Cooperation creates special moral obligations

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Introduction

- Humans are often characterized as the cooperative species (Bowles and Gintis, 2011) and people's moral motivation constitutes a foundation for cooperation in human societies (Fehr and Gachter, 2000; Fehr and Fischbacher, 2004; Henrich, 2004; Falk and Fischbacker, 2006).
  - Does this relationship also go the other way: is cooperation a source of moral obligation?
- A fundamental moral question is whether those who stand in a special relationship have special moral obligations to one another.
  - Do we have special obligations towards family members, colleagues, or fellow citizens?

Cooperation

- This question is at the heart of all issues of distributive justice (Singer, 2011)
  - Clearly seen in the questions raised by the large inequalities between countries and the increasing number of migrants
- A prominent argument for special moral obligations has been put forward by the philosopher John Rawls (Rawls, 1971, 2001): fellow citizens have special moral obligations to one another because a political society is a system of cooperation that creates special moral obligations among its members.
- We study whether cooperation, the relationship of working together for mutual benefit, is seen to create special moral obligations.

Research questions

- Two main research questions:
  - Is cooperation a source of special moral obligations between those who cooperate?
  - Does cooperation also create general moral obligations?
- To identify people's moral views on this question we study the distributive behavior of impartial third parties or 'spectators' who make a redistributive choice in a real situation.
  - Do not study in-group effects (Sherif, 1967; Rabbie, 1969; Tajfel, 1970; Chen and Li, 2009).

Main features of the design

- **Experimental design: Spectators** decide how much to transfer to a **worker** who has lost his or her earnings from another worker who has not lost his or her earnings.
- **Spectators**, 1015 individuals who are representative for the US population on a set of observable (recruited with the help of an international data-collection agency, TNS Gallup).
- **Workers**, 1015 sets of six individuals recruited through an international online market place (Amazon Mechanical turk).

Pre-analysis plan

- Describes the main research questions and formulates the main hypotheses to be tested.
- Describes the design in detail.
- Describes the identification strategy.
- The plan is publicly available and was posted on AEA RCT registry before we opened any data for analysis.

Design: workers (1)

- The workers got a participation fee of 2 USD and were told that they could earn 6 USD if they completed an assignment.
- They were also told that some of them would randomly lose their earnings and that there would be a distribution phase where a third party could decide to transfer earnings from a randomly selected lucky worker (who had not lost the earnings) to an unlucky worker.
- For the assignment, we constructed sets of six workers, where each set was randomly divided into two groups of three workers, group A and group B.

Design: workers (2)

- The workers were placed into one of two conditions in terms of production:
  - *Independent production*: a worker succeeded in doing the assignment if he or she completed a code recognition task.
  - *Cooperative production*: a worker succeeded in doing the assignment if all three workers in the group completed the code recognition task.
- The cooperative production condition captures a key aspect of cooperation: that the success of each individual causally depends on the contribution of the others.

Design - spectator sample

	Full sample
Female (share)	0.52
Age (year)	
Median	41
p25	30
p75	53
Income (share)	
Less than 40 000	0.31
Between 40 000-75 000	0.28
More than 75 000	0.36
Republican (share)	0.31
Number of participants	1015

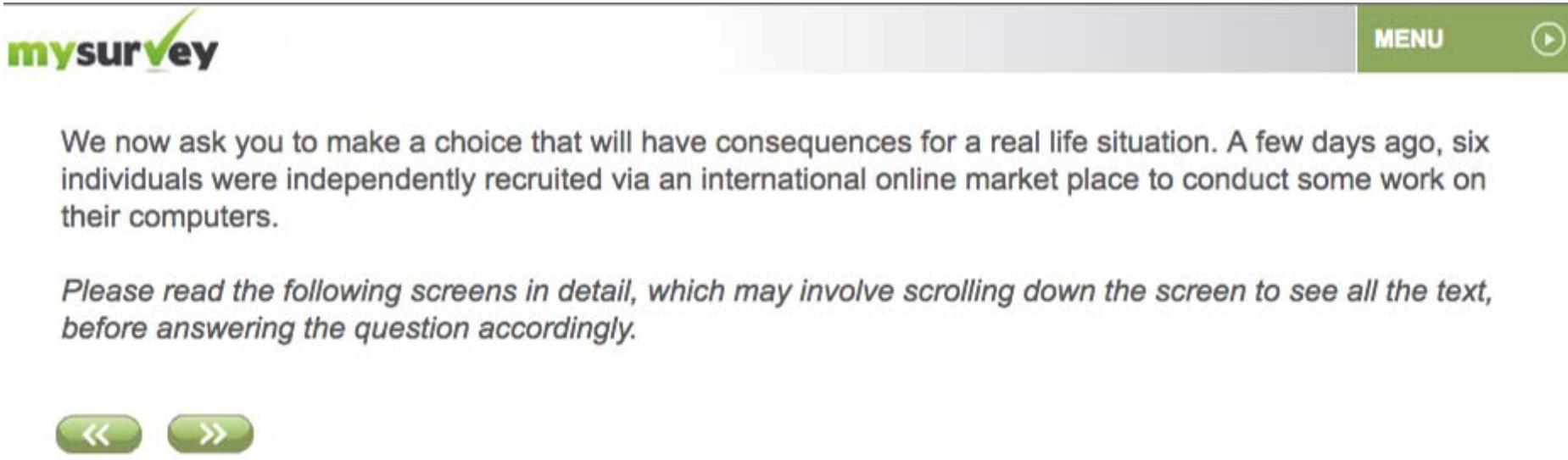
Design: spectators

- In the distributive situations presented to the spectators, all six workers had succeeded in completing the assignment and earned 6 USD. However, one of the workers, randomly drawn, had lost his or her earnings from the assignment.
- In a 2x2 between-subjects design, we varied two aspects of the distributive situation presented to the spectators:
  - whether workers had cooperated within their group or worked independently on the assignment
  - whether the selected lucky worker and the unlucky worker for which the spectator made a redistributive decision belonged to the same group

Overview of design

		Worker Production	
		Independent	Cooperation within group
Spectator Redistribution	Within group	T1	T2
	Between groups	T3	T4

Instructions



No cooperation

mysurvey MENU

They were told that they could earn money if they succeeded in completing an assignment. For the assignment, the individuals were randomly matched in two groups, **group A** and **group B**, each consisting of **three individuals**.

The individuals worked independently on the assignment in the following way:

- Each individual was asked to complete a code recognition task, the same task for all individuals. If the individual completed the task, he or she succeeded in doing the assignment and earned $6.
- If one individual did not complete the task, that individual failed in doing the assignment and did not earn anything.
- The individuals were anonymous and they could not communicate with each other.

The individuals were informed that after completion of the assignment, one of the six individuals, chosen at random, would lose any earnings from the assignment.

They were also told that another person (not one of the workers) would be informed about this and given the opportunity to transfer money from one of the individuals who had not lost their earnings, chosen at random, to the individual who had lost his or her earnings. The individuals were not given any further information.

You are this other person and we will now tell you how these six individuals performed.

« »

Distributive choice: no cooperation

All three individuals in Group A **succeeded in completing the assignment**. As a result, each of the individuals in group A **earned $6**.

All three individuals in Group B **succeeded in completing the assignment**. As a result, each of the individuals in group B **earned $6**.

After the work was done, one individual in group A lost all his or her earnings. We now want you to choose whether to transfer money, from an individual in group A to the unlucky individual in group A.

The two individuals affected by your decision will receive the payment you decide within a few days. The four other individuals will be paid $6 regardless of what you decide. None of the six individuals will receive any additional information.

Please state which of the following alternatives you choose:

Please select one answer only

I do not transfer:

- The unlucky individual in group A is paid $0 and the selected individual in group A is paid $6.

I do transfer:

- The unlucky individual in group A is paid $1 and the selected individual in group A is paid $5.
- The unlucky individual in group A is paid $2 and the selected individual in group A is paid $4.
- The unlucky individual in group A is paid $3 and the selected individual in group A is paid $3.
- The unlucky individual in group A is paid $4 and the selected individual in group A is paid $2.
- The unlucky individual in group A is paid $5 and the selected individual in group A is paid $1.
- The unlucky individual in group A is paid $6 and the selected individual in group A is paid $0.

Cooperation

mysurvey MENU

They were told that they could earn money if they succeeded in completing an assignment. For the assignment, the individuals were randomly matched in two groups, **group A** and **group B**, each consisting of **three individuals**.

Each group collaborated on the assignment in the following way:

- Each individual in the group was asked to complete a code recognition task, the same task for all individuals. If all three individuals in the group completed the task, the group succeeded in doing the assignment and each earned $6.
- If one individual in the group did not complete the task, the group failed in doing the assignment and no one in the group earned anything.
- The individuals in the group knew how their earnings depended on the others in the group, but they were anonymous and could not communicate with each other.

The individuals were informed that after completion of the assignment, one of the six individuals, chosen at random, would lose any earnings from the assignment.

They were also told that another person (not one of the workers) would be informed about this and be given the opportunity to transfer money from one of the individuals who had not lost their earnings, chosen at random, to the individual who had lost his or her earnings. The individuals were not given any further information.

You are this other person and we will now tell you how these six individuals performed.

Distributive choice: cooperation

Group A **succeeded in completing the assignment**. As a result of the successful collaboration, each of the individuals in group A **earned $6**.

Group B **succeeded in completing the assignment**. As a result of the successful collaboration, each of the individuals in group B **earned $6**.

After the work was done, one individual in group A lost all the earnings. We now want you to choose whether to transfer money, from an individual in group A to the unlucky individual in group A.

The two individuals affected by your decisions will receive the payment you decide for them within a few days. The four other individuals will be paid $6 for the assignment no matter what you decide. None of the six individuals will receive any additional information.

Please state which of the following alternatives you choose:

Please select one answer only

I do not transfer:

- ○ The unlucky individual in group A is paid $0 and the selected individual in group A is paid $6.

I do transfer:

- ○ The unlucky individual in group A is paid $1 and the selected individual in group A is paid $5.
- ○ The unlucky individual in group A is paid $2 and the selected individual in group A is paid $4.
- ◉ The unlucky individual in group A is paid $3 and the selected individual in group A is paid $3.
- ○ The unlucky individual in group A is paid $4 and the selected individual in group A is paid $2.
- ○ The unlucky individual in group A is paid $5 and the selected individual in group A is paid $1.
- ○ The unlucky individual in group A is paid $6 and the selected individual in group A is paid $0.

Distributive choice: between groups

Group A **succeeded in completing the assignment**. As a result of the successful collaboration, each of the individuals in group A **earned $6.**

Group B **succeeded in completing the assignment**. As a result of the successful collaboration, each of the individuals in group B **earned $6.**

After the work was done, one individual in group A lost all his or her earnings. We now want you to choose whether to transfer money, from an individual in group B to the unlucky individual in group A.

The two individuals affected by your decision will receive the payment you decide within a few days. The four other individuals will be paid $6 for the assignment regardless of what you decide. None of the six individuals will receive any additional information.

Please state which of the following alternatives you choose:

Please select one answer only

I do not transfer:

- The unlucky individual in group A is paid $0 and the selected individual in group B is paid $6.

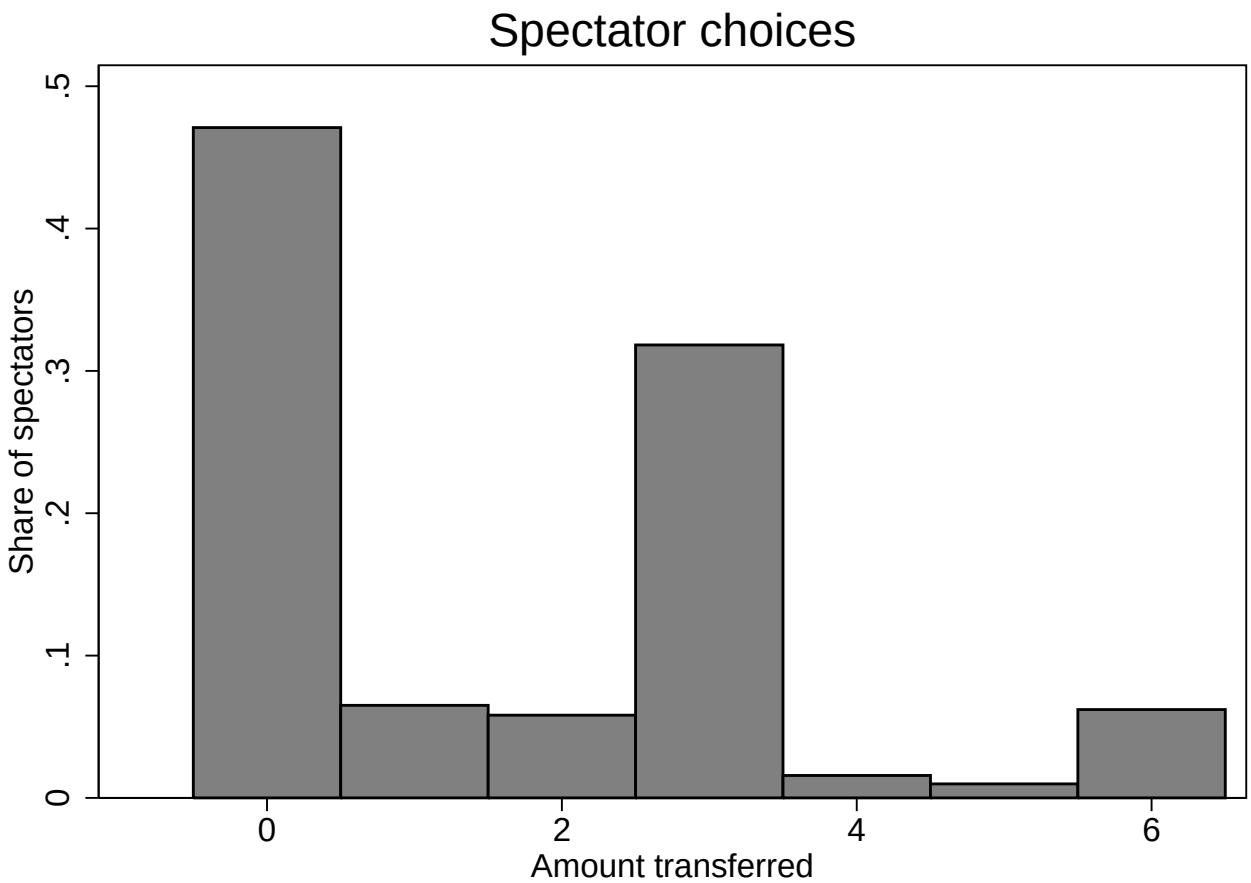
I do transfer:

- The unlucky individual in group A is paid $1 and the selected individual in group B is paid $5.
- The unlucky individual in group A is paid $2 and the selected individual in group B is paid $4.
- The unlucky individual in group A is paid $3 and the selected individual in group B is paid $3.
- The unlucky individual in group A is paid $4 and the selected individual in group B is paid $2.
- The unlucky individual in group A is paid $5 and the selected individual in group B is paid $1.
- The unlucky individual in group A is paid $6 and the selected individual in group B is paid $0.

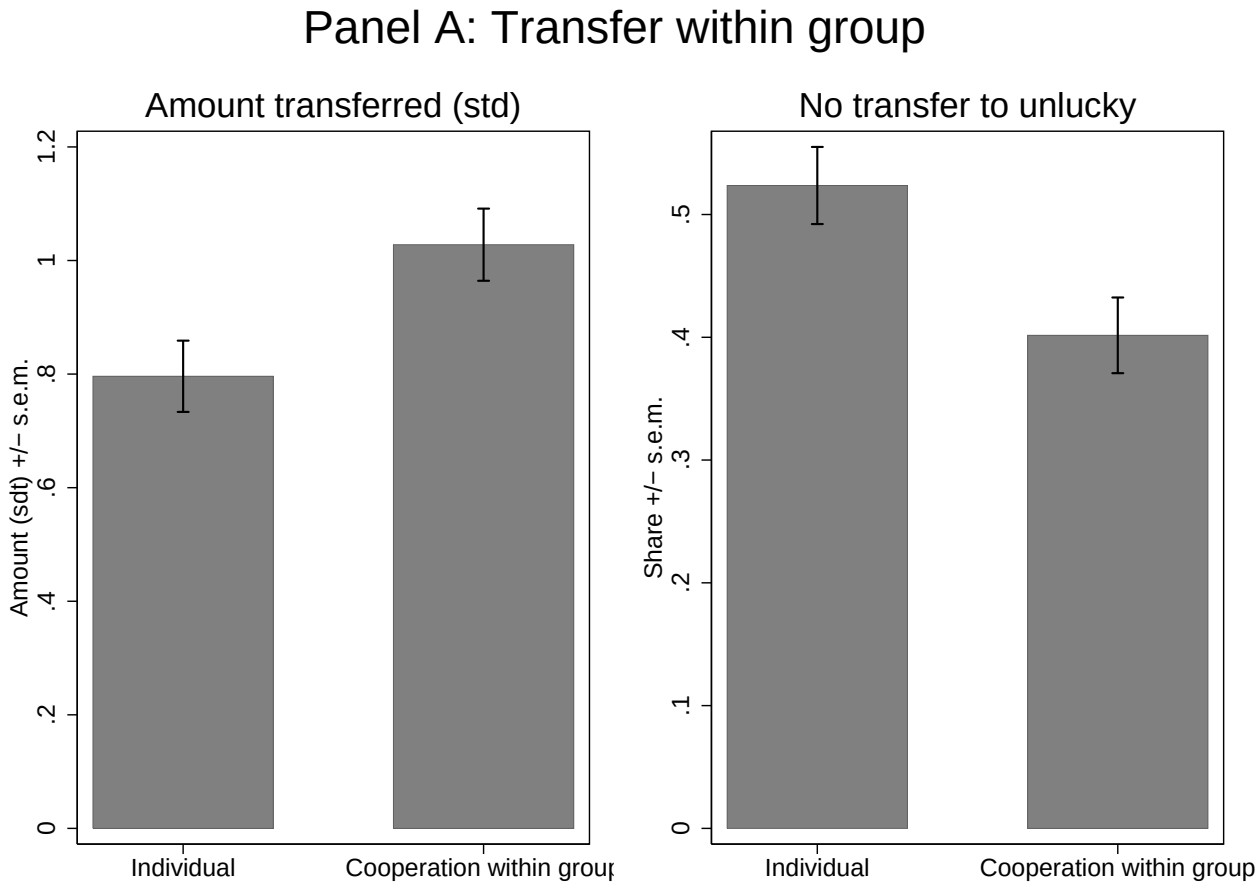
Important design choices

- **Real choice**: The decision made by a spectator determined the final distribution of earnings for two workers.
- **Same pre-redistribution earnings in all situations**: The pre-redistribution earnings between the lucky and unlucky worker was always (6 USD, 0 USD).
- **Information to workers**: Spectators knew that the workers would not get feedback on the group membership of the individual they were matched with.

Histogram of amount transferred



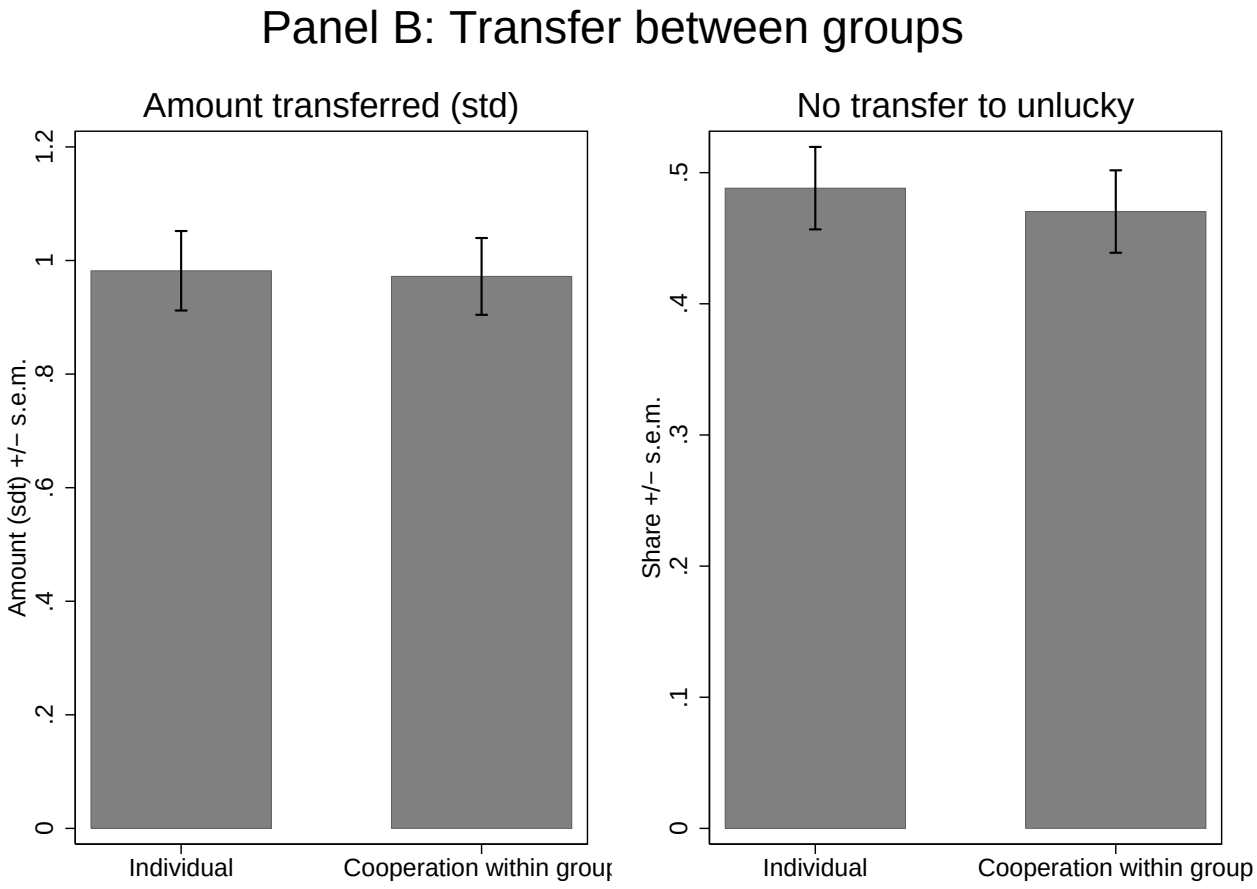
Cooperation - within group transfer



Regressions on transfers within group

	Amount transferred (std)		Transferred nothing	
	(1)	(2)	(3)	(4)
Cooperation	0.232***	0.237***	-0.122***	-0.123***
	(0.089)	(0.090)	(0.044)	(0.044)
Republican		-0.075		0.042
		(0.102)		(0.050)
High age		-0.030		0.129***
		(0.090)		(0.045)
Female		0.012		-0.014
		(0.091)		(0.044)
High income		-0.156*		0.087*
		(0.093)		(0.046)
Constant	0.796***	0.883***	0.524***	0.420***
	(0.063)	(0.088)	(0.031)	(0.047)
Observations	508	508	508	508
R^2	0.013	0.021	0.015	0.045

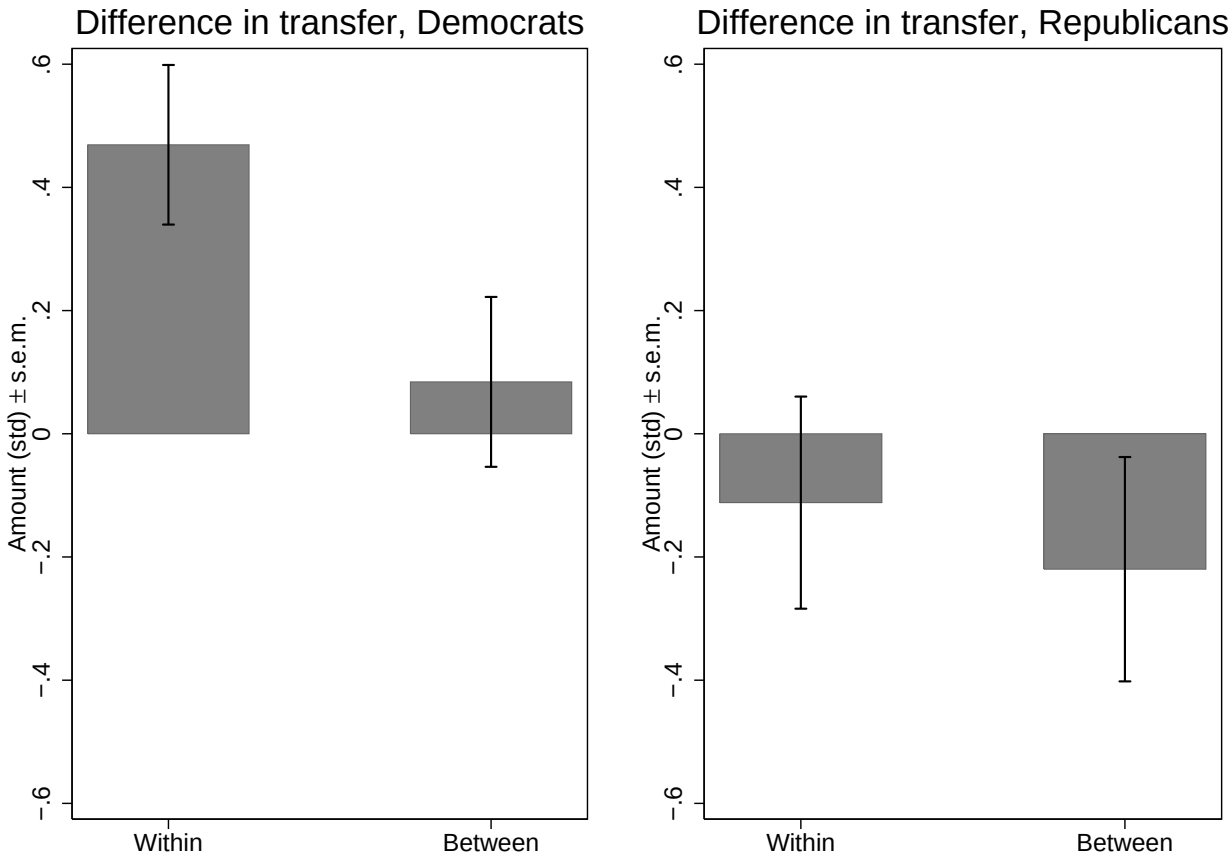
Cooperation - between group transfers



Regressions on transfers between groups

	Amount transferred (std)		Transferred nothing	
	(1)	(2)	(3)	(4)
Cooperation	-0.010	-0.019	-0.018	-0.013
	(0.097)	(0.097)	(0.044)	(0.044)
Republican		-0.055		0.037
		(0.110)		(0.050)
High age		-0.277***		0.139***
		(0.098)		(0.045)
Female		-0.065		0.008
		(0.097)		(0.044)
High income		0.071		-0.039
		(0.101)		(0.046)
Constant	0.982***	1.143***	0.488***	0.418***
	(0.070)	(0.109)	(0.031)	(0.048)
Observations	507	507	507	507
R^2	0.000	0.019	0.000	0.023

Political differences



Heterogeneity - transfers within group

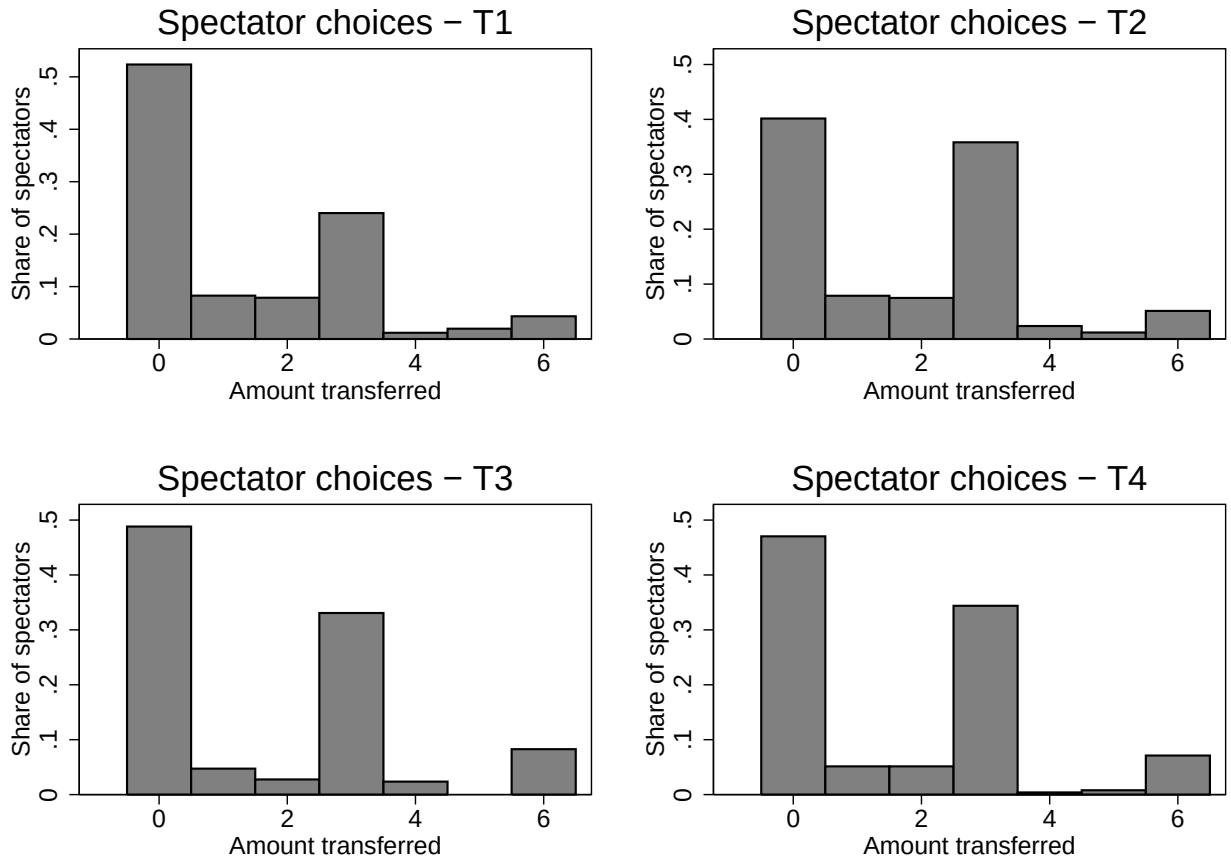
	Amount transferred (std)				
	1	2	3	4	5
Cooperation	0.387***	0.254**	0.135	0.251**	0.245
	(0.105)	(0.118)	(0.135)	(0.114)	(0.160)
Cooperation*Republican	-0.490**				-0.512**
	(0.200)				(0.204)
Cooperation*High age		-0.032			0.090
		(0.180)			(0.181)
Cooperation*Female			0.194		0.188
			(0.180)		(0.180)
Cooperation*High income				-0.039	0.014
				(0.186)	(0.186)
Republican	0.171	-0.074	-0.078	-0.073	0.177
	(0.147)	(0.102)	(0.102)	(0.103)	(0.147)
High age	-0.026	-0.014	-0.028	-0.030	-0.068
	(0.090)	(0.125)	(0.091)	(0.091)	(0.124)
Female	0.019	0.012	-0.084	0.013	-0.074
	(0.090)	(0.091)	(0.126)	(0.090)	(0.126)
High income	-0.136	-0.155*	-0.159*	-0.136	-0.147
	(0.093)	(0.093)	(0.092)	(0.131)	(0.129)
Constant	0.798***	0.875***	0.932***	0.875***	0.867***
	(0.092)	(0.096)	(0.095)	(0.096)	(0.107)
Observations	508	508	508	508	508
R^2	0.034	0.021	0.023	0.021	0.036

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Concluding remarks

- Our findings suggest that cooperation is seen to create special moral obligations between those who cooperate.
- Shed light on how people draw the moral circle that defines whom they include in their moral considerations, which is at the heart of the question of global fairness (Singer, 2011; Risse, 2012).
- We complement work showing that social preferences constitute a foundation for cooperation in human societies (Bowles and Gintis, 2011; Fehr and Gachter, 2000; Fehr and Fischbacher, 2004; Henrich, 2004; Falk and Fischbacker, 2006). We show that the relationship also goes the other way.
- Our results also suggest that political disagreements about redistributive policy partly reflect different views about cooperation as a source of distributive justices.

Histogram of amount transferred by treatment



Note: The figure shows the histogram of transferred amount in USD for each of the four treatments.