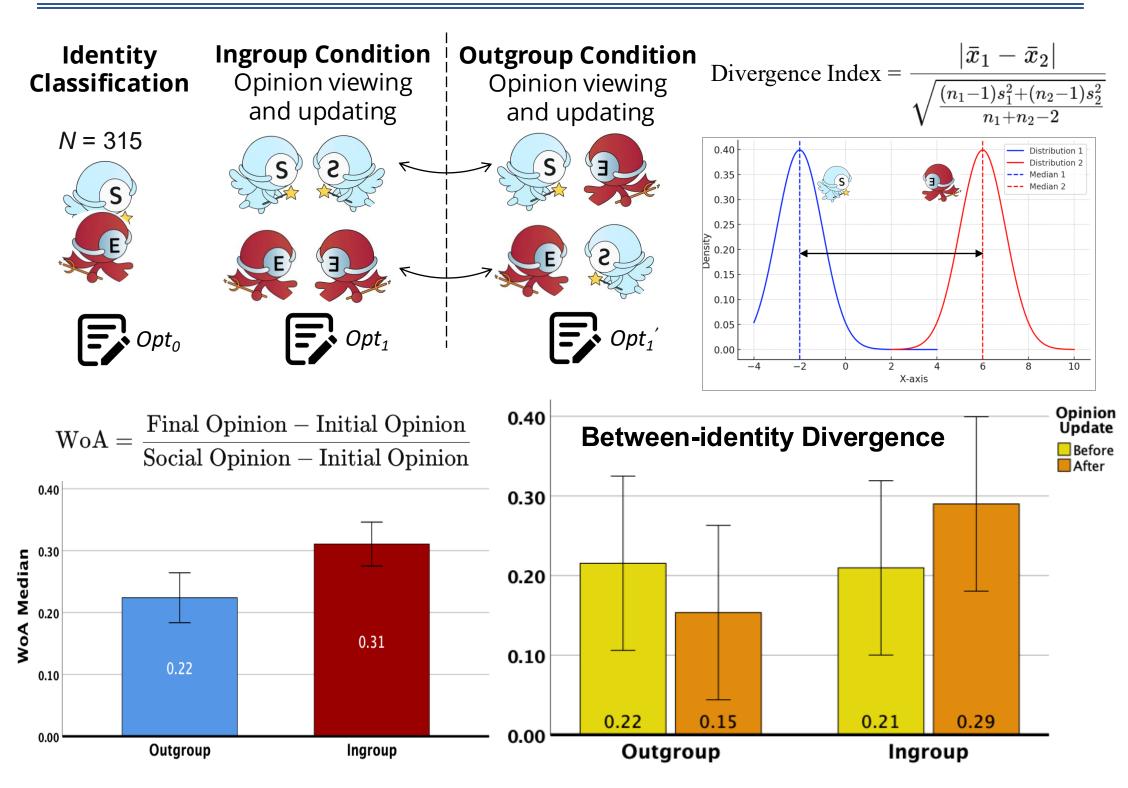
- Intergroup bias can manifest itself in **biased attention to** and **biased assimilation of** ingroup opinions.
- Micro-level bias-driven reinforcement of shared views cumulatively produces macro-level opinion polarization.

## **STUDY 1: A Cross-cultural Longitudinal Study**



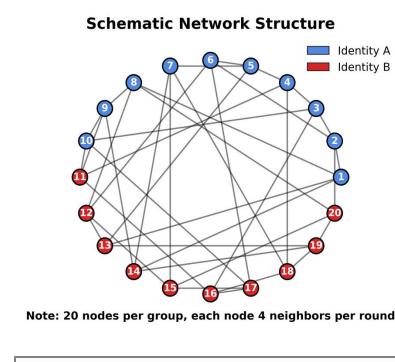


## **STUDY 2: A Social Opinion Experiment**



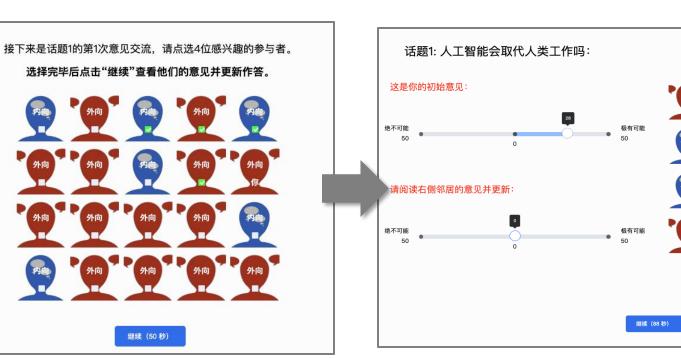
Biased assimilation of ingroup opinions resulted in increased intergroup divergence.

## **STUDY 3: A Social Network Experiment**

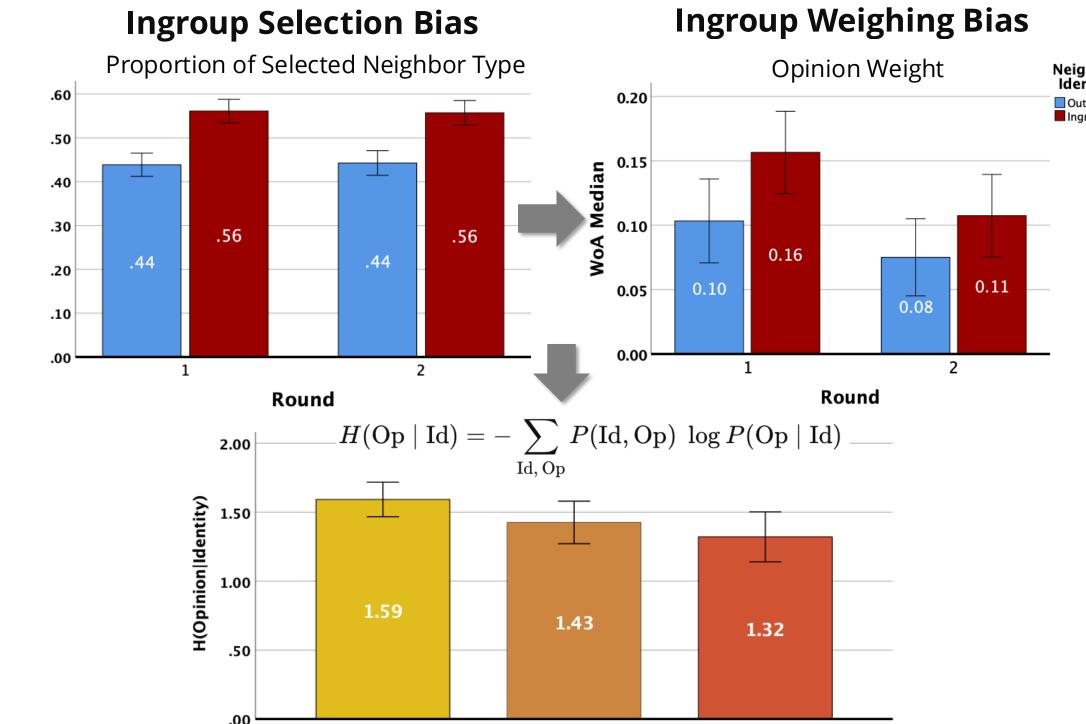


Network with ≈ 20 participants per group, six groups in total.

Each participant finished two rounds of neighbor choice and opinion updating on 12 topics.

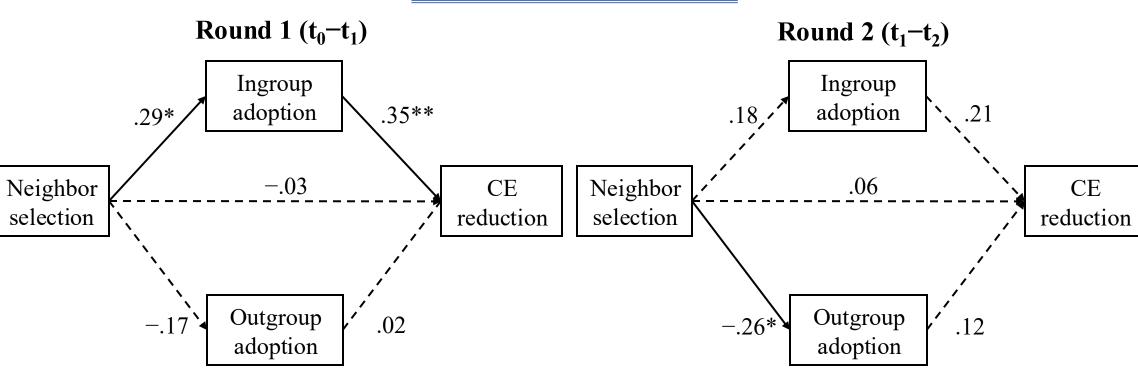


#### Click to choose neighbors Opinion viewing and updating

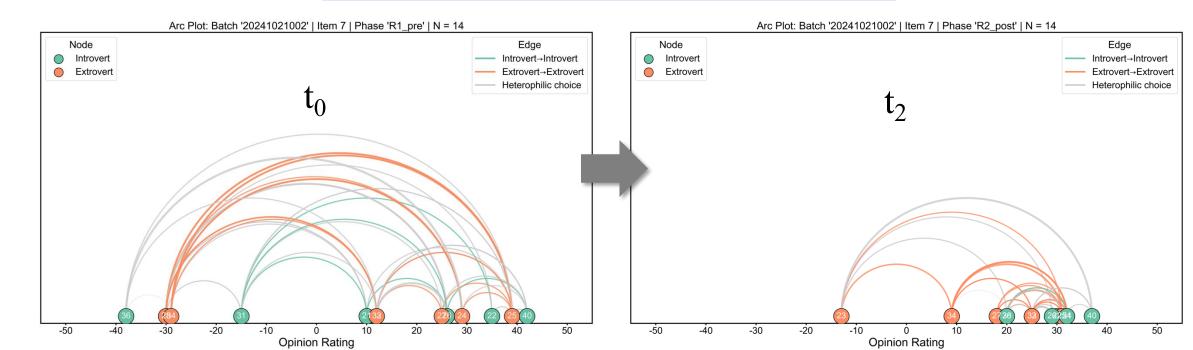


Decreasing conditional entropy *H* (Opinion | Identity) suggests stronger coupling between identity and opinion.

#### **Mediation Analyses**



#### **Example: Legalization of Euthanasia**



Biased selection and assimilation of ingroup opinions led to closer alignment of identity and opinion.

Intergroup bias was mutual and persistent.