

Bajrami, Leon; Loschelder, David D.; Mechtel, Mario

**Conference Paper**

## The effect of information on social preferences towards an outgroup of refugees: A field experiment

Beiträge zur Jahrestagung des Vereins für Socialpolitik 2017: Alternative Geld- und Finanzarchitekturen - Session: Applied Behavioral Models, No. D03-V3

**Provided in Cooperation with:**

Verein für Socialpolitik / German Economic Association

*Suggested Citation:* Bajrami, Leon; Loschelder, David D.; Mechtel, Mario (2017) : The effect of information on social preferences towards an outgroup of refugees: A field experiment, Beiträge zur Jahrestagung des Vereins für Socialpolitik 2017: Alternative Geld- und Finanzarchitekturen - Session: Applied Behavioral Models, No. D03-V3, ZBW - Deutsche Zentralbibliothek für Wirtschaftswissenschaften, Leibniz-Informationszentrum Wirtschaft, Kiel, Hamburg

This Version is available at:

<https://hdl.handle.net/10419/168225>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# The effect of information on social preferences towards an outgroup of refugees: A field experiment

Leon Bajrami\*    David D. Loschelder<sup>†</sup>    Mario Mechtel<sup>‡</sup>

February 28, 2017

## Abstract

Previous research has shown that individuals discriminate against outgroup members in economic decision-tasks (e.g., Chen and Li 2009, Hett et al. 2017, see also Social Identity Theory, Tajfel and Turner 1979). In this paper, we examine senders' economic decisions in a dictator game, given that the receiver belongs to a refugee outgroup. First, we find that providing stylized information about the perspective of the receiver influences senders' social preferences. Second, we show that political preferences matter substantially. Our data reveal that senders' political orientation moderates the effect of information on their social preferences: While the information treatment strengthens social preferences towards outgroup members for more left-wing oriented participants, the treatment effect on participants who favor more right-wing parties is even negative. Our experiment allows to derive policy implications on how attitudes towards refugees could be altered.

*Keywords: outgroup discrimination, social identity, social preferences, refugees, information, field experiment*

---

\*Leuphana University of Lüneburg, Scharnhorststr. 1, 21335 Lüneburg, Germany. E-mail: leon.bajrami1@gmail.com.

<sup>†</sup>Leuphana University of Lüneburg, Institute of Strategic Human Resource Management, Scharnhorststr. 1, 21335 Lüneburg, Germany. E-mail: david.loschelder@leuphana.de.

<sup>‡</sup>**Corresponding author:** Leuphana University of Lüneburg, Institute of Economics, Scharnhorststr. 1, 21335 Lüneburg, Germany. E-mail: mario.mechtel@leuphana.de.

# 1 Introduction

A large number of studies from social psychology and economics have established that individuals treat other persons differently, depending on whether they share membership in the same social groups or not (Tajfel and Turner 1979). Social groups have been shown to matter for discrimination in many contexts such as distributional decisions (Chen and Li 2009, Kranton et al. 2016, Hett et al. 2017), cooperation and coordination (Chen and Chen 2011), and the extent to which norms are being enforced (Goette et al. 2006, Goette et al. 2012).

It is, however, an open question how outgroup discrimination can be affected. Hett et al. (2017) suggest that individuals identify endogenously and point to the importance of group characteristics compared to pre-existing group assignments. The present paper tests an additional explanation. We analyze whether information on a particular outgroup affects individuals' social preferences towards this very outgroup. Following Galinsky and Moskowitz (2000), we expect that providing information about the outgroup as such (not about individual group members) induces stronger social preferences due to an elevated level of perspective-taking.

Our study analyzes a distinct outgroup that has recently been very prominent in political debates in many countries: refugees who came to Europe. The empirical analysis is therefore not based on minimal groups, but on a well-defined existing group of people. First, the experiment allows us to derive conclusions on how information affects social preferences towards an outgroup. This perspective of our paper contributes to the (social identity) literature on outgroup discrimination. Second, we are able to provide evidence on a potential applied mechanism that could help to influence preferences towards refugees – who obviously form a social group that is of great importance in recent public debates.

The field experiment was conducted in Germany. Participants were recruited in the city centers of Lüneburg and Hamburg. The sample therefore includes a broad variety of age groups, professions, and people of different political orientations – which allows us to test more channels than in a standard laboratory environment based on a (typically more homogeneous) student population. The decision task to measure social preferences was a simple dictator game in which participants had to split up 5 Euro between themselves and an anonymous receiver stemming from a group of refugees. Participants were randomly assigned to one of two experimental conditions (between-subjects design). In the *Information Treatment*, participants receive information about the situation of refugees who came to Germany prior to

their dictator game decision. This information is not given to participants from the *Control Group*.

Based on insights from social and political psychology (e.g., Galinsky and Moskowitz 2000 and Jost et al. 2009), we expect that the treatment basically strengthens dictators' social preferences regarding the outgroup due to an elevated level of perspective-taking. However, we hypothesize that this effect may interact with dictators' political preferences. The treatment effect should, thus, be stronger for participants with more left-wing political views, while we expect a weaker – or even a negative – treatment effect for right-wing participants.

It turns out that the treatment influences social preferences regarding the refugee outgroup – but in a very heterogeneous manner. The average amount sent to the receiver is only 7 Cents higher in the Information Treatment than in the Control Group. This aggregate result clouds a lot of heterogeneity, as suggested by our theoretical predictions. The treatment effect is strong and highly significant for those participants who locate themselves in the middle or in the left part of the political spectrum. For this group, the average amount sent to the receiver increases due to the treatment. In contrast, the Information Treatment *decreases* the amount sent to the receiver among the group of more right-wing oriented participants.<sup>1</sup>

These results also emerge when we run regressions with the amount sent to the receiver as the dependent variable. Here, we use a treatment dummy variable, (different definitions of) a right-wing political orientation variable and the interaction term of the two as explanatory variables of main interest, while controlling for a number of personal characteristics. The treatment dummy variable's coefficient is positive and highly statistically significant. While there is no general effect of political orientation, the interaction term's coefficient reveals that giving in the dictator game decreases significantly in the Information Treatment among those participants with a more right-wing political orientation. Our findings are robust to different definitions of a right-wing political orientation and alternative econometric approaches. Overall, we conclude that the Information Treatment strengthens social preferences towards refugees for left-wing participants, while it has the opposite effect for right-wing participants.

The remainder of this paper is organized as follows. Section 2.1 describes the experimental design. The experimental procedure is presented in Section 2.2. We discuss the hypotheses

---

<sup>1</sup>The results presented in this draft rely on a total sample size of 161 observations (target sample size = 300, see Section 2.2), from which 141 categorize themselves as having centrist or left political preferences and 23 locate themselves on the righthand side of the political spectrum. The sample split of this right-wing subsample (12 Control Group, 11 Information Treatment) therefore comes with a relatively low level of statistical power until now. Not all pairwise comparisons of subsamples are significantly different in the present sample.

based on the related literature in Section 2.3, before we present the results in Section 3. Finally, Section 4 concludes and discusses policy recommendations.

## 2 Experiment

### 2.1 Design

We are interested in the effect of information about an outgroup on social preferences towards this very outgroup. As common in economics and social psychology, we measure social preferences by experiment participants' allocation choices in a dictator game. Each participant receives 5 Euro and can decide how to split the money between herself and another person. This other person stems from a distinctive outgroup – he or she is a refugee who came to Germany recently.

The experiment consists of four steps. First, participants are welcomed. Second, they read the dictator game instructions. Third, they make the dictator decisions, before they, fourth, answer a short questionnaire. Experiment participants are randomly assigned to one of two conditions (between-subjects design). We vary whether participants – prior to their dictator game decision – receive information about the situation of refugees who came to Germany. Participants in the *Control Group (C)* make their dictator game choices and subsequently answer a short questionnaire on socio-demographic characteristics and (political) attitudes. Participants in the *Information Treatment (IT)* receive some information about the refugees' situation before they allocate the money. The treatment text reads: “According to the German federal office for migration and refugees (Bundesamt für Migration und Flüchtlinge), 645.000 individuals have left their motherland and sought asylum in Germany in 2016. The majority of these asylum seekers come from Syria, Afghanistan, and Iraq. These refugees have fled from brutal violence of civil war and the Islamic State (ISIS). The hunger, the lack of a desirable future in their homeland, and the fear have led these people to flee to Europe. To that end, refugees depart on long journeys – the distance from Damaskus to Germany is more than 4,000km. According to the United Nations, in 2016 alone, more than 3,800 people, amongst which were numerous children, have died in the Mediterranean Sea on their journey to Europe.”<sup>2</sup> In addition to these sentences, the treatment page also contains three

---

<sup>2</sup>The German original reads: “Dieses Jahr haben laut dem Bundesamt für Migration und Flüchtlinge bis einschließlich September 645.000 Menschen ihr Heimatland verlassen und einen Asylantrag in Deutschland gestellt. Die Mehrheit der Asylantragssteller kommt aus Syrien, Afghanistan und dem Irak. Sie flüchten vor der brutalen Gewalt des Bürgerkriegs und des Islamischen Staats. Der Hunger, die mangelnde Zukunftsperspektive in ihren Heimatländern und die Angst treiben sie nach Europa. Dafür nehmen sie weite Wege auf sich – die Entfernung von Damaskus nach Deutschland beträgt mehr als 4.000 Kilometer. Laut den Vereinten Nationen sind allein im Jahr 2016 ca. 3.800 Menschen, darunter zahlreiche Kinder, auf dem Weg nach

photographs of refugees well-known in Germany. The full instructions are provided in the Appendix.

The questionnaire which the participants fill in subsequently consists of a standard set of questions on socio-demographic characteristics (gender, age, place of birth, migration background, nationality, number of children, confession, subjective religiousness, level of education, average volunteer work, monthly income), political views (general political orientation on a left-wing-right-wing-scale, political party preferences, political interest, sympathy for the German right-wing party AfD), and others (generalized trust, life satisfaction).

We decided against including a third experimental condition featuring an explicit ingroup. On the one hand, this would allow to distinctively measure the degree of outgroup bias. On the other hand, it would have been unclear how an ingroup would look like from the perspective of the heterogeneous participants in our experiment. Given that we wanted to rely on a sample that encompasses a broad variety of the German population (see Section 2.2), we were not able to conduct the experiment in a lab where we could have induced minimal groups. It would have been highly speculative which other persons would be perceived as being “ingroup members” by each participant. We therefore restrained from including a third condition. All of our results should be interpreted in terms of social preferences towards the refugee outgroup for a given level of information.

## 2.2 Procedure

The experiment is conducted in a field setting to have more heterogeneity than in a standard laboratory setting based on students. To include a broad variety of age groups, professions, and political orientations, participants are approached by three research assistants and undergraduate students in the city center of Lüneburg and Hamburg, Germany. Participants are asked whether they would like to participate in a brief study (3-5 minutes), for which they can earn up to 5 Euro. Upon consent, participants receive 5 Euro in ten 50 Cent coins and acknowledge payment. Thereafter, participants receive standardized, written instructions and are asked to fill out a questionnaire in private. Research assistants answer questions, when necessary. Upon making their economic decisions and finishing the questionnaire, participants hand an envelope, in which they can place the money for the anonymous receiver (i.e., the refugee). Participants are asked to then deposit this envelope in a non-transparent box, reminiscent of a ballot box. Participants are then debriefed and thanked.

---

Europa im Mittelmeer gestorben.”

This first draft analyzes a sample of 161 participants who were recruited in the city centers of Lüneburg and Hamburg. The experiments were conducted in November 2016 and February 2017. Overall, the aimed sample size is 300, as indicated in the preregistration of this research project.<sup>3</sup>

## 2.3 Theoretical Predictions

The starting point of our analysis is outgroup bias. This phenomenon has been documented by social psychologists and economists in a broad variety of settings both in the lab and the field. When being confronted with choices between ingroup and outgroup members, people very often tend to favor the ingroup. Ingroups can be existing social groups, but also groups which are build only for the experiment (even “minimal groups”). Refugees who came to a particular country to seek asylum can be interpreted as a special type of outgroup which has recently been very prominent in the public debate in many countries such as Germany. Although many people engage in projects addressed to help refugees, the group of people who came to a new country is certainly more likely to be perceived as “outgroup” than many other social groups within the country.

Our research question is whether information on a particular outgroup affects individuals’ social preferences towards this outgroup. Following Galinsky and Moskowitz (2000), we expect that providing information about the outgroup as such (not about the matching partner in a dictator game herself) reduces outgroup discrimination due to an elevated level of perspective-taking. “The outgroup” becomes less abstract and individuals who receive information about this group should be able to familiarize themselves with the outgroup members. We therefore expect that the average amount sent to the receiver in the dictator game is higher in the Information Treatment than in the Control Group.

The experimental design allows us to focus on factors that might influence social preferences towards the refugee outgroup other than the treatment variation. Based on the literature from political psychology (e.g., Jost et al. 2009), we predict that a stronger right-wing (i.e., conservative) political orientation would correlate with less pronounced social preferences

---

<sup>3</sup>We conducted a sample size analysis in G\*Power. Because – to the best of our knowledge – there are currently no comparable studies that could give some orientation for the expected size of the effect, we chose to expect a small-to-medium effect of  $d = 0.35$  based on Cohen’s (1988) conventions (i.e., the average between a small effect of  $d = 0.2$  and a moderate effect of  $d = 0.5$ ). The sample size analysis based on the following criteria:  $d = 0.35$ ,  $\alpha = 0.05$ , minimal statistical power of  $1 - \beta = 0.90$ , led to a minimum sample size of 282 participants ( $N = 141$  per experimental condition). Based on this estimate, we decided to recruit 300 participants from all age groups, professions, and political orientations.

towards members from a refugee outgroup. Reversely, this implies that the stronger individuals show a left-wing (i.e., liberal) political orientation, the less pronounced their outgroup discrimination. Our setup does not feature an exogenous variation of political preferences at the between-subjects level. We therefore do not interpret the relationship between party preferences and social preferences as being necessarily causal. However, general political views likely affect social preferences towards refugees.

Moreover, we are interested to test whether political views moderate the effect of our information treatment. We expect that having participants assume the perspective of a refugee outgroup member by providing detailed information would (a) alleviate outgroup bias for people on the left spectrum of the political orientation, but (b) not affect or even exacerbate the outgroup bias for people with a right-wing political orientation.

We therefore test the following hypotheses:

**Hypothesis 1:** Providing information about the outgroup as such (not about the matching partner in a dictator game herself) strengthens social preferences towards outgroup members.

**Hypothesis 2a:** A stronger right-wing (i.e., conservative) political orientation correlates with less pronounced social preferences towards members from the refugee outgroup.

**Hypothesis 2b:** A stronger left-wing (i.e., liberal) political orientation correlates with stronger social preferences towards members from the refugee outgroup.

**Hypothesis 3:** Having participants assume the perspective of a refugee outgroup member by providing detailed information (a) alleviates outgroup bias for people on the left spectrum of the political orientation, but (b) does not affect or even exacerbate the outgroup bias for people with a right-wing political orientation (moderation hypothesis).

### 3 Results

The dependent variable of our analysis is dictator game giving: we assess the share of 5 Euro that participants allocated to themselves and to the anonymous refugee. Our set of explanatory variables includes gender, age, place of birth, migration background, nationality, number of children, confession, subjective religiousness, level of education, average volunteer work, monthly income, political orientation (on a left-wing-right-wing-scale), political party



preferences, political interest, sympathy for the German right-wing party AfD, generalized trust, and life satisfaction. Descriptive statistics regarding all variables used in the estimations are provided in Table 1.

Panel A of Table 2 reports the average amounts sent to the receiver in the Information Treatment and the Control Treatment. First of all, it turns out that dictators give a large share of the 5 Euros to the receivers. While in most dictator games, dictators on average send around 30 or 40 percent of their endowment to the receivers, this fraction is much higher in our experiment. Apparently, the participants' average level of social preferences towards the refugee outgroup is quite large. We do not find a significant difference in average dictator giving between the Information Treatment (4.34 Euro) and the Control Group (4.26 Euro). The difference between the two treatments has the expected sign, but is small in size and not statistically significant. Hypotheses 2a, 2b, and 3 focus on participants' political preferences. The post-experimental survey contained an item on political preferences. Participants were asked to rate their general political orientation on a left-wing-right-wing-scale from 1 (very left-wing) to 11 (very right-wing). We utilize this item and define all participants with answers 1–6 as middle-left-wing, while participants who chose 7–11 are defined as having right-wing preferences. A subgroup analysis based on these political preferences reveals a very interesting pattern: The treatment effect is larger in size (25.48 Cents) for the middle-left-wing subgroup than for the full sample, albeit not statistically significant.<sup>4</sup> The opposite holds true for participants with more right-wing political preferences who send smaller amounts to the refugees in the Information Treatment than in the Control Group. These results point to the importance of the moderation effect described in Hypothesis 3.<sup>5</sup>

Similar results emerge once we utilize an alternative measure for dictators' social preferences towards refugees. Panel B of Table 2 shows the share of dictators who chose to send their complete endowment to the receiver. It amounts to 75% in the Information Treatment and 67.8% in the Control Group (full sample). Again, the difference is not statistically significant<sup>6</sup>, which is, until now, not surprising given the sample size. The subsample analyses for

---

<sup>4</sup>Note again that the sample size amounts to a bit more than 50 percent of the target size until now.

<sup>5</sup>Table 3 shows the average amount sent to the receivers for different subgroups. Participants with right-wing political preferences send considerably less (3.54 Euro) than those with middle-left-wing preferences (4.39 Euro). The same pattern emerges once we utilize the following survey item: "Which party would you vote for if there were elections to the German federal parliament next Sunday?". Participants who favor the right-wing and anti-refugee party AfD only send 2 Euro on average (while the sample size is very small), supporters of "other" (in parts protest) parties send 3.19 Euro, while the supporters of more left-wing parties (SPD, Left party, Green party) send considerably more. These results (although the number of observations per cell is rather low in some cases) make us confident that the questions we use to measure political preferences make sense.

<sup>6</sup>Detailed test results for all tests are provided in Table 2.

the middle-left-wing and the right-wing samples support the conclusions drawn in the previous paragraph. While the Information Treatment strengthens social preferences towards the refugees for more left-wing participants, the opposite is true for right-wing participants. Treatment differences are for both groups statistically significant or close to statistical significance.

Regression results for different models are reported in Table 4. We, first, estimate OLS models with participant  $i$ 's amount sent to the receiver being the dependent variable. The core explanatory variables are the dummy variable  $Treatment_i$  that takes the value of 1 whenever participant  $i$  was assigned to the Information Treatment and 0 otherwise and the variable  $Right-wing\ orientation_i$  which captures  $i$ 's political preferences on a scale from 1 (very left-wing) to 11 (very right-wing) as described above. The interaction term of these two variables tells us whether the treatment effect depends on political preferences.

Column (1) reports OLS estimates for a model that consists of the two variables described above and their interaction term. We additionally include dummy variables that capture the day when participant  $i$  took part in the experiment to consider any potential time effect. The coefficient of  $Treatment_i$  equals 1.596 and is statistically significant at the 1%-level. The  $Treatment_i \times Right-wing\ orientation_i$  interaction term's coefficient is -0.308 and also highly significant, while the coefficient of  $Right-wing\ orientation_i$  is very small in absolute magnitude and insignificant. Taken together, these coefficients reveal that a very left-wing participant ( $Right-wing\ orientation_i = 1$ ) sends on average almost 1.3 Euros more to the receiver once she has been assigned to the Information Treatment. This treatment effect becomes weaker once the participant moves to the right along the left-wing-right-wing-scale. For a very right-wing participant ( $Right-wing\ orientation_i = 11$ ), we obtain a strong and negative treatment effect of -1.8 Euro.

Our data allow to control for a rich set of individual characteristics. We include a participant's sex, age (and age squared to capture non-linear age effects) and citizenship in Column (2) of Table 4. In Column (3), we additionally include more control variables to account for a participant's level of education, life satisfaction, income, etc. As can be seen from these columns, the estimated coefficients of the variables of interested remain stable both regarding their magnitude and statistical significance. As one might argue that the dependent variable is censored at a level of 5 Euro, we additionally run Tobit models without (Column 4) other control variables and with the full set of controls (Column 5). The overall picture is quite similar. The same holds once we do not focus on the actual amount sent to a receiver, but on the question whether dictator  $i$  sent all of his money to the refugee. In

Columns (6) and (7), the dependent variable is a dummy variable that takes the value of 1 whenever the dictator sent 5 Euro to the receiver and 0 otherwise. The two columns report coefficients of logistic regressions that basically support the reported findings (same signs for all coefficients). However, they remain statistically insignificant – which is not necessarily surprising given that we neglect some information we have in the data when choosing this empirical approach. Overall, the results reported in Table 4 show a consistent picture: The Information Treatment strengthens social preferences towards the refugees for left-wing participants, while it decreases the amount sent by right-wing participants.

Additional robustness checks are shown in Table 5. Instead of including the variable *Right-wing orientation<sub>i</sub>* directly in the estimations, we use the right-wing dummy variable that was also used in Table 2. Again, this means that we neglect some variation that we have in the data – but this dummy variable is somewhat easier to interpret. The pattern revealed by the OLS, Tobit, and Logit estimations is quite similar to that from Table tab:reg1. The same holds once we use a third measure for political preferences: the degree of participant *i*'s sympathy with the right-wing party AfD, regardless whether we include this measure on a scale from 1–11 or construct a “AfD supporter” dummy (results are available upon request).

Summing up our findings, there is, overall, a negative relationship between right-wing (left-wing) party support and the strength of social preferences regarding refugees, as suggested by Hypotheses 2a and 2b. However, this relationship is not statistically significant in the regressions. The reported evidence shows that receiving information about the outgroup influences social preferences towards this outgroup. However, the information does not necessarily strengthen social preferences as suggested by Hypothesis 1. The actual effect depends on the party preferences of the dictator, which is in line with Hypothesis 3. Receiving information about refugees who came to Germany strengthens social preferences of middle-left-wing oriented participants, while it strongly decreases dictator game giving among right-wing participants.

## 4 Conclusion

In this paper, we analyze whether information on an outgroup of refugees affects individuals' social preferences towards this very outgroup. Our experiment sheds light on how information affects social preferences towards an outgroup and contributes to the literature on outgroup discrimination. Furthermore, we are able to provide evidence on a potential applied mechanism that could help to influence preferences towards refugees – who obviously form a social group that is of great importance in recent public debates.

The field experiment was conducted in two German cities, Lüneburg and Hamburg with a heterogeneous sample of participants recruited in the city centers. Participants played a dictator game to measure social preferences. They were randomly assigned to one of two experimental conditions. In the *Information Treatment*, participants receive information about the situation of refugees who came to Germany prior to their dictator game decision. This information is not given to participants from the *Control Group*.

Our results shows a heterogeneous treatment effect on social preferences towards the refugee outgroup. The treatment effect is strong and highly significant for those participants who locate themselves in the middle or in the left part of the political spectrum. For this group, the average amount sent to the receiver increases considerably due to the treatment. In contrast, the Information Treatment *decreases* the amount sent to the receiver among the group of more right-wing oriented participants. The reported results are robust to different definitions of a right-wing political orientation and alternative econometric approaches. Information on the outgroup strengthens social preferences towards refugees for left-wing participants, while it has the opposite effect for right-wing participants.

Although we do not want to overemphasize external validity, our study potentially provides valuable policy implications. In some parts of Germany where the share of immigrants is the lowest, right-wing parties often receive a relatively large vote share. Public wisdom says that more information about and contact with foreign people would reduce these effects. While this appears to be plausible at first glance, our results suggest that the effects of such a policy might not be trivial. Our results open the floor for more research in this applied direction.

## References

Chen, R. and Y. Chen (2011). The Potential of Social Identity for Equilibrium Selection. *American Economic Review* 101(6), 2562–2589.

Chen, Y. and S.X. Li (2009). Group identity and social preferences. *American Economic Review* 99(1), 431–457.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (Vol. 2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Galinsky, A.D. and G.B. Moskowitz (2000). Perspective-taking: decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of Personality and Social Psychology* 78, 708–724.

Goette, L., D. Huffman, and S. Meier (2006). The impact of group membership on cooperation and norm enforcement: Evidence using random assignments to real social groups. *American Economic Review* 96(2), 212–216.

Goette, L., D. Huffman, and S. Meier (2012). The Impact of Social Ties on Group Interactions: Evidence from Minimal Groups and Randomly Assigned Real Groups. *American Economic Journal: Microeconomics* 4(1), 101–115.

Hett, F., M. Kröll, and M. Mechtel (2017). Choosing Who You Are: The Structure and Behavioral Effects of Revealed Identification Preferences. <http://dx.doi.org/10.2139/ssrn.2837519>.

Jost, J.T., C.M. Federico, and J.L. Napier (2009). Political ideology: Its structure, functions, and elective affinities. *Annual Review of Psychology* 60, 307–337.

Kranton, R., M. Pease, S. Sanders, and S. Huettel. (2016). Groupy and Non-Groupy Behavior: Deconstructing Bias in Social Preferences. *Working Paper*.

Tajfel, H. and J.C. Turner (1979). An integrative theory of intergroup conflict. In W. G. Austin and S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.

## Tables and Figures

Table 1: Descriptive statistics.

	Obs.	Mean	Std. Dev.	Min	Max
Amount sent to receiver	161	4.270186	1.413101	0	5
Treatment (dummy)	161	0.484472	0.5013181	0	1
Right-wing orientation (1–11)	161	4.819876	2.005892	1	11
Right-wing orientation (dummy)	161	0.1428571	0.3510189	0	1
Female (dummy)	161	0.5465839	0.4993785	0	1
Age	156	36.55128	18.84035	15	83
German citizenship (dummy)	161	0.9440994	0.2304465	0	1
Abitur (dummy)	160	0.4125	0.4938299	0	1
College degree (dummy)	160	0.3875	0.488709	0	1
Religiousness (1–11)	156	3.641026	2.721358	1	11
Volunteer work (1–7)	159	2.339623	1.771184	1	7
Life satisfaction (1–11)	160	8.19375	2.305304	1	11
Generalized trust (1 high/2 low)	155	1.374194	0.4854826	1	2
Income (intervals, 1–9)	150	3.86	2.288078	1	9

Table 2: Dictators' decisions.

	Information Treatment	Control	$\Delta$ (IT-C)
<b>Panel A: Average amount sent to receiver</b>			
Full sample	4.339286 ( $n = 84$ )	4.264368 ( $n = 87$ )	0.0749179 ( $p = 0.7236$ )
Subgroup middle-left-wing	4.522388 ( $n = 67$ )	4.267606 ( $n = 71$ )	0.2547824 ( $p = 0.2481$ )
Subgroup right-wing	3 ( $n = 11$ )	4.041667 ( $n = 12$ )	-1.041667 ( $p = 0.1883$ )
<b>Panel B: Share of senders who sent maximum amount</b>			
Full sample	0.75 ( $n = 84$ )	0.6781609 ( $n = 87$ )	0.0718391 ( $p = 0.299$ )
Subgroup middle-left-wing	0.8208955 ( $n = 67$ )	0.6760563 ( $n = 71$ )	0.1448392 ( $p = 0.0506$ )
Subgroup right-wing	0.3636364 ( $n = 11$ )	0.6666667 ( $n = 12$ )	-0.3030303 ( $p = 0.1461$ )

*Notes:* Monetary amounts measured in Euro.  $p$ -values in brackets refer to two-sided t-tests (amount sent to receiver) and two-sided two-sample tests of proportions (share of senders).

Table 3: Average amount sent by dictators' political preferences.

	Obs.	Average amount	Std. Dev.	Min	Max
Middle-left-wing	138	4.391304	1.291097	0	5
Right-wing	23	3.543478	1.8703	0	5
CDU/CSU	35	4.285714	1.441434	0	5
SPD	39	4.435897	1.083242	1	5
Green party	48	4.625	.9481224	0	5
Left party	13	4.461538	1.391365	0	5
FDP	6	4.666667	.8164966	3	5
AfD	4	2	2.44949	0	5
Other	13	3.192308	2.066987	0	5

*Notes:* Monetary amounts measured in Euro. Right-wing refers to values of 6–10 on a Likert scale from 0 (very left-wing) to 10 (very right-wing).

Table 4: Regression results.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	OLS	OLS	OLS	Tobit	Tobit	Logit	Logit
Treatment	1.596** (0.666)	1.738*** (0.647)	1.752** (0.693)	4.332* (2.234)	4.287** (2.112)	2.108 (1.386)	2.922 (1.910)
Right-wing orientation	-0.048 (0.089)	0.007 (0.070)	-0.034 (0.079)	-0.195 (0.222)	-0.146 (0.209)	-0.112 (0.108)	-0.116 (0.178)
Treatment $\times$ Right-wing orient.	-0.308** (0.142)	-0.362*** (0.136)	-0.380** (0.145)	-0.700* (0.391)	-0.755** (0.376)	-0.315 (0.239)	-0.423 (0.333)
Female		-0.119 (0.216)	0.122 (0.249)		0.345 (0.697)		0.246 (0.547)
Age		0.033 (0.048)	0.039 (0.046)		0.077 (0.119)		0.075 (0.096)
Age <sup>2</sup>		-0.000 (0.001)	-0.001 (0.001)		-0.001 (0.001)		-0.001 (0.001)
German citizenship		-0.316 (0.322)	-0.398 (0.459)		0.222 (1.147)		0.696 (1.299)
Abitur			0.006 (0.376)		-0.423 (0.944)		-0.261 (0.775)
College degree			0.034 (0.367)		-0.202 (0.886)		-0.438 (0.638)
Religiousness			-0.039 (0.043)		-0.247** (0.114)		-0.260** (0.108)
Volunteer work			-0.014 (0.072)		0.072 (0.187)		0.063 (0.145)
Life satisfaction			0.060 (0.064)		0.121 (0.175)		0.078 (0.141)
Generalized trust			-0.017 (0.254)		0.138 (0.706)		0.034 (0.506)
Income category dummies	no	no	yes	no	yes	no	yes
Day dummies	yes	yes	yes	yes	yes	yes	yes
Constant	4.569*** (0.441)	4.385*** (0.832)	4.328*** (1.341)	7.839*** (1.277)	6.799** (3.295)	1.426** (0.625)	0.451 (2.535)
N	161	156	132	161	132	161	119
(Pseudo-)R <sup>2</sup>	0.11	0.14	0.30	0.04	0.14	0.06	0.22

*Notes:* Coefficient estimates from ordinary least squares regressions (columns 1–3), tobit estimations (columns 4–5), and logistic regressions (columns 6–7). The dependent variable is the amount sent to the receiver in columns 1–5 and a dummy variable that takes on the value of 1 if a dictator sends the full amount of 5 Euros to the receiver (and 0 otherwise) in columns 6–7. Heteroskedasticity-robust Huber-White standard errors are reported in brackets.

\* significant at the 10 percent level.

\*\* significant at the 5 percent level.

\*\*\* significant at the 1 percent level.



Table 5: Additional robustness checks.

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	Tobit	Tobit	Logit	Logit
Treatment	0.254 (0.221)	0.176 (0.226)	1.359* (0.788)	1.5** (0.696)	0.79* (0.41)	1.455** (0.591)
Right-wing (dummy)	-0.215 (0.507)	-0.027 (0.634)	-0.44 (1.406)	0.159 (1.587)	-0.05 (0.708)	0.433 (1.289)
Treatment $\times$ Right-wing (dummy)	-1.296 (0.787)	-2.053** (0.856)	-3.616** (1.818)	-5.613*** (1.772)	-2.042** (0.982)	-4.664*** (1.66)
Female, Age, Age <sup>2</sup> , German citizenship	no	yes	no	yes	no	yes
Further controls	no	yes	no	yes	no	yes
Day dummies	yes	yes	yes	yes	yes	yes
Constant	4.359*** (0.219)	4.344*** (1.35)	6.924*** (0.837)	6.474** (3.212)	0.897** (0.391)	0.755 (2.675)
N	161	132	161	132	161	119
(Pseudo-)R <sup>2</sup>	0.07	0.30	0.03	0.17	0.06	0.27

*Notes:* Coefficient estimates from ordinary least squares regressions (columns 1–2), tobit estimations (columns 3–4), and logistic regressions (columns 5–6). The dependent variable is the amount sent to the receiver in columns 1–4 and a dummy variable that takes on the value of 1 if a dictator sends the full amount of 5 Euros to the receiver (and 0 otherwise) in columns 5–6. Included control variables are those described in Table 4. Heteroskedasticity-robust Huber-White standard errors are reported in brackets.

\* significant at the 10 percent level.

\*\* significant at the 5 percent level.

\*\*\* significant at the 1 percent level.

## Appendix: Instructions (Information Treatment)