Through the Meritocratic Looking Glass

The Effect of Unveiling Others' Latent Luck and Efforts on Redistributive Behaviour

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Meritocracy

Noun. A social system, society, or organization in which people get success or power because of their abilities, not because of their money or social position

Misattribution of luck and efforts

Misattribution of luck and efforts

A bit of background literature…

- When it comes to redistributive justice, income is not as fungible as we think

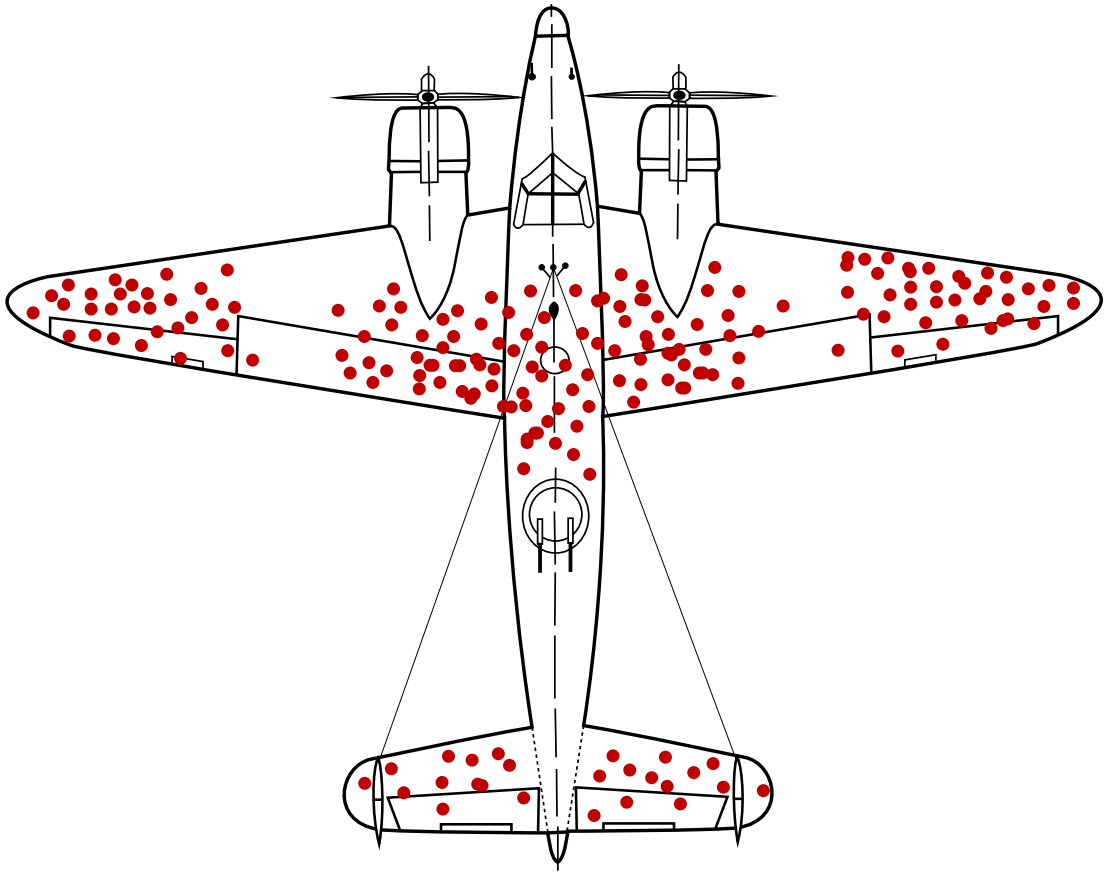
- **The source of income matters!**
  - Lab experiments show that people tend to feel more deserving – and, in turn, redistribute less – of incomes which are earned through merit, i.e., through effort and/or ability, compared to incomes which are generated by pure luck, such as lottery wins (Balafoutas et al., 2013; Lefgren et al., 2016; Gee et al., 2017)

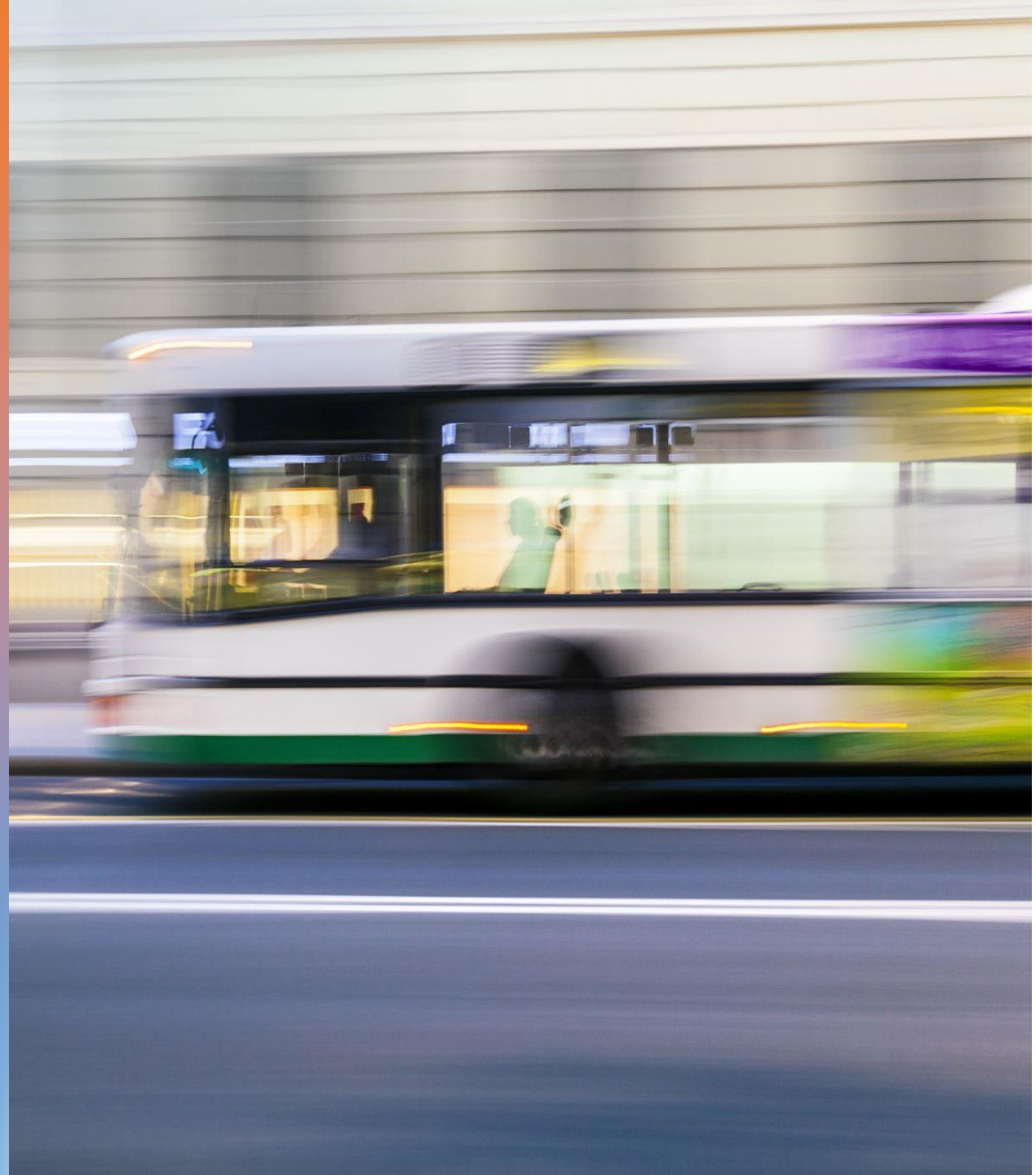
- However, empirical evidence and casual observations suggest not all inherently random sources of income are perceived as random in the real world – **inheritance is one example** (Lekfuangfu et al., 2023)

- A recent study by the Tax Foundation shows a continuous decline in public support for inheritance taxes in many countries worldwide (Cole, 2015)

- Strong empirical evidence of **the ignorance of luck** in people's evaluation of success

Why do we often underestimate luck in our success?





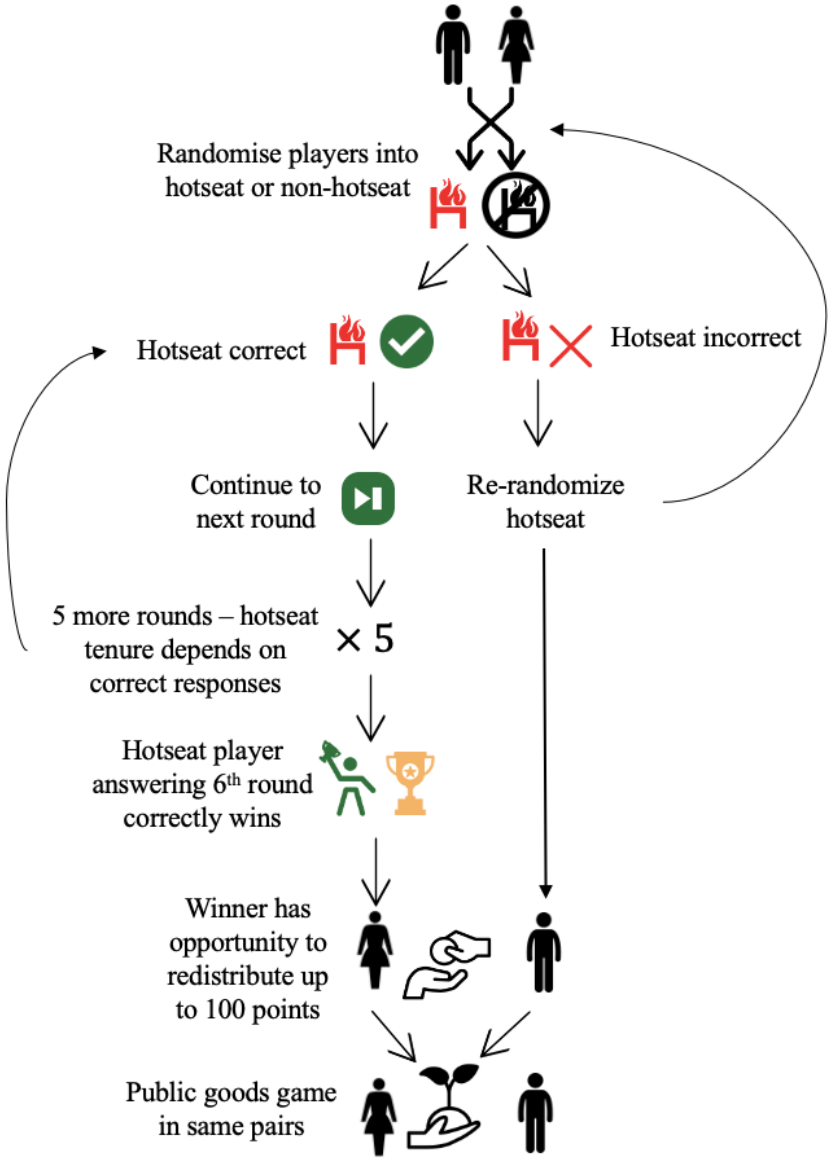
- Imagine two job candidates
- One was hired because he arrived on time, whilst the other was not hire because the bus he was riding got into an accident and he arrived at the interview 15 minutes late
- What if the one who wasn’t hired because of his misfortune is equally as good (or even better) at the job than the person who was hired

We wanted to test whether the information about the other person's latent performance moderates our sense of deservingness in a winner-takes-all situation

The Wheel

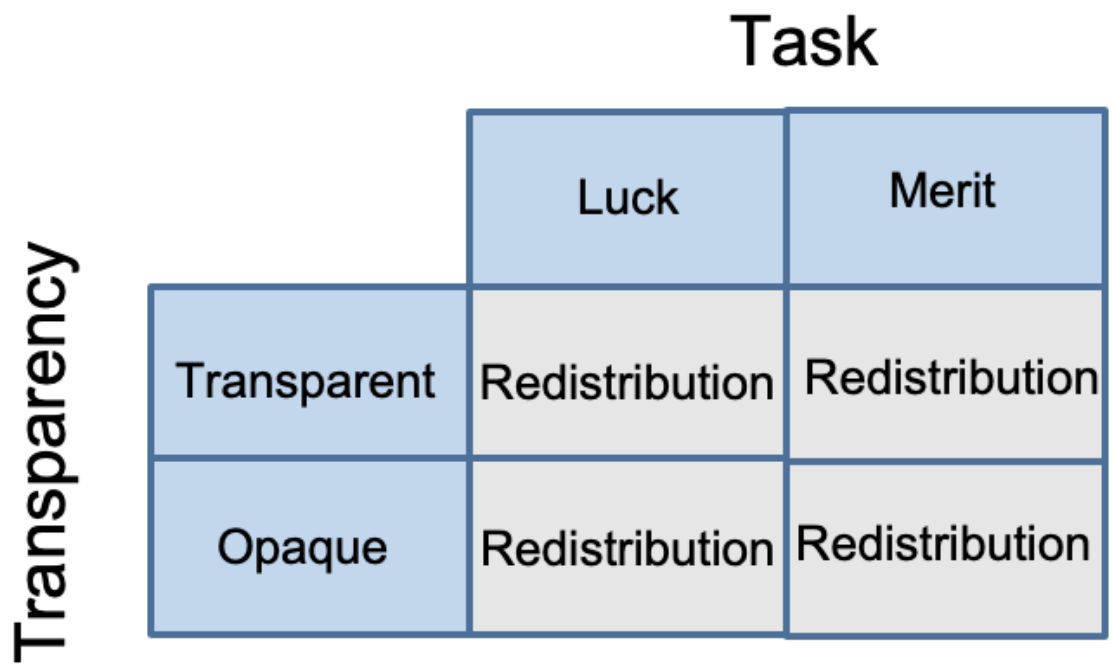
Experimental design

- *N* = 1,986 American adult Prolific participants
- Dyadic game – coin toss prediction or quiz questions
- 100 points = $0.89
- Public goods game endowment of 50 points, x1.5

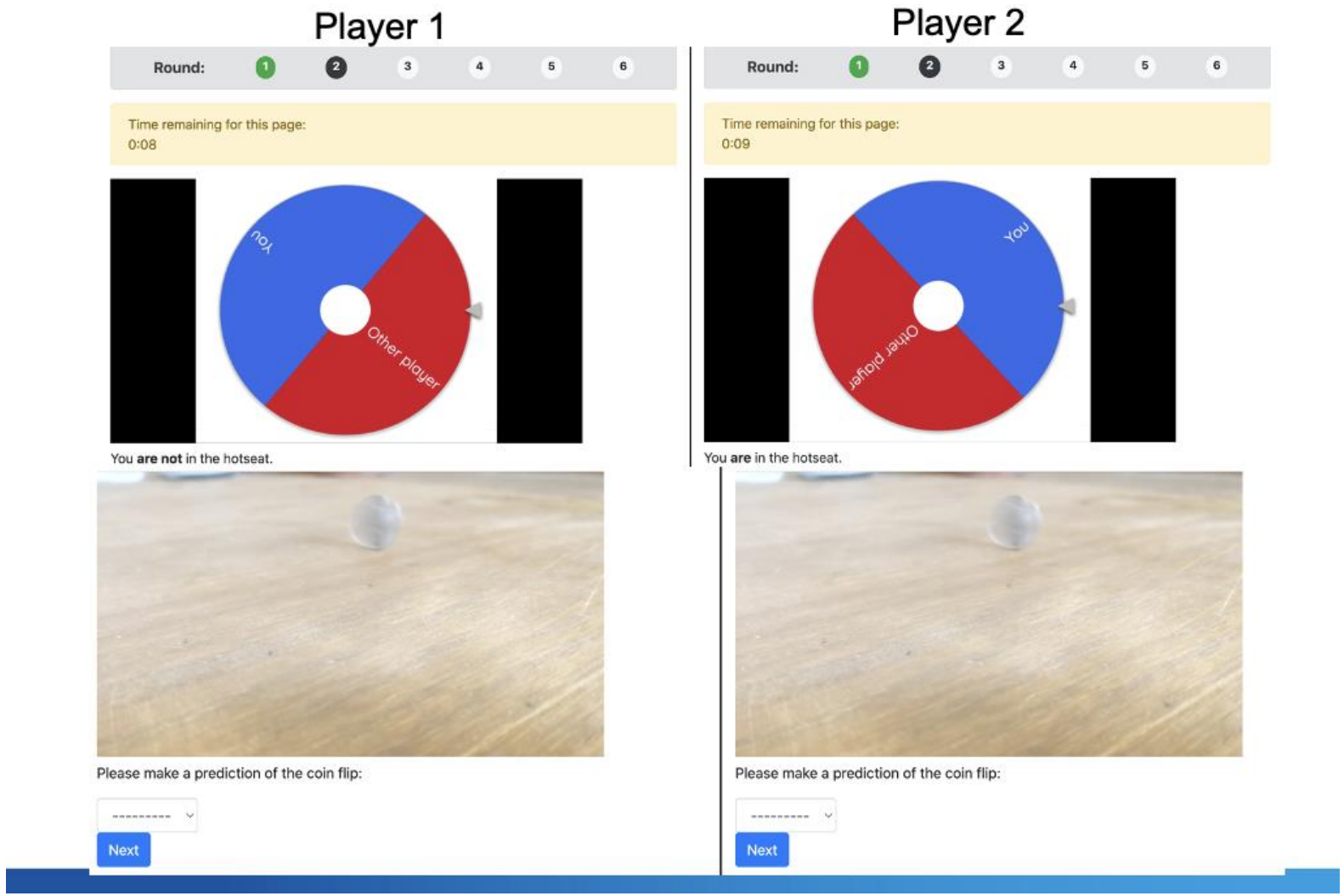


Experimental design

2 x 2 factorial design, varying on:



Luck task


Player 1
Round: 1 2 3 4 5 6
Time remaining for this page:
0:08
You
Other player
You are not in the hotseat.
Please make a prediction of the coin flip:

Next
Player 2
Round: 1 2 3 4 5 6
Time remaining for this page:
0:09
You
Other player
You are in the hotseat.
Please make a prediction of the coin flip:

Next

Merit task

Player 1

Round: 1 2 3 4 5 6

Time remaining for this page:
0:04

You **are not** in the hotseat.
Under what name has street dance been provisionally included as an Olympic sport to debut at Paris 2024?

- Smashing
- Crushing
- Breaking
- Pounding

Player 2

Round: 1 2 3 4 5 6

Time remaining for this page:
0:04

You **are** in the hotseat.
Under what name has street dance been provisionally included as an Olympic sport to debut at Paris 2024?

- Smashing
- Crushing
- Breaking
- Pounding

Transparency condition

Shape Quick Styles

Player 1

Earnings for Task 1

The other player has won the 6th round while being in the hotseat. This means that he/she has won the game, and is given 100 points. The other player will now have the opportunity to redistribute these earnings.

Player	% correct answer
You	62.5%
Other player	75.0%

In the meantime, please imagine that you have won the game.

If given the chance, how much of the 100 points, if any, **would** you give to the other player?

Your answer will not be shared with the other player.

points

Next

Player 2

Earnings for Task 1

Congratulations! You have won the 6th round while being in the hotseat. This means you have won the game and have earned 100 points.

Player	% correct answer
You	75.0%
Other player	62.5%

You now have the chance to redistribute some of your earnings to the other player.

How much of the 100 points, if any, would you like to give to the other player?

points

Next

Opaque condition

Player 1

Earnings for Task 1

The other player has won the 6th round while being in the hotseat. This means that he/she has won the game, and is given 100 points. The other player will now have the opportunity to redistribute these earnings.

Player	% correct answer
You	62.5%

In the meantime, please imagine that you have won the game.

If given the chance, how much of the 100 points, if any, **would** you give to the other player?

Your answer will not be shared with the other player.

points

Next

Player 2

Earnings for Task 1

Congratulations! You have won the 6th round while being in the hotseat. This means you have won the game and have earned 100 points.

Player	% correct answer
You	75.0%

You now have the chance to redistribute some of your earnings to the other player.

How much of the 100 points, if any, would you like to give to the other player?

points

Next


Hypotheses

Hypothesis 1: The winner distributes ½ of their winning to the non-winner in the luck-based condition.

***Hypothesis 2*:** The winner's distributive choices in the merit-based condition depend on the perceived relative contributions in the production phase prior to becoming the winner. The more a winner contributes to the earnings relative to the non-winner, the less they redistribute to the non-winner.

More generally, luck might be involved not only in outcomes of individuals' production tasks, but also in opportunities for production. Luck determines—to some extent—the opportunities which determine the winner of the competition.

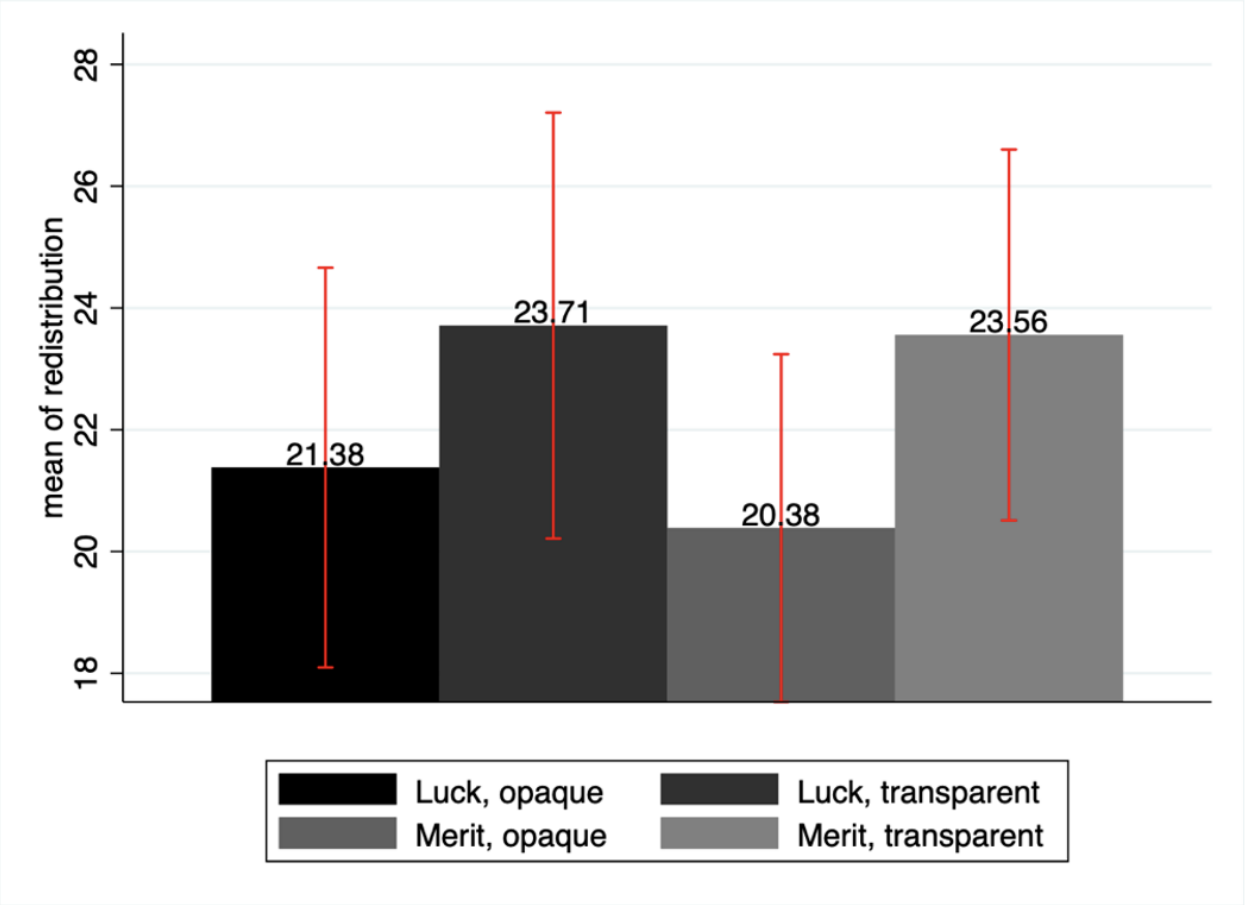
A winner who contributes relatively more in the production phase may have only been able to do so due to unequal opportunities in nature's selection process; **non-winners may have been able to do the same had they received the same opportunities.**

Hypothesis 3: In a scenario where latent performance is observable, the winner's distributive choices in the merit-based condition will depend, in part, on the non-winner's performance had he or she been lucky in the selection process. Holding the winner's latent performance constant, the higher is the non-winner's latent performance, the more he or she distributes to the non-winner.

Results

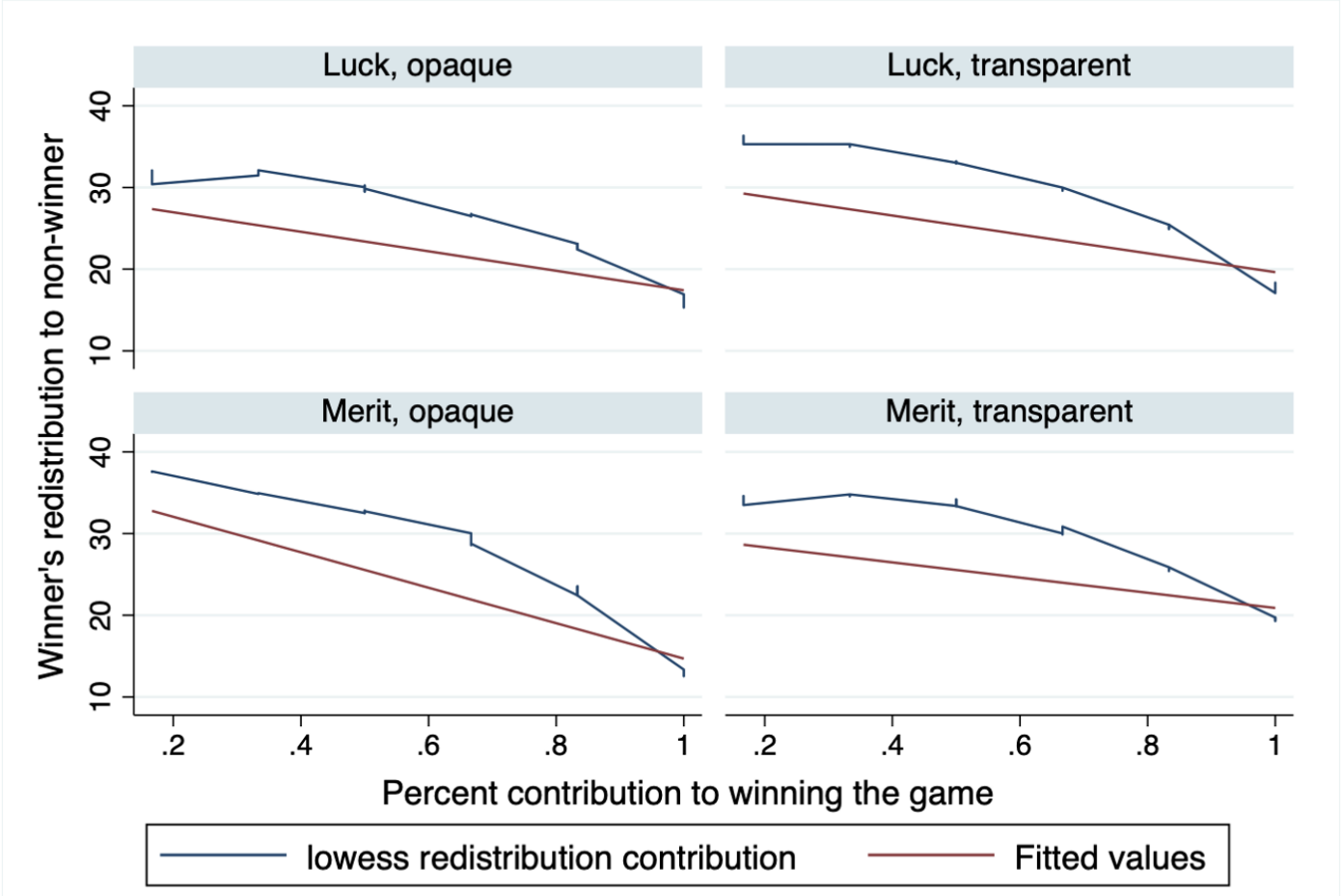
- As anticipated, the average redistribution is higher in the transparent conditions than in the opaque conditions – though not by much

Figure 1: Average winner's redistribution by treatment groups



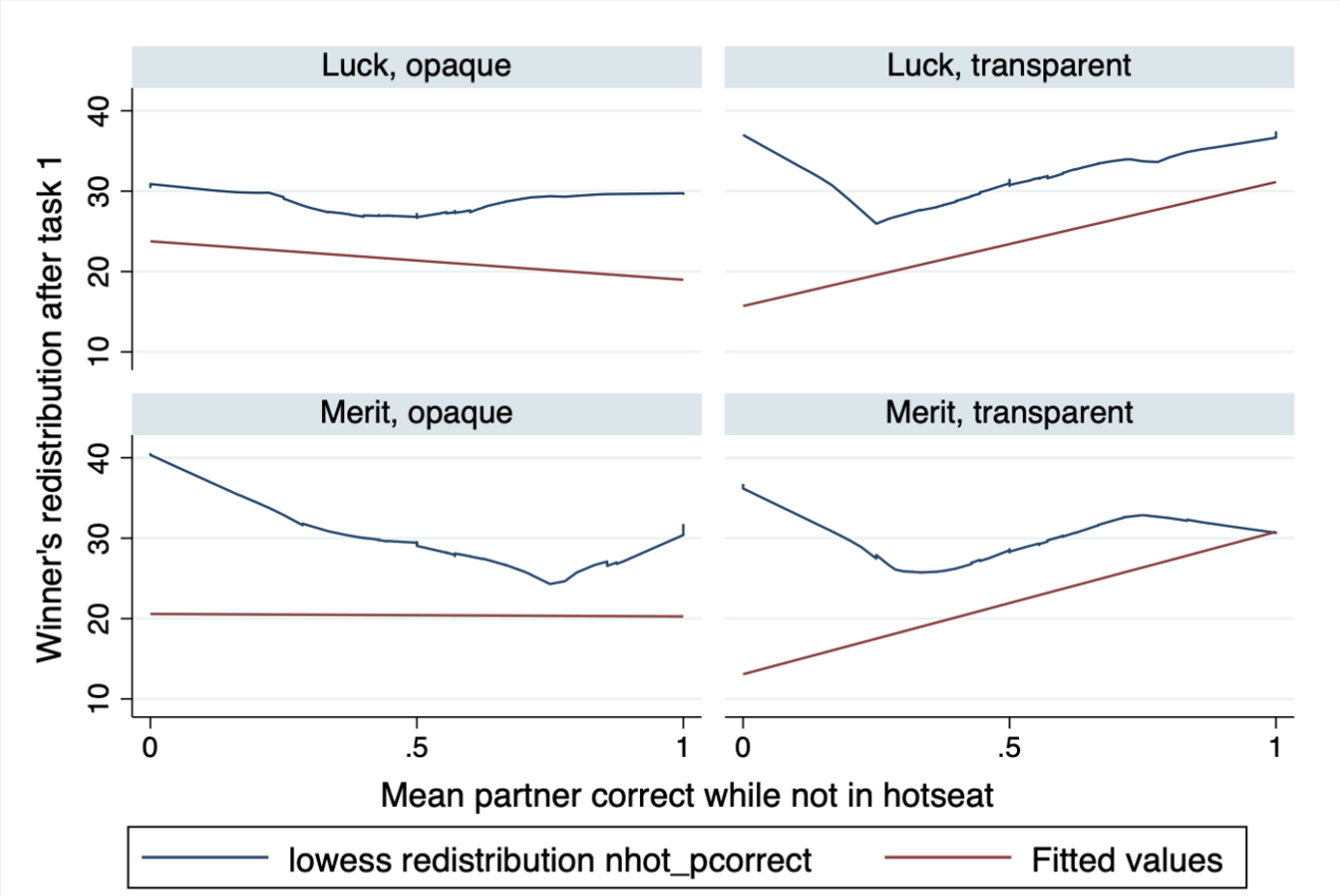
Note: 95% Confidence Intervals are reported.

Figure 2: Relationship between winner's redistribution and relative contribution in the production phase, c_i, by treatment groups



Note: Locally weighted regression of the winner's redistribution after the hotseat game as a function of the proportion of correct answers given by self in the task while in the hotseat.

Figure 3: Relationship between winner's redistribution and the non-winner's latent performance, l_j, by treatment groups



Note: Locally weighted regression of the winner's redistribution after the hotseat game as a function of the proportion of correct answers given by partner while not in the hotseat.

Holding other things constant, an increase in the non-winner's latent performance is positively and statistically significantly correlated with the winner's redistribution

Table 2: Winner's redistribution after the hotseat game: OLS regressions

VARIABLES	(1)	(2)	(3)
Transparent luck	1.756	-19.221	-22.036**
	(2.430)	(10.899)	(11.193)
Opaque merit	-0.418	-6.955	-10.039
	(2.242)	(9.589)	(9.622)
Transparent merit	2.885	-31.225***	-32.199***
	(2.277)	(10.846)	(11.254)
Winner's relative contribution in the production phase, c_i	-11.274***		
	(3.343)		
Winner's latent performance, l_i	-3.904		
	(2.903)		
Non-winner's latent performance, l_j	5.914		
	(3.504)		
Interaction between treatment dummies and c_i			
Opaque luck × c_i		-10.002	-9.595
		(6.705)	(6.631)
Transparent luck × c_i		-9.096	-7.813
		(8.145)	(8.357)
Opaque merit × c_i		-17.619***	-16.377***
		(6.035)	(6.045)
Transparent merit × c_i		-2.031	-2.221
		(7.102)	(7.217)
Interaction between treatment dummies and l_j			
Opaque luck × l_j		-6.198	-7.195
		(7.397)	(7.519)
Transparent luck × l_j		14.241	16.762**
		(7.866)	(8.149)
Opaque merit × l_j		1.097	3.089
		(6.376)	(6.570)
Transparent merit × l_j		18.839***	19.996***
		(6.906)	(7.116)

Table 4: Deservingness regressions: winners

VARIABLES	(1) F1: My opponent was skillful	(2) F2: My winning was due to chance	(3) F3: I completely deserve the win	(4) F4: I put in maximum effort/skills
Transparent luck	0.101	-0.587	0.214	1.092**
	(0.407)	(0.328)	(0.408)	(0.434)
Non-transparent merit	1.304***	-0.486	0.317	0.862**
	(0.389)	(0.373)	(0.323)	(0.389)
Transparent merit	0.507	-0.417	-0.044	1.004***
	(0.412)	(0.392)	(0.411)	(0.389)
Interaction between treatment dummies and c_i				
Opaque luck × c_i	-0.252	-0.198	0.207	0.939***
	(0.308)	(0.224)	(0.267)	(0.302)
Transparent luck × c_i	-0.382	0.459**	0.224	0.161
	(0.295)	(0.201)	(0.271)	(0.331)
Opaque merit × c_i	-1.586***	-0.790***	0.087	0.804***
	(0.233)	(0.247)	(0.156)	(0.221)
Transparent merit × c_i	-0.681***	-1.302***	0.278	0.575***
	(0.253)	(0.279)	(0.234)	(0.201)
Interaction between treatment dummies and l_j				
Opaque luck × l_j	0.019	-0.284	0.053	0.493
	(0.350)	(0.255)	(0.297)	(0.359)
Transparent luck × l_j	0.350	0.561**	-0.353	-0.543
	(0.275)	(0.227)	(0.293)	(0.334)
Opaque merit × l_j	-0.103	-0.028	-0.107	0.231
	(0.233)	(0.258)	(0.163)	(0.233)
Transparent merit × l_j	0.954***	0.268	0.094	0.206
	(0.271)	(0.295)	(0.247)	(0.192)

Public goods

Table 5: Evidence of spillover effect into the subsequent public goods game

VARIABLES	Non-winners: PGG contribution
Winner's redistribution in the first task	0.204***
	(0.025)
Non-winners' expectation of the winner's redistribution level	0.124***
	(0.026)
Controls	**YES**
Constant	16.405***
	(3.123)
Observations	992
R-squared	0.160

Note: **<5%; ***<1%. Heteroskedasticity-consistent standard errors (HC3) are in parentheses. Other control variables are as in Table 2.

Discussion & conclusions

In sum, we found evidence that transparency increases redistribution that, in turn, may increase cooperation between participants in an otherwise unrelated social dilemma situation.

Possible policy applications: