

people reject unfairness but normalize inequality

evidence from a large-scale experiment

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September 3, 2025

the puzzle

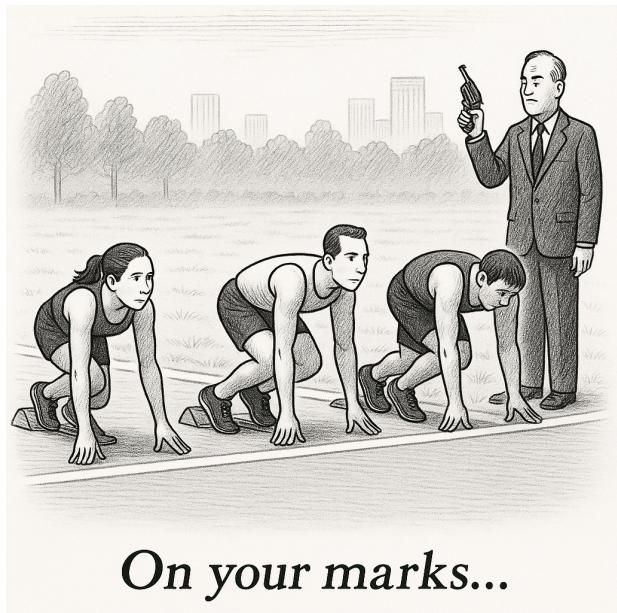
the puzzle

- A large body of research shows people are deeply averse to unfairness and resistant to large economic gaps.
- Yet inequality keeps rising worldwide – often tolerated, rarely contested.

Why do people end up accepting the very inequalities they claim to oppose?

prevailing account

- inequality is tolerated when it originates from a fair process (Starman 2017, *NHB*)



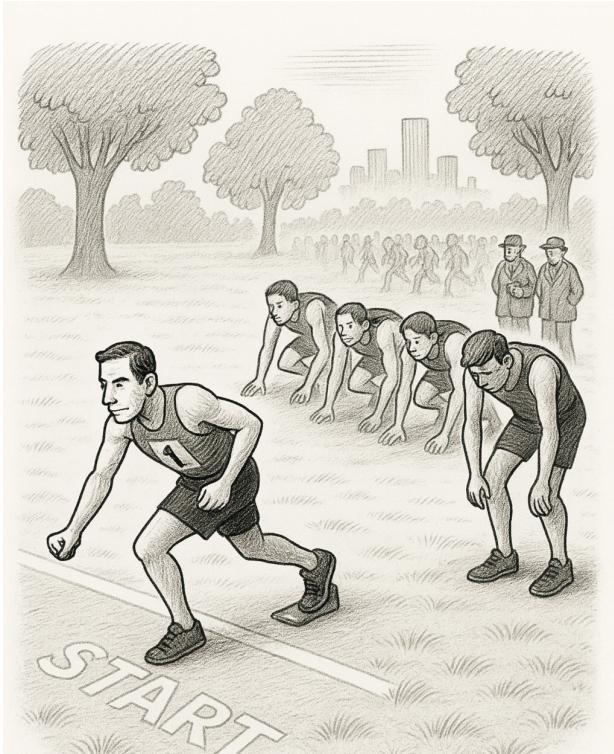
equal opportunity



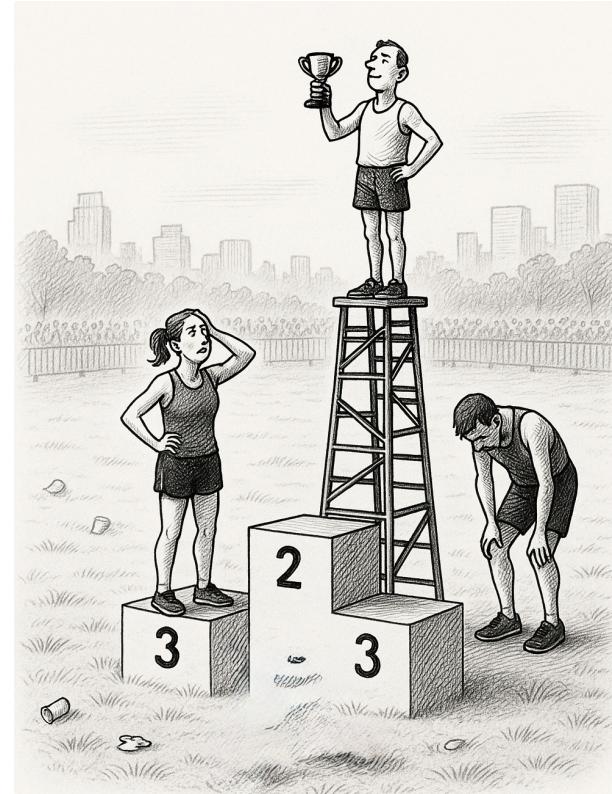
unequal outcomes

prevailing account

- inequality is tolerated when it originates from a fair process (Starman 2017, *NHB*)



unequal opportunity



unequal outcomes

- yet, opportunities are not equally distributed so, **why is still inequality tolerated?**

prevailing account

- limited awareness of systemic inequities
 - misinformation (McCall 2017, *PNAS*; Sands 2019, *Nature*)
 - biased belief systems reinforced by inequality itself—for example, through segregation (Newman 2015, *AJPS*; Mijs 2021, *SR*)

core assumption: people would reject inequality if they were fully aware of unfair origins.

a preview of what we find

evidence points to a **dual-track process of fairness evaluation**:

- People rely on *moral judgment* to assess procedural fairness.
- Their standards for acceptable disparities are *anchored in the level of inequality they experience*.

study design

challenges

- unfeasible to manipulate societal inequality in observational data.
- experiments often manipulate arbitrary inequalities, triggering perceptions of unfairness (Starman 2017, *NHB*).
- ➔ we need *controlled* experiment that *resembles a real social environment*:
 - individual are endowed with (un)equal opportunity
 - outcomes plausibly depend on individual choice
 - (!) yet, the actual role of skill or effort must be controlled.



experiment overview

- pre-registered, interactive online card game ($N = 3,335$)
- conducted on cloudresearch connect (US sample)
- fully crossed $2 \times 2 \times 2$ design:
 - *opportunity inequality*: equal vs. opportunities [details](#)
 - *outcome inequality*: low vs. high payoff gap [identification](#)
 - *social position*: winner vs. loser
- several game features suggest skill matters, but outcomes are driven almost entirely by chance or rules [tested](#)

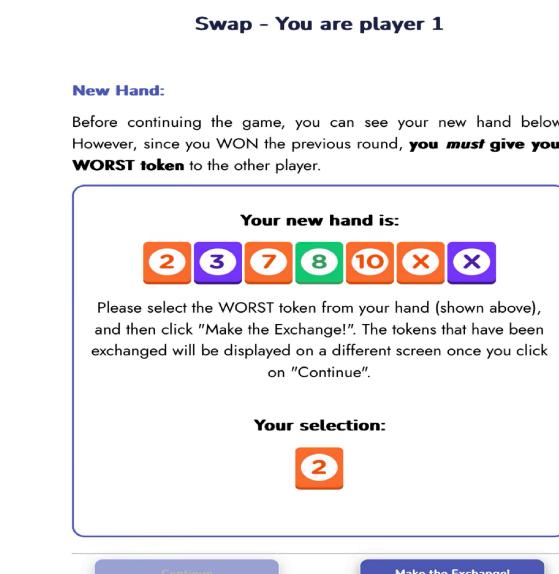
sample

scheme	inequality of opportunity	inequality of outcomes	social position	payment	n
1	equal	high (\$5 gap)	loser	\$5	210
1	equal	high (\$5 gap)	winner	\$10	199
2	equal	high (\$5 gap)	loser	\$2.5	258
2	equal	high (\$5 gap)	winner	\$7.5	200
3	unequal	high (\$5 gap)	loser	\$5	208
3	unequal	high (\$5 gap)	winner	\$10	203
4	unequal	high (\$5 gap)	loser	\$2.5	205
4	unequal	high (\$5 gap)	winner	\$7.5	202
5	equal	low (\$2.5 gap)	loser	\$5	222
5	equal	low (\$2.5 gap)	winner	\$7.5	210
6	equal	low (\$2.5 gap)	loser	\$7.5	198
6	equal	low (\$2.5 gap)	winner	\$10	200
7	unequal	low (\$2.5 gap)	loser	\$5	214
7	unequal	low (\$2.5 gap)	winner	\$7.5	200
8	unequal	low (\$2.5 gap)	loser	\$7.5	203
8	unequal	low (\$2.5 gap)	winner	\$10	203

experimental platform

two-player, 5-round game

- each round, players receive *7 random tokens*
- *exchange rules* before each round:
 - random exchange = equal opportunity
 - regressive exchange = unequal opportunity
- overall winner/loser = most *rounds won*
- payoffs: *payoff gaps* of \$2.5, (low inequality) or \$5 (high inequality).



dependent variables

- Fairness (1–7 slider)

1 = completely unfair, 7 = completely fair

- attributions: ,ost/lear important factor

- *luck, talent, rules*

- Fair Distribution

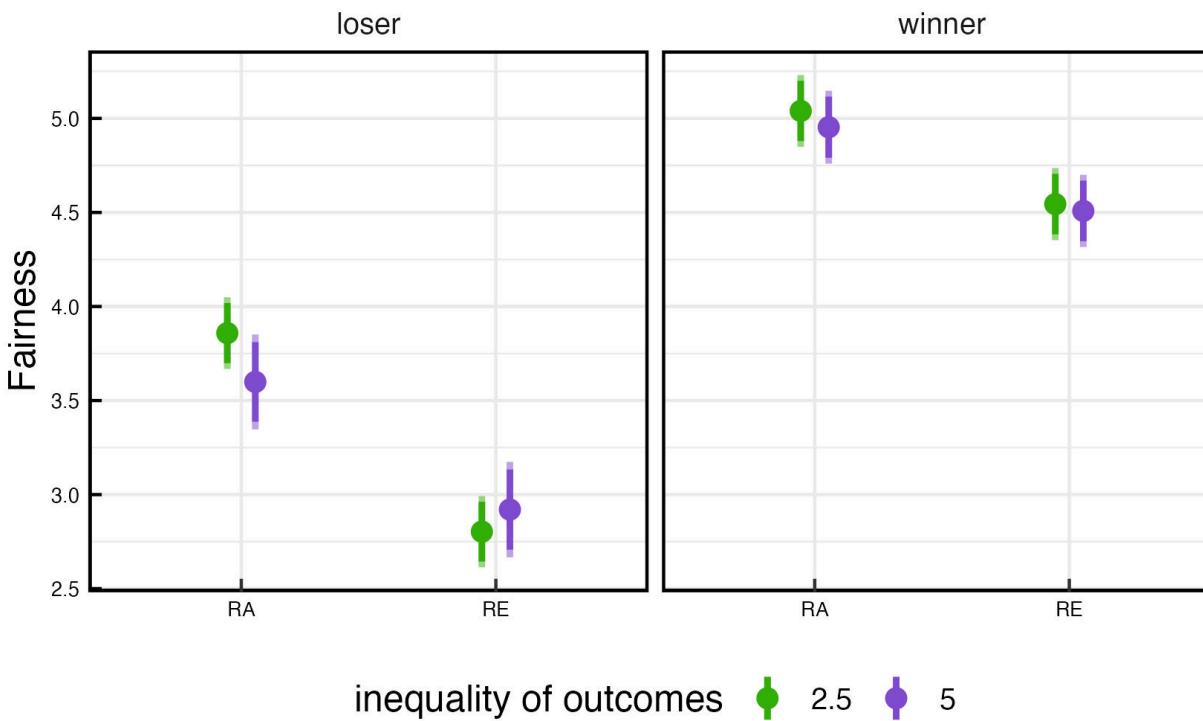
“Keeping the total reward constant, what would be a fair distribution between winner and loser?”

Slider initialized at actual distribution

- Rank Preservation: did participants preserve winner > loser?
 - Fair Inequality: winner’s share in proposed distribution.
 - Jasso’s-like Justice: log ratio of observed vs. fair inequality.

findings

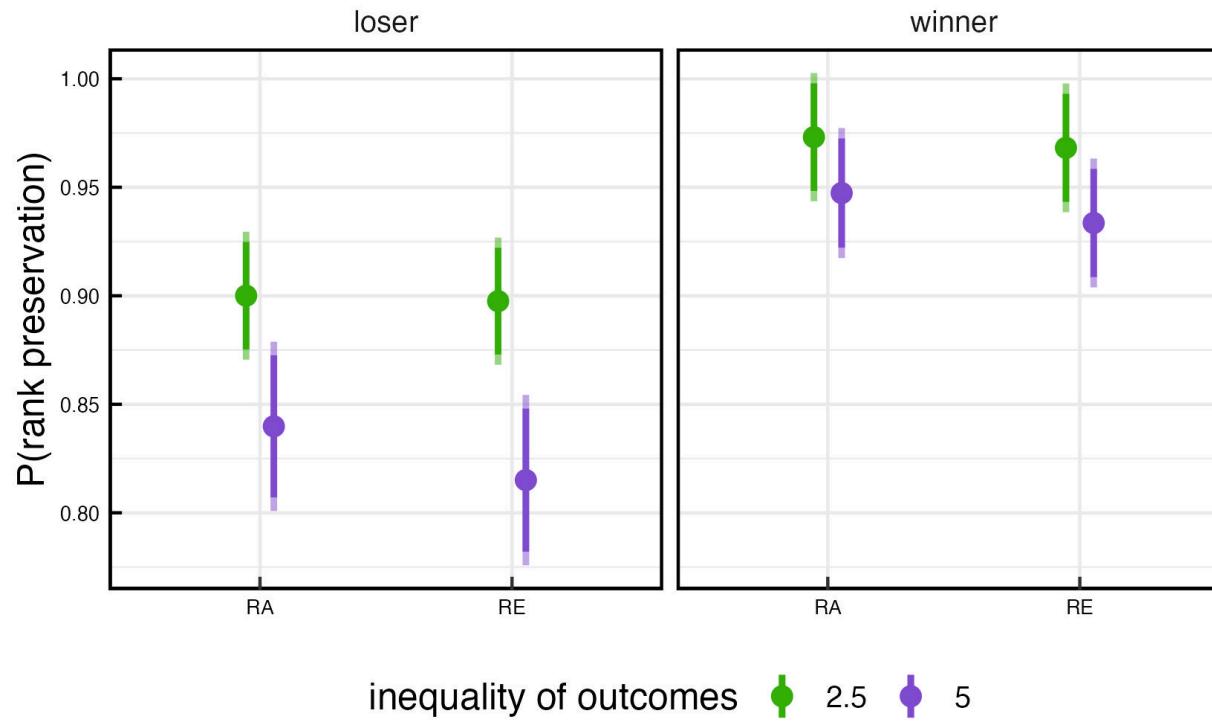
rejection of unfairness



- *unequal opportunities produce a substantial drop in perceived fairness*
- *the size of the outcome gap has no detectable effect*
- *across all conditions, winners judge outcomes as fairer than losers*

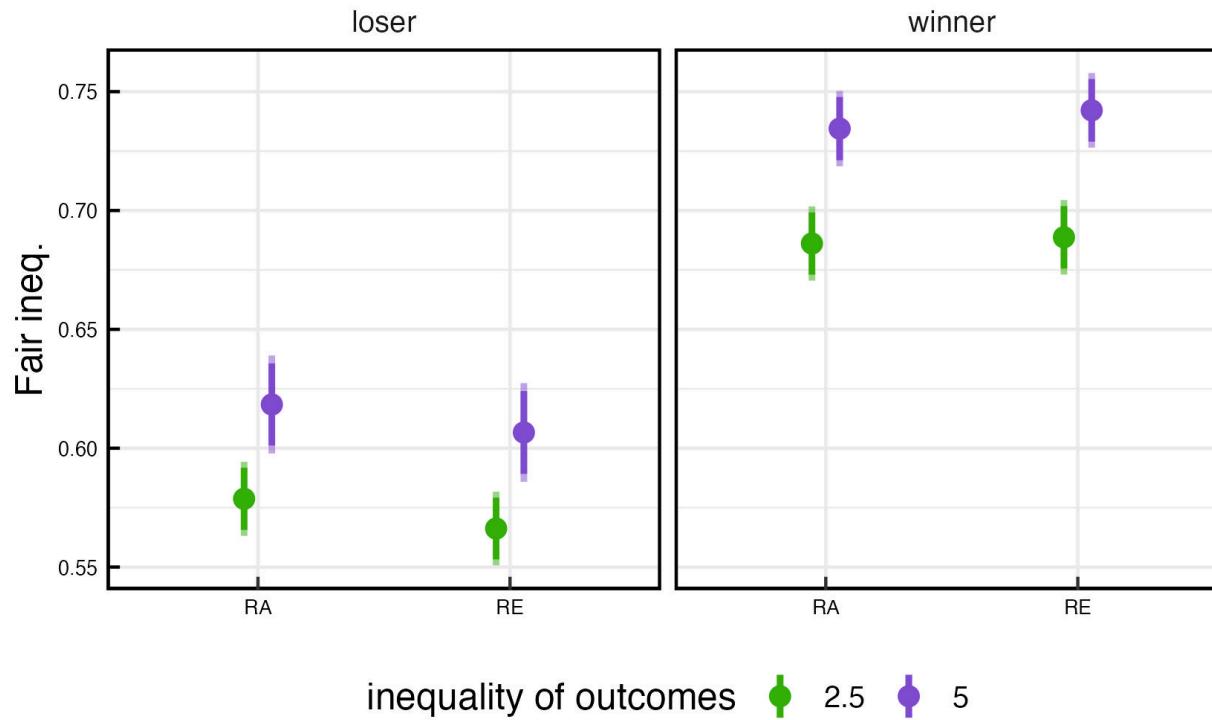
normalization of inequality

rank preservation



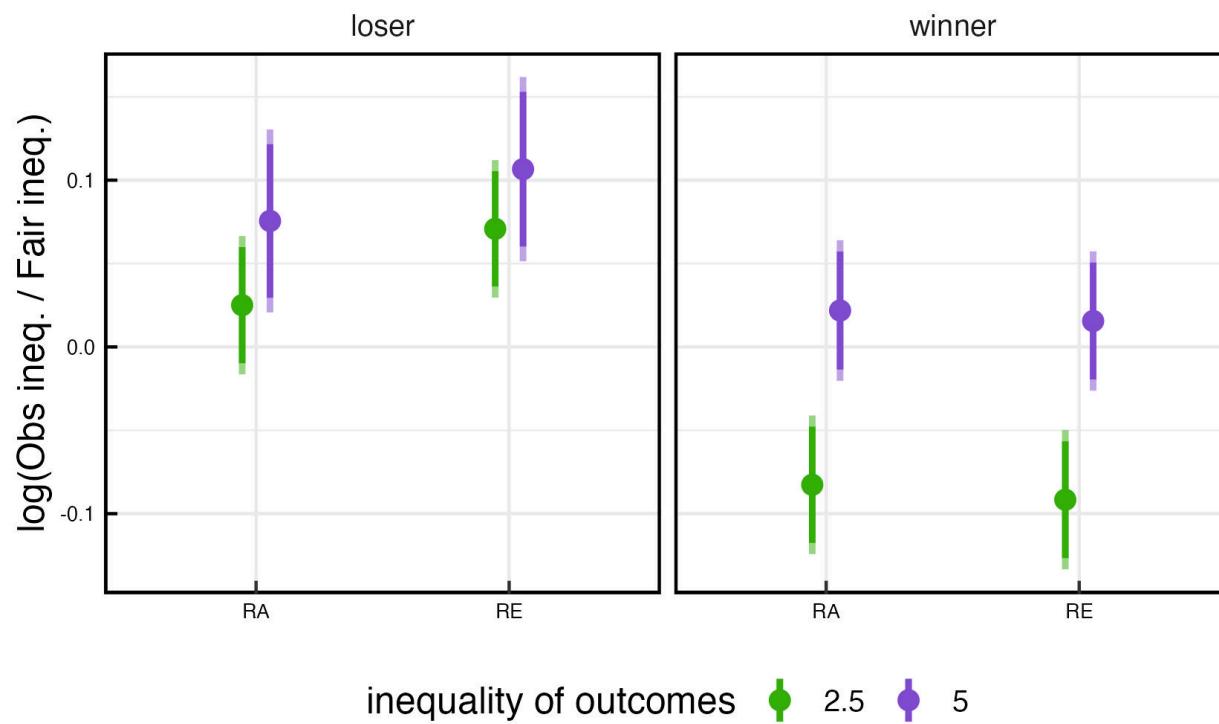
- *across all conditions, a clear majority favor unequal reward distributions that preserve the original winner–loser ranking*

fair inequality



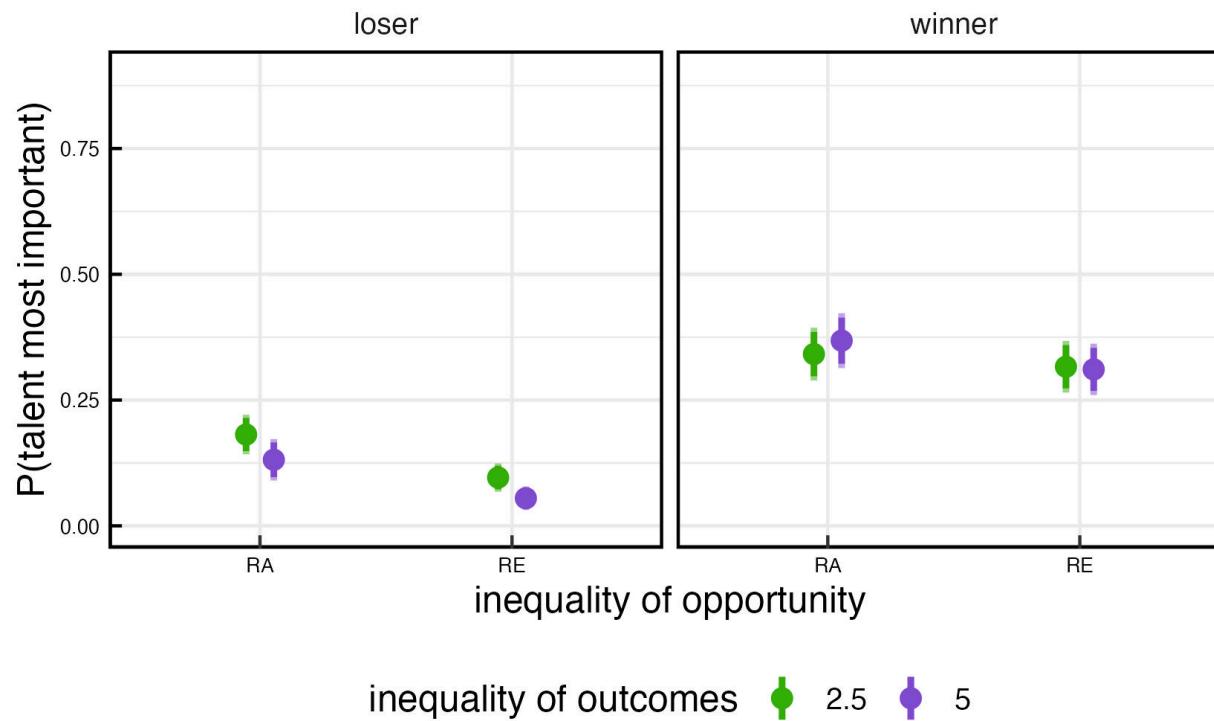
- *perceived “fair” inequality mirrors participants’ exposure*
- *those in high-inequality conditions endorse larger gaps than those in low-inequality conditions*
- *holds regardless of opportunity distribution or personal outcome*
- *winners see more inequality as fair*

experienced vs fair inequality (Jasso's justice)



- losers saw actual inequality as slightly greater than what they considered fair
- winner in high-inequality viewed observed gaps as fair
- winners in low-inequality felt underpaid and favored larger winner shares

causes of inequality



- winners credited **talent** — even when game was rigged.
- losers, especially under **high inequality**, less likely to credit talent.
- RA more often cited **luck**; RE more often cited **rules**.

other findings

- *selective effects on broader societal beliefs (GSS questions, importance of family wealth and talent to get ahead) [details](#)*
- *no detectable effect on redistributive behavior (dictator game and ultimatum game) [details](#).*

main takeaway

Why do people accept (unfair) outcome inequalities if they reject inequality of opportunity ?

- No need to assume limited awareness of unfairness
- We document a dual-track process where:
 - *Rejection of procedural unfairness:* Unequal opportunities are seen as less fair than equal opportunity, but the size of outcome inequality doesn't affect fairness evaluations.
 - *Normalization of inequality:* People anchor their evaluation of outcome inequality in what they experience; opportunity distribution doesn't affect tolerance for disparities.
 - *Personal consequences amplify effects:* Winners see more fairness, accept larger gaps, and credit talent—regardless of rules or results.

discussion

- provides microfoundations for the macro puzzle of persistent inequality.
- unifies cognition, fairness judgments, and stability of unequal arrangements.

so ...



Why people prefer unequal societies

Christina Starmans*, Mark Sheskin and Paul Bloom

There is immense concern about economic inequality, both among the scholarly community and in the general public, and many insist that equality is an important social goal. However, when people are asked about the ideal distribution of wealth in their country, they actually prefer unequal societies. We suggest that these two phenomena can be reconciled by noticing that, despite appearances to the contrary, there is no evidence that people are bothered by economic inequality itself. Rather, they are bothered by something that is often confounded with inequality: economic unfairness. Drawing upon laboratory studies, cross-cultural research, and experiments with babies and young children, we argue that humans naturally favour fair distributions, not equal ones, and that when fairness and equality clash, people prefer fair inequality over unfair equality. Both psychological research and decisions by policymakers would benefit from more clearly distinguishing inequality from unfairness.

THEY DON'T! THEY JUST GET USED TO IT.

thank you

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supplementary materials

outcome treatment

- Y_i : outcome for individual i
- $\text{Position}_i \in \{\text{winner}, \text{loser}\}$: social position
- $\mathbb{I}^{\text{out}} \in \{\text{high}, \text{low}\}$: outcome inequality level
- $P_i \in \{\$10, \$7.5, \$5, \$2.5\}$: payment received by individual i

causal effect of outcome inequality:

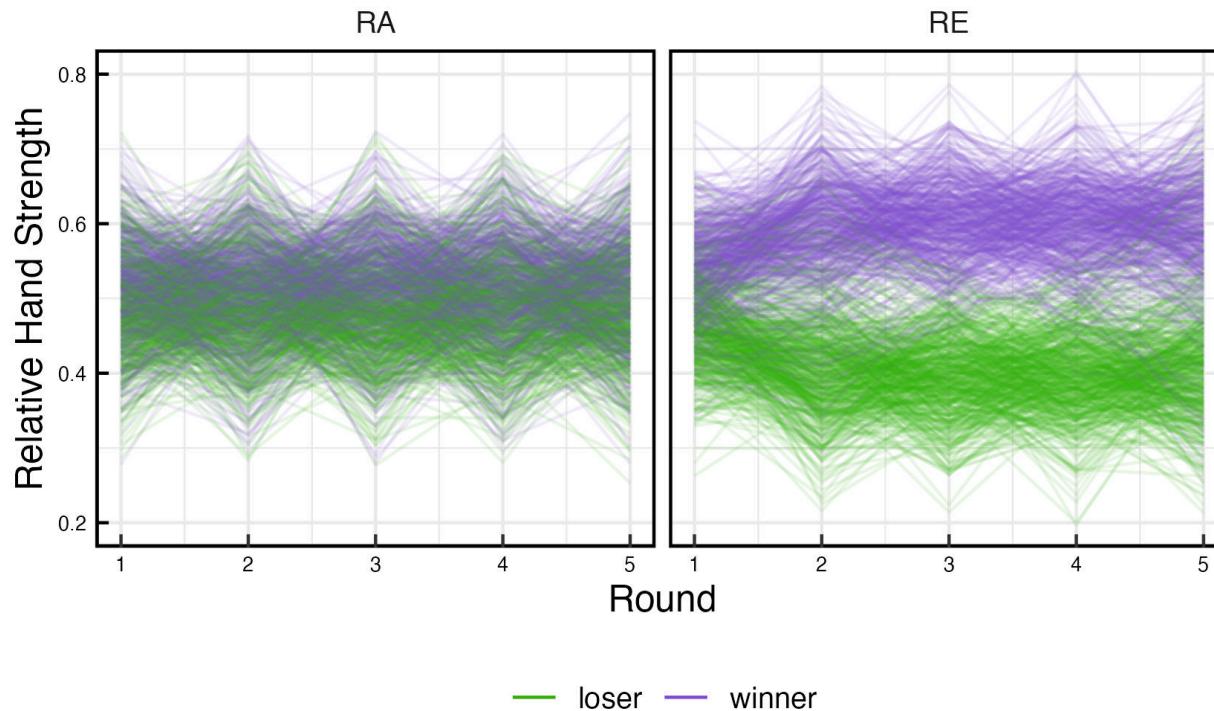
$$\mathbb{E}[Y \mid \mathbb{I}^{\text{out}} = \text{high}, \text{Position}_i = p, P_i = p^*] - \mathbb{E}[Y \mid \mathbb{I}^{\text{out}} = \text{low}, \text{Position}_i = p, P_i = p^*]$$

- compares *same position* (winner/loser),
- with *same payoff* $P_i = p^*$,
- but different inequality levels (high vs. low).

earnings are fixed \Rightarrow differences reflect exposure to inequality only

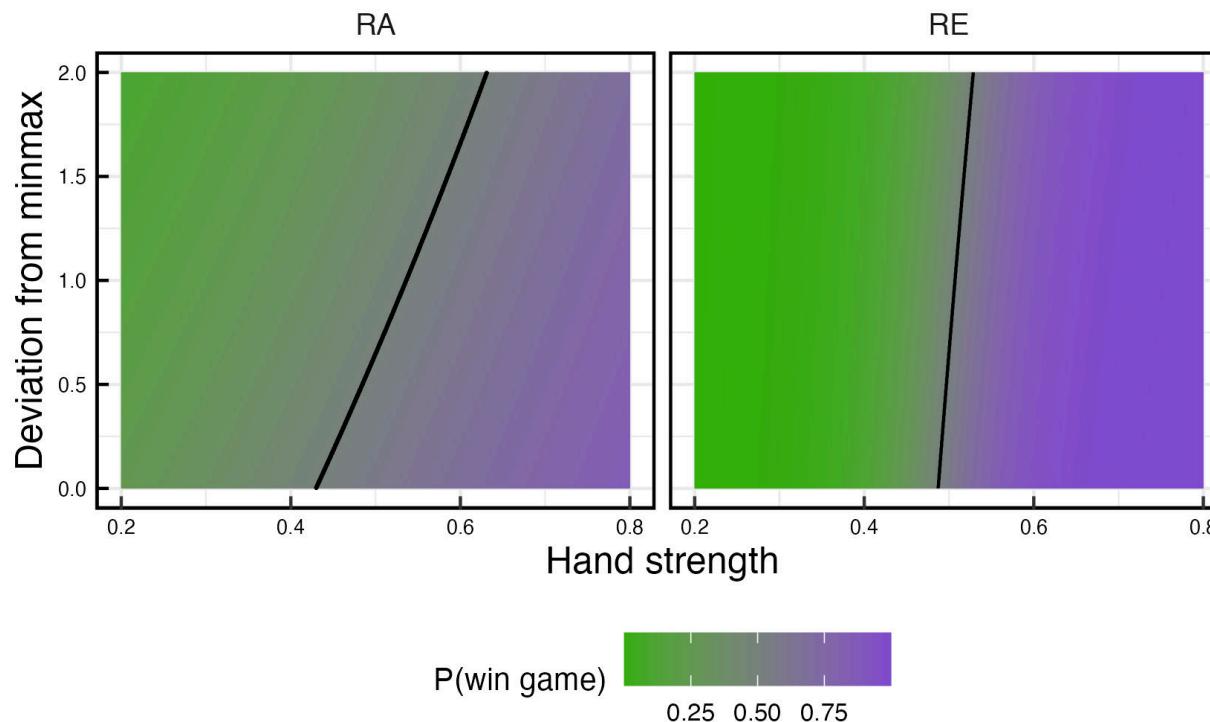
opportunity treatment

RA/RE induces equal/unequal opportunity

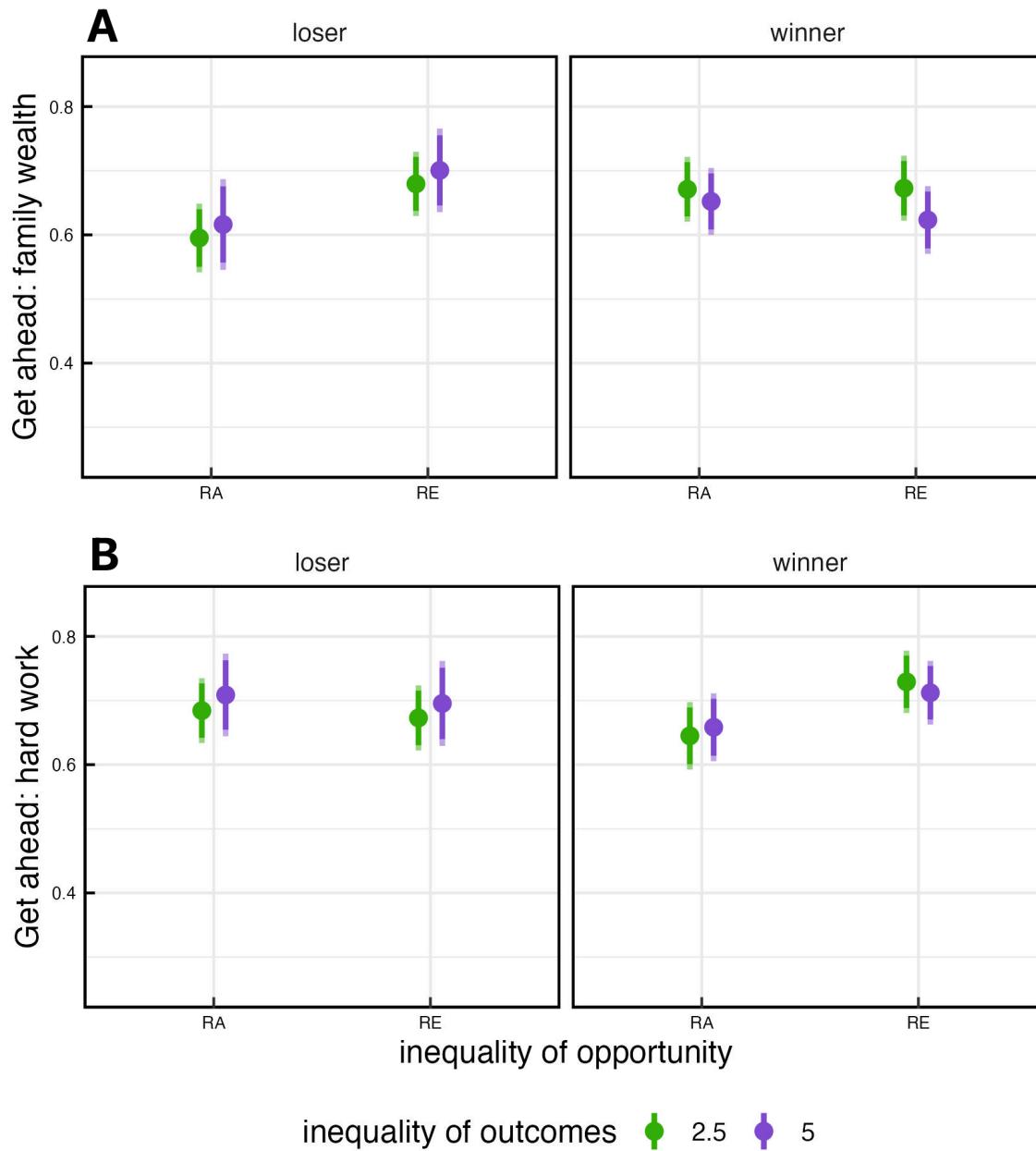


limited role of talent/effort

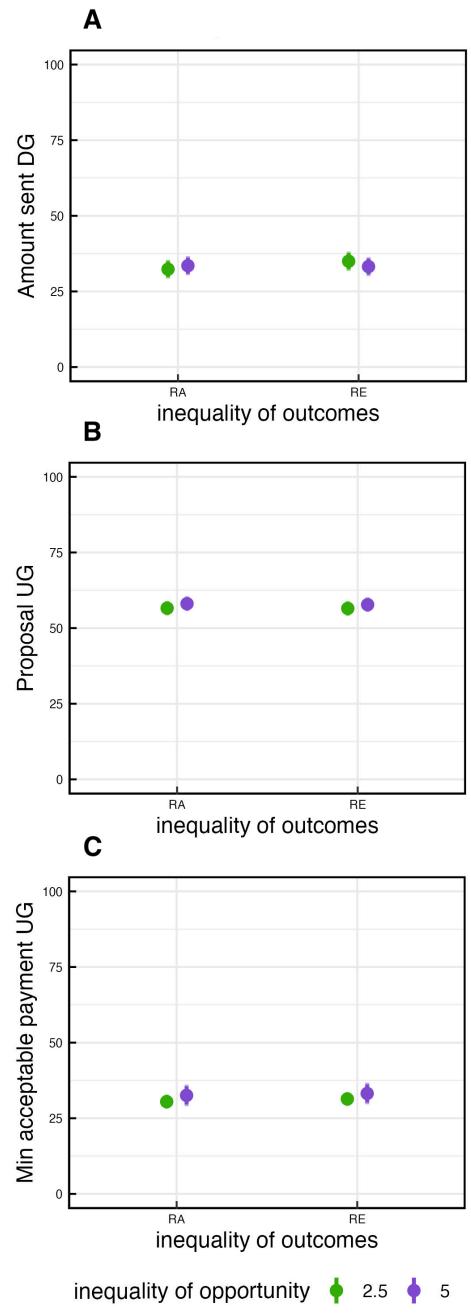
Skill minimized; success \approx hand strengths



external validity: GSS items



redistributive behavior



power analysis

- $N = 3,335$, $2 \times 2 \times 2$ factorial.
- Detectable effects:
 - Main: 7–8 p.p. differences
 - 2-way: ~10 p.p.
 - 3-way: ~14–16 p.p.
- Bonferroni corrected $\alpha = 0.0083$.

sample composition

- Sample size: 3,333 participants
- Average age: 39 years (range: 18–80)
- Education: Nearly half hold a college degree; 17% have graduate/professional degrees
- Gender: 53% female, 45% male, 1.5% other
- Income: Broadly distributed, with most between \$25,000 and \$99,999
- Political ideology: Average score 6 (on a 1–9 scale)
- Political party: Majority identify as Democrat or Democrat-leaning; 18% Republican or Republican-leaning; 14% Independent
- Race: 70% White, 12% Black, 9% Asian, 8% Latino/Hispanic, 3% Other
- Region: 30% West, 27% South, 23% Midwest, 20% Northeast
- Religion: 44% report no religion; 22% Protestant/Lutheran; 16% Catholic; 14% Other; small percentages Jewish and Muslim