Studying Oppression in the Lab

Noah Bacine[1], Haley Harwell, Ryan Rholes[1]

Oxford University[1]

November 21, 2023

In Step with Klaus

From Abbink & Herrmann (2011):

"Antisocial behaviour is ubiquitious in the real world ... Yet behavioral economists have devoted almost all their attention to prosociality."

What is Oppression?

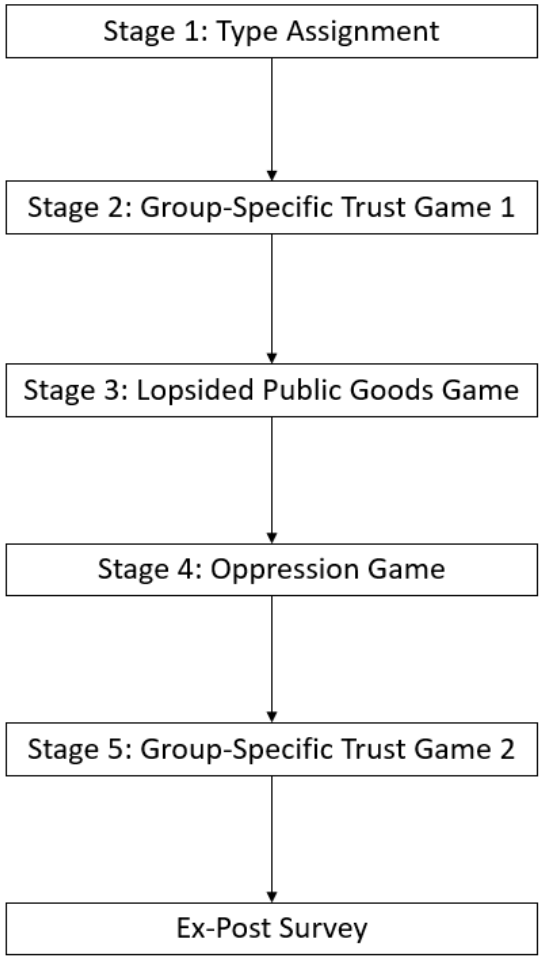
Oppression is malicious or unjust treatment or exercise of power, often under the guise of governmental authority or cultural opprobrium.
Economic Oppression is the social act of placing severe economic restrictions on individuals, groups or institutions. Economic oppression may take several forms, including the practice of bonded labour (in some parts of India); serfdom; forced labour; low wages; denial of equal opportunity;

What is Oppression?

Oppression is malicious or unjust treatment or exercise of power, often under the guise of governmental authority or cultural opprobrium.
Economic Oppression is the social act of placing severe economic restrictions on individuals, groups or institutions. Economic oppression may take several forms, including the practice of bonded labour (in some parts of India); serfdom; forced labour; low wages; denial of equal opportunity;

We seek to introduce a framework to study oppressive behavior in the lab

Full Experimental Design



Stage 1: Type Assignment

- In the first stage participants are assigned to one of two types:
  - 40% are advantaged players
  - 60% are disadvantaged players
- Participants unaware of the difference across types until Stage 3
- Treatments vary the Type Assignment Stage (Adapted from Ball, Eckel, Grossman & Zame, 2001)
  - Baseline: Types are neutral (1/2) and randomly assigned
  - Earned: Types are neutral (1/2) and determined 'High' scores on a quiz
  - Reinforced: Types have implied status (Star/No Star) through language in instructions, celebratory ceremony and treatment by researchers but are randomly assigned

Stage 2/5: Group Specific Trust Game

- Participants complete a trust game using the strategy method
  - Informed of the identity of their partner prior to making the decision
  - Partner identity is fixed across TGs
  - Endowed with 20 ECU in both roles
- First make a decision as a sender:
  - Can send amounts in discrete increments of 4
  - Any amount sent tripled by experimenters
- Then make a decision as a receiver:
  - Make a decision for every possible amount they could be sent

Stage 3: The Lopsided Public Goods Game

Groups of 5 play a modified public goods game for 5 rounds:

- Players start each round with 20 tokens and can:
  - Put tokens in private account providing a return of 1 ECU
  - Put tokens in the public account providing 2 ECUS split as follows:
    - **2 advantaged (Type 1) players get 0.73 ECUs**
    - **3 disadvantaged (Type 2) players get 0.18 ECUs**
    - Returns selected such that Type 2 will be worse off when everyone contributes max than if no one contributes anything

$$E_i = (20 - c_i) + \sum_{i=0}^{N} c_i * r_i$$

Where c_i is player i's contribution and r_i is their return from the public good [0.18,0.73]

Stage 4: The Oppression Game

After 5 rounds of the LPGG, costly punishment is introduced:

- Only advantaged (Type 1) players can punish
  - Advantaged (Type 1) players pay 1 ECU for each point they assign
- Only disadvantaged (Type 2) players can be punished
  - Disadvantaged (Type 2) players lose 10% of their earnings for each point they receive

We define **oppression** as the decision to apply punishment in this context

Ex-post Survey

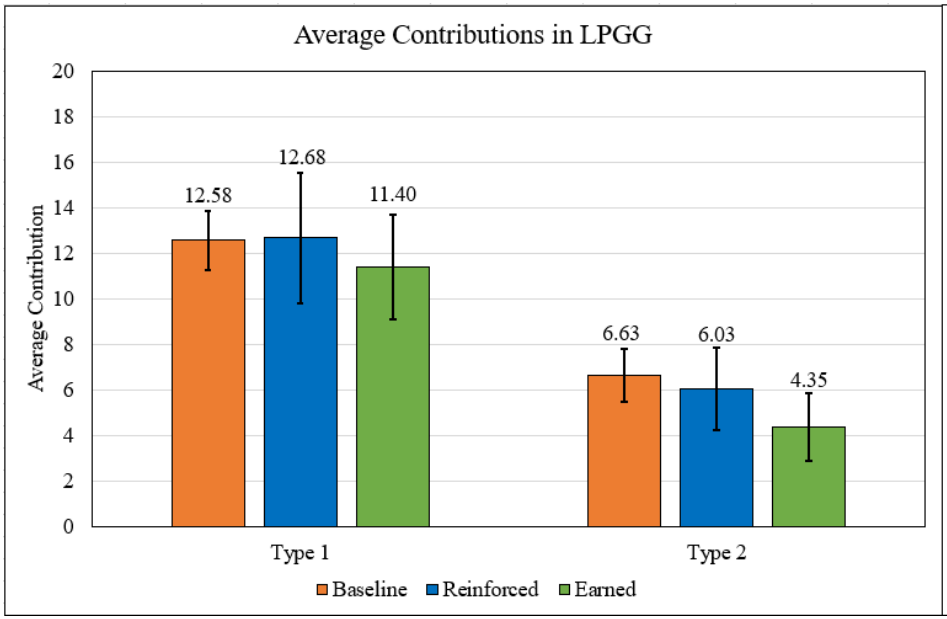
Participants complete a short survey after the experimental conditions

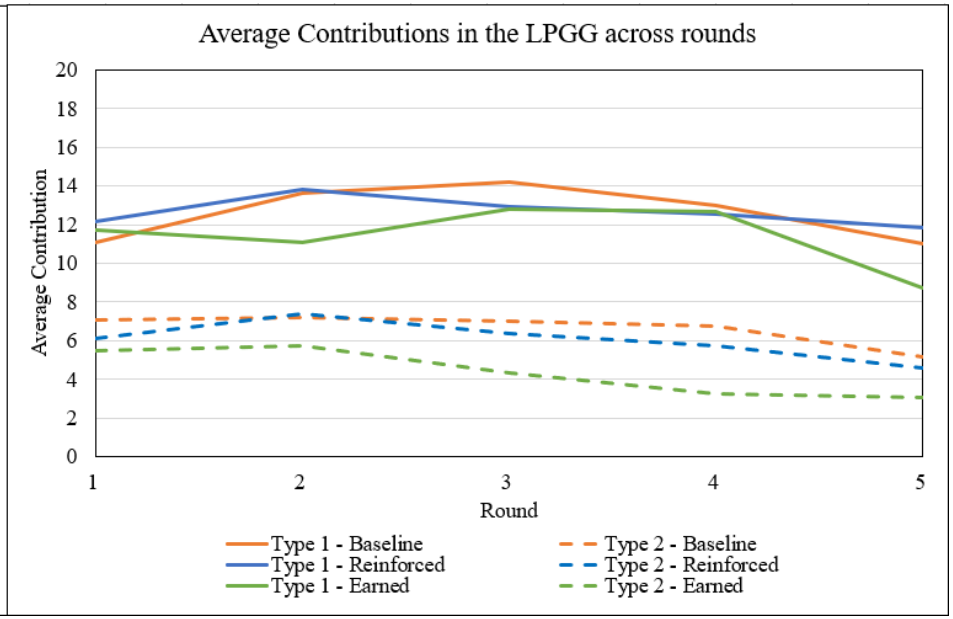
- Demographics
- In-group favoritism
- Norms about in-game behaviour
- Social Dominance Orientation
- Feelings & Experience during the experiment

Sample and Data collection

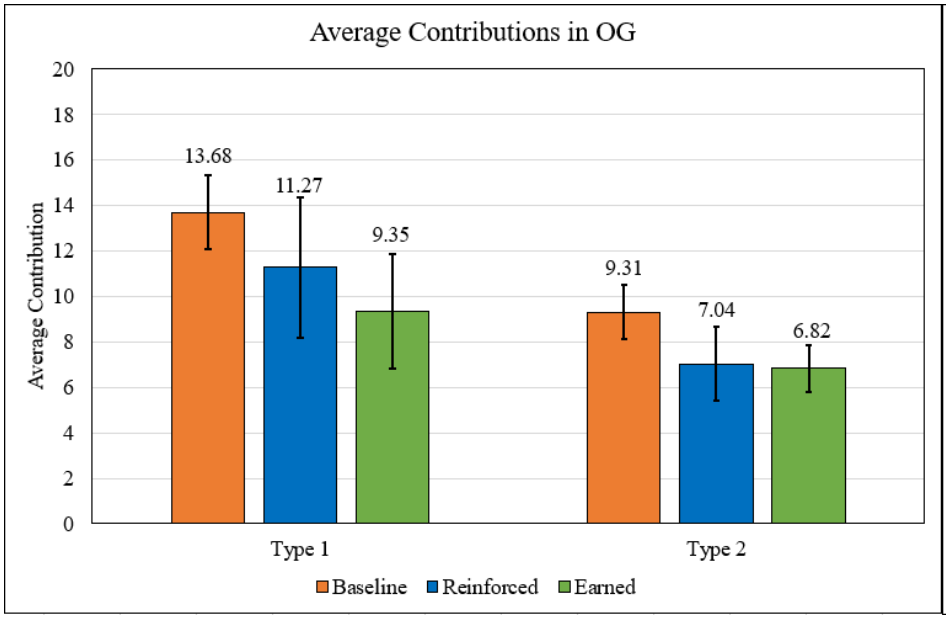
- We ran 3 pilot sessions at Oxford's lab in April 2022
- Ongoing data collection:
  - 13 sessions of Baseline:
    - 150 participants in 30 groups of 5
    - 60 'oppressors' and 90 'oppressees'
  - 4 sessions of Reinforced:
    - 60 participants in 12 groups of 5
    - 24 'oppressors' and 34 'oppressees'
  - 4 sessions of Earned:
    - 65 participants
    - 26 'oppressors' and 39 'oppressees'
- AEA pre-registration: AEARCTR-0009160

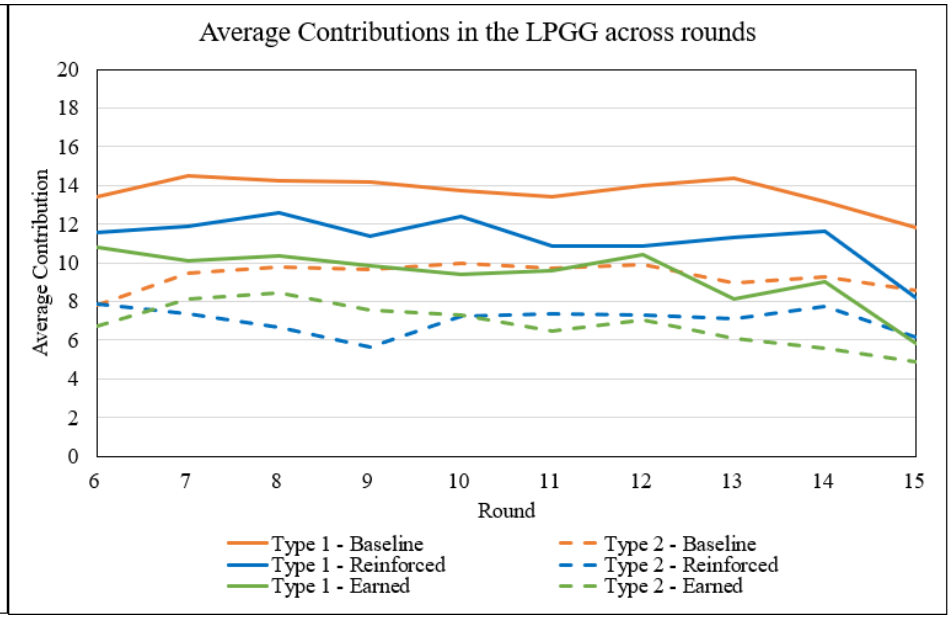
Lopsided Public Goods Game Contributions



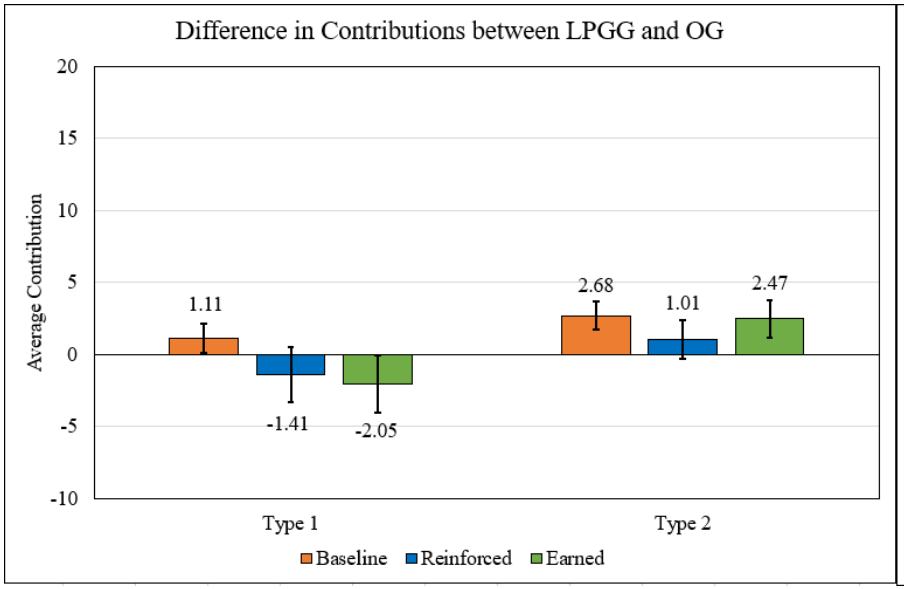


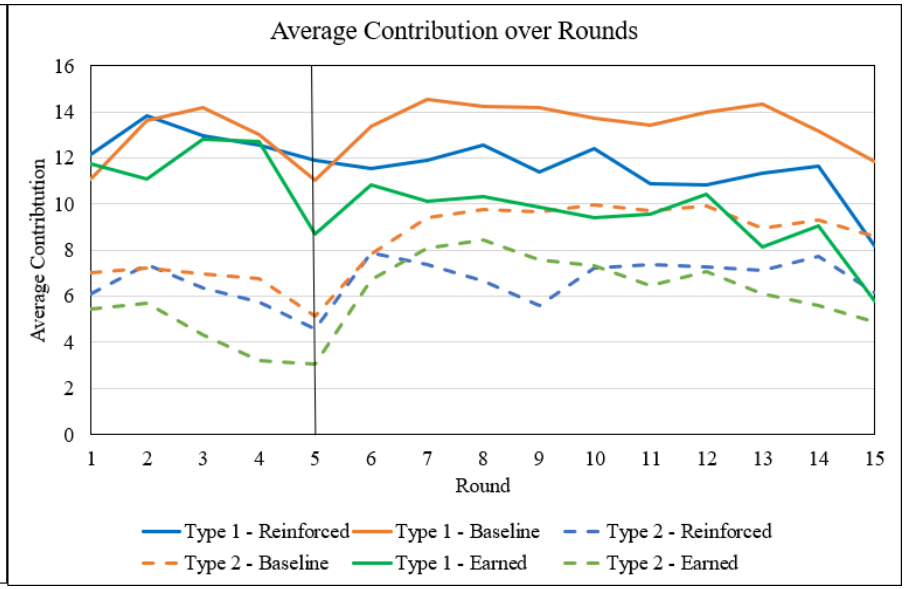
Oppression Game Contributions



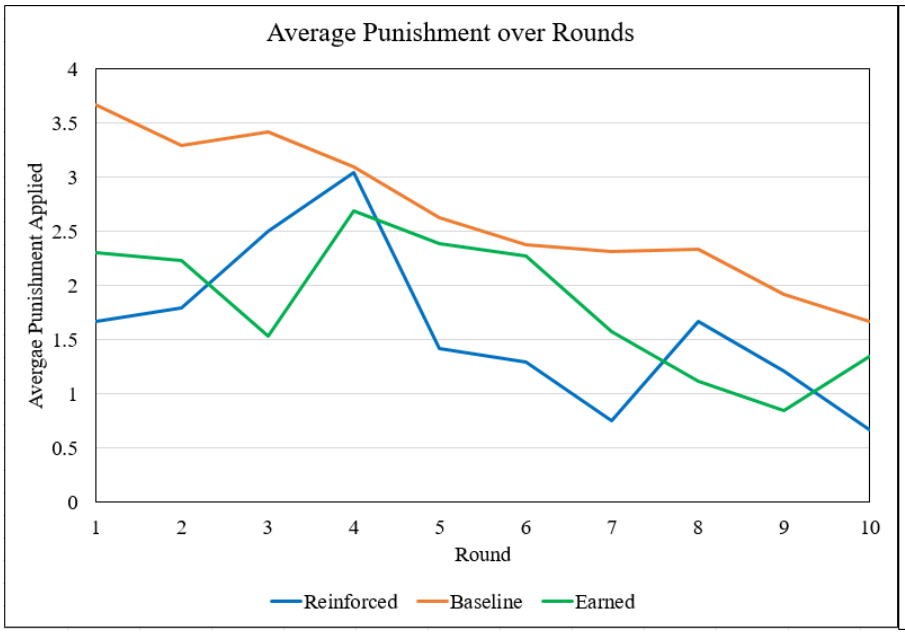


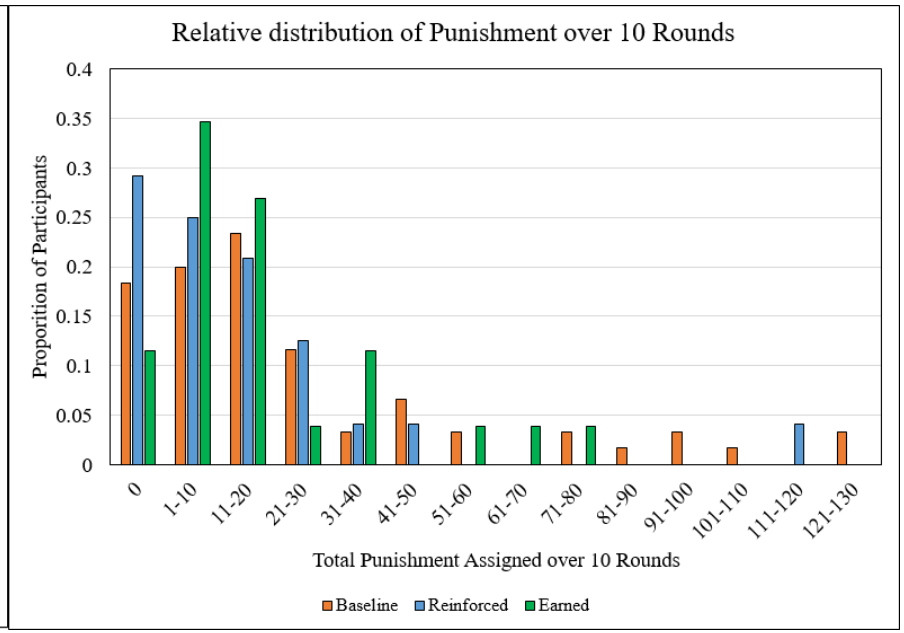
Overall Contributions





Aggregate Punishment Behaviour





- Average punishment over 10 rounds:
  - Baseline: 26.73
  - Reinforced: 16
  - Earned: 18.31

Unpacking Punishment Determinants

Table 1: Regression Table: Punishment Decisions

	(1) Punishment	(2) Punishment	(3) Punishment	(4) Punishment
Cont.	-0.117****			-0.070****
	(0.016)			(0.018)
$\Delta Cont.$		-0.064****		-0.005
		(0.010)		(0.007)
Cont. - $\overline{Cont._{g,t}}$			-0.142****	-0.073****
			(0.019)	(0.020)
constant	1.893****	0.962****	0.970****	1.529****
	(0.235)	(0.136)	(0.145)	(0.228)
N	3300	2970	3300	2970
Clusters	55	55	55	55

Random effects regressions with time FE. Robust standard errors clustered at group level in parentheses.
* $p < .10$, ** $p < .05$, *** $p < .01$, **** $p < .001$

Unpacking Punishment Across Treatments

Table 2: Regression Table: Punishment Decisions

	(1) Punishment	(2) Punishment	(3) Punishment	(4) Punishment	(5) Punishment
Contribution	-0.117****	-0.119****	-0.112****	-0.120****	-0.150****
	(0.016)	(0.017)	(0.025)	(0.026)	(0.043)
Baseline		0.000			
		(.)			
Reinforced		-0.683***			
		(0.264)			
Earned		-0.632***			
		(0.233)			
Constant	1.893****	2.213****	2.170****	1.499****	1.774****
	(0.235)	(0.295)	(0.378)	(0.384)	(0.400)
N	3300	3300	1800	720	780
Clusters	55	55	30	12	13
Treatment	All	All	Baseline	Reinforced	Earned

Random effects regressions. Robust standard errors clustered at the group level in parentheses.

* $p < .10$, ** $p < .05$, *** $p < .01$, **** $p < .001$

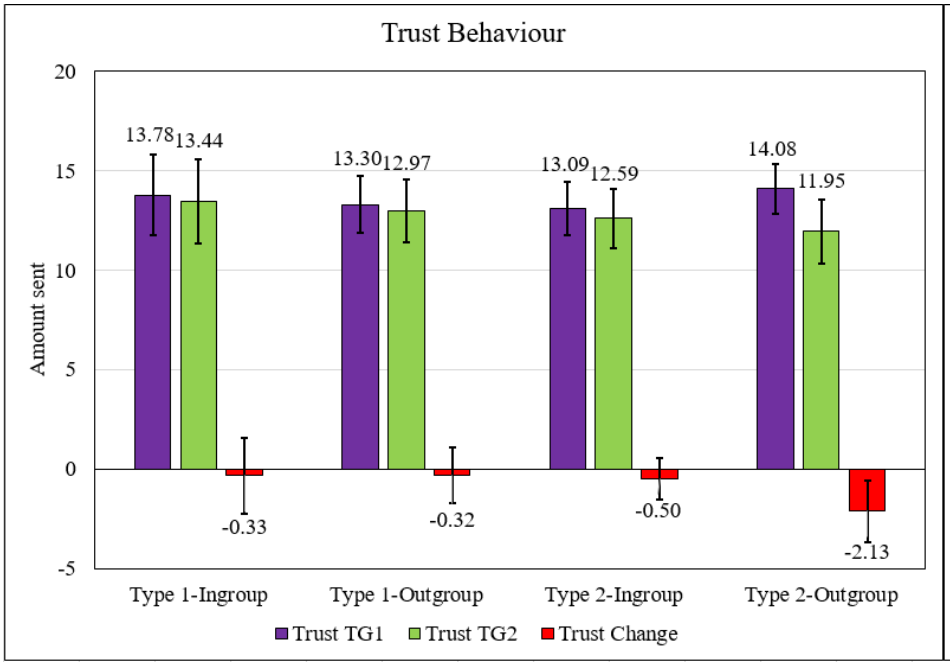
Individual Heterogeneity in Punishment

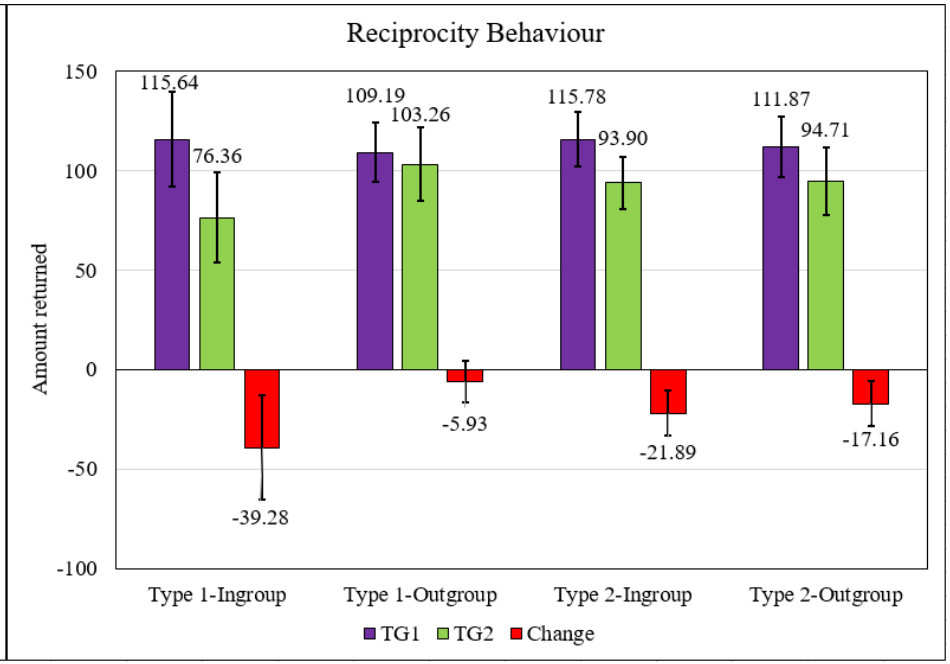
Table 3: How Punishment Responds to Contributions By GSS$_Fair$

	(1) Punishment	(2) Punishment	(3) Punishment	(4) Punishment
Contribution	-0.557****	-0.420****	-0.793****	-0.525****
	(0.090)	(0.071)	(0.229)	(0.082)
Female	-0.412***	-0.495*	-0.528	-0.352*
	(0.156)	(0.288)	(0.426)	(0.189)
Constant	0.340**	0.293	0.422	0.355*
	(0.137)	(0.236)	(0.408)	(0.188)
N	3270	900	690	1680
$GSSType$	All	Take Advantage	Fair	Other

Random effects regressions with time FE. Robust standard errors clustered at group level in parentheses.
* $p < .10$, ** $p < .05$, *** $p < .01$, **** $p < .001$

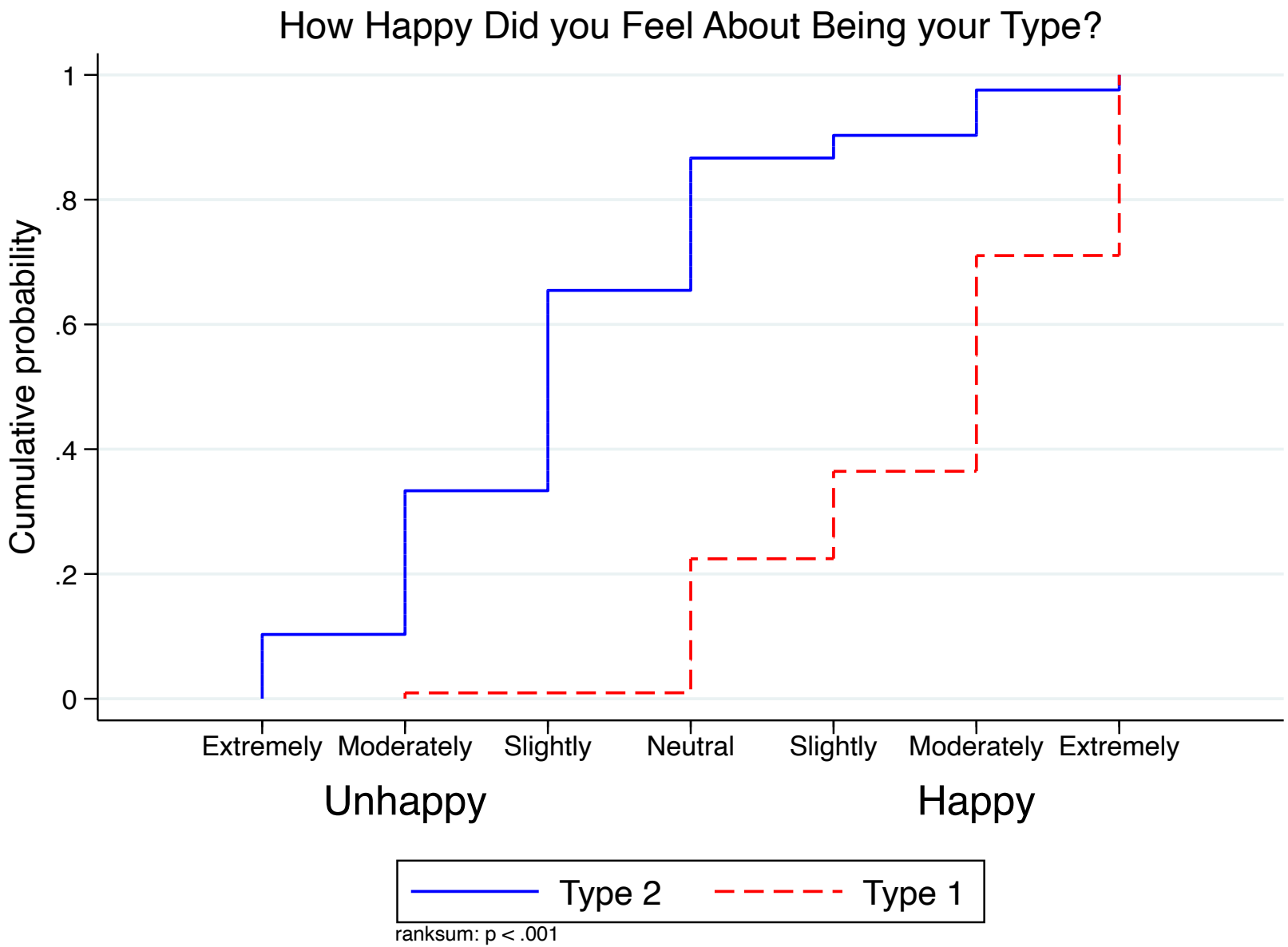
Impacts on Trust & Reciprocity





- Only trust change that was distinguishable from 0 was Type 2s towards Type 1s
- Reciprocity decreases across the board but:
  - strong group differentiation among Type 1s
  - large decline across both groups for Type 2s

Happiness about being One's type



Type 2 Qual Responses

We asked participants to guess what they thought the game was about & how they felt during the course of the session:

- "I felt that I was put in an "unfair" position as a type 2 participant."
- "I was very frustrated being a No-Star. Whatever I did, was not enough to escape from penalties of Starts, which showed no compassion. Just awful"
- "being assigned to Type 2 (with lower conversion rates) makes me feel I am in an inferior group and my effort and gain are not positively related (feel a bit helpless)"
- "I felt that type 1 people took advantage of their advantageous position. Effectively forcing type 2 individuals to contribute money to the public account (and being worse off than if they kept their money in the private account) while failing to contribute to the public account themselves."
- "Feeling some unfairness towards being part of the No Star group, also feeling solidarity towards my No Start peers. Certainly expecting high moral standards from people in the Start Group and holding them to principle of fairness and wealth re-distribution. Feeling very disappointed when I felt they took decisions that negatively impacted no stars"

Type 1 Qual Responses

- "I was angry at myself as well at some points and ashamed when i realized I was being harsh and unfair toward the type 2s - I started to understand that it was normal for them not to want to put anything in the public account since that meant virtually giving it all up - and so i felt guilty for having penalized them for doing so when it's actually a perfectly rational reaction"
- "I was happy about my type, I felt powerful. I was however angry that the second type 1 was exploiting people and not putting anything into the account. I felt guilty about applying penalties to people so I tried to keep the penalty low to incentivize them to give so the other type one wouldnt punish them. Until I realized that I could not give anything as well"
- "It's scary how behind closed doors so to speak, we can become ruthless and lose all compassion. If interacting with those people IRL i probably would've made different decisions... I usually think of myself as pretty altruistic but now I might how to revise that in light of today!"

Summary of Findings

- Despite a large literature on the importance of fairness and equality concerns in the PGG setting, we document a willingness to punish in an unfair scenario
- People will oppress others given the opportunity (will encourage payoff decreasing behavior in unfair situations)
- Willingness to oppress differs across individuals with some fully abstaining & others being as extractive as possible
- The experience of an oppressive environment impacts both trust and reciprocity

Thank you!

Contact us at:

noah.bacine@nuffield.ox.ac.uk
ryan.rholes@economics.ox.ac.uk