

Excessive pay is not about the numbers

How power abuse erodes inequality acceptance

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Understanding inequality acceptance

Research question:

Does (potential) power abuse decrease inequality acceptance?

Challenges studying power use in the income distribution

- Power abuse increases inequality
- Power use hard to observe
- Power positions not obtained randomly

Moving the question to the lab

- Randomize power in wage setting: dictator-set vs. externally-set initial earnings
- Power orthogonal to inequality and individual characteristics
- Measure inequality acceptance: redistribution decisions

In terms of the experiment:

Do spectators redistribute more when a dictator worker decides initial earnings (for their own gain)?

Measuring the effect of power abuse on inequality acceptance

Two-stage redistribution experiment

1. Worker stage: Create variation in potential power abuse
 - Workers solve task in pairs
 - Dictator or External Decision: initial earnings
2. Spectator stage: Measure inequality acceptance
 - Spectators see: Dictator Decision (DD) or External Decision (ED)
 - Identically distributed: performance, initial wage
 - Spectator redistribute: final earnings

Sneak peek results

Results in a nutshell

1. ATE: spectators redistribute 4 percentage points more when workers hold a power position
2. Mechanism: Reaction specific to power abuse, no difference for meritocratic initial choices
3. Heterogeneity among spectators: punishers vs. correcters. 11% punish on average to 19% below performance.

Literature

1. Inequality acceptance: Source of inequality matters

- Acceptance for merit-based differences: merit and luck (Cappelen et al., 2022), tournament pay (Bartling et al., 2018), merit and efficiency (Almås, Cappelen and Tungodden, 2020)
- Moderators: agency (Akbaş, Ariely and Yuksel, 2019), risk (Cappelen et al., 2019), (Mollerstrom, Reme and Sørensen, 2015), (Cappelen, Cappelen and Tungodden, 2018), beliefs (Cappelen, Haaland and Tungodden, 2018)
- Opportunity to cheat: Bortolotti et al. (2017) and Klimm (2019). Special case of our setting.
- Contribution: effect of power abuse on inequality acceptance

2. Monopsony power

- Labor work on existence (Azar, Marinescu and Steinbaum, 2022; Berger, Herkenhoff and Mongey, 2022; Card, 2022). Supply elasticity, non-compete agreements, limited through-put of firm productivity
- Consequences: Legitimacy of income distribution/inequality.

3. Observational studies on inequality acceptance: mechanism check

- Correlation between abuse of power and demand for redistribution (Almås et al., 2022), lab findings for beliefs only (Kuziemko et al. (2015) and Ragusa (2015))
→ Contribution: Check causal link

Overview

Motivation

Experiment set-up

- Design

- Workers: power (ab)use

- Summary statistics

Results

- Attitudes at baseline

- Hypotheses and results

- Heterogeneity

Conclusion

Experimental design

Two-stage disinterested spectator experiment

- Standard set-up for redistribution questions: as in Almås, Cappelen and Tungodden (2020); Cappelen, Falch and Tungodden (2019); Cappelen et al. (2020).
- Worker stage for earnings process, spectator stage to observe redistribution choices
- Real implementation of spectator's choices: Initial split (50%) and spectator's choice (50%). Emphasize implementation probability.

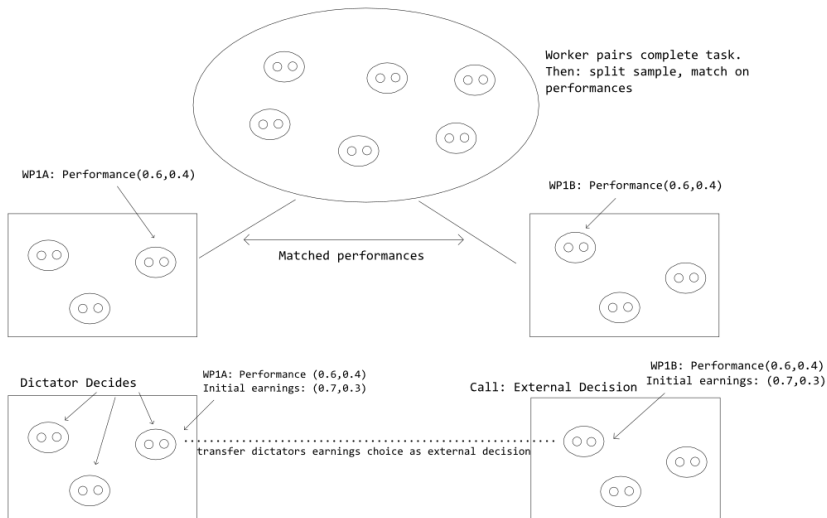
Control questions

Experiment in practice

- Participants recruited on Prolific: 3926 workers in 1963 pairs. 1963 matched spectators. Stratified by region.
- Both worker and spectator experiment pre-registered on AER RCT registry.

▶ Spectator pre-plan

Worker stage: Data generation process



Treatment

Dictator Decides treatment (DD)

We let one of the participants in the pair choose preliminary pay-offs. This randomly selected participant decides both their own pay-off and the pay-off of the other participant.

External Decision treatment (ED)

We let another participant in Prolific choose preliminary pay-offs. This randomly selected participant decides both how much to give to participant A and how much to give to participant B.

[Full treatment instructions](#)

Experiment stages

- Worker experiment

1. Form pairs. Info about tasks [Tasks](#)
2. Randomize to role (dictator vs. receiving co-worker)
3. Work on tasks
4. Dictator makes decision

- Spectator experiment

1. Info about workers: set-up and performance [Spectator basic info](#) [Spectator task info](#)
2. Treatment. Who decides wages?
3. Redistribution choices [First choice control](#) [First choice treatment](#)
4. Free-text reasoning. Exit survey: Political and redistribution preferences.

Identifying the partial effect of power

1. Block randomize performances

- split worker sample, creating perfect matches by performance (identically distributed)
- allows for variation in performance

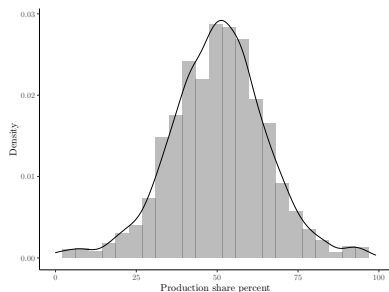
2. Make power position orthogonal to inequality

- Record dictator decision for worker pair X
- Find the twin worker pair in the (performance-matched) second group
- Set “external decision” in twin worker pair to dictator decision in dictator group
- Yields: “dictator decides” and “external decision” worker groups with identical initial decisions

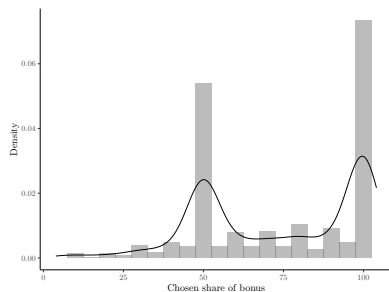
3. Eliminate position legitimacy

- Randomize dictator position in each pair
- Communicate to spectator

Worker data



(a) Workers' performances



(b) Workers' choices

Figure 1: Workers' performances and choices

Worker data: Power use and abuse

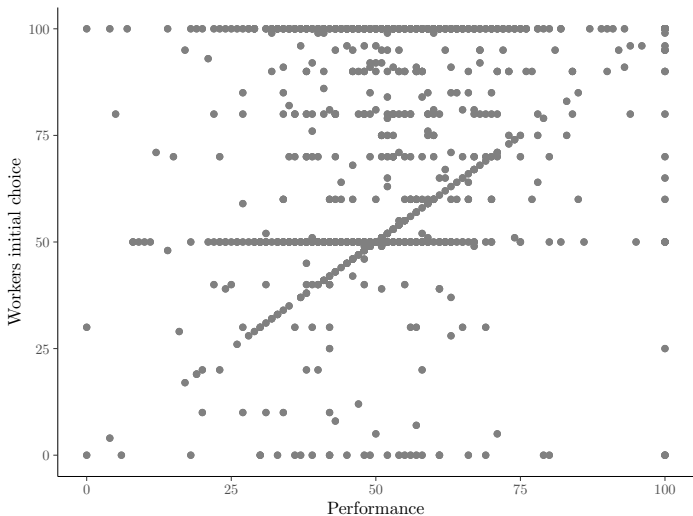


Figure 2: Workers' performances and choices

Summary statistics

Treatment	Dictator Decides (DD)		External Decision (ED)		
Variable	Mean	sd	Mean	sd	p-value
Matched variables					
Performance	52.77	18.31	52.77	18.31	1.00
Initial choice	71.52	27.56	71.52	27.56	1.00
Pre-choice variables					
Female	0.58	0.49	0.58	0.49	0.90
Batch Prolific	5.36	2.53	5.35	2.51	0.90
Age	28.69	27.04	28.11	9.27	0.53
Employed	0.57	0.50	0.55	0.50	0.37
Student	0.48	0.50	0.49	0.50	0.68
joint F statistic: 0.65					
Post-choice variables					
Right	2.05	0.90	2.06	0.87	0.98
Ladder	5.49	1.60	5.50	1.65	0.86
Time taken	654.02	322.51	615.92	287.77	0.01
N	981		981		

Table 1: Summary statistics

Overview

Motivation

Experiment set-up

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Workers: power (ab)use

Summary statistics

Results

Attitudes at baseline

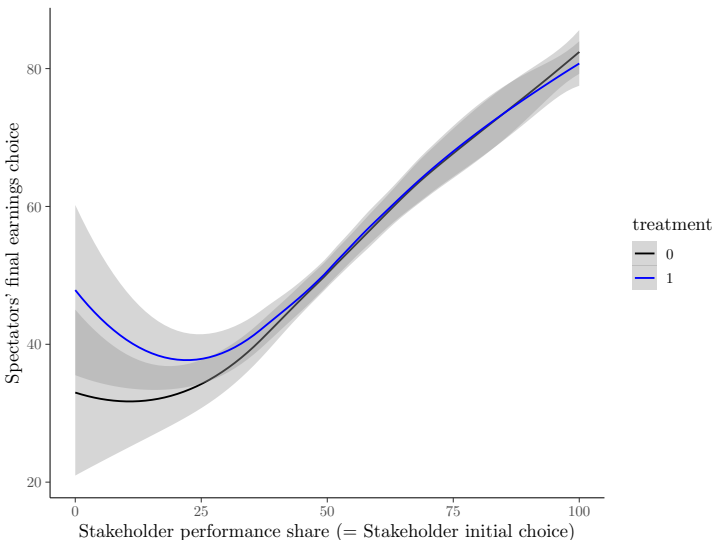
Hypotheses and results

Heterogeneity

Conclusion

Spectator attitudes: Meritocratic pay broadly accepted

Sample: Initial wage share = performance share (meritocratic stakeholders)



Common patterns in spectator behaviour

Hypotheses

Hypothesis 1: Mean final earnings in the Dictator Decides treatment are lower than in the External Decision treatment. We expect $\gamma < 0$.

$$w_{c,i} = \alpha + \beta X_{c,i} + \gamma T_i + u_i \quad (1)$$

Hypothesis 2: Final earnings in the Dictator Decides treatment are lower when overproportional initial earnings are claimed. We expect $\delta < 0$.

$$w_{c,i} = \alpha + \beta X_{c,i} + \gamma T_i + \delta T_i * \text{Overprop}_c + \theta T_i * \text{Underprop}_c + \pi \text{Overprop}_c + \nu \text{Underprop}_c + u_i \quad (2)$$

- Full specification pre-registered
- T : binary treatment indicator, 1 for DD and 0 for ED
- w : final earnings share assigned by spectator
- Controls: performance share m , dummies for batches and time
- Overprop and Underprop: indicators for $c > m$ and $m < c$; reference category $m = c$

Hypothesis 1: Average Effect

	DV: Spectators' final wage decision		
	(1) Baseline	(2) Baseline +	(3) Main
Dictator	-3.99*** (0.62)	-3.99*** (0.51)	-3.99*** (0.51)
Performance		0.60*** (0.02)	0.60*** (0.02)
Time Controls	No	No	Yes
Batch Controls	No	No	Yes
R ²	0.01	0.36	0.36
Adj. R ²	0.01	0.36	0.36
Num. obs.	3924	3924	3924

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table 2: Average differences in assigned wage share between the DD and ED treatment

All control variables were specified in our pre-plan. Standard errors are clustered at the individual level.

Hypothesis 2: Mechanism

	DV: Spectators' final wage decision		
	Intensive Margin (1)	Performance (2)	Main (3)
Dictator Decides (DD)	-2.48*** (0.57)	-0.04 (2.02)	0.35 (1.11)
Performance	0.57*** (0.02)	0.64*** (0.03)	0.59*** (0.02)
Take-rate	0.00 (0.01)		
Overproportional			1.00 (0.82)
Underproportional			-0.61 (1.00)
DD: Overproportional			-5.75*** (1.30)
DD: Underproportional			-2.76* (1.49)
DD: Take-rate	-0.08*** (0.02)		
DD: Performance		-0.07** (0.04)	
Adj. R ²	0.36	0.36	0.36
Num. obs.	3924	3924	3924

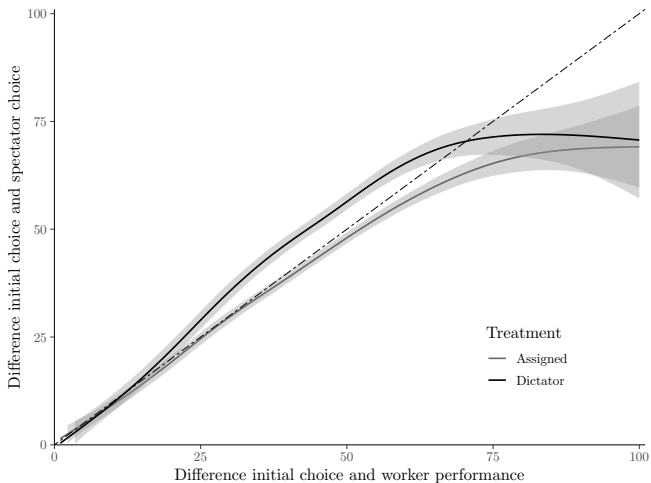
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table 3

All control variables were specified in our pre-plan. All standard errors are clustered at the individual level.

Reactions to power abuse

Sample: Initial wage share > performance share (overproportional choices)



Heterogeneity: Punishing vs. correcting power abuse

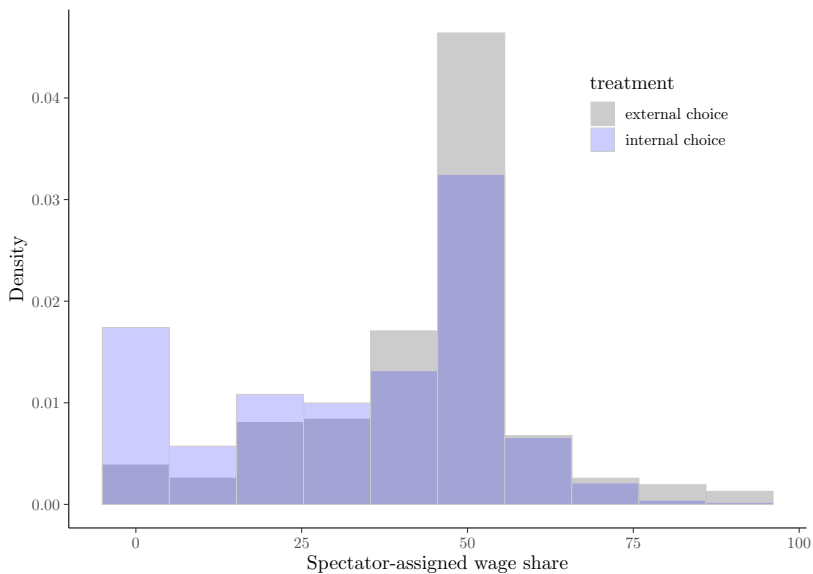
Punishment

- Penalty on overproportional pay: interpreted as self-serving?
- Need to deviate from baseline motives: performance pay or equality.
Costly!
- Definitions:
 - Punishing choices: Final wage $<$ performance & Initial claim $>$ performance
 - Correcting choices: Final wage = performance & Initial claim $>$ performance (meritocratic benchmark)

Prevalence of punishment

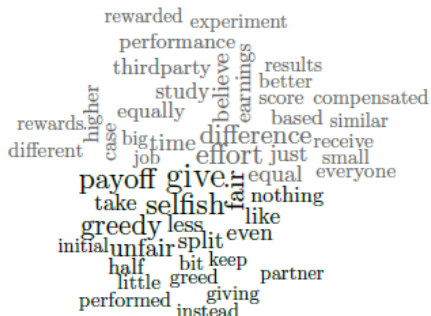
- 36% vs. 23% make any punishing choice in treatment vs. control group
- Average punishment: 19% below performance share in treatment group vs. 8% in control group
- Switches between punishing and correcting, while constant share of accepters ($\sim 18\%$)

Distribution of punishing choices



Mechanism evidence: Spectator verbal reasoning

External Choice Treatment



Internal Choice Treatment

Figure 3: Explanation difference across treatments among punishers

Mechanism evidence: Quotes

Punishing power abuse:

- *“Participant B got fewer points from performance, but decided to give themselves all the points and left none for A. I decided to give them the points they earned minus 20 points as a penalty for this unfair behavior.”*

Weighing motives: Correcters

- *“I thought splitting the reward corresponding to the percentages each participant got was fair. It was tempting to punish the (in my opinion) selfish participants who rewarded themselves despite doing worse, but I felt that the participants each deserve the bonus according to their performance, regardless of their own decision on the split.”*

Treatment heterogeneity: Political and SES predictors

	Dependent variables alternates: probability of punishing or correcting					
	P	C	P	C	P	C
DD	0.23*** (0.04)	-0.16*** (0.05)	0.03 (0.06)	0.08 (0.06)	0.01 (0.06)	-0.06 (0.07)
leftRight	0.02 (0.01)	-0.02 (0.02)				
DD:leftRight	-0.05*** (0.02)	0.04* (0.02)				
justice			0.00 (0.01)	0.03** (0.01)		
DD:justice			0.03* (0.02)	-0.05*** (0.02)		
ladder					0.00 (0.01)	0.00 (0.01)
DD:ladder					0.02** (0.01)	-0.00 (0.01)
R ²	0.11	0.01	0.11	0.01	0.11	0.01
Adj. R ²	0.10	0.01	0.10	0.01	0.10	0.01
Num. obs.	2565	2565	2588	2588	2587	2587

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$ All regressions control for performance and initial choice

Table 4: Political and socio-economic predictors of punishment

Conclusion

Main findings

- Spectators redistribute more when workers decide initial earnings (Dictator Decides treatment)
- Mechanism: Power abuse reduces inequality acceptance
- Heterogeneity: Subsample of spectators switch from correcting to punishing when treated. These spectators value addressing power abuse over meritocratic pay.

Implications

- Fairness dimension: Power matters (independent of inequality)
- With power in wage setting: More difficult to justify high inequality

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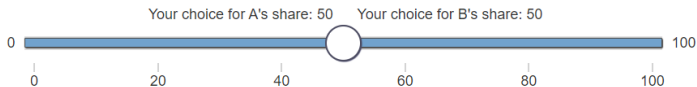
Example: Choice - treatment group

First decision

You will now make your first decision with real consequences. If this decision is selected, we will pay the participants exactly as you decide with a 50% chance. If your decision does not get selected, the preliminary choice still stands.

How do you want to split pay-offs between participant A and participant B?

Choose on the slider below what percentage of earnings you want to give to participant A. Participant B receives the remaining share.



Short summary: Participant A performed at 60%. Participant B performed at 40%. Participant A decided to give 70% of total pay-off to themselves and gave the remaining 30% of the pay-off to participant B. If your decision does not get selected, this choice still stands.

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Example task for workers: Question 5

6030160790407200040038008809500020650908
236040008503000730540900833620000039738

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Treatment salience

Before you make your final decision, you have to answer two control questions.

Q1: Who made the decision about pay-outs for this pair of participants?

Participant B

Participant A

A third-party participant

Q2: What share of the total pay-off did participant A give to participant B?

30

percent

See information on the pair of participants again

Continue

Figure A1: Control question to spectators

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Information to spectators

Decide real pay-offs for participants in a previous study

This is not a hypothetical survey. The choices you make in this experiment have real life consequences, because we will pay participants of a previous Prolific study according to your wishes.

Where, when and how did we run the previous study?

We ran a series of studies on Prolific between October 12th and 18th (last week on Tuesday until this week on Monday). We invited a total of 4120 participants to our study. Everyone on Prolific was invited to participate, but we had reserved minimum spots for several regions to achieve a balanced sample. Participants in this study worked on tasks for five minutes and were matched into pairs. All participants have already received a participation fee of 1£.

You will decide about final pay-outs to participants

On top of the participation fee, each pair of participants will receive a bonus. This is where your decision comes in. We ask you to decide about final pay-offs for 2 pairs of participants. We have reserved a bonus of 2£ for each pair that you will decide on. In the study, an initial decision about how to split the bonus was reached. However, you will make the final decision on how to split this money between participants in the two pairs we will show you.

We select one of your two decisions for payment. For the selected decision, we will flip a coin. *With a 50% chance, we will pay the participants exactly as you decide.*

Continue

Figure A2: Main instructions to spectators

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Info about workers to spectators

What kind of task did participants work on?

Participants in our previous study were working on a task for 5 minutes. They had to count zeros in 15 sets like the one displayed below.

60301607904072000400338008809500020650908
 236040066503000730540900653620000033738

They received several points for counting the correct number and one point if they were off by one zero. We calculate productivity of the participants in each pair as the share of points they receive. Both get a percentage share and those two shares add up to 100%. So if one participant gets 5 points and the other one gets 15 points, the productivity of the first participant would be 25% and the productivity of the second participant would be 75%.

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Figure A3: Spectators knowledge about task

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Treating spectators: exposure to dictator or external choice

Shared information about performance

Pair of participants for your first choice

How did the participants do?

Participant A got 60% of the points in the pair. Participant B got 40% of the points.

Initial decision: This will be paid out if you do not make a decision or if your decision is not selected.

Internal choice treatment

We let one of the participants in the pair choose preliminary pay-offs. This randomly selected participant decides both their own pay-off and the pay-off of the other participant.

In this pair, participant A got to decide their own and the other person's pay-off and made the following choice:

Give 70% of the total pay-off to myself (participant A, right side), and give 30% of the pay-off to participant B (left side).

External choice treatment

We let another participant in Prolific choose preliminary pay-offs. This randomly selected participant decides both how much to give to participant A and how much to give to participant B.

This Prolific user made the following choice:

Give 70% of the total pay-off to participant A (right side) and give 30% of the pay-off to participant B (left side).

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Example: Info - treatment group

How did the participants do?

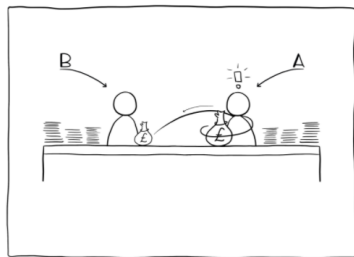
Participant A got 60% of the points in the pair. Participants B got 40% of the points.

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"Give 70% of the total pay-off to myself (participant A, right side), and give 30% of the pay-off to participant B (left side)"



Continue

Example: Info - control group

How did the participants do?

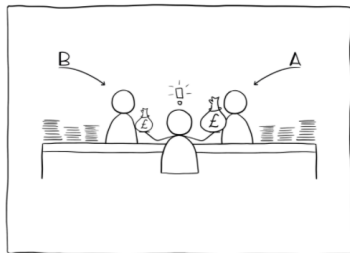
Participant A got 60% of the points in the pair. Participants B got 40% of the points.

Initial decision: This will be paid out if you do not make a decision or if your decision is not selected.

We let another participant in Prolific choose preliminary pay-offs. This randomly selected participant decides both how much to give to participant A and how much to give to participant B.

This Prolific user made the following choice:

"Give 70% of the total pay-off to participant A and give 30% of the pay-off to participant B."



Continue

What are we measuring?

Testing for job perceptions

- Randomized order
- Two questions at different locations: deservingness vs. discretion (“can decide”)
- High intra-person correlation of job wage discretion and job deservingness perceptions, median of 0.73 and mean of 0.43

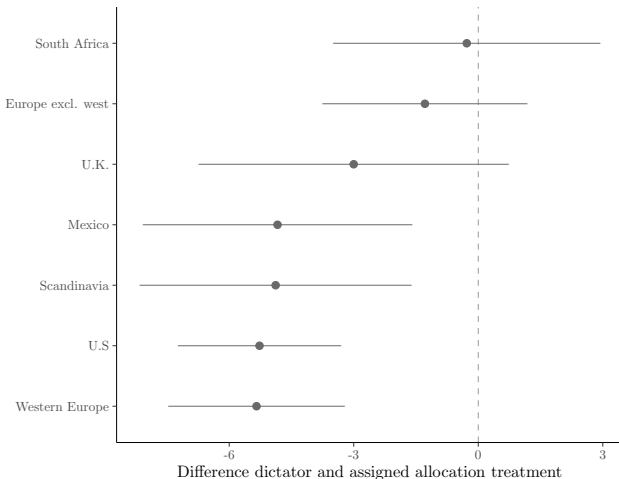
To what extent do you think people working in the following occupations get paid what they deserve?



Continue

Frame Title

Figure A4: Average effect by country or region



Notes: The plot shows the estimated γ coefficient separately by country/group of countries, i.e. the difference in assigned wages between the DD and ED treatment from hypothesis 1. All regressions include a linear term controlling for performance and standard errors clustered at the individual level.

Common patterns in spectator behaviour

Meritocracy acceptance

- 51% (78% rounded) of meritocratic choices accepted
- Contrast: 19% (29% rounded) of full sample

Some egalitarian spectators

- 16% assign egalitarian share if non-egalitarian suggestion
- 26% including egalitarian accepters

Earnings floor

- $< 1\%$ pay below 10%, 4% below 25% in External Decision treatment
- Dictator Decides treatment: 5% below 10% and 10% below 25%
- \rightarrow Slope on performance < 1

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