

# Injunctive vs. Descriptive Social Norms and Reference Group Dependence

*Franziska Heinicke, Christian König-Kersting, and Robert Schmidt*

EPOS Summer Summit 2022

8 April 2022

# Social Norms

- Psychology (e.g. Sherif, 1936; Cialdini et al. 1990)
- Sociology (e.g. Merton, 1957; Coleman 1990)
- Economics (e.g. Elster, 1989; Ostrom 2000)

Social norms...

- ... affect saving rates, financial reporting, job search, energy consumption, etc.,
- ... are sensitive to the context, (perceived) compliance, and enforcement,
- ... form endogenously.

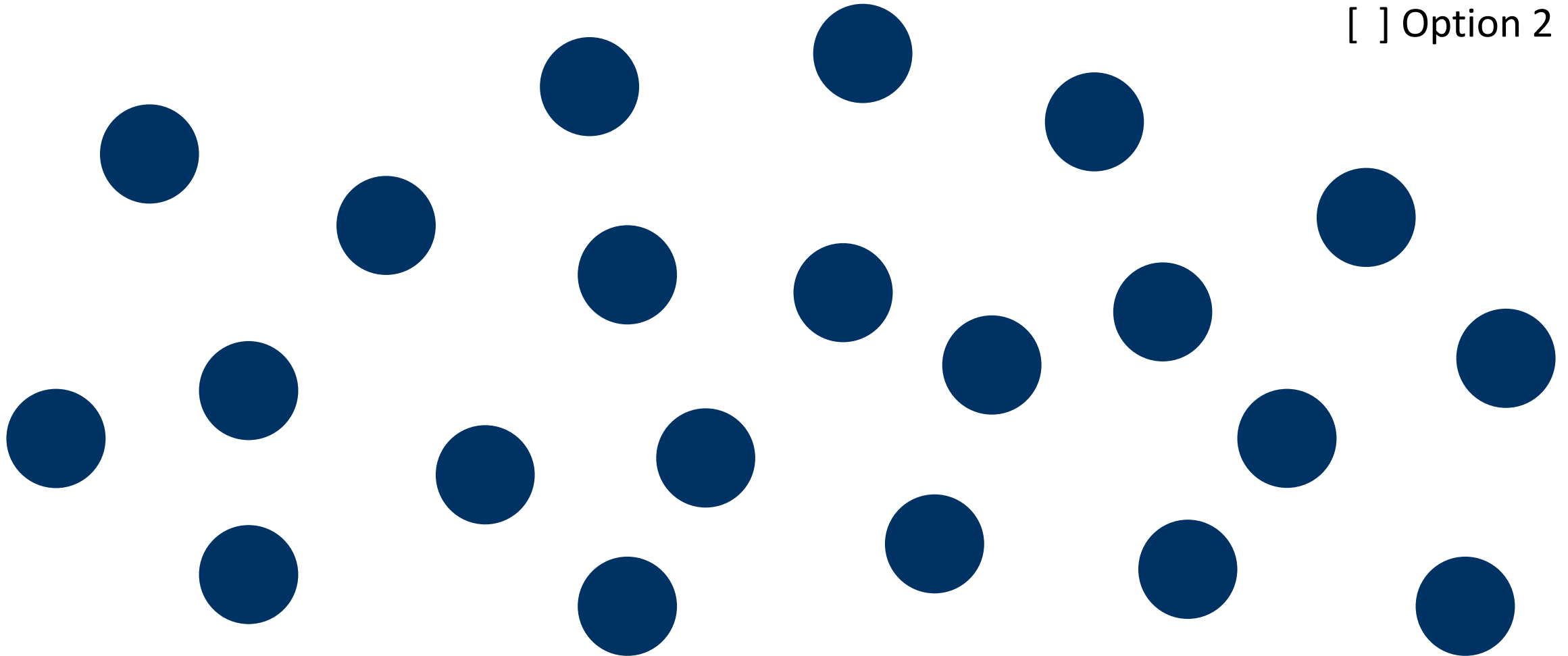
Descriptive norms: “norms of is”

Injunctive norms: “norms of ought” (Cialdini et al. 1990)

# Visualization

[ ] Option 1

[ ] Option 2



# Visualization

[ ] Option 1

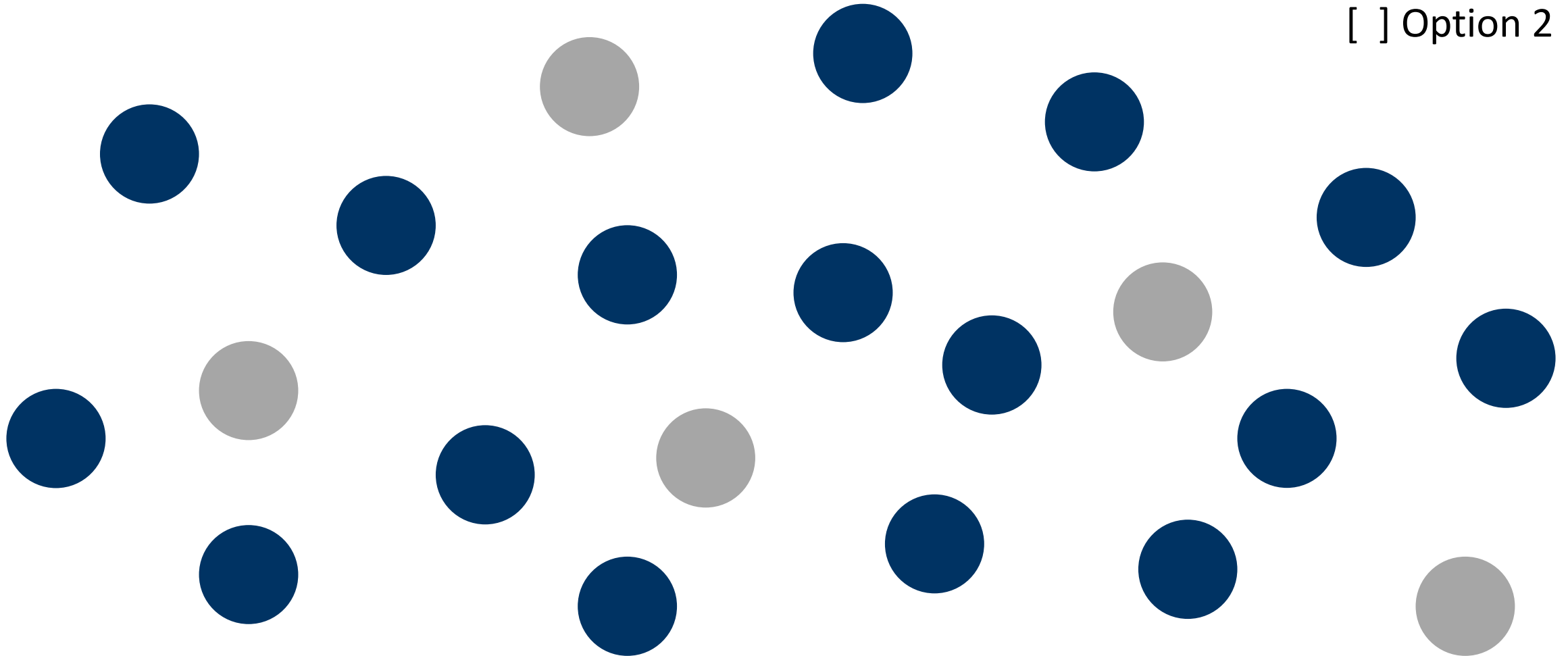
[ ] Option 2



# Visualization

[ ] Option 1

[ ] Option 2



# Hypothesis

People...

... strive for a positive self-image and engage in motivated belief formation (Bénabou and Tirole, 2016)

... engage in self-serving information processing (Gino et al., 2016)

... have a “desire to be selfish” that affects their beliefs about others (Di Tella et al. 2015)

*Tendencies to behave self-servingly affect individuals' social norms.*

# Reference Group Dependence

Aligned vs. misaligned interests

- more likely to observe self-serving norms when interests are aligned
- prediction unclear for misaligned interests

Injunctive vs. descriptive norms

- injunctive norms („norms of ought“) potentially more affected
- descriptive norms („norms of is“) potentially less affected

# Experimental Design

## 1) Allocations

- random role assignment (dictator / recipient, same for all decisions)
- 10 mini-dictator decision

## 2) Norm elicitation

- Krupka and Weber (2013) task to elicit norms
- vary *type of norm* (injunctive / descriptive) and
- *reference group* for coordination (separate / joint)

## 1) Belief elicitation

- Ask both roles what norm they believe the respective other role to have coordinated on



# Stage 1: Allocation Decisions

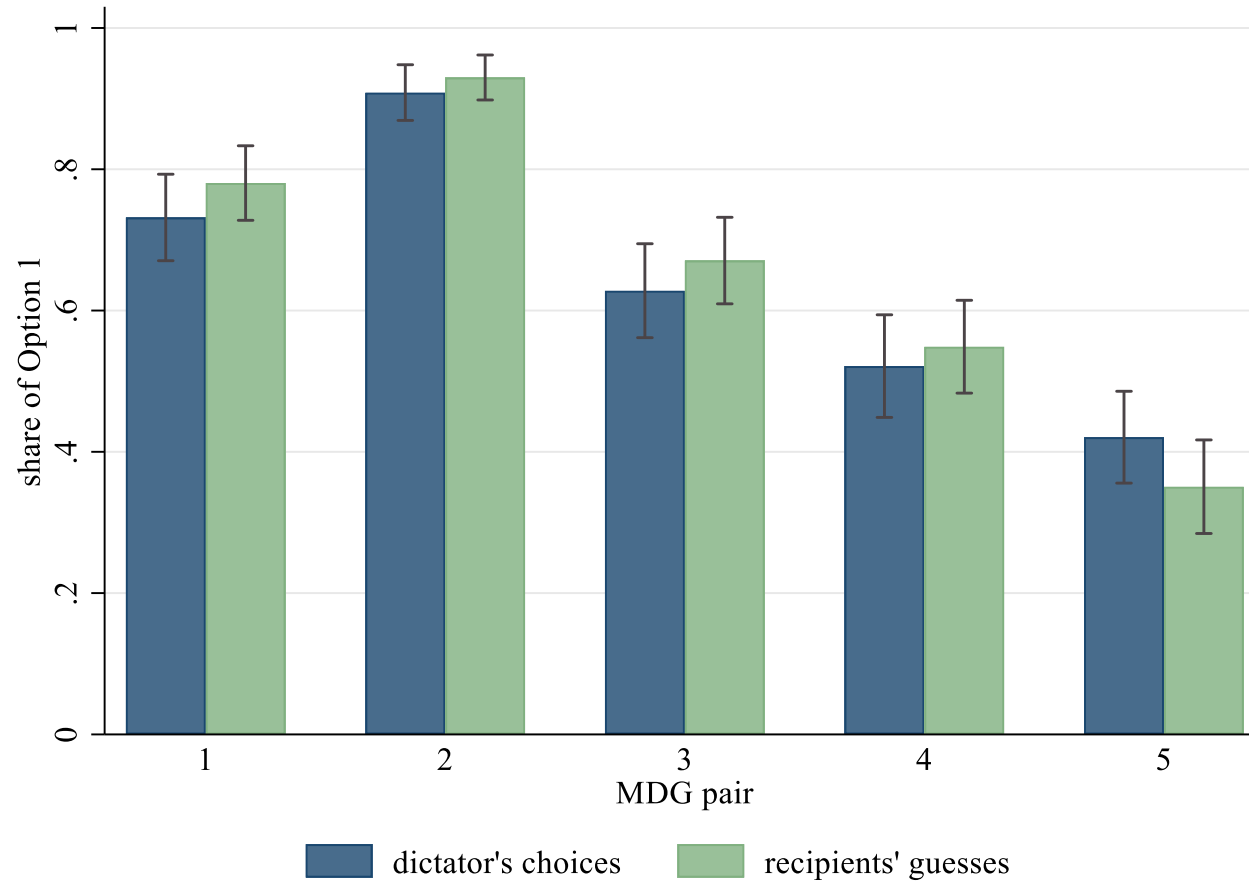
# Mini-Dictator Tasks

*For the motives, we take the dictator's perspective.*

MDT Pair	Order	Option 1	Option 2	Motive Option 1	Motive Option 2
1	1	7, 4	5, 5	Profit / Efficiency	Egalitarianism
	6	11, 0	5, 5		
2	2	5, 4	4, 6	Profit / Egalitarianism	Efficiency
	7	5, 0	0, 10		
3	3	6, 4	5, 5	Profit	Egalitarianism
	8	10, 0	5, 5		
4	4	6, 3	5, 5	Profit	Efficiency / Egalitarianism
	9	7, 1	5, 5		
5	5	5, 5	5, 6	Egalitarianism / Profit	Efficiency / Profit
	10	5, 5	5, 10		

We observe 64% Option 1 choices across all MDTs.

# Allocations and Guesses



## Stage 2: Norm Elicitation

# Treatments

## Reference Group for Coordination

		Separate	Joint
Type of Norm	Injunctive	<ul style="list-style-type: none"> <li>- <i>Appropriateness</i> of dictators' choices</li> <li>- <i>Separate</i> coordination</li> </ul> <p>N=84</p>	<ul style="list-style-type: none"> <li>- <i>Appropriateness</i> of dictators' choices</li> <li>- <i>Joint</i> coordination</li> </ul> <p>N=84</p>
	Descriptive	<ul style="list-style-type: none"> <li>- <i>Most common choice</i> of dictators</li> <li>- <i>Separate</i> coordination</li> </ul> <p>N=80</p>	<ul style="list-style-type: none"> <li>- <i>Most common choice</i> of dictators</li> <li>- <i>Joint</i> coordination</li> </ul> <p>N=80</p>

# Injunctive vs. Descriptive Norms

	Dictator		Recipient	
	SEPARATE	JOINT	SEPARATE	JOINT
INJUNCTIVE	0.225 (0.377)	-0.081(0.289)	-0.174 (0.371)	-0.084 (0.355)
DESCRIPTIVE	0.431 (0.278)	0.363 (0.377)	0.389 (0.346)	0.349 (0.268)
Test-statistic	2.932	5.030	5.558	5.119
p-value	0.003	<0.001	<0.001	<0.001

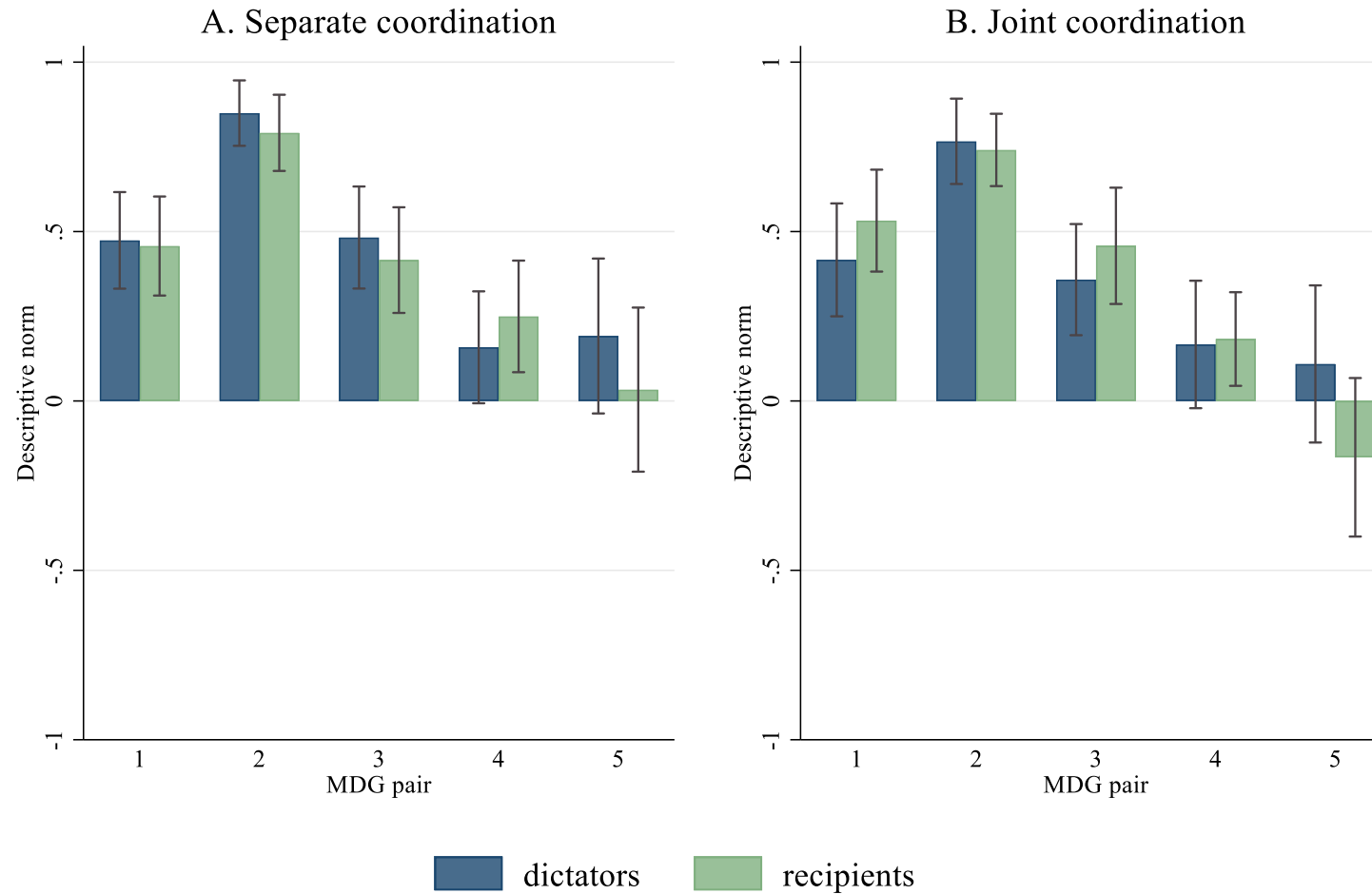
From top to bottom, the table reports means (standard deviations) for the average norm of Option 1 for injunctive and descriptive norms, the test statistic of a Mann-Whitney-U test and the corresponding p-value. Average norm ranges from -1 (very inappropriate, a small minority) to 1 (very appropriate, a large majority).

# Correlation with Allocation Choices

	INJUNCTIVE	DESCRIPTIVE	INJ. vs. DES.
Dictators			
- SEPARATE	0.172*	0.509***	p < 0.01
- JOINT	0.297***	0.594***	p < 0.01
Recipients			
- SEPARATE	0.209**	0.582***	p < 0.001
- JOINT	0.354***	0.522***	p = 0.063

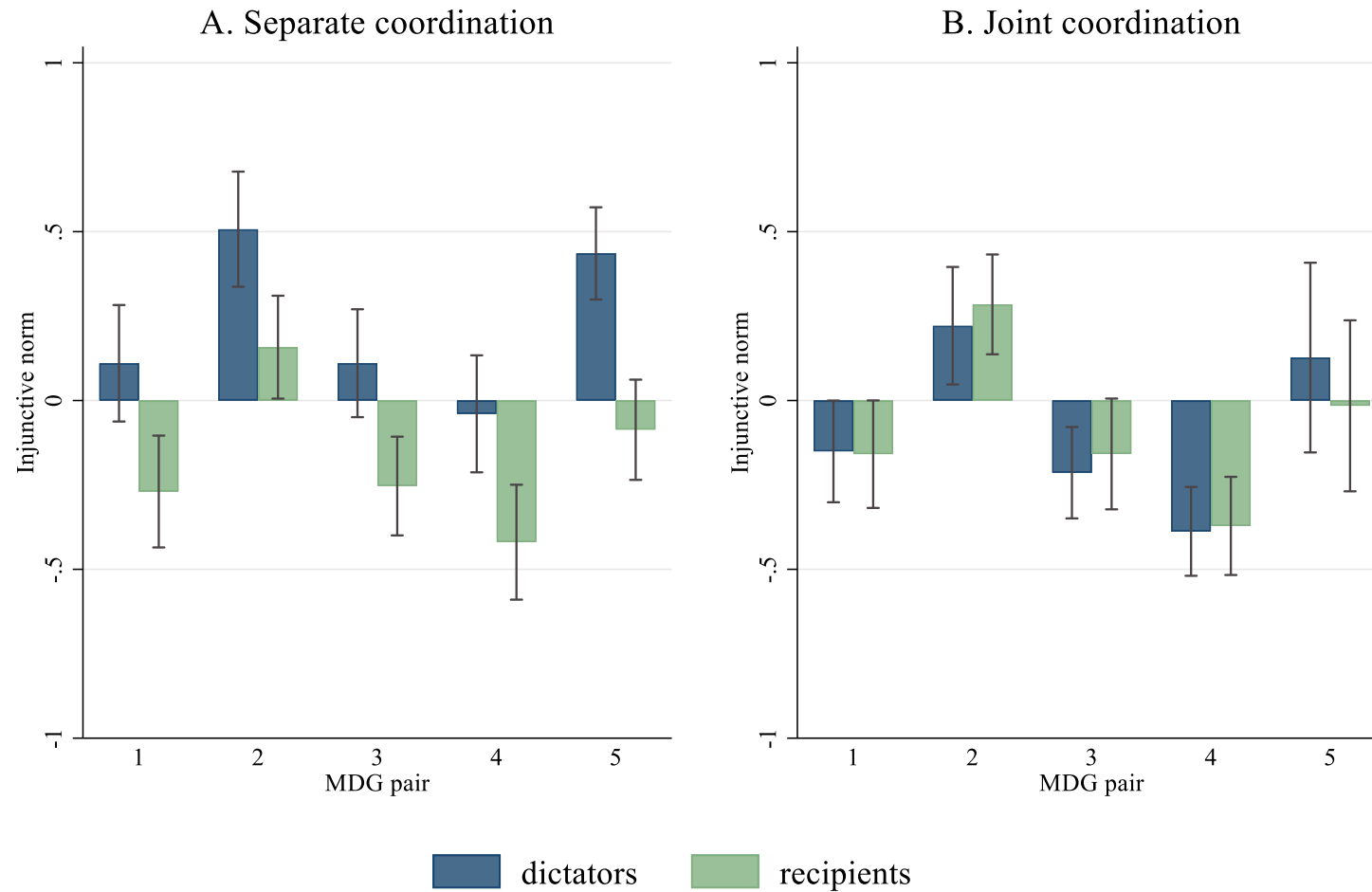
Columns INJUNCTIVE and DESCRIPTIVE report average Spearman correlation coefficients of norm and allocation choice; \*/\*\*/\*\* indicates significance at 5%/1%/0.1% of Wilcoxon-Signed-Rank tests against zero. The last column reports the p-value of Mann-Whitney-U tests of the two correlation coefficients.

# Descriptive Norms





# Injunctive Norms



# Dictators' vs. Recipients' Norms

	INJUNCTIVE		DESCRIPTIVE	
	SEPARATE	JOINT	SEPARATE	JOINT
Dictator norm	0.225 (0.377)	-0.081 (0.289)	0.431 (0.278)	0.363 (0.377)
Recipient norm	-0.174 (0.371)	-0.084 (0.355)	0.389 (0.346)	0.349 (0.268)
Test-statistic	4.720	0.492	0.308	0.544
p-value	<0.001	0.626	0.761	0.590

From top to bottom, the table reports means (standard deviations) for the average norm of Option 1 of dictators and recipients, the test statistic of a Mann-Whitney-U test and the corresponding p-value.

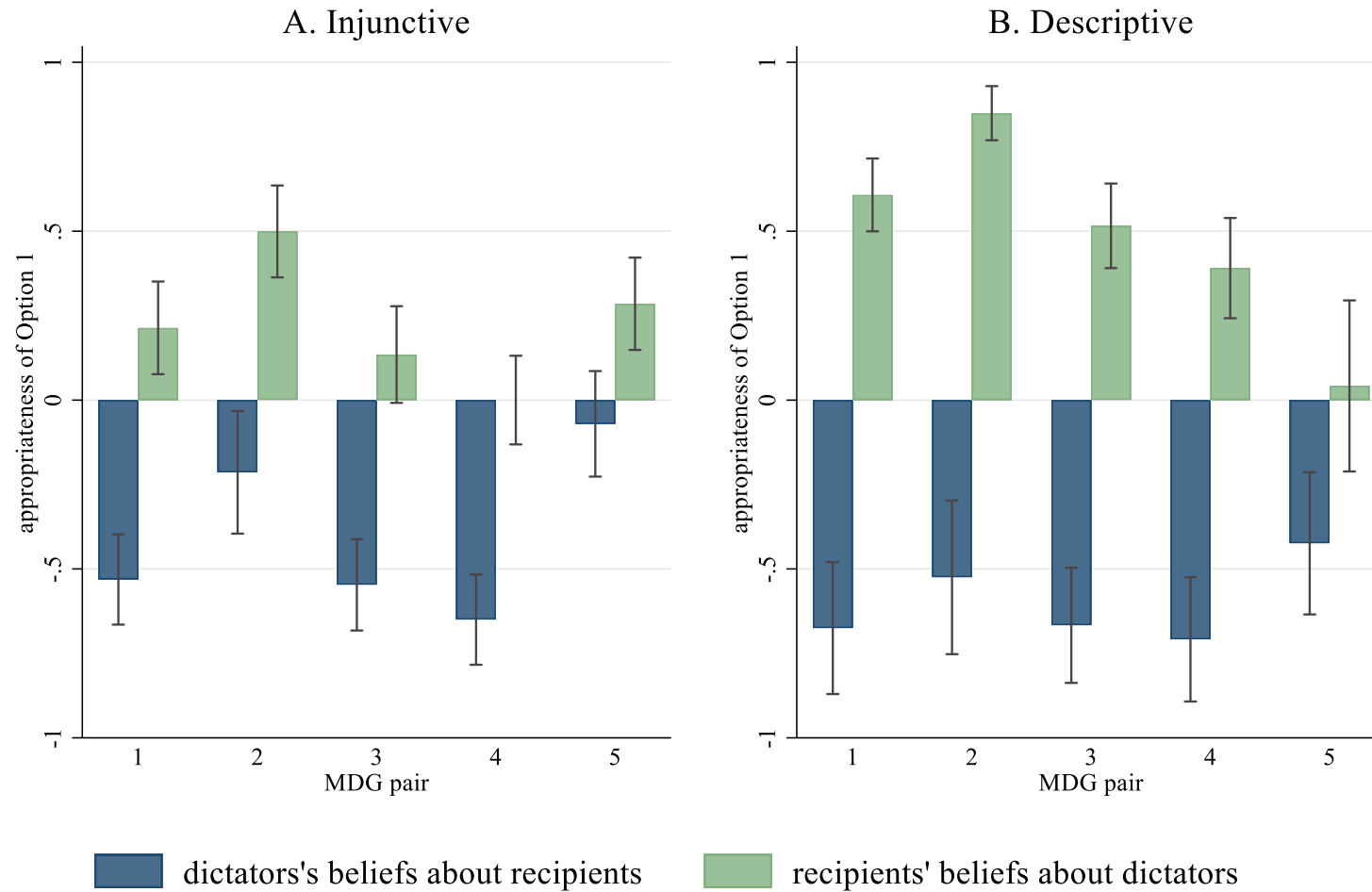
# Separate vs. Joint Elicitation

	Dictator		Recipient	
	INJUNCTIVE	DESCRIPTIVE	INJUNCTIVE	DESCRIPTIVE
SEPARATE	0.225 (0.377)	0.431 (0.278)	-0.174 (0.371)	0.389 (0.346)
JOINT	-0.081 (0.289)	0.363 (0.377)	-0.084 (0.355)	0.349 (0.268)
Test-statistic	-3.624	-0.467	0.210	-0.881
p-value	<0.001	0.644	0.212	0.382

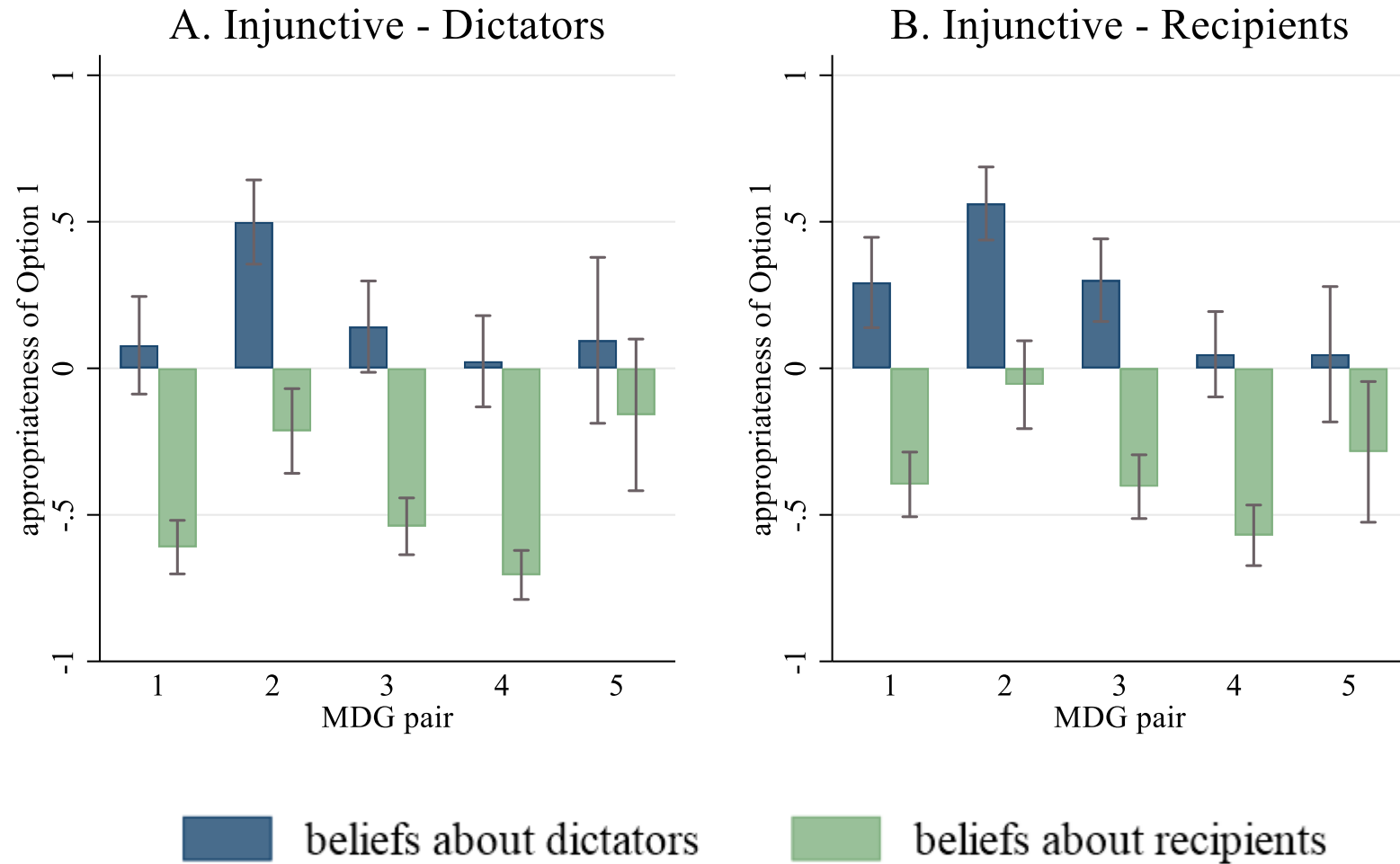
From top to bottom, the table reports means (standard deviations) for the average norm of Option 1 in separate and joint elicitation, the test statistic of a Mann-Whitney-U test and the corresponding p-value.

## Stage 3: Beliefs

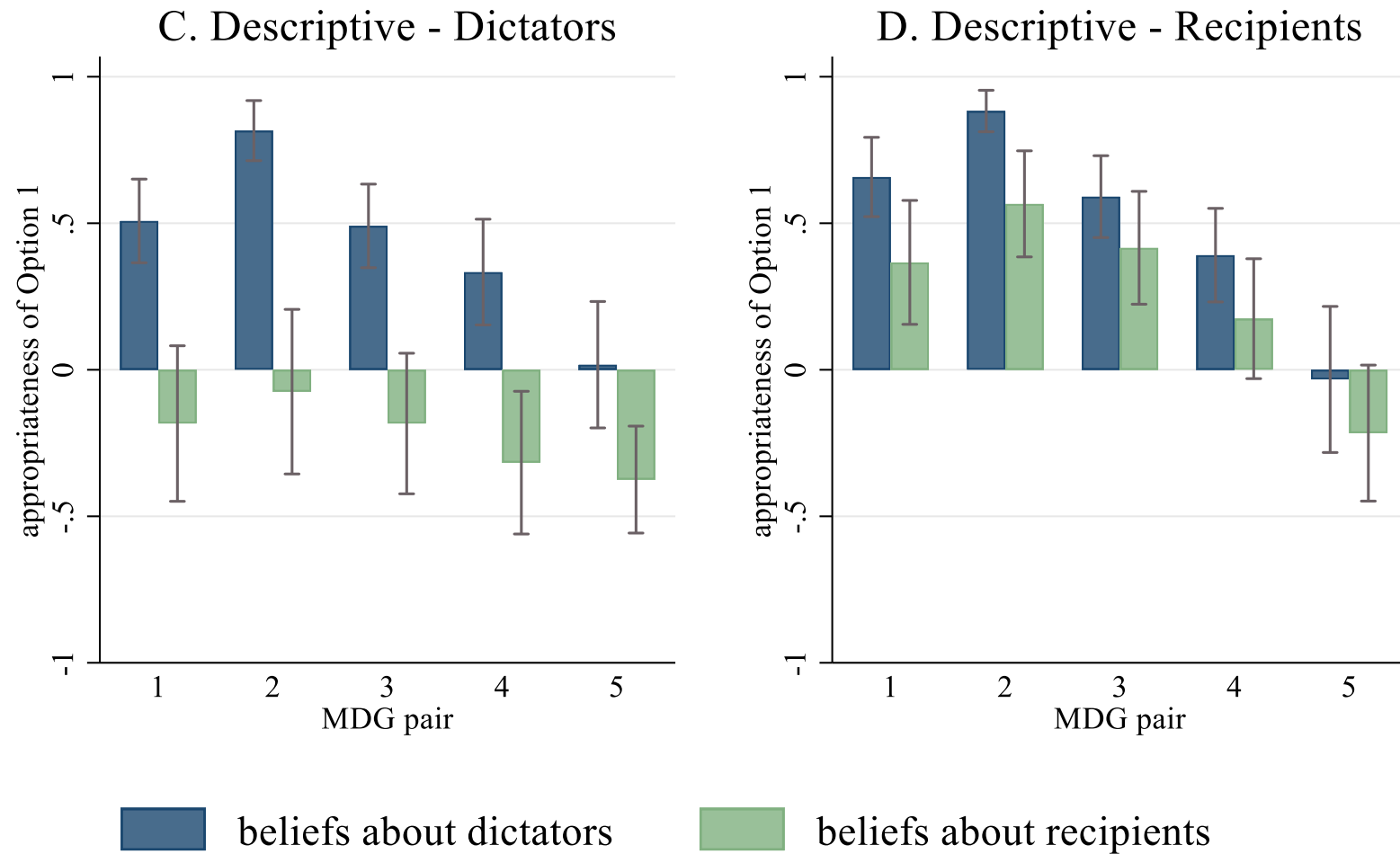
# Beliefs: Separate Elicitation



# Beliefs: Joint Elicitation (within-subject data)



# Beliefs: Joint Elicitation (within-subject data)



# Key Insights

- Dictators coordinate on self-serving **injunctive** norms when coordinating **separately**.
- Participants overestimate the importance of role and reference groups
- Group behavior might be affected through the intermediate step of norm formation
- Bicchieri et al. (2020) show that **ex-ante** elicitation of norms affects future choices, we find that **ex-post** elicitation allows participants to cleanse their self-image after the fact.