

Appendix for:

**Understanding Refugee Assistance:  
Evidence on Syrian and Ukrainian Refugees in Poland**

Volha Charnysh, Leonid Peisakhin, Nik Stoop, and Peter van der Windt

A.	Deviations from the Pre-Analysis Plan .....	2
B.	Sampling Strategy .....	2
C.	Results with Sampling Weights .....	4
D.	Variable Descriptions .....	7
E.	Measurement of Dispositional Empathy .....	8
F.	Survey Experiment Text and Illustrations .....	10
G.	Balance .....	12
H.	Conjoint Experiment .....	13
H.1	Selection of Attributes .....	13
H.2	Evaluation of Refugee Profiles .....	14
H.3	Results of the Conjoint Experiment in Tabular Format .....	15
H.4	Other Types of Helping Behaviors.....	16
I.	Correlates of Refugee Assistance .....	19
I.1	Results without Standardizing .....	19
I.2	Controlling for Survey Experiment Treatment Condition.....	20
I.3	Excluding Family Victimization.....	21
I.4	Including Political Ideology.....	22
I.5	Alternative assistance index.....	24
I.6	Sensitivity Analysis .....	25
J.	Survey Experiment Heterogeneity .....	27
K.	Correlates of Dispositional Empathy .....	28
	References .....	29

## A. Deviations from the Pre-Analysis Plan

This study was pre-registered in Open Science Foundation's EGAP registry prior to data collection: [<https://osf.io/q32gd>, doi: [10.17605/OSF.IO/YDGXW](https://doi.org/10.17605/OSF.IO/YDGXW)], and we follow the pre-analysis plan closely.

In the study, we present results for all pre-registered hypotheses, although in different order. All hypotheses in the manuscript are pre-registered, with one exception: the second part of H4, which states that respondents with higher dispositional empathy will be more sensitive to refugees who are in need.

For some hypotheses, we pre-registered multiple indicators to measure the same independent variable. For example, we put forward multiple indicators to measure a household's financial situation: income level, economic situation, residence ownership, and number of rooms. In the manuscript, we report the results for only one indicator to avoid issues of multi-collinearity. However, we verified that the results remain similar when using the other pre-registered indicators.

Furthermore, in the analyses, we also include a variable for egocentric concern over jobs, and the respondent's age and gender. We deem both to be important theoretically and empirically. The results do not change when these variables are excluded.

When writing the pre-analysis plan, we were not yet fully aware of the literature on different types of empathy, although the survey experiment was already designed to tap into situational empathy specifically. In fleshing out the paper's theoretical contribution it became clear that the distinction between dispositional and situational empathy should be stressed, and we did that in the paper.

## B. Sampling Strategy

The study builds on a large survey that is representative of the population in Poland. The fieldwork was implemented by a leading public opinion firm in Poland, DANAE. They undertook the following steps for sample selection.

**Step 1. Sample distribution across provinces:** There are 16 provinces in Poland, they are all selected. Data from the Central Statistical Office were used to assign respondents to provinces proportional to the share of the population that lives there.

**Step 2. Selection of strata:** Four categories of strata were created: 1) towns over 200,000 inhabitants, 2) towns between 50 and 200,000 inhabitants, 3) towns up to 50,000 inhabitants, 4) rural areas. All of Poland's 18 towns over 200,000 inhabitants were automatically selected. Within each province, one stratum from each of the remaining three categories was randomly drawn, proportional to population size. Respondents assigned to a province were divided across the selected strata proportional to the number of addresses in each stratum.

**Step 3. Selection of municipalities:** In each of the selected strata, a list of census areas (Primary Sampling Units) was created. From this list, PSUs were randomly selected proportional to population size. The number of selected PSUs depends on the number of respondents assigned to a stratum. Within each PSU, ten addresses were randomly selected in the next step. Hence, if a stratum was assigned 40 respondents, 4 PSUs were selected.

**Step 4. Selection of dwellings and respondents:** Respondents needed to adhere to gender and age quotas. These were set based on the population distribution in each province and across the four types of strata defined above. Within each PSU, a starting address was randomly selected. Interviewers arrived at this pre-set address. If there was a respondent who fit the gender and age quotas, (s)he was interviewed. If there were multiple eligible respondents, one was randomly selected. If there was no eligible respondent, the interviewer moved to the next door on the right. After each successful interview, the interviewer moved to the third door on the right. In each PSU we targeted to conduct ten interviews. In total we targeted 2,500 respondents. **Table A1** and **Table A2** show the distribution of respondents across gender and age categories, by province and type of strata.

After data collection, DANA E relied on Random Iterative Method (RIM) weighting to correct for sampling biases, aligning the sample with population benchmarks for gender and age. In the article, we present results from unweighted regressions, as we are mostly interested in estimating causal relationships. Following the advice of Solon *et al.* (2015), we also present results with weighted regressions in Appendix C and show that results remain qualitatively unchanged.

**Table A1. Sample by Province, Gender, and Age**

Province	Women				Men				Total
	18-29	30-44	45-64	65+	18-29	30-44	45-64	65+	
Dolnośląskie	13	29	31	28	14	27	29	19	190
Kujawsko-pomorskie	10	21	23	18	12	20	22	13	140
Lubelskie	10	17	22	20	11	18	20	12	130
Lubuskie	5	10	12	10	5	10	11	7	70
Łódzkie	12	23	29	27	12	25	26	15	170
Małopolskie	17	30	35	27	18	32	31	19	210
Mazowieckie	25	53	56	51	28	53	53	32	350
Opolskie	4	8	11	8	6	7	9	7	60
Podkarpackie	10	21	23	21	11	22	21	11	140
Podlaskie	5	12	13	9	7	11	14	7	80
Pomorskie	12	22	24	21	12	22	24	13	150
Śląskie	19	42	49	37	22	41	47	31	290
Świętokrzyskie	5	12	12	12	7	13	12	8	80
Warmińsko-Mazurskie	7	12	16	12	7	12	15	8	90
Wielkopolskie	17	35	37	33	17	36	34	21	230
Zachodniopomorskie	10	16	20	17	11	16	19	11	120
Total	188	363	413	351	200	365	387	234	2500

Notes: Distribution of respondents across gender and age categories.

**Table A2. Sample by Settlement Type, Gender, and Age**

Stratum	Women				Men				Total
	18-29	30-44	45-64	65+	18-29	30-44	45-64	65+	
Town over 200,000	28	77	80	79	30	71	69	46	480
Town 50-200,000	26	59	75	66	31	57	64	42	420
Town up to 50,000	41	81	103	94	47	89	94	61	610
Rural area	86	146	161	112	92	148	160	85	990
Total	181	363	419	351	200	365	387	234	2500

Notes: Distribution of respondents across gender and strata.

### C. Results with Sampling Weights

After data collection, the survey company DANA E relied on RIM (Random Iterative Method) weighting to correct for sampling biases, aligning the sample with the relevant population benchmarks for gender and age (see Appendix B). Throughout the paper we present results based on unweighted regressions, as we are mostly interested in estimating causal relationships. Following the advice of Solon *et al.* (2015), this appendix section additionally presents estimates for the main analyses when relying on weighted least squares, weighting observations to make the sample nationally representative. **Table A3 to Table A6** replicate the analyses presented in Tables 3, 4, 5 and Figure 1, respectively, but weight observations. The findings remain qualitatively unchanged.

**Table A3. Replicating Table 3, with Sampling Weights**

	Ukrainian Refugee					Syrian Refugee				
	Past assistance (1)	Future assistance (2)	Donate (3)	Support entry (4)	Assistance index (5)	Past assistance (6)	Future assistance (7)	Donate (8)	Support entry (9)	Assistance index (10)
Dispositional empathy	0.169*** (0.033)	0.231*** (0.029)	0.073* (0.043)	0.115*** (0.033)	0.251*** (0.029)	0.046 (0.035)	0.280*** (0.032)	0.116*** (0.036)	0.169*** (0.035)	0.302*** (0.036)
Sociotropic concern economy	-0.150*** (0.032)	-0.260*** (0.034)	-0.219*** (0.032)	-0.354*** (0.032)	-0.352*** (0.032)	-0.071** (0.033)	-0.202*** (0.036)	-0.152*** (0.035)	-0.173*** (0.037)	-0.259*** (0.037)
Egocentric concern job	-0.025 (0.031)	-0.040 (0.027)	-0.050 (0.033)	0.014 (0.030)	-0.014 (0.025)	0.030 (0.037)	-0.035 (0.031)	0.003 (0.034)	-0.088** (0.037)	-0.030 (0.031)
Cultural similarity Ukraine	0.137*** (0.031)	0.086*** (0.032)	0.076* (0.039)	0.081** (0.033)	0.138*** (0.028)					
Cultural similarity Syria						0.164*** (0.051)	0.056 (0.041)	0.175*** (0.043)	0.198*** (0.040)	0.158*** (0.040)
Anxiety over Russia	0.078** (0.034)	0.086** (0.033)	0.110*** (0.040)	0.011 (0.029)	0.085*** (0.025)	-0.000 (0.041)	0.065* (0.035)	-0.013 (0.036)	-0.068* (0.037)	-0.016 (0.033)
Respondent is female	0.003 (0.024)	-0.017 (0.020)	-0.043* (0.022)	-0.028 (0.021)	-0.041** (0.019)	-0.016 (0.025)	-0.018 (0.023)	-0.016 (0.024)	0.012 (0.023)	-0.010 (0.024)
Respondent's age	-0.104*** (0.027)	-0.062** (0.025)	-0.052* (0.029)	-0.049** (0.024)	-0.082*** (0.025)	-0.019 (0.032)	-0.076*** (0.028)	-0.039 (0.024)	-0.067** (0.028)	-0.074** (0.029)
Respondent's wealth	0.014 (0.038)	0.114*** (0.025)	0.082** (0.033)	0.149*** (0.031)	0.159*** (0.025)	0.126** (0.052)	-0.018 (0.039)	0.074*** (0.028)	-0.039 (0.034)	0.048 (0.039)
Resp. has higher education	0.077*** (0.025)	0.016 (0.021)	0.011 (0.027)	-0.034 (0.025)	0.009 (0.019)	0.003 (0.026)	0.017 (0.027)	-0.014 (0.025)	0.043 (0.027)	0.027 (0.025)
Respondent is Catholic	-0.029 (0.029)	0.045* (0.023)	-0.007 (0.034)	0.021 (0.028)	0.010 (0.023)	0.011 (0.031)	0.009 (0.029)	0.008 (0.034)	-0.092*** (0.032)	-0.020 (0.028)
Fam. died or displaced in WWII	0.048 (0.030)	0.053** (0.025)	0.049 (0.030)	0.077** (0.031)	0.102*** (0.025)	0.091** (0.042)	0.056* (0.032)	0.013 (0.034)	-0.014 (0.035)	0.089*** (0.034)
Observations	1,993	1,927	1,883	1,885	1,702	1,856	1,756	1,776	1,715	1,510
R <sup>2</sup>	0.141	0.234	0.105	0.231	0.368	0.065	0.159	0.084	0.143	0.248

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at the level of the municipality. Outcome variables and covariates are standardized. Estimates are obtained from a weighted least squares regression. RIM weighting was used to adjust the sample data based on the relevant population benchmarks for gender and age.

**Table A4. Replicating Table 4, with Sampling Weights**

	Ukrainian refugees				Syrian refugees			
	Future assistance (1)	Donate (2)	Support entry (3)	Assistance index (4)	Future assistance (5)	Donate (6)	Support entry (7)	Assistance index (8)
Suffering Syrians	-0.053 (0.034)	3.175 (16.372)	-0.025 (0.039)	-0.105 (0.092)	-0.026 (0.039)	-21.045** (9.189)	-0.015 (0.038)	-0.066 (0.090)
Suffering Ukrainians	-0.034 (0.030)	8.071 (14.544)	-0.011 (0.036)	-0.068 (0.080)	-0.029 (0.036)	-10.191 (8.263)	-0.037 (0.032)	-0.109 (0.078)
Suffering Syrians + shared experience	-0.063* (0.035)	14.990 (14.996)	-0.023 (0.037)	-0.061 (0.094)	0.005 (0.040)	1.776 (9.396)	-0.037 (0.036)	-0.061 (0.090)
Suffering Ukrainians + shared experience	-0.029 (0.027)	9.453 (14.845)	0.034 (0.035)	-0.053 (0.081)	-0.010 (0.037)	-7.588 (10.593)	-0.001 (0.036)	0.001 (0.085)
Observations	2,329	2,284	2,226	1,965	2,237	2,284	2,116	1,812
R <sup>2</sup>	0.002	0.001	0.002	0.001	0.001	0.003	0.001	0.002

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at municipality level. Estimates are obtained from a weighted least squares regression. RIM weighting was used to adjust the sample data based on the relevant population benchmarks for gender and age.

**Table A5. Replicating Table 5, with Sampling Weights**

	Dispositional empathy (1)	Dispositional empathy (2)	Dispositional empathy (3)
Family member died in WWII	0.077** (0.034)		
Family displaced in WWII		0.087** (0.035)	
Family member died or displaced in WWII			0.123*** (0.035)
Respondent is female	0.229*** (0.021)	0.231*** (0.021)	0.228*** (0.020)
Respondent's age	-0.008 (0.025)	-0.001 (0.023)	-0.016 (0.024)
Respondent's economic condition	0.059 (0.036)	0.061* (0.036)	0.067* (0.036)
Respondent has higher education	0.053** (0.027)	0.053* (0.028)	0.055** (0.027)
Respondent is Catholic	-0.029 (0.041)	-0.026 (0.041)	-0.028 (0.039)
Observations	2,178	2,203	2,373
R <sup>2</sup>	0.073	0.075	0.082

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at municipality level. Outcome variables and covariates are standardized. Estimates are obtained from a weighted least squares regression. RIM weighting was used to adjust the sample data based on the relevant population benchmarks for gender and age.

**Table A6. Replicating Figure 1 in Tabular Format, with Sampling Weights**

	All refugee profiles	Ukrainian refugee	Syrian refugee	High dispositional empathy	Low Dispositional empathy	All respondents (interaction)
Figure 1's panel:	(a) and (b)	(a)	(a)	(b)	(b)	NA
	(1)	(2)	(3)	(5)	(6)	(7)
Family status: single young mother with child	0.288*** (0.009)	0.276*** (0.012)	0.302*** (0.012)	0.317*** (0.013)	0.259*** (0.013)	0.190*** (0.025)
Economic: poor, cleaner	0.067*** (0.008)	0.071*** (0.011)	0.063*** (0.011)	0.084*** (0.011)	0.050*** (0.012)	0.029 (0.021)
Suffering: refugee, relatives killed	0.041*** (0.008)	0.059*** (0.011)	0.022* (0.011)	0.035*** (0.010)	0.047*** (0.011)	0.041** (0.020)
Religion: Muslim	-0.212*** (0.009)	-0.227*** (0.012)	-0.197*** (0.012)	-0.208*** (0.013)	-0.217*** (0.013)	-0.235*** (0.024)
Skin tone: dark skin, black hair, black eyes	-0.054*** (0.008)	-0.059*** (0.010)	-0.050*** (0.011)	-0.044*** (0.011)	-0.065*** (0.011)	-0.092*** (0.020)
Dispositional empathy						-0.067*** (0.016)
Family status: single young mother with child * Disp.						0.065*** (0.015)
Economic: poor, cleaner * Disp. empathy						0.025* (0.013)
Suffering: refugee, relatives killed * Disp. empathy						-0.000 (0.012)
Religion: Muslim * Disp. empathy						0.015 (0.015)
Skin tone: dark skin, black hair, black eyes * Disp. empathy						0.025** (0.013)
Suffering Syrians	-0.006 (0.004)	-0.006 (0.006)	-0.007 (0.006)	-0.003 (0.007)	-0.008 (0.006)	-0.006 (0.004)
Suffering Ukrainians	-0.001 (0.004)	0.002 (0.006)	-0.004 (0.006)	0.003 (0.006)	-0.005 (0.006)	-0.001 (0.004)
Suffering Syrians + shared experience	-0.004 (0.005)	-0.011* (0.007)	0.003 (0.006)	-0.008 (0.007)	0.001 (0.006)	-0.003 (0.005)
Suffering Ukrainians + shared experience	-0.001 (0.004)	0.004 (0.006)	-0.007 (0.006)	-0.001 (0.007)	-0.001 (0.006)	-0.001 (0.004)
Observations	19178	9992	9186	9578	9586	19164
R <sup>2</sup>	0.137	0.139	0.136	0.151	0.125	0.139

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Standard errors are clustered at respondent level. Table also controls for assignment to treatment in the survey experiment. Estimates are obtained from a weighted least squares regression. RIM weighting was used to adjust the sample data based on the relevant population benchmarks for gender and age. Columns 5 and 6 make use of a binary empathy variable (above or below the median dispositional empathy score).

## D. Variable Descriptions

**Table A7. Variable Descriptions**

Variable	Description	Q
<i>Demographic information</i>		
Respondent is female	Binary. Interviewer records respondent's gender without asking. One if female.	Q1
Respondent's age	Continuous. Age is calculated from the question: "In what year were you born?".	Q2
<i>Refugee helping behaviors</i>		
Previous assistance to Ukrainian refugees	Binary. Since February 2022, did you or your household members have a chance to assist Ukrainian refugees in any way?	Q16
Previous assistance to Syrian refugees	Binary. In the past 7 years, did you or your household members have a chance to assist Syrian refugees in any way?	Q6
Future assistance to Ukrainian refugees	Binary. Imagine that tomorrow you meet a recently arrived Ukrainian refugee family. This family fled from Kharkiv, bombed by Russian jets earlier this year. Would you be willing to assist them?	Q31
Future assistance Syrian refugees	Binary. Imagine that tomorrow you meet a recently arrived Syrian refugee family. This family fled from the Syrian province of Idlib, bombed by Russian jets earlier this year. Would you be willing to assist them?	Q27
Support entry Ukrainian refugees into Poland	Binary. Some say that the government should start limiting the entry of Ukrainian refugees into Poland. Others say that as many Ukrainians as want to migrate should be allowed to enter. Response options: 0) Government should start limiting the entry of Ukrainian refugees, 1) As many Ukrainians as want to migrate should be allowed to enter. One if response equals 1.	Q34
Support entry Syrian refugees into Poland	Binary. The Polish government has been reluctant to admit Syrian refugees into the country in 2016. Do you support or oppose this government decision to keep Syrian refugees out? Response options 1) Support, 0) Oppose. One if response equals 0.	Q30
Contribution to charity supporting Ukrainian / Syrian refugees	Continuous (0-1000). To thank you for participating in the survey we would like to donate 1,000 Zloty to a charity or charities of your choice. From all completed surveys, we will select 10 at random in a lottery and will make the donations as instructed. You can allocate the entire 1,000 to a single charity or split this amount in any way you like across the charities below. The total must add up to 1,000. Which charities would you like to donate to and how much? Response options (order was randomized): 1) Large Polish charity helping Ukrainian refugees, 2) Large Polish charity helping Syrian refugees, 3) Large Polish charity helping to preserve the environment in Poland, 4) Large Polish charity helping homeless animals in Poland, 5) Large Polish charity working to improve Polish healthcare. For Ukrainian refugees one if response equals 1, For Syrian refugees, one if response equals 2.	Q58
<i>Explanatory variables</i>		
Dispositional empathy	Continuous (0-3). How well do the following statements describe you? 1) I often feel sorry for people who are less fortunate than me, 2) I really get involved with the feelings of the characters in a novel, 3) I try to look at everybody's side of a disagreement before I make a decision, 4) When I see someone being taken advantage of, I feel kind of protective toward them, 5) I sometimes try to understand my friends better by imagining how things look from their perspective, 6) Being in a tense emotional situation scares me, 7) When I'm upset at someone, I usually try to "put myself in his shoes" for a while. Response options: 0) Does not describe me well, 1) Only describes me a little, 2) Describes me well, 3) Describes me very well. Mean score across the 7 statements.	Q56
Sociotropic concern economy	Binary. Some people say that refugees that come into the country are making it more difficult for Poles to find jobs. Others say that migrants take the jobs that Poles are unwilling to do and are not a threat in this way. What is your opinion? Response options: 1) Migrants are making it more difficult for Poles to find jobs, 0) Migrants do jobs that Poles are unwilling to take and migrants are not an economic threat. One if response equals 1.	Q51
Egocentric concern job	Binary. How concerned are you that you personally or a close relative (spouse, parent, or child) might lose their job in the next 6 months? Response options: 1) very unconcerned, 2) quite unconcerned, 3) quite concerned, 4) very concerned. One if response equals 3 or 4.	Q50
Cultural similarity Ukraine / Syria	Continuous (1-10). Imagine a 10-step ladder of cultural similarity. Poles are culturally similar to each other and are all on step 10. Nationalities who are completely different from Poles are at the opposite end, on step 1. Which step would you place each of the following groups on in terms of their similarity to Poles? Response to Ukrainians / Syrians.	Q42
Concern over Russia	Continuous (1-4). How concerned are you that Russia might attack Poland as the war in Ukraine continues? 1) Not at all concerned, 2) Not that concerned, 3) A little concerned, 4) Very concerned.	Q43
Respondent's economic condition	Continuous (1-6). How would you describe your household's economic situation over the past six months from the options below? Response options: 1) We do not have enough money for food, 2) We have enough money for food but not for new clothes, 3) We can afford food and clothes, but it would be difficult to buy a new electrical appliance, like a television, 4) We can afford all of the above and have enough money to travel abroad on vacation, 5) We can do all of the above but it would be difficult to buy a new car, 6) We do not experience any financial limitations.	Q66
Respondent has higher education	Binary. What is your education level? Response options: 1) Incomplete primary, 2) Primary or junior high school, 3) Vocational, 4) Secondary vocational, 5) Secondary education, 6) Higher (bachelor's, engineering, master's degree), 7) PhD and higher. One if response equals 6 or 7.	Q63
Respondent is Catholic	Binary. Do you consider yourself as: 1) belonging to the Catholic Church, 2) belonging to another religious community, 3) not belonging to any religious community? One if response equals 1.	Q48
Family member died or displaced in WW2	Binary. Q44: Did any of your family members die, were killed or disappeared in World War II? Q46: Was your family displaced either during World War II or in its aftermath? One if response to any question is yes.	Q44, Q46
Right-wing political ideology	Continuous (1-5). If the parliamentary election took place this Sunday, which political party would you vote for? Respondents could choose between eight parties. We created an ideology ranking based on the responses, going from left- to right-wing parties. 1) includes Agrounia (Michał Kołodziejczak) and Lewica (Włodzimierz Czarzasty, Adrian Zandberg, Robert Biedroń), 2) includes Koalicja Obywatelska (Platforma Obywatelska, Nowoczesna, Zieloni, Inicjatywa Polska), 3) includes Polskie Stronnictwo Ludowe (Władysław Kosiniak Kamysz) and Polska 2050 (Szymon Hołownia), 4) includes Zjednoczona Prawica (Prawo i Sprawiedliwość, Solidarna Polska, Republikanie) and Kukiz 2015 (Paweł Kukiz), 5) includes Konfederacja (Krzysztof Bosak).	Q55

Notes: Variable descriptions. Column "Q" refers to the question number in the survey. All study instruments and data are publicly available on [Redacted for anonymity].

## E. Measurement of Dispositional Empathy

### Item Selection

To measure dispositional empathy, we rely on the “Interpersonal Reactivity Index” (IRI), a scale widely used in psychology (Davis 1983). The original scale consists of 28 items. It has four subscales, each consisting of seven items, which measure separate components of empathy. The Empathic Concern (EC) scale assesses the tendency to experience feelings of sympathy and concern for unfortunate others; the Perspective Taking (PT) scale measures the tendency to adopt the psychological perspective of others; the Personal Distress (PD) scale measures the tendency to have feelings of discomfort when witnessing others’ negative experiences, and the Fantasy (FS) scale measures the tendency to identify with fictitious characters (Davis 1983, 113–114).<sup>1</sup>

In the psychology literature, two components of empathy are generally distinguished: a cognitive component that involves the capacity to imagine someone else’s thoughts and feelings, and an affective component that involves the ability to respond to someone else’s thoughts and feelings with appropriate emotion (Baron-Cohen 2011; Baron-Cohen and Wheelwright 2004; Jolliffe and Farrington 2006). In the IRI scale, the Perspective Taking subscale measures cognitive empathy, while the Empathic Concern and Personal Distress subscales assess affective empathy. Some also consider the Fantasy scale to measure affective empathy, while others argue it picks up a distinct aspect (Baron-Cohen and Wheelwright 2004; De Corte *et al.* 2007).

Many studies validate and use shorter versions of the IRI scale (see e.g., Ingoglia *et al.* 2016; Lauterbach and Hosser 2007). To reduce the survey burden, we rely on a seven-item scale, consisting of three items from the PT scale to measure the cognitive component, two items from the EC scale to measure the affective component, and one item from the PD and FS scales each. The items were chosen to capture a range of different emotions, while also considering how strongly each item was correlated with the four aspects of empathy in previous studies. Below we provide an overview of the selected items and the subscale they were drawn from.

Perspective Taking: (1) I try to look at everybody’s side of a disagreement before I make a decision; (2) When I’m upset at someone, I usually try to “put myself in his shoes” for a while; (3) I sometimes try to understand my friends better by imagining how things look from their perspective; Empathic Concern: (4) I often feel sorry for people who are less fortunate than me; (5) When I see someone being taken advantage of, I feel kind of protective toward them; Personal Distress: (6) Being in a tense emotional situation scares me; Fantasy: (7) I really get involved with the feelings of the characters in a novel.

Respondents were asked to indicate to what extent these statements applied to them using a four-point Likert scale: 0) Does not describe me well; 1) Only describes me a little; 2) Describes me well; 3) Describes me very well. Higher item scores are associated with higher levels of empathy. In the analysis, we use the simple mean of the seven items as our measure of dispositional empathy, with higher scores indicating higher levels of empathy.

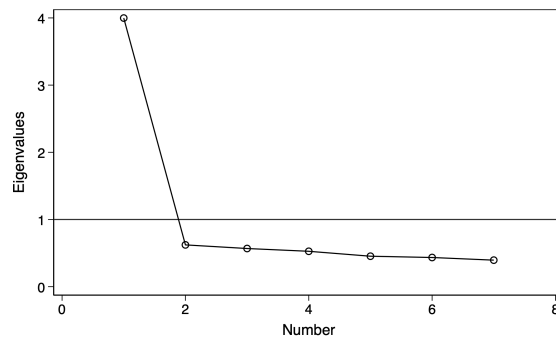
---

<sup>1</sup> Perspective-taking subscale in IRI, which measures inherent ability to empathize, is not to be confused with perspective-taking exercises, which activate situational empathy.

### Internal Validity and Consistency

Our short version of the IRI scale is not intended to accurately measure the four dimensions of dispositional empathy, but rather as a single-dimension measure of respondents' inherent levels of empathy. Conducting an exploratory factor analysis, we indeed find that all seven items strongly load on the same factor, implying they are getting at a similar underlying concept. **Figure A1** shows the scree plot, indicating that the first factor has an eigenvalue of 3.99, while **Table A8** shows the separate item factor loadings (which are all  $\geq 0.71$ ). In addition, we find a Cronbach's Alpha value of 0.87, indicating internal consistency for our seven-item empathy scale. Furthermore, as many studies tend to find that women score higher on empathy than men, one method of evaluating the validity of the empathy scale is checking whether such gender differences exist (see e.g., De Corte *et al.* 2007; Jolliffe and Farrington 2006). **Table A9**, which shows the mean scores for male and female respondents for our empathy scale and each of the separate items, confirms that this is indeed the case.

**Figure A1. Scree Plot of Eigenvalues after Factor Analysis**



**Table A8. Item Factor Loadings**

Item	Factor loading
I try to look at everybody's side of a disagreement before I make a decision.	0.77
When I'm upset at someone, I usually try to "put myself in his shoes" for a while.	0.74
I sometimes try to understand my friends better by imagining how things look from their perspective.	0.78
I often feel sorry for people who are less fortunate than me.	0.78
When I see someone being taken advantage of, I feel kind of protective toward them.	0.78
Being in a tense emotional situation scares me.	0.72
I really get involved with the feelings of the characters in a novel.	0.71

Notes: This table shows how each of the empathy items loads on the first factor retained after an exploratory factor analysis.

**Table A9. Gender Differences in Dispositional Empathy**




	Men		Women		Difference
	N	mean	N	mean	
Mean empathy score	1,175	1.25	1,306	1.57	-0.322***
I try to look at everybody's side of a disagreement before I make a decision.	1,164	1.40	1,293	1.64	-0.242***
When I'm upset at someone, I usually try to "put myself in his shoes" for a while.	1,147	1.13	1,275	1.43	-0.297***
I sometimes try to understand my friends better by imagining how things look from their	1,154	1.39	1,272	1.63	-0.234***
I often feel sorry for people who are less fortunate than me.	1,152	1.34	1,287	1.66	-0.323***
When I see someone being taken advantage of, I feel kind of protective toward them.	1,155	1.36	1,280	1.67	-0.311***
Being in a tense emotional situation scares me.	1,143	1.18	1,284	1.54	-0.360***
I really get involved with the feelings of the characters in a novel.	1,138	0.96	1,288	1.47	-0.511***

Notes: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Based on pairwise t-tests (two-sided).

## F. Survey Experiment Text and Illustrations

Respondents were assigned randomly to the control condition, and one of four treatments. **Table A10** presents the text and illustrations for each treatment in the survey experiment.

**Table A10. Treatment Text and Illustrations**

Treatment	Illustration	Text
Control	None	None
Syrian Suffering	 <p data-bbox="358 779 873 804">Syrian civilians fleeing Aleppo after Russian attack in 2016.</p>	<p>Russia's military intervention in <b>Syria</b> resulted in great suffering for millions of civilians. Cities were encircled and bombed to ruins; thus millions of families were displaced. In a matter of minutes many <b>Syrians</b> lost everything and saw their loved ones die. Numerous civilians were subjected to torture or disappeared without a trace. Some managed to flee and are now seeking refuge in Poland and other European countries.</p>
Ukrainian Suffering	 <p data-bbox="358 1115 873 1140">Ukrainians civilians fleeing Kyiv after Russian attack in 2022.</p>	<p>Russia's military intervention in <b>Ukraine</b> resulted in great suffering for millions of civilians. Cities were encircled and bombed to ruins; thus millions of families were displaced. In a matter of minutes many <b>Ukrainians</b> lost everything and saw their loved ones die. Numerous civilians were subjected to torture or disappeared without a trace. Some managed to flee and are now seeking refuge in Poland and other European countries.</p>
Syrian suffering + shared experience	 <p data-bbox="358 1402 873 1428">Syrian civilians fleeing Aleppo after Russian attack in 2016.</p> <p data-bbox="358 1738 857 1764">Polish civilians fleeing after the Warsaw uprising in 1944.</p>	<p>Russia's military intervention in <b>Syria</b> resulted in great suffering for millions of civilians. Cities were encircled and bombed to ruins; thus millions of families were displaced. In a matter of minutes many <b>Syrians</b> lost everything and saw their loved ones die. Numerous civilians were subjected to torture or disappeared without a trace. Some managed to flee and are now seeking refuge in Poland and other European countries.</p> <p>Poles, like few other people in Europe, know what it's like to be at war with Russia and to flee from violence. Not that long ago, Polish families had experienced the same fear, the same shock, the same emotions as <b>Syrians</b> are living through.</p> <p>In 1939, the invasion by Nazi Germany from the west and the Soviet Union from the east displaced millions of Polish civilians. Polish cities were razed to the ground. Nearly everyone saw a family member die. After the war, many more Polish families lost their homes after the country's eastern borderlands were annexed by the Soviet Union.</p>

		<p>Poles have first-hand experience with forced migration and military aggression that <b>Syrians</b> are living through now.</p>
<p>Ukrainian suffering + shared experience</p>	<div data-bbox="358 285 816 590" data-label="Image"> </div> <p data-bbox="358 592 878 617">Ukrainians civilians fleeing Kyiv after Russian attack in 2022.</p> <div data-bbox="358 646 816 951" data-label="Image"> </div> <p data-bbox="358 953 854 978">Polish civilians fleeing after the Warsaw uprising in 1944.</p>	<p>Russia's military intervention in <b>Ukraine</b> resulted in great suffering for millions of civilians. Cities were encircled and bombed to ruins; thus millions of families were displaced. In a matter of minutes many <b>Ukrainians</b> lost everything and saw their loved ones die. Numerous civilians were subjected to torture or disappeared without a trace. Some managed to flee and are now seeking refuge in Poland and other European countries.</p> <p>Poles, like few other people in Europe, know what it's like to be at war with Russia and to flee from violence. Not that long ago, Polish families had experienced the same fear, the same shock, the same emotions as <b>Ukrainians</b> are living through.</p> <p>In 1939, the invasion by Nazi Germany from the west and the Soviet Union from the east displaced millions of Polish civilians. Polish cities were razed to the ground. Nearly everyone saw a family member die. After the war, many more Polish families lost their homes after the country's eastern borderlands were annexed by the Soviet Union.</p> <p>Poles have first-hand experience with forced migration and military aggression that <b>Ukrainians</b> are living through now.</p>

Notes: Illustrations and text for each treatment condition.

## G. Balance

As expected from randomization, **Table A11** shows that there is balance across covariates collected before the survey experiment.

**Table A11. Covariate Balance across Survey Experiment Treatments**

	(1) Control		(2) Syrian suffering		(3) Ukrainian suffering		(4) Syrian suffering + shared experience		(5) Ukrainian suffering + shared experience		(6) F-test for balance across all groups	
	N	Mean (SE)	N	Mean (SE)	N	Mean (SE)	N	Mean (SE)	N	Mean (SE)	N	F-statistic (p-value)
Dispositional empathy	507	1.467 (0.039)	491	1.410 (0.041)	502	1.408 (0.038)	483	1.368 (0.041)	498	1.442 (0.037)	2,481	1.766 (0.136)
Sociotropic concern econ.	457	0.381 (0.029)	456	0.408 (0.029)	466	0.412 (0.029)	441	0.392 (0.030)	464	0.388 (0.029)	2,284	0.336 (0.854)
Egocentric concern job	491	0.438 (0.028)	479	0.436 (0.028)	488	0.453 (0.030)	468	0.476 (0.032)	490	0.424 (0.029)	2,416	0.799 (0.527)
Cultural similarity Ukr.	468	6.188 (0.180)	445	6.479 (0.160)	464	6.151 (0.164)	440	6.266 (0.153)	456	6.410 (0.178)	2,273	1.462 (0.214)
Cultural similarity Syr.	428	2.935 (0.176)	412	2.859 (0.151)	435	2.936 (0.156)	410	3.100 (0.150)	432	3.030 (0.181)	2,117	0.834 (0.505)
Concern Russia	501	3.078 (0.042)	486	3.080 (0.050)	496	3.069 (0.047)	475	3.040 (0.043)	494	3.002 (0.040)	2,452	1.015 (0.400)
Respondent is female	509	0.528 (0.021)	497	0.537 (0.020)	507	0.531 (0.022)	485	0.520 (0.021)	502	0.512 (0.019)	2,500	0.220 (0.927)
Respondent's age	509	49.104 (0.661)	497	48.042 (0.657)	507	48.631 (0.689)	485	49.893 (0.717)	502	47.793 (0.634)	2,500	1.398 (0.236)
Resp. econ. condition	493	3.469 (0.063)	471	3.384 (0.060)	482	3.440 (0.057)	462	3.364 (0.053)	488	3.355 (0.055)	2,396	1.222 (0.302)
Resp. higher education	505	0.186 (0.017)	496	0.171 (0.018)	505	0.188 (0.020)	484	0.163 (0.018)	502	0.191 (0.019)	2,492	0.437 (0.782)
Resp. is Catholic	509	0.780 (0.021)	497	0.732 (0.023)	507	0.781 (0.023)	485	0.784 (0.023)	502	0.775 (0.022)	2,500	1.160 (0.329)
Family member died/displaced in WWII	509	0.403 (0.029)	497	0.390 (0.027)	507	0.339 (0.026)	485	0.371 (0.027)	502	0.380 (0.026)	2,500	1.280 (0.279)

Notes: Covariate balance survey experiment. Columns 1-5 show the group mean and standard error of the group mean for each variable. Column 6 presents results of F-tests for joint significance across all groups for each variable.

## H. Conjoint Experiment

### H.1 Selection of Attributes

In selecting attributes for the conjoint experiment, we studied the discourse about Syrian and Ukrainian refugees in Poland and the EU and prioritized theoretical and substantive considerations. In addition to frequent references to religion (Muslims vs. Christians), demographics (women and children vs. single young men), and shared history of Russian aggression, the media often highlighted the refugees' race. For Syrians and Ukrainians alike, blond and blue-eyed individuals became the focus of attention. The BBC published a story about a 16-year-old Syrian boy with blond hair and green eyes fleeing Aleppo for Norway, who claimed he was aided by his lighter features that made him appear European.<sup>2</sup> Media references to Ukrainian refugees often included references to their blue eyes and blond hair as an indicator of Europeaness.<sup>3</sup> For this reason, we opted to include information about refugees' physical appearance among conjoint attributes (white skin, blond hair, blue eyes vs. dark skin, black hair, black eyes). While Syrians with white skin, blue eyes, and blond hair exist,<sup>4</sup> as do dark-skinned Ukrainians, such individuals are extremely rare, and thus refugee profiles with these traits might appear less plausible. For us, the benefits of including such profiles to isolate the effect of refugees' race on helping behavior outweigh the possible methodological costs. (Hainmueller *et al.* 2014) argue that atypical combinations of attributes do not threaten internal validity and are unlikely to affect respondents' attention or interest in the survey. (Bansak and Jenke 2023) argue that the impact of "odd" attribute combinations in a conjoint "is minimal and is unlikely to meaningfully affect the first-order inferences."

Some attributes in the conjoint experiment were bundled: we combined gender and parenthood (single young mother with a child vs. single young man) and wealth and skill level (well-off programmer vs. poor cleaner). We had substantive and theoretical reasons for doing so. First, as noted above, the arguments about Syrians and Ukrainians in Poland frequently bundled gender, age, and/or parenthood together: Syrians are portrayed as single young men without families, which is used to question their refugee status, while Ukrainian refugees are portrayed as overwhelmingly women and children and thus in need of assistance. Second, the bundling of skill level and economic status is common in the real world, as people assume that programmers are well-off while cleaners are poor. Because a wealthy cleaner or a poor programmer is an implausible profile, combining these specific attributes can be thought of as a restriction on the randomization distribution. To understand how such combinations work in our survey, we included follow-up questions about each profile's perceived humanitarian need, contribution to crime, and impact on the job market. We present results in **Table A12** in Section H.2. We find that young mothers are perceived as in greater need and less likely to increase crime, and poor cleaners are perceived as in greater need and more likely to take Polish jobs (i.e., less beneficial for the economy), but in both cases the coefficients are much larger for perceived need than for contribution to crime and unemployment, respectively.

---

<sup>2</sup> "From Syria to Norway as an unaccompanied child." *The BBC Newshour*, December 28, 2015.

<sup>3</sup> Bayomi, Moustafa. "They are 'civilized' and 'look like us': the racist coverage of Ukraine." *The Guardian*. Opinion. March 2, 2022.

<sup>4</sup> Genomic analyses demonstrate that Syrians are "genetically closer to neighboring human populations, (Jordanians, Lebanese, and Turks), and to Europeans in the north of the Mediterranean", where lighter features such as pale skin, blond hair, and blue eyes are not uncommon than they are to populations in the Arabian Peninsula and North Africa (Ikhtiar *et al.* 2018).

## H.2 Evaluation of Refugee Profiles

After the first round of each conjoint experiment, we asked respondents to indicate to what extent they agreed that each of the evaluated refugee profiles was “in great need”, “will increase crime or terrorism,” and “will take our jobs and benefits”. Answer options ranged from 1) strongly disagree to 5) strongly agree. We created a variable that indicates profiles for which respondents (strongly) agreed with these statements. **Table A12** shows the marginal contribution of each attribute towards respondents’ perceptions.

**Table A12. Evaluation of Refugee Profiles**

This refugee profile is considered:	In great need (1)	Will increase crime (2)	Will take our jobs (3)
Family status: single young mother with child	0.081*** (0.010)	-0.062*** (0.009)	-0.019* (0.010)
Economic: poor, cleaner	0.103*** (0.011)	0.010 (0.009)	0.017* (0.010)
Suffering: refugee, relatives killed	0.020* (0.010)	-0.004 (0.008)	0.002 (0.009)
Religion: Muslim	-0.028*** (0.010)	0.045*** (0.009)	0.018* (0.010)
Physical appearance: dark skin, black hair, black eyes	0.013 (0.010)	0.016* (0.008)	-0.007 (0.009)
Observations	9,585	9,316	9,422
$R^2$	0.019	0.009	0.001

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Standard errors are clustered at the level of the respondent and presented between brackets.

### H.3 Results of the Conjoint Experiment in Tabular Format

**Table A13** replicates Figure 1 and additionally controls for treatment assignment in the survey experiment on situational empathy that preceded the conjoint experiment.

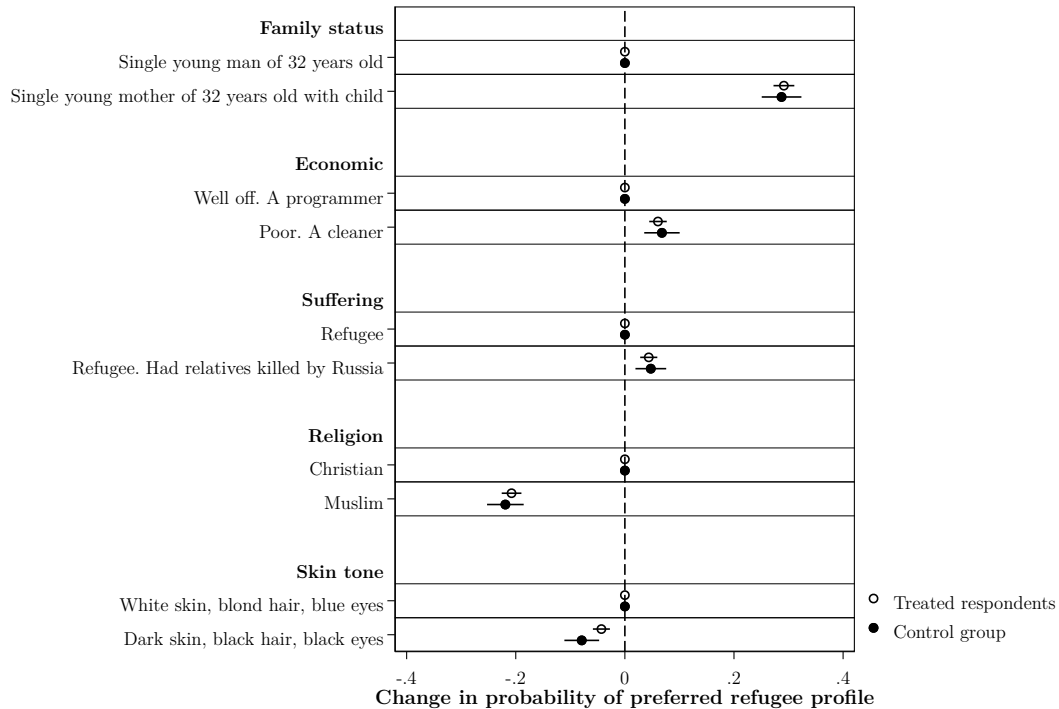
**Table A13. Conjoint Experiment – Full Results**

	All refugee profiles	Ukrainian refugee	Syrian refugee	High dispositional empathy	Low Dispositional empathy	All respondents (interaction)
Figure 1's panel:	(a) and (b)	(a)	(a)	(b)	(b)	NA
	(1)	(2)	(3)	(5)	(6)	(7)
Family status: single young mother with child	0.291*** (0.009)	0.279*** (0.011)	0.304*** (0.011)	0.315*** (0.012)	0.267*** (0.012)	0.201*** (0.023)
Economic: poor, cleaner	0.062*** (0.007)	0.065*** (0.010)	0.060*** (0.010)	0.083*** (0.010)	0.042*** (0.010)	0.018 (0.019)
Suffering: refugee, relatives killed	0.045*** (0.007)	0.055*** (0.010)	0.033*** (0.010)	0.041*** (0.010)	0.048*** (0.010)	0.045** (0.018)
Religion: Muslim	-0.210*** (0.008)	-0.224*** (0.011)	-0.196*** (0.011)	-0.202*** (0.012)	-0.218*** (0.011)	-0.240*** (0.021)
Skin tone: dark skin, black hair, black eyes	-0.050*** (0.007)	-0.056*** (0.010)	-0.044*** (0.010)	-0.048*** (0.010)	-0.053*** (0.010)	-0.071*** (0.019)
Dispositional empathy						-0.064*** (0.014)
Family status: single mother with child * Disp. empathy						0.060*** (0.014)
Economic: poor, cleaner * Disp. empathy						0.030** (0.012)
Suffering: refugee, relatives killed * Disp. empathy						-0.000 (0.011)
Religion: Muslim * Disp. empathy						0.020 (0.013)
Skin tone: dark skin, black hair, black eyes * Disp. empathy						0.014 (0.012)
Suffering Syrians	-0.007* (0.004)	-0.008 (0.006)	-0.006 (0.006)	-0.005 (0.006)	-0.008 (0.005)	-0.007* (0.004)
Suffering Ukrainians	-0.004 (0.004)	-0.004 (0.006)	-0.005 (0.006)	-0.004 (0.006)	-0.005 (0.006)	-0.005 (0.004)
Suffering Syrians + shared experience	-0.006 (0.004)	-0.011** (0.006)	-0.001 (0.006)	-0.012* (0.006)	-0.001 (0.006)	-0.006 (0.004)
Suffering Ukrainians + shared experience	-0.004 (0.004)	-0.002 (0.006)	-0.008 (0.006)	-0.008 (0.006)	-0.001 (0.005)	-0.005 (0.004)
Observations	19,178	9,992	9,186	9,578	9,586	19,164
R <sup>2</sup>	0.137	0.138	0.137	0.149	0.127	0.139

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Standard errors are clustered at the level of the respondent and presented in parentheses. Columns 5 and 6 make use of a binary empathy variable (above or below the median dispositional empathy score). Columns (5) and (6) separate out results by respondents' level of dispositional empathy. The estimated coefficients on family status and economic condition between these two groups are statistically significantly different from each other with a p-value of 0.005.

**Figure A2** presents conjoint results for respondents who were assigned to either the treatment or the control group in the survey experiment. The results are very similar across groups. Treated respondents are slightly less likely ( $p < 0.05$ ) to dislike profiles with darker features – an attribute that is not associated with perceptions of suffering (see H.2). Overall, these findings suggest that exposure to the survey experiment did not prime respondents to consider the suffering of refugees when evaluating conjoint profiles.

**Figure A2. Conjoint results by treatment in the survey experiment**



Notes: This Figure presents estimated AMCEs for the refugee profiles evaluated by treated respondents (N=15,220 profiles) and control respondents (N=3,958 profiles). Standard errors are clustered at the level of the respondent. Bars indicate 95% confidence intervals.

#### H.4 Other Types of Helping Behaviors

In the conjoint experiment, in addition to the forced choice, we also asked respondents to rate their willingness to host the different evaluated refugee profiles and, after the first round of each conjoint experiment, asked how much they would be willing to help each type of refugee in other ways through donation of food/clothes or money. The following two tables explore the determinants of these different helping outcomes. For ease of comparison with Table 3, **Table A14** presents results with standardized coefficients. **Table A15** presents results without standardizing coefficients.

**Table A14. Conjoint – Other Helping Outcomes, Coefficients Standardized**

	Willing to host (1)	Would donate food or clothes (2)	Would donate money (3)
<i>Respondent characteristics</i>			
Dispositional empathy	0.285*** (0.020)	0.214*** (0.020)	0.252*** (0.020)
Sociotropic concern economy	-0.209*** (0.018)	-0.150*** (0.019)	-0.165*** (0.019)
Egocentric concern economy	-0.086*** (0.017)	-0.083*** (0.018)	-0.175*** (0.018)
Concern Russia	-0.048** (0.020)	0.079*** (0.021)	-0.000 (0.019)
Respondent is female	-0.013 (0.017)	-0.012 (0.018)	-0.029 (0.018)
Respondent's age	-0.069*** (0.018)	-0.111*** (0.020)	-0.031 (0.019)
Respondent's economic condition	0.072*** (0.018)	0.003 (0.017)	0.092*** (0.018)
Respondent has higher education	-0.042** (0.018)	0.025 (0.017)	0.004 (0.019)
Respondent is Catholic	0.037** (0.018)	0.045** (0.019)	-0.032* (0.018)
Family member died/displaced in WWII	-0.026 (0.018)	0.058*** (0.018)	0.012 (0.018)
<i>Refugee profile attributes</i>			
Ukrainian	0.091*** (0.006)	0.023*** (0.008)	0.059*** (0.007)
Single young mother with child	0.094*** (0.007)	0.053*** (0.010)	0.068*** (0.010)
Poor, cleaner	0.009 (0.006)	0.065*** (0.010)	0.055*** (0.011)
Refugee, relatives killed	0.004 (0.006)	0.019* (0.010)	-0.011 (0.010)
Muslim	-0.072*** (0.007)	-0.023** (0.010)	-0.038*** (0.010)
Dark skin, black hair, black eyes	-0.004 (0.006)	-0.002 (0.010)	0.014 (0.010)
<i>Treatment in survey experiment</i>			
Suffering Syrians	0.005 (0.021)	0.013 (0.021)	-0.015 (0.022)
Suffering Ukrainians	-0.008 (0.021)	-0.005 (0.022)	-0.027 (0.022)
Suffering Syrians + shared experience	0.015 (0.020)	0.038* (0.021)	0.010 (0.022)
Suffering Ukrainians + shared experience	0.009 (0.021)	-0.019 (0.021)	-0.005 (0.022)
Observations	24,270	8,422	8,386
R <sup>2</sup>	0.179	0.125	0.153

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at the level of the respondent and presented between brackets. Coefficients are standardized. The willingness to donate food/clothes or money was only measured after the first repetition of each conjoint.

**Table A15. Conjoint – Other Helping Outcomes, Coefficients Not Standardized**

	Willing to host (1)	Would donate food or clothes (2)	Would donate money (3)
<i>Respondent characteristics</i>			
Dispositional empathy	0.365*** (0.026)	0.374*** (0.034)	0.489*** (0.039)
Sociotropic concern economy	-0.355*** (0.030)	-0.347*** (0.044)	-0.424*** (0.048)
Egocentric concern economy	-0.143*** (0.029)	-0.189*** (0.042)	-0.441*** (0.045)
Concern Russia	-0.051** (0.022)	0.116*** (0.031)	-0.001 (0.032)
Respondent is female	-0.021 (0.029)	-0.027 (0.040)	-0.073 (0.046)
Respondent's age	-0.003*** (0.001)	-0.007*** (0.001)	-0.002 (0.001)
Respondent's economic condition	0.060*** (0.015)	0.003 (0.020)	0.117*** (0.023)
Respondent has higher education	-0.090** (0.039)	0.073 (0.050)	0.012 (0.062)
Respondent is Catholic	0.074** (0.036)	0.121** (0.052)	-0.096* (0.054)
Family member died or displaced in WWII	-0.045 (0.030)	0.136*** (0.042)	0.030 (0.048)
<i>Refugee profile attributes</i>			
Ukrainian	0.150*** (0.010)	0.052*** (0.017)	0.147*** (0.018)
Single young mother with child	0.155*** (0.012)	0.119*** (0.023)	0.171*** (0.025)
Poor, cleaner	0.015 (0.010)	0.146*** (0.024)	0.138*** (0.027)
Refugee, relatives killed	0.007 (0.010)	0.042* (0.024)	-0.027 (0.025)
Muslim	-0.120*** (0.011)	-0.053** (0.023)	-0.096*** (0.026)
Dark skin, black hair, black eyes	-0.007 (0.009)	-0.005 (0.023)	0.036 (0.025)
<i>Treatment in survey experiment</i>			
Suffering Syrians	0.010 (0.043)	0.038 (0.060)	-0.048 (0.069)
Suffering Ukrainians	-0.016 (0.043)	-0.014 (0.061)	-0.083 (0.069)
Suffering Syrians + shared experience	0.031 (0.043)	0.107* (0.060)	0.032 (0.069)
Suffering Ukrainians + shared experience	0.019 (0.043)	-0.055 (0.059)	-0.016 (0.068)
Observations	24,270	8,422	8,386
R <sup>2</sup>	0.179	0.125	0.153

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at the level of the respondent and presented between brackets. The willingness to donate food/clothes or money was only measured after the first repetition of each conjoint.

## I. Correlates of Refugee Assistance

### I.1 Results without Standardizing

In Table 3 in the main manuscript, we present results for standardized outcome variables and covariates to facilitate the comparison of effect sizes across different explanatory variables. **Table A16** replicates Table 3 but presents estimated coefficients when the variables are not standardized.

**Table A16. Replicating Table 3, without Standardizing the Variables**

	Ukrainian Refugee					Syrian Refugee				
	Past assistance (1)	Future assistance (2)	Donate (3)	Support entry (4)	Assistance index (5)	Past assistance (6)	Future assistance (7)	Donate (8)	Support entry (9)	Assistance index (10)
Dispositional empathy	0.144*** (0.024)	0.152*** (0.020)	27.746** (12.858)	0.108*** (0.022)	0.541*** (0.060)	0.016 (0.015)	0.203*** (0.024)	25.931*** (7.411)	0.129*** (0.025)	0.523*** (0.065)
Sociotropic concern economy	-0.139*** (0.029)	-0.236*** (0.029)	-90.547*** (13.962)	-0.358*** (0.030)	-0.969*** (0.084)	-0.039** (0.018)	-0.213*** (0.035)	-43.740*** (9.458)	-0.169*** (0.034)	-0.634*** (0.088)
Egocentric concern job	-0.026 (0.029)	-0.042* (0.023)	-22.371* (12.996)	0.013 (0.028)	-0.056 (0.067)	0.023 (0.020)	-0.046 (0.030)	-1.338 (9.509)	-0.084** (0.033)	-0.084 (0.070)
Cultural similarity Ukraine	0.030*** (0.006)	0.018*** (0.006)	6.560** (3.036)	0.016** (0.006)	0.079*** (0.015)					
Cultural similarity Syria						0.017*** (0.006)	0.011 (0.008)	9.746*** (2.505)	0.040*** (0.008)	0.075*** (0.020)
Concern Russia	0.062*** (0.021)	0.056*** (0.019)	27.539** (10.608)	0.000 (0.018)	0.152*** (0.045)	0.006 (0.014)	0.054** (0.023)	-5.310 (6.635)	-0.048** (0.022)	-0.020 (0.049)
Respondent is female	0.001 (0.021)	-0.009 (0.016)	-17.198* (9.225)	-0.025 (0.020)	-0.112** (0.048)	-0.012 (0.013)	-0.013 (0.021)	-7.387 (6.241)	0.017 (0.020)	-0.008 (0.053)
Respondent's age	-0.003*** (0.001)	-0.002*** (0.001)	-0.540* (0.326)	-0.001 (0.001)	-0.005*** (0.002)	-0.001 (0.000)	-0.003*** (0.001)	-0.287 (0.203)	-0.002*** (0.001)	-0.006*** (0.002)
Resp. economic condition	-0.004 (0.019)	0.057*** (0.011)	16.243** (6.657)	0.077*** (0.015)	0.209*** (0.037)	0.027* (0.014)	0.003 (0.020)	12.216*** (3.743)	-0.022 (0.017)	0.066 (0.046)
Resp. has higher education	0.097*** (0.031)	0.011 (0.023)	5.234 (14.147)	-0.043 (0.031)	0.031 (0.064)	0.003 (0.019)	0.015 (0.033)	-8.110 (9.059)	0.047 (0.033)	0.058 (0.073)
Respondent is Catholic	-0.027 (0.033)	0.054** (0.024)	0.716 (14.976)	0.007 (0.032)	0.027 (0.075)	0.010 (0.019)	0.024 (0.032)	-1.388 (11.448)	-0.099*** (0.036)	-0.047 (0.078)
Family member died or displaced in WWII	0.039 (0.028)	0.054** (0.022)	21.431* (11.894)	0.083*** (0.027)	0.296*** (0.066)	0.047** (0.023)	0.047 (0.031)	7.193 (9.110)	-0.020 (0.031)	0.171** (0.078)
Observations	1,993	1,927	1,883	1,885	1,702	1,856	1,756	1,776	1,715	1,510
R <sup>2</sup>	0.138	0.231	0.102	0.230	0.357	0.048	0.159	0.083	0.137	0.234

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Standard errors are clustered at the level of the municipality. Outcome variables and covariates are not standardized.

## I.2 Controlling for Survey Experiment Treatment Condition

**Table A17. Replicating Table 3, Controlling for Treatment Condition in the Survey Experiment**

	Ukrainian Refugee					Syrian Refugee				
	Past assistance (1)	Future assistance (2)	Donate (3)	Support entry (4)	Assistance index (5)	Past assistance (6)	Future assistance (7)	Donate (8)	Support entry (9)	Assistance index (10)
Dispositional empathy	0.187*** (0.031)	0.224*** (0.029)	0.089** (0.040)	0.141*** (0.029)	0.261*** (0.029)	0.037 (0.037)	0.268*** (0.032)	0.122*** (0.034)	0.173*** (0.034)	0.292*** (0.036)
Sociotropic concern economy	-0.135*** (0.029)	-0.261*** (0.032)	-0.214*** (0.033)	-0.350*** (0.029)	-0.350*** (0.030)	-0.069** (0.033)	-0.210*** (0.035)	-0.152*** (0.033)	-0.171*** (0.035)	-0.265*** (0.037)
Egocentric concern job	-0.027 (0.029)	-0.048* (0.026)	-0.055* (0.031)	0.013 (0.028)	-0.021 (0.025)	0.041 (0.037)	-0.046 (0.030)	-0.006 (0.034)	-0.087** (0.034)	-0.036 (0.030)
Cultural similarity Ukraine	0.147*** (0.031)	0.098*** (0.031)	0.078** (0.036)	0.077** (0.030)	0.146*** (0.027)					
Cultural similarity Syria						0.139*** (0.050)	0.051 (0.038)	0.160*** (0.041)	0.189*** (0.039)	0.146*** (0.039)
Anxiety over Russia	0.096*** (0.032)	0.097*** (0.034)	0.102*** (0.039)	0.002 (0.028)	0.088*** (0.026)	0.018 (0.038)	0.086** (0.035)	-0.030 (0.036)	-0.077** (0.035)	-0.010 (0.032)
Respondent is female	0.001 (0.021)	-0.010 (0.019)	-0.042* (0.022)	-0.025 (0.020)	-0.041** (0.018)	-0.021 (0.025)	-0.014 (0.022)	-0.026 (0.022)	0.018 (0.021)	-0.004 (0.023)
Respondent's age	-0.103*** (0.025)	-0.060*** (0.023)	-0.045* (0.027)	-0.023 (0.023)	-0.065*** (0.023)	-0.040 (0.029)	-0.096*** (0.026)	-0.037 (0.024)	-0.078*** (0.026)	-0.092*** (0.027)
Respondent's wealth	-0.007 (0.037)	0.128*** (0.024)	0.079** (0.031)	0.154*** (0.030)	0.154*** (0.027)	0.097* (0.051)	0.010 (0.040)	0.087*** (0.026)	-0.046 (0.034)	0.059 (0.039)
Resp. has higher education	0.074*** (0.024)	0.009 (0.020)	0.010 (0.026)	-0.035 (0.024)	0.008 (0.018)	0.002 (0.027)	0.012 (0.026)	-0.021 (0.025)	0.037 (0.026)	0.018 (0.024)
Respondent is Catholic	-0.024 (0.028)	0.050** (0.023)	0.002 (0.030)	0.004 (0.027)	0.007 (0.023)	0.013 (0.029)	0.019 (0.027)	-0.004 (0.034)	-0.086*** (0.031)	-0.017 (0.028)
Family member died/displaced in WWII	0.039 (0.027)	0.060** (0.024)	0.051* (0.028)	0.082*** (0.026)	0.108*** (0.024)	0.083** (0.041)	0.048 (0.030)	0.026 (0.031)	-0.021 (0.031)	0.073** (0.032)
Suffering Syrians	-0.038 (0.063)	0.013 (0.064)	0.086 (0.084)	0.005 (0.067)	-0.022 (0.066)	-0.058 (0.075)	0.078 (0.078)	-0.029 (0.071)	-0.046 (0.072)	0.022 (0.076)
Suffering Ukrainians	0.044 (0.063)	0.059 (0.061)	0.069 (0.069)	0.068 (0.064)	0.079 (0.062)	0.011 (0.067)	0.090 (0.070)	-0.006 (0.064)	-0.051 (0.065)	0.066 (0.068)
Suffering Syrians + shared experience	0.063 (0.066)	0.022 (0.070)	0.149* (0.078)	0.047 (0.066)	0.089 (0.070)	-0.017 (0.083)	0.206*** (0.076)	0.126* (0.071)	-0.019 (0.073)	0.165** (0.076)
Suffering Ukrainians + shared experience	0.016 (0.059)	0.031 (0.058)	0.056 (0.075)	0.097 (0.068)	0.033 (0.068)	0.045 (0.084)	0.119 (0.073)	-0.030 (0.077)	-0.021 (0.072)	0.097 (0.073)
Observations	1.993	1.927	1.883	1.885	1.702	1.856	1.756	1.776	1.715	1.510
R <sup>2</sup>	0.139	0.232	0.104	0.232	0.359	0.049	0.163	0.085	0.138	0.238

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at the level of the municipality. Outcome variables and covariates are standardized.

### I.3 Excluding Family Victimization

**Table A18** replicates Table 3 but excludes family victimization in WWII from the covariates. Results remain consistent, alleviating concerns about potential collider bias.

**Table A18. Replicating Table 3, Excluding Family Victimization**

	Ukrainian Refugee					Syrian Refugee				
	Past assistance (1)	Future assistance (2)	Donate (3)	Support entry (4)	Assistance index (5)	Past assistance (6)	Future assistance (7)	Donate (8)	Support entry (9)	Assistance index (10)
Dispositional empathy	0.191*** (0.031)	0.231*** (0.029)	0.092** (0.041)	0.149*** (0.029)	0.272*** (0.029)	0.049 (0.035)	0.271*** (0.032)	0.123*** (0.034)	0.171*** (0.034)	0.300*** (0.036)
Sociotropic concern economy	-0.139*** (0.029)	-0.265*** (0.032)	-0.217*** (0.033)	-0.357*** (0.029)	-0.358*** (0.031)	-0.077** (0.033)	-0.215*** (0.035)	-0.155*** (0.033)	-0.170*** (0.035)	-0.271*** (0.037)
Egocentric concern job	-0.025 (0.029)	-0.045* (0.027)	-0.052* (0.031)	0.015 (0.028)	-0.016 (0.025)	0.043 (0.037)	-0.045 (0.030)	-0.004 (0.034)	-0.088** (0.034)	-0.034 (0.030)
Cultural similarity Ukraine	0.148*** (0.031)	0.101*** (0.031)	0.082** (0.035)	0.082*** (0.030)	0.153*** (0.027)					
Cultural similarity Syria						0.142*** (0.052)	0.054 (0.039)	0.162*** (0.041)	0.189*** (0.039)	0.150*** (0.041)
Concern Russia	0.102*** (0.032)	0.107*** (0.034)	0.112*** (0.038)	0.015 (0.028)	0.107*** (0.026)	0.031 (0.040)	0.093*** (0.036)	-0.025 (0.036)	-0.081** (0.035)	0.001 (0.033)
Respondent is female	-0.001 (0.021)	-0.013 (0.018)	-0.044** (0.022)	-0.029 (0.020)	-0.048*** (0.018)	-0.026 (0.024)	-0.015 (0.022)	-0.028 (0.022)	0.018 (0.021)	-0.007 (0.023)
Respondent's age	-0.091*** (0.025)	-0.045* (0.023)	-0.030 (0.024)	-0.002 (0.022)	-0.037 (0.023)	-0.017 (0.031)	-0.083*** (0.025)	-0.028 (0.025)	-0.083*** (0.025)	-0.071*** (0.027)
Resp. economic condition	-0.009 (0.037)	0.124*** (0.024)	0.075** (0.032)	0.148*** (0.030)	0.149*** (0.027)	0.093* (0.052)	0.004 (0.040)	0.085*** (0.026)	-0.045 (0.034)	0.055 (0.040)
Resp. has higher education	0.079*** (0.024)	0.016 (0.020)	0.015 (0.027)	-0.025 (0.024)	0.020 (0.019)	0.013 (0.026)	0.017 (0.026)	-0.020 (0.024)	0.035 (0.026)	0.027 (0.025)
Respondent is Catholic	-0.021 (0.027)	0.054** (0.023)	0.003 (0.031)	0.009 (0.027)	0.013 (0.024)	0.017 (0.028)	0.022 (0.028)	-0.003 (0.034)	-0.087*** (0.031)	-0.015 (0.029)
Observations	1,993	1,927	1,883	1,885	1,702	1,856	1,756	1,776	1,715	1,510
R <sup>2</sup>	0.137	0.228	0.100	0.225	0.347	0.042	0.157	0.082	0.137	0.230

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at the level of the municipality. Outcome variables and covariates are standardized.

## I.4 Including Political Ideology

**Table A19** replicates Table 3 but additionally controls for respondents' political ideology on a left (1) to right (5) scale, coded based on respondents' vote preferences if the parliamentary election was imminent.

**Table A19. Replicating Table 3, Including Political Ideology**

	Ukrainian Refugee					Syrian Refugee				
	Past assistance (1)	Future assistance (2)	Donate (3)	Support entry (4)	Assistance index (5)	Past assistance (6)	Future assistance (7)	Donate (8)	Support entry (9)	Assistance index (10)
Dispositional empathy	0.208*** (0.034)	0.205*** (0.032)	0.090* (0.053)	0.160*** (0.034)	0.266*** (0.033)	0.036 (0.046)	0.248*** (0.035)	0.119*** (0.037)	0.166*** (0.038)	0.280*** (0.043)
Sociotropic concern economy	-0.141*** (0.036)	-0.251*** (0.035)	-0.218*** (0.036)	-0.359*** (0.036)	-0.366*** (0.037)	-0.107*** (0.040)	-0.201*** (0.039)	-0.156*** (0.039)	-0.175*** (0.037)	-0.279*** (0.042)
Egocentric concern job	-0.030 (0.031)	-0.034 (0.029)	-0.062* (0.037)	0.001 (0.031)	-0.007 (0.028)	0.060 (0.041)	-0.040 (0.032)	-0.004 (0.041)	-0.077** (0.039)	-0.014 (0.032)
Cultural similarity Ukraine	0.144*** (0.036)	0.062** (0.031)	0.071* (0.041)	0.084** (0.035)	0.126*** (0.029)					
Cultural similarity Syria						0.171*** (0.060)	0.100*** (0.038)	0.144*** (0.044)	0.190*** (0.033)	0.179*** (0.041)
Concern Russia	0.103*** (0.036)	0.080** (0.039)	0.132*** (0.050)	-0.023 (0.034)	0.069** (0.032)	0.008 (0.048)	0.076* (0.041)	-0.068 (0.043)	-0.083** (0.041)	-0.021 (0.040)
Respondent is female	0.014 (0.025)	0.008 (0.025)	-0.008 (0.029)	-0.026 (0.027)	-0.011 (0.024)	-0.005 (0.031)	-0.030 (0.027)	-0.022 (0.025)	0.006 (0.028)	-0.016 (0.028)
Respondent's age	-0.089*** (0.031)	-0.059** (0.026)	-0.041 (0.035)	-0.014 (0.029)	-0.063** (0.027)	-0.067* (0.037)	-0.103*** (0.030)	-0.040 (0.029)	-0.077** (0.032)	-0.091*** (0.031)
Resp. economic condition	-0.016 (0.042)	0.132*** (0.027)	0.098** (0.040)	0.140*** (0.034)	0.156*** (0.032)	0.103 (0.064)	-0.016 (0.047)	0.108*** (0.032)	-0.058 (0.041)	0.068 (0.050)
Resp. has higher education	0.080*** (0.031)	-0.005 (0.023)	0.018 (0.036)	-0.056* (0.031)	-0.014 (0.025)	0.037 (0.040)	0.027 (0.028)	-0.020 (0.031)	0.037 (0.033)	0.034 (0.030)
Respondent is Catholic	-0.007 (0.036)	0.024 (0.027)	-0.022 (0.047)	-0.003 (0.033)	-0.003 (0.031)	-0.027 (0.039)	-0.008 (0.031)	-0.033 (0.047)	-0.121*** (0.038)	-0.057 (0.036)
Family member died or displaced in WWII	0.065** (0.030)	0.065** (0.026)	0.062* (0.032)	0.105*** (0.031)	0.145*** (0.027)	0.089* (0.047)	0.069** (0.031)	0.052 (0.037)	0.000 (0.035)	0.099*** (0.036)
Right-wing political ideology	-0.035 (0.035)	-0.024 (0.030)	0.020 (0.038)	0.016 (0.033)	-0.011 (0.033)	0.130*** (0.043)	-0.077** (0.035)	-0.002 (0.034)	-0.135*** (0.036)	-0.063* (0.036)
Observations	1,290	1,253	1,241	1,235	1,141	1,231	1,160	1,193	1,148	1,030
R <sup>2</sup>	0.156	0.209	0.101	0.235	0.358	0.081	0.175	0.091	0.183	0.274

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at the level of the municipality. Outcome variables and covariates are standardized.

A substantial share of respondents indicated they would not vote or preferred not to disclose their vote choice. To deal with missingness on this variable, we constructed an alternative measure for political ideology that places all respondents with missing information at the middle of the 1-5 Left-Right scale. This increases the number of observations from 1,484 to 2,500. **Table A20** replicates Table 3 while controlling for this alternative measure of political ideology; results remain consistent.

**Table A20. Replicating Table 3, with Alternative measure for Political Ideology**

	Ukrainian Refugee					Syrian Refugee				
	Past assistance (1)	Future assistance (2)	Donate (3)	Support entry (4)	Assistance index (5)	Past assistance (6)	Future assistance (7)	Donate (8)	Support entry (9)	Assistance index (10)
Dispositional empathy	0.186*** (0.031)	0.224*** (0.029)	0.087** (0.040)	0.141*** (0.029)	0.260*** (0.029)	0.039 (0.036)	0.264*** (0.032)	0.120*** (0.034)	0.171*** (0.033)	0.289*** (0.036)
Sociotropic concern economy	-0.133*** (0.029)	-0.260*** (0.032)	-0.215*** (0.032)	-0.352*** (0.029)	-0.351*** (0.031)	-0.080** (0.034)	-0.202*** (0.035)	-0.153*** (0.033)	-0.156*** (0.034)	-0.259*** (0.036)
Egocentric concern job	-0.024 (0.029)	-0.046* (0.026)	-0.055* (0.031)	0.011 (0.028)	-0.020 (0.025)	0.033 (0.036)	-0.040 (0.030)	-0.004 (0.034)	-0.074** (0.034)	-0.029 (0.029)
Cultural similarity Ukraine	0.144*** (0.031)	0.096*** (0.031)	0.079** (0.035)	0.078*** (0.030)	0.144*** (0.027)					
Cultural similarity Syria						0.140*** (0.048)	0.052 (0.038)	0.161*** (0.041)	0.187*** (0.038)	0.147*** (0.040)
Concern Russia	0.096*** (0.032)	0.097*** (0.034)	0.103*** (0.039)	-0.000 (0.028)	0.087*** (0.026)	0.015 (0.038)	0.086** (0.035)	-0.029 (0.037)	-0.076** (0.034)	-0.011 (0.032)
Respondent is female	-0.000 (0.021)	-0.010 (0.019)	-0.041* (0.022)	-0.024 (0.020)	-0.041** (0.018)	-0.019 (0.024)	-0.016 (0.021)	-0.027 (0.023)	0.013 (0.021)	-0.006 (0.023)
Respondent's age	-0.097*** (0.025)	-0.057** (0.023)	-0.046 (0.028)	-0.027 (0.023)	-0.064*** (0.023)	-0.058** (0.027)	-0.080*** (0.026)	-0.034 (0.024)	-0.052* (0.027)	-0.077*** (0.027)
Resp. economic condition	-0.006 (0.036)	0.129*** (0.024)	0.076** (0.032)	0.151*** (0.030)	0.153*** (0.027)	0.088* (0.049)	0.013 (0.040)	0.087*** (0.027)	-0.035 (0.033)	0.063 (0.040)
Resp. has higher education	0.072*** (0.024)	0.007 (0.020)	0.011 (0.026)	-0.031 (0.024)	0.009 (0.018)	0.014 (0.027)	0.004 (0.026)	-0.023 (0.025)	0.024 (0.026)	0.012 (0.024)
Respondent is Catholic	-0.020 (0.028)	0.054** (0.023)	-0.000 (0.029)	0.004 (0.027)	0.009 (0.024)	0.004 (0.028)	0.028 (0.027)	-0.004 (0.034)	-0.071** (0.031)	-0.009 (0.028)
Family member died or displaced in WWII	0.039 (0.027)	0.060** (0.025)	0.049* (0.028)	0.080*** (0.026)	0.106*** (0.024)	0.080** (0.040)	0.050 (0.031)	0.025 (0.032)	-0.016 (0.030)	0.075** (0.033)
Right-wing political ideology	-0.024 (0.026)	-0.017 (0.023)	0.012 (0.029)	0.016 (0.025)	-0.002 (0.024)	0.088*** (0.033)	-0.071*** (0.027)	-0.004 (0.028)	-0.121*** (0.028)	-0.061** (0.027)
Observations	1,993	1,927	1,883	1,885	1,702	1,856	1,756	1,776	1,715	1,510
R <sup>2</sup>	0.139	0.232	0.102	0.231	0.357	0.055	0.164	0.083	0.152	0.238

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at the level of the municipality. Outcome variables and covariates are standardized.

## I.5 Alternative assistance index

Past helping behavior, willingness to assist refugees in the future, attitudes toward the government's immigration policies, and charitable donations all measure different facets of the same underlying concept. To capture this empirically we built an assistance index that combines all four measures. We first created a variable indicating above or below median charity donations and then summed the values of the four indicator variables, which resulted in an index of helping behavior that ranges from 0 to 4.

By construction, the assistance index has a missing value when any of its component indicators are missing. To reduce attrition, we constructed an alternative index that averages the available indicators rather than summing them, thereby increasing the number of observations from 1,950 to 2,489 for Ukrainian refugees and from 1,776 to 2,488 for Syrian refugees. This alternative index ranges from 0 to 1. **Table A21** reports statistics and **Table A22** replicates Table 3 using both versions of the assistance index. Results remain consistent.

**Table A21. Descriptives alternative assistance index**

	Obs.	Mean	Std. Dev.	Min	Max
Assistance index, Ukrainian refugees (0-4)	1,950	2.35	1.35	0	4
Assistance index, Syrian refugees (0-4)	1,776	1.52	1.16	0	4
Alternative assistance index, Ukrainian refugees (0-1)	2,489	0.57	0.34	0	1
Alternative assistance index, Syrian refugees (0-1)	2,488	0.37	0.30	0	1

**Table A22. Alternative assistance index**

	Ukrainian Refugees		Syrian Refugees	
	Assistance index (1)	Alternative assistance index (2)	Assistance index (3)	Alternative assistance index (4)
Dispositional empathy	0.260*** (0.029)	0.240** (0.025)	0.291*** (0.036)	0.247*** (0.035)
Sociotropic concern economy	-0.352*** (0.030)	-0.347*** (0.028)	-0.267*** (0.037)	-0.225*** (0.035)
Egocentric concern job	-0.021 (0.025)	-0.042* (0.023)	-0.036 (0.030)	-0.062** (0.031)
Cultural similarity Ukraine	0.144** (0.027)	0.160** (0.025)		
Cultural similarity Syria			0.148*** (0.040)	0.160*** (0.038)
Concern over Russia	0.087*** (0.026)	0.082*** (0.026)	-0.013 (0.033)	-0.009 (0.032)
Respondent is female	-0.041** (0.018)	-0.020 (0.016)	-0.003 (0.023)	-0.015 (0.019)
Respondent's age	-0.065*** (0.023)	-0.071*** (0.021)	-0.090*** (0.027)	-0.080*** (0.026)
Respondent's economic condition	0.153*** (0.027)	0.116*** (0.027)	0.056 (0.039)	0.055 (0.035)
Resp. has higher education	0.009 (0.018)	0.025 (0.018)	0.019 (0.024)	0.014 (0.022)
Respondent is Catholic	0.008 (0.023)	0.016 (0.023)	-0.017 (0.028)	-0.024 (0.027)
Family member died or displaced in WWII	0.106*** (0.024)	0.088*** (0.022)	0.071** (0.032)	0.070** (0.031)
Observations	1,702	2,016	1,510	1,890
R <sup>2</sup>	0.357	0.342	0.234	0.186

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at the level of the municipality. Outcome variables and covariates are standardized.

## I.6 Sensitivity Analysis

We explore the sensitivity of our key finding on the role of dispositional empathy in refugee assistance to unobserved confounding using the *Sensemaker* tool developed by Cinelli and Hazlett (2020). We compute the robustness value ( $RV=0.25$ ) and the proportion of variation in the outcome explained uniquely by the treatment ( $R^2_{Y-D|X} = 0.08$ ) for dispositional empathy (see **Table A23**). The RV indicates that unobserved confounders would have to explain more than 25% of the residual variance in both the refugee assistance index and empathy to reduce the point estimate on empathy to zero. Partial  $R^2$  indicates that an extreme confounder that explains 100% of the residual variance in refugee assistance would need to explain at least 8% of the residual variance in empathy to eliminate its effect. We consider this unlikely, given that our regression models already include key demographic correlates of dispositional empathy.

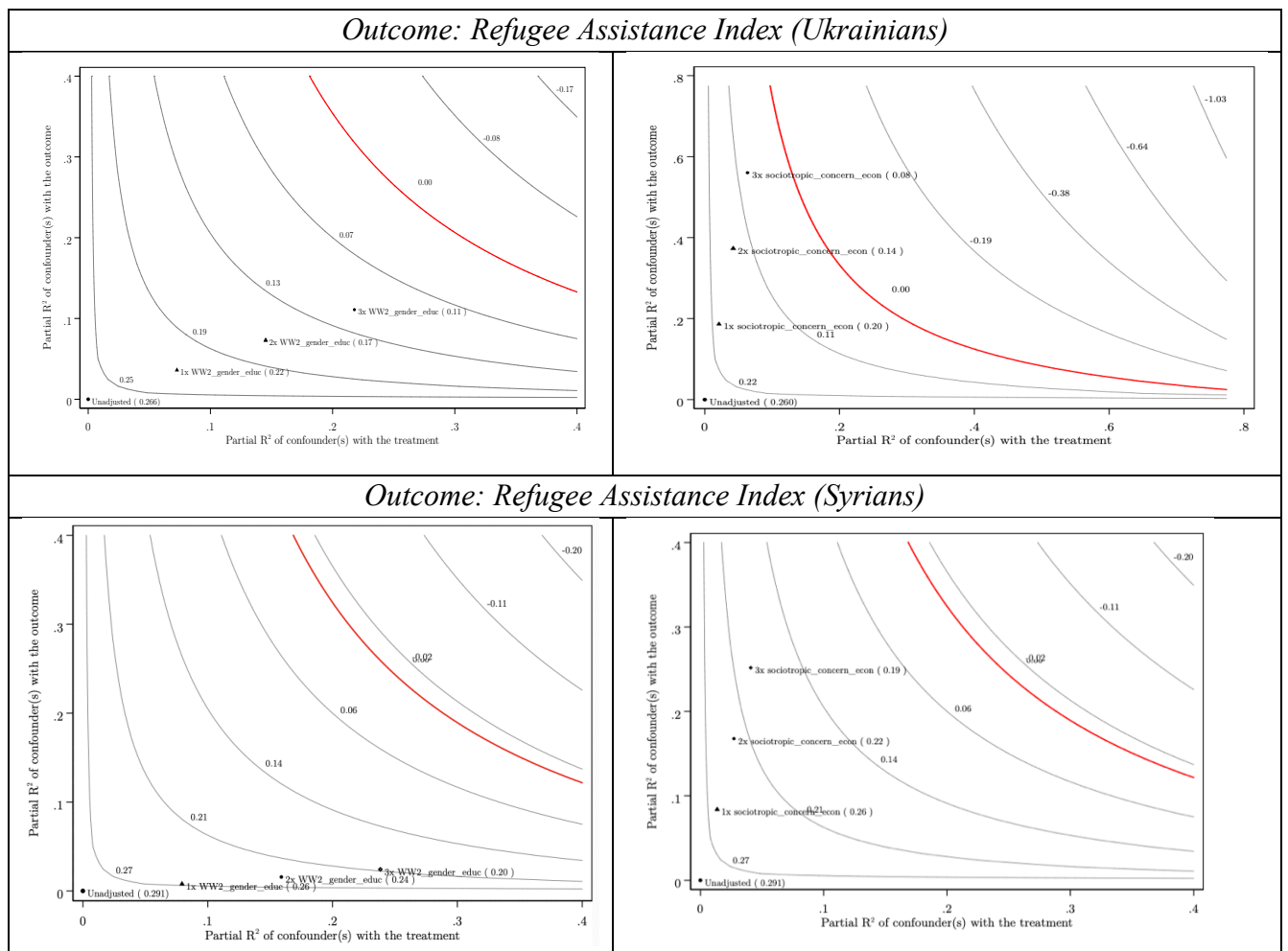
To benchmark the results from sensitivity analysis, we focus on covariates that are strongly correlated with our treatment (dispositional empathy, see Table 5) and/or outcome (refugee assistance index, see Table 3). The first category includes exposure to WWII violence, gender, and education, combined into one benchmark for presentation purposes and as a more conservative approach; the second category includes sociotropic concern about the economy. We present bounds on confounders as strong as these at the bottom of **Table A23**. Note that for each benchmark,  $R^2_{Y-Z|D,X}$  and  $R^2_{D-Z|X}$  are both below the robustness values for dispositional empathy, i.e. confounders as strong as these benchmarks are insufficient to explain away our results. Furthermore, the bound on  $R^2_{D-Z|X}$  is below the partial  $R^2$  of dispositional empathy ( $R^2_{Y-D|X}$ ). That is, even an extreme confounder that explains all residual variation in the outcome would not change our conclusions about empathy.

**Figure A3** presents the results graphically: the coefficient on dispositional empathy would remain positive and statistically significant even in the presence of a confounder up to three times as strong as the grouped benchmark or as sociotropic concern about the economy.

**Table A23. Sensitivity to unobserved confounders<sup>†</sup>**

		<i>Outcome: Refugee Assistance Index (Ukrainians)</i>				
<i>Treatment</i>	<i>Estimate</i>	<i>Standard error</i>	<i>t-value</i>	$R^2_{Y-D X}$	<i>RV</i>	$RV_{\alpha=0.05}$
Dispositional empathy	0.260	0.022	11.854	0.077	0.250	0.213
<sup>†</sup> df=1690. Bound 1: Z as strong as the combination of WWII violence, female, and education: $R^2_{Y-Z D,X}=0.023$ , $R^2_{D-Z X}=0.075$ . Bound 2: Z as strong as sociotropic economy concern: $R^2_{Y-Z D,X}=0.186$ , $R^2_{D-Z X}=0.021$ .						
		<i>Outcome: Refugee Assistance Index (Syrians)</i>				
<i>Treatment</i>	<i>Estimate</i>	<i>Standard error</i>	<i>t-value</i>	$R^2_{Y-D X}$	<i>RV</i>	$RV_{\alpha=0.05}$
Dispositional empathy	0.291	0.026	11.024	0.075	0.247	0.208
<sup>†</sup> df=1498. Bound 1: Z as strong as the combination of WWII violence, female, and education: $R^2_{Y-Z D,X}=0.008$ , $R^2_{D-Z X}=0.079$ . Bound 2: Z as strong as sociotropic economy concern: $R^2_{Y-Z D,X}=0.084$ , $R^2_{D-Z X}=0.014$ .						

**Figure A3. Sensitivity contour plots for the point estimate on dispositional empathy**



*Notes:* This figure uses the index of refugee assistance – based on the four different forms of helping behavior – as an outcome. Our benchmarks are (1) exposure to WWII violence, gender, and education, combined into one benchmark and strongly associated with dispositional empathy (Table 5) and (2) sociotropic concern about the economy, the variable that predicts the refugee assistance index with the largest estimated coefficient in Table 3. We show the bounds on the partial  $R^2$  for a confounder one, two, or three times as strong as each benchmark.

## J. Survey Experiment Heterogeneity

The following tables replicate Table 4, looking at heterogeneity by past family suffering in WWII and respondents' levels of empathy, respectively.

**Table A24. Heterogeneity by Family Suffering in WWII**

	Ukrainian refugees				Syrian refugees			
	Future assistance	Donate	Support entry	Assistance index	Future assistance	Donate	Support entry	Assistance index
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Suffering Syrians	-0.016 (0.043)	-2.833 (17.567)	-0.067 (0.044)	-0.101 (0.113)	-0.024 (0.046)	-19.697* (11.037)	-0.034 (0.048)	-0.061 (0.111)
Suffering Ukrainians	0.012 (0.039)	27.660* (16.109)	0.043 (0.046)	0.153 (0.108)	-0.016 (0.042)	4.144 (10.849)	-0.039 (0.040)	-0.051 (0.096)
Suff. Syr. + shared exp.	0.004 (0.042)	26.656 (17.953)	-0.022 (0.042)	0.088 (0.108)	0.049 (0.047)	19.544 (13.786)	-0.038 (0.045)	0.068 (0.108)
Suff. Ukr. + shared exp.	-0.011 (0.038)	1.284 (17.200)	0.035 (0.046)	0.030 (0.114)	0.005 (0.045)	-6.286 (12.487)	0.026 (0.045)	0.111 (0.104)
Fam. lost or displaced in WWII	0.129*** (0.044)	39.305** (18.178)	0.098* (0.054)	0.445*** (0.123)	0.048 (0.057)	14.909 (15.622)	-0.046 (0.054)	0.166 (0.125)
Suffering Syrians * WWII	-0.008 (0.057)	25.725 (26.177)	0.116* (0.067)	0.087 (0.153)	0.040 (0.071)	8.753 (17.763)	0.063 (0.076)	0.039 (0.176)
Suffering Ukrainians * WWII	-0.044 (0.058)	-51.956* (26.783)	-0.106 (0.070)	-0.378** (0.164)	0.058 (0.074)	-22.832 (17.698)	0.018 (0.068)	-0.000 (0.157)
Suff. Syr. + shared exp. * WWII	-0.079 (0.062)	-25.403 (29.333)	0.031 (0.064)	-0.171 (0.157)	-0.028 (0.072)	-38.146* (20.810)	0.048 (0.070)	-0.082 (0.163)
Suff. Ukr. + shared exp. * WWII	-0.012 (0.054)	19.571 (25.510)	0.003 (0.071)	-0.101 (0.161)	0.037 (0.070)	-4.522 (20.271)	-0.021 (0.067)	-0.081 (0.158)
Observations	2,329	2,284	2,226	1,965	2,237	2,284	2,116	1,812
R <sup>2</sup>	0.014	0.011	0.017	0.029	0.007	0.006	0.003	0.007

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at the level of the municipality and presented between brackets.

**Table A25. Heterogeneity by Levels of Dispositional Empathy**

	Ukrainian refugees				Syrian refugees			
	Future assistance	Donate	Support entry	Assistance index	Future assistance	Donate	Support entry	Assistance index
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Suffering Syrians	0.052 (0.078)	13.886 (33.484)	-0.008 (0.076)	0.084 (0.197)	0.079 (0.083)	5.742 (20.709)	0.090 (0.083)	0.247 (0.194)
Suffering Ukrainians	0.057 (0.079)	35.871 (30.451)	0.078 (0.081)	0.221 (0.193)	0.078 (0.080)	3.486 (21.117)	0.089 (0.077)	0.136 (0.177)
Suff. Syr. + shared exp.	0.018 (0.081)	-12.504 (27.609)	-0.072 (0.076)	0.062 (0.209)	0.089 (0.084)	10.785 (25.045)	0.063 (0.081)	0.169 (0.203)
Suff. Ukr. + shared exp.	0.043 (0.076)	46.264 (36.059)	0.051 (0.082)	0.144 (0.207)	0.139* (0.082)	9.358 (24.511)	-0.003 (0.083)	0.198 (0.188)
Dispositional empathy	0.209*** (0.031)	48.963** (13.817)	0.178*** (0.039)	0.582*** (0.089)	0.247*** (0.038)	39.728** (11.805)	0.161*** (0.043)	0.648*** (0.091)
Suffering Syrians * Disp. empathy	-0.038 (0.045)	-3.235 (22.052)	-0.005 (0.047)	-0.079 (0.113)	-0.048 (0.054)	-13.565 (13.704)	-0.063 (0.050)	-0.171 (0.116)
Suffering Ukrainians * Disp. Empathy	-0.037 (0.046)	-19.689 (19.147)	-0.046 (0.049)	-0.130 (0.110)	-0.039 (0.051)	-3.741 (13.279)	-0.078 (0.049)	-0.098 (0.108)
Suff. Syr. + shared exp. * Disp. empathy	-0.019 (0.046)	23.862 (20.346)	0.055 (0.046)	-0.003 (0.120)	-0.020 (0.051)	-1.850 (17.237)	-0.045 (0.050)	-0.052 (0.129)
Suff. Ukr. + shared exp. * Disp. empathy	-0.034 (0.044)	-25.301 (22.296)	-0.007 (0.051)	-0.098 (0.120)	-0.074 (0.055)	-11.667 (15.857)	0.017 (0.051)	-0.069 (0.122)
Observations	2,317	2,267	2,216	1,957	2,226	2,267	2,107	1,805
R <sup>2</sup>	0.071	0.021	0.055	0.092	0.075	0.026	0.032	0.112

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Standard errors are clustered at the level of the municipality and presented between brackets.

## K. Correlates of Dispositional Empathy

Table A26 replicates Table 5, while restricting the sample to respondents in the survey experiment control group. Results remain consistent with Table 5; even in this much smaller sample, family victimization is significantly correlated with dispositional empathy. These findings alleviate concerns that the experimental primes may have influenced reported dispositional empathy, particularly among respondents reporting past family victimization.

**Table A26. Replicating Table 5 among Survey Experimental Control Group**

	Dispositional empathy (1)	Dispositional empathy (2)	Dispositional empathy (3)
Family member died in WWII	0.160*** (0.055)		
Family displaced in WWII		0.139*** (0.050)	
Family member died or displaced in WWII			0.202*** (0.054)
Respondent is female	0.255*** (0.037)	0.266*** (0.038)	0.262*** (0.038)
Respondent has higher education	0.007 (0.055)	0.049 (0.049)	0.024 (0.052)
Respondent's age	0.110** (0.050)	0.121** (0.049)	0.124** (0.051)
Respondent's economic condition	0.039 (0.043)	0.039 (0.043)	0.040 (0.042)
Respondent is Catholic	-0.013 (0.061)	-0.000 (0.060)	-0.001 (0.056)
Observations	454	458	487
$R^2$	0.114	0.123	0.140

Notes: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ ; Standard errors are clustered at municipality-level. Outcome variables and covariates are standardized.

## References

- Bansak K and Jenke L** (2023, May 4) Odd Profiles in Conjoint Experimental Designs: Effects on Survey-Taking Attention and Behavior. OSF. <https://doi.org/10.31235/osf.io/juxsd>.
- Baron-Cohen S** (2011) The Evolution and Diagnosis of Empathy. *The Evolutionary Review* **2**(1), 55–57.
- Baron-Cohen S and Wheelwright S** (2004) The Empathy Quotient: An Investigation of Adults with Asperger Syndrome or High Functioning Autism, and Normal Sex Differences. *Journal of Autism and Developmental Disorders* **34**(2), 163–175.
- Cinelli C and Hazlett C** (2020) Making Sense of Sensitivity: Extending Omitted Variable Bias. *Journal of the Royal Statistical Society Series B: Statistical Methodology* **82**(1), 39–67.
- Davis MH** (1983) Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology* **44**(1), 113–126.
- De Corte K, Buysse A, Verhofstadt LL, Roeyers H, Ponnet K and Davis MH** (2007) Measuring Empathic Tendencies: Reliability And Validity of the Dutch Version of the Interpersonal Reactivity Index. *Psychologica Belgica* **47**(4), 235.
- Hainmueller J, Hopkins DJ and Yamamoto T** (2014) Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments. *Political Analysis* **22**(1), 1–30.
- Ikhtiar AM, Jazairi B, Khansa I and Othman A** (2018) HLA class I alleles frequencies in the Syrian population. *BMC Research Notes* **11**(1), 324.
- Ingoglia S, Lo Coco A and Albiero P** (2016) Development of a Brief Form of the Interpersonal Reactivity Index (B-IRI). *Journal of Personality Assessment* **98**(5), 461–471.
- Jolliffe D and Farrington DP** (2006) Development and Validation of the Basic Empathy Scale. *Journal of Adolescence* **29**(4), 589–611.
- Lauterbach O and Hossler D** (2007) Assessing empathy in prisoners--A shortened version of the Interpersonal Reactivity Index. *Swiss Journal of Psychology* **66**(2), 91–101.
- Solon G, Haider SJ and Wooldridge JM** (2015) What Are We Weighting For? *The Journal of Human Resources* **50**(2), 301–316.