

How Experiencing Unequal Opportunities Shapes Redistributive Preferences

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PRE-ANALYSIS PLAN - EXTENSION

1 Motivation

A central insight of our main study is that direct experience of unequal opportunities causally shifts beliefs and redistributive preferences. In particular, experiencing disadvantage increases the perceived role of circumstances and leads to higher redistribution toward disadvantaged agents. However, an important open question is whether these effects are driven by experience per se, or whether they could instead be replicated by exposure to information about unequal opportunities.

To address this question, we extend the design along three complementary interventions: **MIXED**, **REPORTS** and **STATISTICS**.

First, we introduce the **MIXED** treatment arm, in which participants experience both the **EASY** and the **HARD** version of the task. This allows us to isolate the role of comparative exposure. In the baseline, subjects only observe one side of the opportunity distribution, which may lead to incomplete inference or asymmetric updating. Experiencing both conditions provides a richer, comparison and removes uncertainty about the existence and magnitude of the difficulty gap. This treatment helps clarify whether belief updating is driven by contrast and direct comparison, rather than by the salience of a single experience.

Second, we add the **REPORTS** treatment arm, in which participants read reports or narratives describing agents' experiences. This provides a clean test of vicarious learning and perspective-taking. While lived experience may be particularly vivid, narratives can convey contextual detail, emotional content, and causal mechanisms in ways that approximate real exposure. Comparing this treatment to direct experience allows us to assess whether the observed effects are driven

by embodied experience or whether they can be reproduced through structured, qualitative information about others’ circumstances.

Third, we include the **STATISTICS** treatment arm, in which participants are provided with statistical information about average performance differences across task versions. This isolates the role of purely informational updating. In the baseline, participants update beliefs based on their own (limited) experience, which may be noisy or biased. Providing aggregate statistics removes this noise and directly communicates the extent of unequal opportunities. This allows us to test whether belief changes can be explained by updating in response to objective data, as opposed to experiential or affective channels.

Taken together, these additional interventions allow us to systematically compare three distinct channels: direct experience, narrative evidence, and statistical information. These comparisons are crucial because prior evidence suggests that individuals may weight experienced information more heavily than observed information, implying that identical facts may have different effects depending on how they are acquired. By embedding these interventions in a unified framework, we can identify whether experience has a uniquely powerful role in shaping fairness views, or whether similar effects can be achieved through scalable informational interventions.

2 Experimental design

The experimental design follows in structure the one of the main experiment. We now indicate the main differences. One common difference in all three treatment arms is that we no longer incentivize the three beliefs measures we had previously incentivized. This is mainly explained by the fact that for one of our new three treatments, the answers are provided as information, making the incentivization senseless.

We now describe each of the new three interventions in details.

2.1 Mixed Experience

In the **MIXED** treatment arm, participants are exposed to both versions of the task within the experience phase. Specifically, they spend two minutes working on the **HARD** version and two minutes working on the **EASY** version (in randomized order).

2.2 Reports

In the **REPORTS** treatment arm, participants are provided with qualitative information about agents' experiences. They first read a summary of the most recurring themes for agents who completed Version A, followed by two representative quotes from these agents. This is then followed by a separate summary for agents who completed Version B, again accompanied by two representative quotes. All of this information is drawn from a pilot study conducted with agents who performed a task that was nearly identical to that of the main agents. To ensure understanding, participants are required to correctly answer two comprehension questions about the information before proceeding.

2.3 Statistics

In the **STATISTICS** treatment arm, participants are shown quantitative performance information separately for Agent A and Agent B. For each type of agent, they observe the average number of encryptions completed, the maximum and minimum performance, the percentage of correct table completions, and the probability that an agent of that type outperforms an agent of the other type. All of this information is drawn from the data of the agents of the main study. To ensure understanding, participants are required to correctly answer two comprehension questions about the information before proceeding.

3 Hypotheses

3.1 Main Hypotheses

Hypothesis 1. Relative to **EASY**, the **MIXED**, **REPORTS**, and **STATISTICS** treatment arms all lead to higher redistribution when evaluating a pair formed by agents that had unequal opportunities, with similar differences to the one between **HARD** and **EASY**.

Hypothesis 2. Relative to **EASY**, the **MIXED**, **REPORTS**, and **STATISTICS** treatment arms all lead to attributing more importance to the task version in determining success, with similar differences to the one between **HARD** and **EASY**.

Hypothesis 3. Relative to **EASY**, the **MIXED**, **REPORTS**, and **STATISTICS** treatment arms all lead to higher willingness to pay a cost to implement preferred redistribution, with similar differences to the one between **HARD** and **EASY**.

4 Sample

We will recruit the respondents on Prolific. Each extension treatment will include 180 participants, balancing feasibility with comparability to the main study.

5 Data Analysis

The tests will be the same as the ones described in the main analysis.

We do change the way we look at the difference $\text{POSTERIOR_PERFORMANCEA} - \text{POSTERIOR_PERFORMANCEB}$. To correct for scale-driven artifacts and to capture relative differences, we compute the proportional difference $(\text{POSTERIOR_PERFORMANCEA} - \text{POSTERIOR_PERFORMANCEB}) / \text{POSTERIOR_PERFORMANCEB}$, which expresses how much $\text{POSTERIOR_PERFORMANCEA}$ exceeds $\text{POSTERIOR_PERFORMANCEB}$ relative to the baseline value of $\text{POSTERIOR_PERFORMANCEB}$.

Notice that, since we randomize the order of experience in the mixed treatment, we will also compare this two sub-treatments within MIXED . We expect to find no difference, which would justify looking at MIXED as one unique treatment.