

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

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Abstract: Who helps refugees, and which refugee profiles attract more aid? Drawing on a representative face-to-face survey in Poland (N=2,500), we examine how dispositional and situational empathy, and their interaction, shape assistance to refugees from the Global South (Syria) and Global North (Ukraine). We find that dispositional empathy, a stable personality trait reflecting the capacity to understand and share others' emotions, strongly predicts helping behavior. By contrast, a perspective-taking experiment designed to activate situational empathy, a transient, target- and context-specific emotional response, had no effect. A conjoint experiment shows that respondents prioritize refugees in greater humanitarian need over those with higher economic potential, and that individuals with high dispositional empathy are especially responsive to vulnerability cues. By distinguishing between dispositional and situational empathy, integrating behavioral and attitudinal measures of helping, and comparing responses to Global North and South refugees, this study advances the understanding of the psychological underpinnings of prosocial behavior.

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1. Introduction

Forced displacement is among the most acute challenges of this century. At the end of 2024, an estimated 123.2 million people were forcibly displaced due to conflict and natural calamities; 31 million of them crossed international borders as refugees (UNHCR 2025). Despite the scale and urgency of the problem, scholarly understanding of who helps refugees and why remains incomplete. Addressing this gap is important for assessing the society's capacity to incorporate refugees and designing policies that mobilize support from host communities.

This article explores the factors that shape hosts' willingness to assist and the characteristics of refugees that elicit helping behavior. We advance the literature by distinguishing between hosts' dispositional and situational empathy. This distinction originates in psychology (Cuff *et al.* 2016; Heyers *et al.* 2025) but is yet to gain wide usage in political science.¹ Dispositional empathy is a baseline capacity to understand and share others' emotions, which is relatively stable over time and is a product of socialization, lived experience, and, to some extent, genetics (Abramson *et al.* 2020; Davis *et al.* 1994). Situational empathy, by contrast, is a transient, target- and context-specific reaction to another individual's feelings (Depow and Inzlicht 2025). It is scaled by a person's dispositional empathy and amplified or dampened by situational factors (Heyers *et al.* 2025).

Political science studies on the causes of helping behavior typically focus on situational empathy and explore the effectiveness of context-specific triggers of assistance (Adida *et al.* 2018;

¹ Psychologists also refer to dispositional empathy as a personality trait – i.e. something that is relatively stable – and to situational empathy as a state – that is, something which is a one-off product of specific contextual triggers (Heyers *et al.* 2025).

Audette *et al.* 2020; McAuliffe *et al.* 2020; Todd and Galinsky 2014; Williamson *et al.* 2020). Such studies activate situational empathy through perspective-taking exercises that ask respondents to imagine themselves in the shoes of a particular individual (e.g. a Colombian migrant) with a specific need (e.g. shelter), thereby eliciting a strictly context-dependent empathetic response. While this work is extremely useful – after all, all helping decisions are context-specific – it offers incomplete insight about the broader question of why and when people help others. Fundamentally, it is important to understand individual decisions to help in everyday life in the absence of any nudges to do so. Moreover, an exclusive focus on situational empathy risks overestimating the effectiveness of empathetic “nudges” by implicitly assuming that they work uniformly across individuals. By contrast, scholars of dispositional empathy caution that individuals with low dispositional empathy might avoid empathy-eliciting situations, whereas those with high dispositional empathy might assist others even in the absence of situational cues and instructions to empathize (Heyers *et al.* 2025).

In this study, we directly measure dispositional empathy, assess its effect on helping behavior, and, separately, examine its interaction with situational cues using two experimental interventions embedded in a nationally representative face-to-face survey of 2,500 Polish citizens conducted in fall 2022.² Poland is an interesting case because it faced pressure to accept refugees from the Global South (Syrians, alongside Afghans and Iraqis, under a European Union (EU)-wide quota in 2015) and the Global North (Ukrainians after Russia’s 2022 invasion). The government refused to accommodate Syrians, breaking EU laws, but welcomed Ukrainians. This stark contrast in the reception of different refugee groups, in Poland and elsewhere, fueled debates about the “racial

² Hypotheses in this study were pre-registered. [Link to PAP redacted for anonymity.] Deviations from PAP are discussed in Appendix A and in the text.

empathy gap” and lets us test how dispositional empathy shapes responses to situational prompts across distinct refugee profiles.

We find that dispositional empathy is a key predictor of actual helping behavior, past self-reported assistance, and willingness to help in the future. A one-standard-deviation increase in dispositional empathy is associated with an increase in the willingness to help Ukrainian refugees by 10 percentage points and Syrian refugees by 13 percentage points. Consistent with prior studies, we find that dispositional empathy is higher among female, older, and better-educated respondents. Furthermore, we show that Poles whose families were victimized during World War II (WWII) have higher levels of dispositional empathy and are more likely to assist both Syrian and Ukrainian refugees.³ By contrast, a survey experiment designed to trigger situational empathy – by drawing a parallel between the historical suffering of Poles in WWII and the experiences of refugees today – fails to elicit helping behavior toward either group.⁴ The fact that the perspective-taking exercise in this study failed suggests that empathy “nudges” are highly context dependent and less effective than commonly assumed.

Turning to situation-specific refugee characteristics, results from a conjoint experiment in the same survey demonstrate that respondents prioritize humanitarian needs over potential economic contributions, irrespective of refugee origins. Mothers with children, individuals who are poorer or suffered more intense violence are more likely to receive help than single young men and better-

³ This is consistent with the theoretical proposition that dispositional empathy might be shaped by past experience of violence, referred to as the “altruism born of suffering” hypothesis (Staub and Vollhardt 2008; for empirical tests see Hartman and Morse 2018; Peisakhin *et al.* 2025).

⁴ Standard perspective-taking interventions ask respondents to imagine themselves in others’ position in order to weaken ingroup-outgroup boundary. Emphasizing similarities between respondents’ or their families’ past experiences and refugees’ current experiences serves the same purpose (Dinas *et al.* 2021; Wayne *et al.* 2023; Wayne and Zhukov 2022). Therefore, we refer to our intervention as (modified) form of perspective-taking.

off individuals with professional skills.⁵ Crucially, respondents with higher levels of dispositional empathy are especially responsive to vulnerability cues. At the same time, respondents are much less likely to assist Muslims (see also Adida *et al.* 2016, 2019) and refugees of a different race. These penalties apply equally to the Global North and Global South refugees and are not moderated by dispositional empathy, suggesting clear limits to the reach of dispositional empathy in interactions with salient outgroups.

This study is among the first in political science to distinguish between dispositional and situational empathy (see also Brophy and Mullinix 2024), measure dispositional empathy directly, and demonstrate the relationship between dispositional empathy, intergenerational exposure to violence, and refugee assistance. We evaluate refugee assistance using a multifaceted measurement strategy, which assesses both self-reported real-world helping behavior and actual charitable contributions toward refugees' welfare, in addition to the more commonly used metrics of pro-refugee attitudes and policy preferences. By asking respondents to donate money to a charity, we reduce concerns about cheap talk and social desirability bias. Ours is one of the few studies to compare helping behavior toward refugees from the Global North and South side-by-side and explore the relevance of various elements constituting these broad regional identities, from religion and race to demographic and economic traits (see also Bansak *et al.* 2016, 2023). Finally, by studying Poland, we explore refugee assistance in an understudied context, adding geographic diversity to a field that has primarily focused on Western Europe, North America, and the Global South.

⁵ These findings align with research suggesting that attitudes toward refugees are less sensitive to economic concerns than attitudes toward economic migrants (Abdelaaty 2021; Abdelaaty and Steele 2022; Newman *et al.* 2015) and challenges the view that highly-skilled refugees are more welcome in the Global North (Weber *et al.* 2025).

2. Theory

Research on attitudes toward refugees initially emphasized economic or cultural concerns in host countries; scholars argued that hosts preferred migrants who are highly skilled, educated, speak the local language, and share the dominant religion (for an overview see Weber *et al.* 2025). More recent studies show that humanitarian considerations lead to a preference for more vulnerable individuals (Adida *et al.* 2019; Alrababa'h *et al.* 2021) and that empathy plays a central role in refugee assistance (Adida *et al.* 2018; Hartman and Morse 2018; Newman *et al.* 2015; Williamson *et al.* 2020; Abdelaaty 2021). Yet despite the growing focus on empathy, few studies on refugee reception have directly measured empathy, gone beyond light-touch perspective-taking interventions in studying its effects, or distinguished between its different forms.⁶

In this paper, we draw on psychology and neuroscience to differentiate between dispositional and situational empathy.⁷ Dispositional empathy is conceptualized as a relatively stable trait – a capacity to understand and share others' emotions, while situational empathy refers to understanding/sharing emotions of a *specific* target in *specific* circumstances (Heyers *et al.* 2025; Konrath *et al.* 2011). Empathetic reaction occurs at the intersection of dispositional capacity and situational cues, motivating helping behavior (Cuff *et al.* 2016).

⁶ Newman *et al.* (2015) measure dispositional empathy – although they do not explicitly use this term -- and show that it moderates the effect of a humanitarian prime that portrays migrants as fleeing domestic hardships on immigrant policy preferences. Chatruc and Roza (2021) measure respondents' empathetic capacity as an outcome following a perspective-taking intervention. Williamson *et al.* (2020) use respondents' empathetic response toward immigrants as a mediator in a perspective-taking exercise.

⁷ Empathy studies often distinguish between cognitive empathy (the ability to understand others' emotional states), and affective empathy (the ability to feel another person's emotions) (Cuff *et al.* 2016). This distinction is not directly relevant to our research question of who empathizes and when. Research has shown that cognitive and affective elements manifest within both dispositional and situational empathy (Heyers *et al.* 2025).

Laboratory evidence shows that individuals with higher dispositional empathy *spontaneously* experience greater levels of self-reported situational empathy as well as stronger neural activation when witnessing others' distress (Rameson *et al.* 2012). At the same time, when individuals are explicitly instructed to empathize in a perspective-taking exercise, differences between high- and low-empathy individuals diminish or disappear altogether (Rameson *et al.* 2012).⁸ For example, when two people encounter the same external stimulus – such as a crying person or a homeless refugee -- the individual high in dispositional empathy will *automatically* feel more concerned, while the individual low in dispositional empathy may require a perspective-taking nudge to reach the same level of concern. Correspondingly, Heyers *et al.* (2025, 7) describe dispositional empathy as “a stable multiplier” of the initial empathic reaction to a particular target.

Studies further show that while dispositional empathy consistently predicts the frequency of empathetic responses in daily life, it leaves substantial variance unexplained (Depow and Inzlicht 2025). Thus, the relationship between dispositional empathy and situational empathy is context-dependent: while having high dispositional empathy increases the likelihood of empathizing across settings, it does not guarantee an empathetic response to every stimulus. People high in dispositional empathy can exhibit low situational empathy when empathizing is costly or identity-threatening, whereas those low in dispositional empathy may still respond empathically when faced with strong affective cues or incentives. For example, an individual high in dispositional empathy may suppress their emotional response to suffering civilians in a foreign country when

⁸ Still, direct empirical evidence on whether and how dispositional empathy moderates the effects of perspective taking remains thin; a meta-analysis by McAuliffe *et al.* (2020) found that “the vast majority” of perspective-taking studies have failed to explore the relevance of dispositional factors.

this country is framed as an enemy. Conversely, an individual low in dispositional empathy may respond strongly to suffering civilians who resemble family members in appearance or whose life stories closely mirror their own. Target characteristics, such as perceived vulnerability, cultural similarity, or ingroup/outgroup status, are perhaps the most common contextual moderators of empathy – a point to which we return below (Zaki 2014).

Dispositional empathy is hypothesized to have a genetic component, but it also evolves through experiences and social interactions (Abramson *et al.* 2020; Heyes 2018; Ries 2017; Sirin *et al.* 2017). It typically increases with age and education, as people “build increasingly sophisticated cognitive representations of other people’s emotional experiences” (Sirin *et al.* 2017, 430). Gender differences are also well-documented: Women exhibit higher dispositional empathy due to both neurobiological characteristics and socialization (Rochat 2023).

Adverse life experiences can cultivate dispositional empathy. According to the “altruism born of suffering” hypothesis, experiencing adversity increases empathy and prosocial behavior (Hadjiandreou and Cameron 2022; Staub and Vollhardt 2008).⁹ The more severe the adversity, the greater dispositional empathy and willingness to help others (Lim and DeSteno 2016). These effects operate through a heightened ability to understand the emotions of those going through hardship (Staub and Vollhardt 2008) and function at both individual and collective levels. Family histories of war and displacement fit this pattern: through parental socialization and shared group narratives, they can raise baseline levels of dispositional empathy. For example, Sirin *et al.* (2017)

⁹ A related concept is “post-traumatic growth,” whereby individuals who have struggled with traumatic events experience positive transformations, which include improved connections with others and greater empathy (Tedeschi and Calhoun 2004).

show that historically disadvantaged groups express greater empathy toward marginalized outgroups because of their own “salient narrative of group oppression and struggle.” All of this suggests that dispositional empathy is a trait that can be strengthened over time.

Moving from theory to empirics, in political science, studies in Liberia, Syria, and the Democratic Republic of the Congo have shown that individuals who have personally experienced displacement are more likely to host refugees and internally displaced persons; a pattern attributed to their greater capacity to empathize (Hartman *et al.* 2021; Hartman and Morse 2018; Peisakhin *et al.* 2025). Findings on intergenerational transmission of empathy caused by past trauma are mixed: while Wayne and Zhukov (2022) show that the descendants of Holocaust survivors in the U.S. are more supportive of hosting refugees, Wayne *et al.* (2023) do not observe this pattern in Israel where shared historic suffering is more salient. Notably, most studies relating empathy and prosocial behavior to displacement and violence do not differentiate between dispositional and situational empathy or measure these concepts.

As mentioned above, situational empathy varies with target characteristics. Refugees perceived as outgroup members – because they do not share religion, ethnicity, regional origins, or historical experiences with hosts – may elicit less situational empathy and receive less assistance (Arceneaux 2017; Hadjiandreou and Cameron 2022; Williamson *et al.* 2020). Conversely, refugees perceived as more vulnerable may elicit greater situational empathy, particularly among individuals high in dispositional empathy, who are automatically more responsive to contextual cues of need and suffering (Rameson *et al.* 2012; Newman *et al.* 2015). Evidence remains limited on whether dispositional empathy also affects responsiveness to cues about group status; that is, whether

individuals with higher dispositional empathy will down-weight targets' ascriptive characteristics when considering their suffering, relative to individuals with lower dispositional empathy. Hartman and Morse (2018) find that individuals who experienced violence are more likely to host refugees from ethnic and religious outgroups and respond strongly to humanitarian need, whereas Hartman *et al.* (2021) show that respondents exposed to violence react differently to vulnerability cues based on whether refugees share their religion, but neither study measured dispositional empathy.

Most political science research to date studies situational empathy through perspective-taking and other empathy-inducing interventions. This work shows that prompting respondents to imagine having to flee their home or exposing them to refugees' personal narratives increases refugee acceptance and support for immigration (Adida *et al.* 2018; Audette *et al.* 2020; Chatruc and Rozo 2021; Simonovits *et al.* 2018). A variation on this approach – also adopted in this study – seeks to activate memories of past family suffering to increase self-identification with refugees and lower group boundaries. For instance, Dinas *et al.* (2021) reminded Greek and German respondents about their families' displacement in the aftermath of the two world wars and linked these experiences to those of contemporary refugees, showing that this prime increased pledged donations to the UN refugee agency (UNHCR) and improved attitudes toward refugees among respondents with displacement background but not respondents without such family history (for similar findings see Hong *et al.* 2024; Williamson *et al.* 2020). In our framework, intergenerational exposure to displacement is expected to elevate respondents' baseline levels of dispositional empathy, whereas the family-history primes operate by activating situational empathy by encouraging respondents to relate to refugees' hardships, without altering dispositional empathy itself. However, because

existing studies do not directly measure either dispositional or situational empathy, the observed behavioral and attitudinal effects likely reflect a combination of both.

Empathy interventions are appealing because they can be randomized and translated into low-cost, scalable policy interventions. Yet people help even in the absence of such nudges, making it is important to understand the drivers of real-world, nudge-free variation in assistance. More generally, empathy generated through perspective-taking likely does not generalize beyond the targeted group or context (Todd and Galinsky 2014; see Simonovits *et al.* 2018 on the presence and limitations of transfer effects) and tends to be short-lived (Adida *et al.* 2018), except in more costly interventions.¹⁰ Like other low-cost prejudice-reduction strategies, perspective-taking rarely produces effects that outlast the study period and does not capture the range of real-world influences (Paluck and Green 2009). Critically, individuals with low dispositional empathy – those who might benefit from perspective-taking interventions the most – may actively avoid perspective-taking cues in everyday life through situation selection, attention modulation, or biased appraisal of others’ emotions (Zaki 2014).

Building on this discussion, we hypothesize that assistance to refugees will be higher among individuals with greater dispositional empathy (H1). We further expect that dispositional empathy will be higher among respondents who were exposed to violence and displacement, directly or through their families (H2). We tentatively follow the standard expectation in the literature on perspective-taking and hypothesize that drawing parallels between a family’s experience of historical displacement and refugees’ current experiences will increase helping behavior (H3).

¹⁰ For instance, Simonovits *et al.* (2018) find that a three-chapter role-playing game reduced prejudice toward the targeted group for at least one month.

Finally, we hypothesize that respondents will be more supportive of refugees with characteristics that signal greater humanitarian need and that dispositional empathy will moderate their responsiveness to such characteristics (H4).¹¹

Alongside these hypotheses, we test several pre-registered alternative explanations for helping behavior. These include perceived economic threat, proxied by the concern that refugees might take the natives' jobs (Hainmueller and Hopkins 2014; Sniderman *et al.* 2004), perceived cultural proximity between respondents and refugees (Pepinsky *et al.* 2022), geopolitical anxiety, theorized to exacerbate the outgroup empathy gap (Arceneaux 2017), and sociodemographic characteristics such as education, political ideology, religiosity, and wealth (Hainmueller and Hiscox 2010).

3. Context

This study is set in Poland, a middle-income Eastern European country that faced pressure to accept refugees from the Global South and Global North but responded to these groups very differently.¹² In 2015, when 1.3 million refugees from Syria sought asylum in Europe, the centrist Civic Platform (PO) government reluctantly agreed to admit a small number under an EU deal but said that religious background would factor into asylum decisions (Financial Times 2015). Following the election of the right-wing Law and Justice (PiS) government, Poland refused to accept its EU refugee quota. As a result, fewer than one thousand Syrian refugees resided in Poland

¹¹ These hypotheses were pre-registered before data collection. The exception is the second part of H4: that dispositional empathy will moderate responsiveness to vulnerability cues. We also pre-registered the focus on differences in assistance to Syrians and Ukrainians.

¹² Ukrainians are commonly described as refugees and granted a temporary protection status introduced in 2022 specifically in response to the Russian invasion, which provides them with a humanitarian residence permit. The status of Middle Eastern migrants is more ambiguous, requiring them to apply for asylum and prove their eligibility for refugee status in the EU.

at the time of the study, most of whom were Christian Syrians, admitted through government-approved private initiatives.¹³

The issue of Syrian refugees, however, did not fade from public view. In the summer and fall of 2021, thousands of migrants from the Middle East tried to cross illegally into Poland, encouraged by Belarusian authorities. The Polish government declared a state of emergency and, in 2022, began constructing a 190-km border wall, perceiving the crisis as an operation by Belarusian and Russian security services to destabilize European security (Euronews 2022). The crisis persisted through 2025, with Polish border guards recording thousands of illegal crossing attempts.

Poland's response to Ukrainian refugees was markedly more welcoming. The first wave of displaced Ukrainians arrived shortly after Russia annexed Crimea in 2014. At that time, Poland granted work permits to more than 300,000 Ukrainians. Following Russia's invasion of Ukraine in February 2022, Poland opened its borders and revised immigration laws to grant Ukrainians full access to the formal labor market and social benefits. At the time of the survey, nearly 1.4 million Ukrainians had temporary protection status in Poland (UNHCR 2022). Assistance efforts were driven primarily by voluntary, grassroots initiatives, with local governments, private citizens, and NGOs playing key roles in supporting Ukrainians fleeing the war. However, as the Russia-Ukraine conflict went on, some Poles grew frustrated with the Ukrainian refugees' access to the labor market and public health services, prompting the government to scale back refugee benefits starting in summer 2023 (Krzysztozek 2023).

¹³ Only 10% of Syria's population is Christian.

Polish discourse framed Ukrainians as culturally proximate fellow Europeans. By contrast, debates over Syrians, a predominantly Muslim group, were marked by Islamophobic rhetoric, with the far right portraying Syrian refugees as a security and cultural threat. Some politicians also explained their reluctance to host Syrians by the fact that they were mostly young men and thus economic migrants rather than refugees (Polsatnews 2017). The refugee status of Ukrainians – mostly women and children – was never questioned.

Polish media and politicians further stressed that like Ukraine, Poland experienced Russian aggression.¹⁴ In 1939, Poland was invaded by Nazi Germany from the west and the Soviet Union from the east, and more than six million Poles perished during WWII.¹⁵ During the Soviet occupation, many Polish families were deported to Siberia, and the Soviet annexation of Polish territory in 1945 permanently displaced two million people (Davies 2005). Russia's invasion of Ukraine raised fears that Poland would be next.¹⁶ In a March 2022 CBOS survey, 85% of Poles agreed that the war in Ukraine posed a serious and urgent threat to their own security. These dynamics make Poland a critical case for testing the empathy born of violence hypothesis as well as for evaluating the effectiveness of perspective-taking interventions that invoke shared experiences between refugees and host populations.

4. Data and Empirical Strategy

4.1. Data Collection and Sample

¹⁴ Some Polish media also drew analogies between Poles' experience in WWII and that of Syrians, but this framing was rare (Gazeta Krakowska 2015; Na Temat 2015).

¹⁵ This statistic includes Polish Jews, of which around three million were killed (Bankier and Gutman 2003).

¹⁶ At the same time, the history of violent interethnic conflict between Poles and Ukrainians, which escalated into the ethnic cleansing of Poles in 1943-45 and continues to be a contentious issue in Polish-Ukrainian relations, was, for a time, de-emphasized.

The survey was fielded face-to-face in the autumn of 2022 in a nationally representative sample of 2,500 individuals over the age of 18. The fieldwork was implemented by a leading public opinion firm, DANAЕ.¹⁷ Details of the sampling strategy are in Appendix B, and we describe the respondent pool in Table 1.¹⁸ The typical respondent is 49 years old and is relatively comfortable economically (3.4 on a 6-point scale).¹⁹ About half (53%) are female. Most respondents are Catholic (77%), and around a fifth (18%) have higher education. The wording of all the survey questions is available in Appendix D.

4.2. Measuring Helping Behavior

We measure assistance to Ukrainian and Syrian refugees using multiple indicators, summarized in Table 1.²⁰ The first measure captures self-reported past helping behavior. Just over half of respondents (51%) reported having helped Ukrainian refugees since the start of the Russian invasion of Ukraine in February 2022. The most common forms of assistance were donations of food and clothes (42%) and monetary contributions (22%). Far fewer respondents reported volunteering (5%) or assisting with employment or housing (3%). Reported assistance to Syrian refugees was substantially lower. Only 8% of respondents indicated providing any help since 2015; 5% of respondents reported donating food, clothing, or money, and none reported assisting with jobs or housing. This low rate is unsurprising given the limited presence of Syrian refugees in Poland.²¹ When asked about future behavior, the gap in willingness to help narrowed considerably:

¹⁷ Voluntary informed consent was obtained from all participants. Respondents received no compensation for participation. The study involved minimal risk of harm and did not entail deception. IRB approval was obtained before the survey was implemented.

¹⁸ The response rate is a little under 16%, which is representative for Eastern Europe. DANAЕ used Random Iterative Method weighting to correct for sampling biases, aligning the sample with the relevant population benchmarks on gender and age. Throughout the paper we present results based on unweighted regressions. Results based on weighted regressions can be found in Appendix C; findings remain qualitatively unchanged.

¹⁹ This corresponds to a situation where households have enough money to buy food and clothes, while leaning towards being able to buy new electrical appliances and travel abroad on vacation.

²⁰ Outcome measures were deliberately collected at different points in the survey (see Appendix D). As will be shown, we obtain a very similar picture across the different outcomes.

²¹ Sixty-nine percent of respondents reported that they have not met any Syrian refugees.

75% of respondents expressed willingness to help Ukrainian refugees, and 57% of respondents indicated willingness to assist Syrians.²²

We also recorded respondents' opinions about the Polish government's refugee policy. We asked whether respondents supported the admission of as many Ukrainian refugees as wished to enter Poland. For Syrian refugees, given the already highly restrictive nature of existing policy, we asked whether respondents favored more Syrian refugees being allowed in or if they supported the status quo. Overall, 47% of respondents supported unrestricted admission of Ukrainian refugees, and 37% favored easing restrictions on Syrians.

Survey-based measures of helping behavior may be influenced by social desirability bias, with respondents potentially overstating their past or intended assistance. To obtain a more objective indicator, we asked respondents to allocate an endowment of 1,000 złoty (around 200USD at the time of the survey) across five large Polish charities – two supporting Syrian and Ukrainian refugees and three dedicated to domestic issues (public health, animal shelters, and environmental protection). We described the causes supported by each charity but did not provide specific organization names. The order of charities was randomized across respondents. Respondents were required to allocate the entire endowment, knowing that the choices of ten randomly selected survey-takers would be implemented. An organization aiming to improve healthcare in Poland received, on average, 364 złoty (75USD), while a shelter for abandoned animals received 223 złoty (45USD). A charity supporting Ukrainian refugees received 162 złoty (33USD), slightly more than

²² The order of question blocks about Syrian and Ukrainian refugees – for both past help and willingness to help in the future – was randomized to guard against question order effects.

a domestic environmental organization (155 złoty; 32USD). The charity supporting Syrian refugees came last, with an average donation of 97 złoty (20USD).

Past helping behavior, willingness to assist refugees in the future, attitudes toward the government's immigration policies, and charitable donations all measure different dimensions 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; this resulted in an index of helping behavior that ranges from 0 to 4.²³ On average, respondents score 2.35 on this 5-point index when it comes to assistance toward Ukrainians and 1.52 in relation to Syrians.

Table 1. Descriptive Statistics

	Obs.	Mean	Std.	Min	Max
<i>Demographic information</i>					
Respondent is female (0/1)	2,500	0.53	0.50	0	1
Respondent's age	2,500	48.69	16.85	18	89
Respondent's economic condition (1= We don't have enough money for food; ... 6= We do not experience any financial limitations)	2,396	3.40	0.99	1	6
Respondent has higher education (0/1)	2,492	0.18	0.38	0	1
Respondent is Catholic (0/1)	2,500	0.77	0.42	0	1
<i>Refugee helping behaviors</i>					
Previous assistance to Ukrainian refugees (0/1)	2,440	0.51	0.50	0	1
Previous assistance Syrian refugees (0/1)	2,404	0.08	0.27	0	1
Future assistance Ukrainian refugees (0/1)	2,329	0.74	0.44	0	1
Future assistance Syrian refugees (0/1)	2,237	0.57	0.49	0	1
Support entry Ukrainian refugees into Poland (0/1)	2,226	0.47	0.50	0	1
Support entry Syrian refugees into Poland (0/1)	2,116	0.37	0.48	0	1
Contribution to charity supporting Ukrainian refugees (0-1000)	2,284	161.51	206.98	0	1,000
Contribution to charity supporting Syrian refugees (0-1000)	2,284	96.68	139.67	0	1,000
Assistance index, Ukrainian refugees (0-4)	1,950	2.35	1.35	0	4

²³ An additive index is more intuitive than a standardized z-transformed index, and the two are almost perfectly correlated (at 0.95 for assistance to Syrians and 0.96 for Ukrainians). By construction, the index coefficient is missing for respondents who failed to provide information on even one of its components. To mitigate against this missingness, we also constructed an alternative index that takes the mean of the available indicator variables, increasing the number of observations. Results are similar irrespective of which version of the index is used; see Appendix I.5.

Assistance index, Syrian refugees (0-4)	1,776	1.52	1.16	0	4
<i>Explanatory variables</i>					
Dispositional empathy (0= Does not describe me well; ... 3= Describes me very well)	2,481	1.42	0.65	0	3
Sociotropic concern economy (0/1)	2,284	0.40	0.49	0	1
Egocentric concern job (0/1)	2,416	0.45	0.50	0	1
Cultural similarity Ukraine (1= completely different from Poles; ... 10 = Poles)	2,273	6.30	2.45	1	10
Cultural similarity Syria (1= completely different from Poles; ... 10 = Poles)	2,117	2.97	2.31	1	10
Concern Russia (1= Not at all; ...; 4= very concerned.)	2,452	3.05	0.77	1	4
Family member died or displaced in WWII	2,500	0.38	0.48	0	1
Right-wing political ideology (1-5)	1,484	2.95	1.10	1	5

Notes: Descriptive statistics on demographic, outcome, and explanatory variables. Detailed variable descriptions in Appendix D.

4.3. Explanatory Variables

To measure dispositional empathy we use a modified Interpersonal Reactivity Index (IRI) (Davis 1983), considered “one of the most comprehensive measures of self-reported empathic disposition” (Ingoglia *et al.* 2016, 461). The IRI statements are abstract, designed to capture stable personality characteristics. The index is ideal for our purposes because of its stability over time and high self-other agreement (i.e., that an individual's self-reports closely align with assessments made by others) (Eisenberg *et al.* 2002). In line with earlier studies, we shortened the standard 28-item scale to seven items that are representative of each sub-component of the IRI, to fit within the strict time constraints of field interviews. Respondents rated each item on a four-point scale ranging from “Does not describe me well” (0) to “Describes me very well” (3). Our measure of dispositional empathy is the mean score across the seven items.²⁴ An average respondent scored

²⁴ More information on the modified scale, along with tests for internal validity and consistency of this shortened version of the index, is provided in Appendix E.

1.4, around the middle point on the scale, with higher scores indicating higher dispositional empathy (see Table 1).²⁵

The role of dispositional empathy in helping decisions is assessed against alternative explanations stressing economic concerns, cultural distance from refugees, anxiety over Russia possibly attacking Poland, ideological leanings, and respondents' demographic characteristics. We measure respondents' risk of unemployment and, separately, their sociotropic concerns about the refugees' impact on the job market. Forty-five percent of respondents were worried that they or a close relative might lose their job in the next six months. Forty percent of respondents agreed that refugees' entry makes it harder for any Pole to find a job.²⁶ Cultural distance from refugees is measured on a 10-point scale of cultural similarity where respondents arranged Syrians and Ukrainians on a ladder relative to Poles who are at 10. On average, respondents place Syrians at 3.0 and Ukrainians at 6.3. We include a measure of respondents' concern about a potential Russian attack against Poland as a proxy for geopolitical anxiety. An average respondent is "somewhat concerned" about a possible Russian attack, at three on a four-point scale. To measure family exposure to suffering in the past we asked whether any family members died, were killed, or disappeared during WWII, and whether anyone experienced displacement during the war or its immediate aftermath. Considering the average respondent is 49 years old, most were reporting information about their grandparents. Thirty-eight percent of respondents said that at least one family member died or was displaced in the war. To measure ideology, we asked which political

²⁵ Women might score higher on the IRI because they are socialized to see empathy as a more desirable trait. The IRI may also be less interpretable for people with lower IQ and verbal skills. To mitigate against these concerns, we include gender and education as control variables in all the analyses.

²⁶ That the two measures, as operationalized in this study, get at different underlying concepts – egocentric and sociotropic economic concerns – is evidenced by the fact that the correlation between them is negative at -0.17.

party respondents would vote for in the next parliamentary election, placing them on a Left-Right scale from 1 on the left (*Lewica, Agrounia*) to 5 on the extreme right (*Konfederacja*). An average respondent rated right of center at 2.95.

4.4. Survey Experiment

A perspective-taking experiment was embedded in the survey to explore whether priming similarity between hosts' and refugees' experiences of displacement and violence can increase refugee assistance by activating situational empathy. The intervention consisted of text and images that draw a direct parallel between the experiences of Syrians/Ukrainians and Polish suffering during WWII (for similar interventions see Dinas *et al.* 2021; Hong *et al.* 2024; Wayne *et al.* 2023; Wayne and Zhukov 2022). We reminded respondents that many Polish families lost family members in the war and were displaced during the fighting or in its immediate aftermath. This text was accompanied by two evocative images: one of Syrians/Ukrainians fleeing bombed-out Aleppo/Kyiv on foot and another of Polish civilians escaping war-torn Warsaw in 1944. The effectiveness of this treatment is compared to a pure control and an intervention where we presented the text and the image pertaining only to the experiences of Syrian/Ukrainian refugees with no mention of parallels to Polish historical suffering. There are five treatment arms in total: a pure control, an information treatment focused on the suffering of Syrian/Ukrainian refugees, and a treatment that draws a parallel between the situation of Syrians/Ukrainians and the historical suffering of Poles, in addition to providing information about refugees' suffering. The text and photos of the treatments are in Appendix F while balance tests are reported in Appendix G.

4.5. Conjoint Experiment

To test how responsive respondents are to situational cues conveyed through specific refugee profiles and to explore how dispositional empathy interacts with these situational cues, we also included a conjoint experiment. We asked respondents about their willingness to host refugees in their home, which is an especially costly form of assistance. Respondents saw two conjoint experiments in random order: one about Ukrainian and the other about Syrian refugees. In each experiment, they chose which of the two presented refugee profiles they preferred to host, with profiles varying randomly across five attributes: family status, physical appearance, religion, prior history of suffering, and economic/professional status.²⁷ The variation in attribute levels is summarized in Table 2.²⁸ Each respondent completed three rounds of each conjoint experiment. By design, we thus aimed to present a total of 15,000 Ukrainian and 15,000 Syrian profiles for evaluation. In addition to the forced choice, we also asked respondents to score how willing they were to host the different evaluated refugee profiles, and to help by donating food/clothes or money.²⁹

Table 2. Description of the Conjoint Experiment

Attribute	Level
Family status	- Single young man of 32 years old - Single young mother of 32 years old with child
Physical appearance	- White skin, blond hair, blue eyes - Dark skin, black hair, black eyes

²⁷ As discussed in Appendix H.1, we included the unlikely yet possible profiles of a blond and blue-eyed Syrian and a dark-skinned Ukrainian refugee in the conjoint because the media frequently mentioned race as a relevant factor for helping decisions.

²⁸ To maximize statistical power, we limited the number of levels per attribute to two (Schuessler and Freitag 2020). To avoid ordering effects, the order of the attributes was randomized across respondents but fixed across rounds for the same respondent.

²⁹ In 36% of cases, respondents did not make a forced choice, as they equally preferred both profiles; as a result, the total number of refugee profiles in the forced choice analysis is 19,178. Respondents were more likely to answer how willing they were to host each refugee profile on a four-point scale; the missingness for that outcome is only 8%. The question about the willingness to donate was asked only after the first round of the conjoint for each respondent and is available for around 10,000 profiles.

Religion	- Christian - Muslim
Prior history of suffering	- Refugee. Had relatives killed by Russia - Refugee
Economic status and occupation	- Well-off. A programmer - Poor. A cleaner

Notes: Respondents participated in two conjoint experiments in random order; one assessing Ukrainian refugee profiles and another with Syrian refugee profiles. For both refugee types, the attributes and levels were the same. Each conjoint was repeated three times. Attribute order was randomized across respondents.

4.6. Estimation Strategy

To examine the correlates of helping behavior we estimate the following model:

$$Y_i = \beta_0 + \beta_1 X_i + \Gamma W_i + \varepsilon_i \quad (1)$$

where Y_i is the outcome variable for respondent i . X_i represents dispositional empathy, the key explanatory variable, and W_i is a vector containing other potential correlates of helping behavior including economic and cultural concerns, anxiety about the Russian threat, ideology, family's experience of suffering, and respondents' demographic characteristics. Standard errors are clustered at the municipality level to account for within-municipality correlation of the residuals.

For the survey experiment, we re-estimate equation (1) where we additionally include the four treatment assignment indicators, comparing them to the pure control group. For the analysis of the conjoint experiment, we follow Hainmueller *et al.* (2014) and estimate the average marginal component effect (AMCE) using ordinary least squares (OLS) regressions with standard errors clustered at respondent level. The AMCEs measure the marginal effect of each attribute on the choice of a refugee profile, averaged over the joint distribution of the other attributes.

5. Results

5.1. Dispositional Empathy as a Key Correlate of Refugee Assistance

In Table 3, we examine the correlates of different forms of refugee assistance. All coefficients are standardized, allowing for direct comparison of effect sizes across variables; the corresponding non-standardized results are reported in Appendix I.1.³⁰ Standardized coefficients denote the change in the standard deviation of the outcome variable associated with one standard deviation increase in the explanatory variable.

The results indicate that dispositional empathy is a key predictor of helping behavior and pro-refugee attitudes. Coefficients on this variable are large and statistically significant across all outcomes, with the exception of past assistance to Syrians, an outcome showing minimal variation due to the small number of Syrian refugees in Poland. A one-standard-deviation increase in dispositional empathy (0.65 on the four-point scale), is associated with a 0.22 standard deviation increase, or 10 percentage points, in willingness to help Ukrainian refugees in the future. For Syrian refugees, a one-standard-deviation increase in dispositional empathy is associated with a 0.27 standard deviation increase, or 13 percentage points, in future assistance.³¹ These findings support the hypothesis that individuals with higher dispositional empathy are more likely to assist refugees (H1).

Among other factors that matter in explaining helping behavior are sociotropic economic concerns and feelings of cultural similarity with the refugees. Anxiety about a potential Russian attack

³⁰ Results remain unchanged when controlling for respondents' treatment assignment in the survey experiment (Appendix I.2).

³¹ Correspondingly, a one-unit increase on the dispositional empathy scale is associated with a 15 percentage-point increase in the willingness to help Ukrainian refugees in the future and a 20 percentage-point increase in the willingness to help Syrians. For all non-standardized results see Appendix I.1.

predicts greater willingness to assist Ukrainian refugees, but the coefficient on this variable is not always significant and sometimes turns negative when it comes to assisting Syrians. Respondents whose relatives had experienced violence and displacement in WWII are generally more likely to help.³² We do not find a consistent association between egocentric economic concerns, wealth, education, affiliation with the Catholic Church, or gender, and refugee assistance.³³ Political ideology is not included in the main models, because many respondents did not disclose their vote choice. The association between political ideology and helping behavior is explored separately in Appendix I.4. We find that respondents on the right and far right are just as willing to help Ukrainian refugees as other respondents. At the same time, right-wing respondents are considerably more likely to support the Law and Justice government's restrictions on accepting Syrian refugees. This suggests that the influence of ideology is contextual: right-wing voters are not always opposed to humanitarian assistance (for a similar finding see Hainmueller and Hopkins 2014).

³² Results are similar when family victimization in WWII is omitted from the model, alleviating concerns about potential collider bias (Appendix I.3).

³³ Catholicism measures a different underlying concept from dispositional empathy (correlation of 0.005).

Table 3. Correlates of Assistance toward Ukrainian and Syrian Refugees

	Ukrainian Refugees					Syrian Refugees				
	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)	0.140*** (0.029)	0.260*** (0.029)	0.039 (0.036)	0.265*** (0.032)	0.120*** (0.034)	0.173*** (0.034)	0.291*** (0.036)
Sociotropic concern economy	-0.136*** (0.029)	-0.261*** (0.032)	-0.214*** (0.033)	-0.350*** (0.029)	-0.352*** (0.030)	-0.070** (0.033)	-0.211*** (0.035)	-0.153*** (0.033)	-0.171*** (0.035)	-0.267*** (0.037)
Egocentric concern job	-0.026 (0.029)	-0.048* (0.026)	-0.054* (0.031)	0.013 (0.028)	-0.021 (0.025)	0.041 (0.037)	-0.046 (0.030)	-0.005 (0.034)	-0.087** (0.034)	-0.036 (0.030)
Cultural similarity Ukraine	0.146*** (0.031)	0.097*** (0.031)	0.078** (0.036)	0.077** (0.030)	0.144*** (0.027)					
Cultural similarity Syria						0.140*** (0.049)	0.053 (0.038)	0.161*** (0.041)	0.189*** (0.039)	0.148*** (0.040)
Concern over Russia	0.095*** (0.032)	0.097*** (0.034)	0.103** (0.040)	0.000 (0.027)	0.087*** (0.026)	0.016 (0.039)	0.084** (0.035)	-0.029 (0.037)	-0.077** (0.035)	-0.013 (0.033)
Respondent is female	0.001 (0.021)	-0.010 (0.019)	-0.042* (0.022)	-0.025 (0.020)	-0.041** (0.018)	-0.022 (0.024)	-0.013 (0.022)	-0.026 (0.022)	0.017 (0.021)	-0.003 (0.023)
Respondent's age	-0.102*** (0.025)	-0.060*** (0.023)	-0.044* (0.027)	-0.023 (0.023)	-0.065*** (0.023)	-0.040 (0.029)	-0.095*** (0.026)	-0.035 (0.024)	-0.078*** (0.026)	-0.090*** (0.027)
Respondent's economic condition	-0.008 (0.037)	0.127*** (0.024)	0.077** (0.032)	0.152*** (0.030)	0.153*** (0.027)	0.096* (0.051)	0.006 (0.040)	0.086*** (0.026)	-0.046 (0.034)	0.056 (0.039)
Resp. has higher education	0.075*** (0.024)	0.009 (0.020)	0.010 (0.026)	-0.033 (0.024)	0.009 (0.018)	0.004 (0.027)	0.012 (0.026)	-0.022 (0.025)	0.037 (0.026)	0.019 (0.024)
Respondent is Catholic	-0.023 (0.028)	0.051** (0.023)	0.001 (0.030)	0.006 (0.027)	0.008 (0.023)	0.015 (0.029)	0.020 (0.027)	-0.004 (0.034)	-0.086*** (0.031)	-0.017 (0.028)
Family member died or displaced in WWII	0.038 (0.027)	0.059** (0.024)	0.050* (0.028)	0.081*** (0.026)	0.106*** (0.024)	0.083** (0.041)	0.047 (0.031)	0.025 (0.032)	-0.020 (0.031)	0.071** (0.032)
Observations	1,993	1,927	1,883	1,885	1,702	1,856	1,756	1,776	1,715	1,510
R ²	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 standardized.

The results presented thus far are based on observational data, raising the possibility of unobserved confounders correlated with dispositional empathy and/or helping behavior. To address the robustness of our findings to omitted variable bias, we use the *Sensemkr* tool (Cinelli and Hazlett 2020). We find that the coefficient on dispositional empathy would remain positive and statistically significant in the presence of a confounder three times as strong as either sociotropic economic concern or the combined benchmark of exposure to WWII violence, gender, and education (Appendix I.6).³⁴ In other words, while unobserved confounders cannot be ruled out, they would need to be exceptionally strong to reduce the reported coefficient on dispositional empathy to zero.

5.2. Priming Situational Empathy through Appeal to Historical Memory of Suffering

In this section, we explore whether a modified perspective-taking treatment – comparing the historical suffering of Poles in WWII to the recent suffering of Ukrainian and Syrian refugees – can increase refugee assistance. The results of the survey experiment are presented in Table 4. Outcomes are the same as in the previous analyses, but past helping behavior is excluded because it was measured before the experimental treatment, as a situational empathy prompt could affect willingness to help in the present or future *but not* past behavior.³⁵ Respondents randomized into the pure control condition serve as the comparison group, and average levels of assistance in the control group are reported at the bottom of the table for reference. Coefficients are not standardized, and covariates are omitted because there is balance across treatments (see Appendix G) and most covariates were measured post-treatment.

³⁴ These variables were selected because they predict refugee-helping behavior (see Table 3), dispositional empathy (see section 5.4), or both.

³⁵ The assistance index in Table 4 thus excludes past behavior.

Table 4. Survey Experiment

	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	-0.020 (0.031)	7.150 (15.673)	-0.022 (0.036)	-0.067 (0.085)	-0.008 (0.035)	-16.308* (8.423)	-0.008 (0.034)	-0.044 (0.082)
Suffering Ukrainians	-0.012 (0.029)	7.405 (12.952)	0.001 (0.033)	-0.006 (0.077)	0.001 (0.033)	-4.646 (8.189)	-0.030 (0.029)	-0.058 (0.071)
Suffering Syrians + shared experience	-0.030 (0.031)	16.140 (14.454)	-0.012 (0.034)	0.013 (0.084)	0.037 (0.036)	4.775 (8.439)	-0.018 (0.033)	0.031 (0.083)
Suffering Ukrainians + shared experience	-0.019 (0.027)	8.573 (13.997)	0.035 (0.033)	-0.015 (0.080)	0.018 (0.034)	-8.200 (9.016)	0.019 (0.033)	0.076 (0.081)
Mean control group	0.752	153.769	0.472	1.834	0.563	101.603	0.376	1.429
Observations	2,329	2,284	2,226	1,965	2,237	2,284	2,116	1,812
R ²	0.001	0.001	0.001	0.001	0.001	0.003	0.001	0.002

Notes: Survey Experiment. Reminders of past family suffering and willingness to help refugees in the present. *** p<0.01, ** p<0.05, * p<0.1; Standard errors are clustered at the municipality level. Outcome variables and covariations are not standardized.

Willingness to assist refugees in the group that received a simple informational treatment about refugee suffering –text and an illustration explaining why refugees fled Syria and Ukraine and the nature of their experiences – did not differ statistically from the pure control group.³⁶ Adding a framing that highlights parallels between the suffering of Poles in WWII and that of Syrian (Ukrainian) refugees today likewise fails to increase willingness to assist. None of the coefficients for the information and shared suffering experience treatments reach statistical significance, and several are negatively signed. These results provide no support for the hypothesis that priming shared historical suffering increases refugee assistance by activating situational empathy (H3).³⁷

³⁶ The only exception is a weakly significant result on donations to Syrian refugees, but the information appears to decrease the willingness to help Syrians, which is contrary to expectations.

³⁷ In Appendix J, we examine the heterogeneity of treatment effects by whether respondents' families had direct experience of violence or displacement in WWII and, separately, by respondents' levels of dispositional empathy. We find that neither those whose families had experienced suffering nor those with higher dispositional empathy are more susceptible to the treatments. The latter result confirms the intuition that the relationship between dispositional and situational empathy is context-dependent (Depow and Inzlicht 2025).

This finding underscores the context-dependent nature of situational empathy. The lack of effect from a pure information treatment is unsurprising, since most respondents are likely already aware of the conflicts in Syria and Ukraine. Attempts to activate historical memory have yielded mixed results, as not all studies using similar designs find effects on helping behavior. While Dinas *et al.* (2021) and Hong *et al.* (2024) find that activating the memory of past displacement triggers greater willingness to assist refugees in Greece and South Korea, Wayne and Zhukov (2022) and Wayne *et al.* (2023) fail to replicate this effect among Holocaust survivors, their descendants, and the Israeli population more broadly. Wayne and coauthors suggest that this null finding reflects floor effects: the memory of collective suffering is already highly salient in the families of Holocaust survivors and in Israel more generally, so additional appeals to historical suffering have limited impact.

In short, references to historical suffering appear ineffective at triggering situational empathy and, by extension, helping behavior when the memory of that suffering is already highly salient. In Poland, WWII experience remains highly visible in part because of the war's staggering human toll, but, more importantly, because the Law and Justice Party has relied on memory politics for over 20 years to mobilize public support (Jaskulowski and Majewski 2023). For instance, a 2019 CBOS survey found that 82% of Polish respondents agreed that "WWII is still a living part of Polish history that should be constantly remembered."³⁸ These findings suggest that attempts to

³⁸ There are alternative explanations for why the situational empathy prompt failed. It is possible that Poles do not accept a parallel with Syrian suffering and view Ukrainians not as victims in WWII but as oppressors given that Ukraine was a constituent part of the Soviet Union that partitioned Poland with Nazi Germany. Another possibility is that the treatments present information passively, whereas situational empathy is more likely to be activated through active engagement. Irrespective of the explanation, the point holds that situational empathy can be difficult to trigger.

trigger situational empathy through appeals to historical memory might fail in contexts where the awareness of past suffering is already widespread. The results also underscore that dispositional empathy remains a robust predictor of helping behavior, even when situational empathy is not activated.

5.3. Priming Situational Empathy by Varying Refugee Characteristics

Perspective-taking is just one approach to activating situational empathy; in everyday life, the most common empathy-inducing stimulus is direct exposure to a person in need. In this section, we explore how respondents react to specific refugee profiles using a conjoint experiment to understand the relationship between target characteristics, situational empathy, and dispositional empathy. Among the characteristics included are family status (mother with a child vs. a young man) and socioeconomic indicators (poor, low-skilled vs. wealthy, skilled), allowing us to test whether attributes that signal vulnerability elicit greater willingness to help than characteristics that signal economic independence.³⁹ We also measure whether willingness to help decreases when refugees belong to the outgroup: here, Muslims and individuals of darker complexion. Finally, we investigate whether individuals with different levels of dispositional empathy respond to situational cues differently.

The results of the conjoint experiment are reported in panel (a) in Figure 1 for all refugee profiles combined and separately for Ukrainian and Syrian refugee profiles.⁴⁰ Humanitarian factors emerge

³⁹ We know from the survey that respondents are sensitive to income and family status as signaling humanitarian need; see Appendix H.2 for supporting evidence.

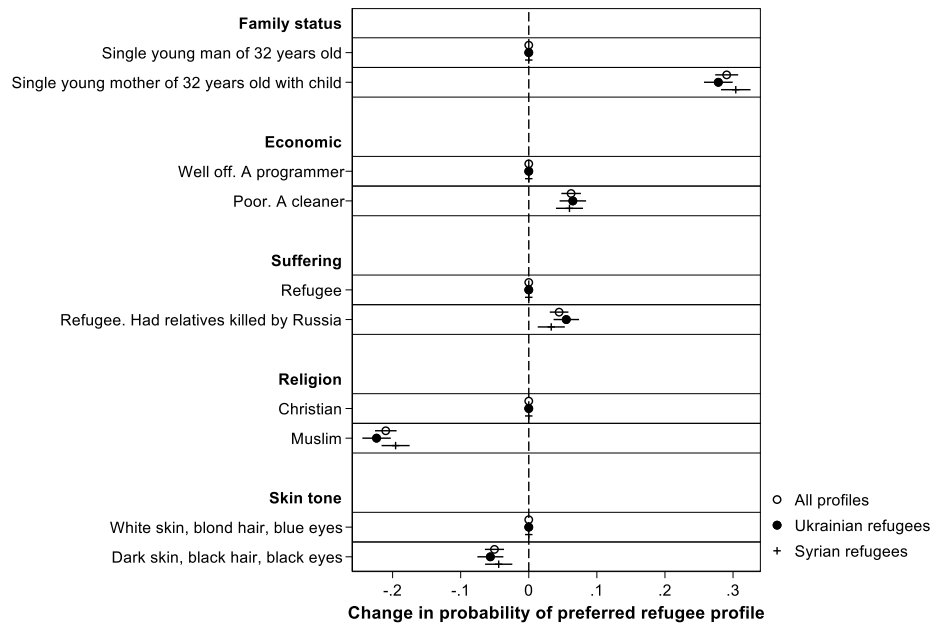
⁴⁰ Full tabular results that also control for treatment assignment in the preceding survey experiment that primes historical memory of suffering are in Appendix H.3. There we also separate out the conjoint results for those assigned to the control and treatment groups in the survey experiment. The pattern of results is similar for both groups of respondents, suggesting that the historical memory experiment did not prime respondents to be more attentive to vulnerability cues in the conjoint.

as strong contextual determinants of hosts' willingness to help. Single mothers with children are roughly 29 percentage points more likely to be hosted than single young men. Refugees who lost relatives due to violence are around four percentage points more likely to be helped than those whose families are intact, and poor cleaners are around six percentage points more likely to be hosted than well-off computer programmers. In other words, profiles signalling vulnerability elicit greater situational empathy and corresponding assistance, whereas profiles that signal economic stability or earning potential are perceived as less deserving.⁴¹

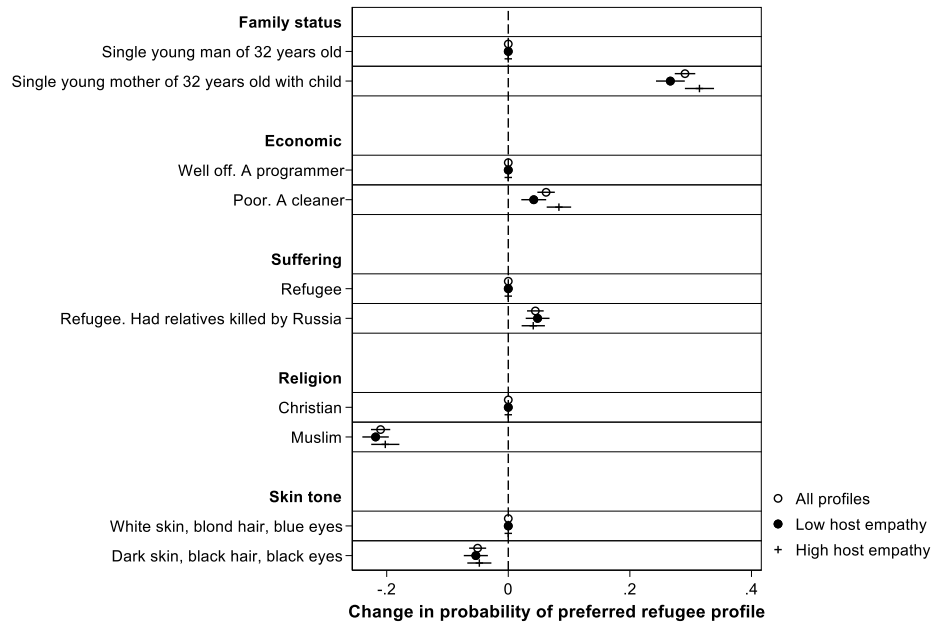
By contrast, attributes signalling outgroup status appear to dampen situational empathy and through it the willingness to help. Most notably, Muslim refugees are heavily penalized relative to Christians, being around 21 percentage points less likely to be hosted – second only to the effect of single motherhood in magnitude (on the Muslim penalty see Adida *et al.* 2016, 2019). The racial penalty is smaller but still present: refugees with darker skin are around five percentage points less likely to be hosted than otherwise identical light-skinned peers.

⁴¹ Interestingly, greater willingness to help single mothers and poorer refugees extends equally to Syrians and Ukrainians, which suggests that Europeans' willingness to admit different refugee groups is driven by the same set of factors irrespective of refugee origin (see also Bansak *et al.* 2016, 2023).

Figure 1. Conjoint Experiment – Refugee Types that are More Likely to be Hosted



Panel (a). Ukrainian versus Syrian refugees



Panel (b). Low versus high dispositional empathy respondents

Notes: Panel (a) presents estimated AMCEs for all refugee profiles (N=19,178), Ukrainian profiles (N=9,992) and Syrian profiles (N=9,186); Panel (b) does so for all refugee profiles (N=19,178), low empathy respondents (N=9,586) and high empathy respondents (N=9,578). Standard errors are clustered at the level of the respondent. Bars indicate 95% confidence intervals. Tabular results are in Appendix H.3.

In panel (b), we combine Ukrainian and Syrian refugee profiles but separate the results by respondents' levels of dispositional empathy into two groups: high (above the median) and low (below the median). Among high-dispositional-empathy respondents, single mothers with children are around 31 percentage points more likely to be hosted than single young men, compared to 27 percentage points among low-dispositional-empathy respondents. Similarly, while poor cleaners are around four percentage points more likely to be hosted than well-off computer programmers among low-empathy respondents, this effect doubles to eight percentage points for high-empathy respondents. These differences are statistically significant at $p < 0.01$ (Appendix H.3).

These results illustrate that helping behavior exists at the intersection of dispositional and situational empathy, whereby dispositional empathy intensifies the effect of situational cues that signal vulnerability.⁴² In terms of effect sizes, situational cues appear to be doing more work in the conjoint than dispositional empathy, likely because we picked especially strong and unambiguous contextual signals for the conjoint. Overall, the findings support the hypothesis that individuals in host societies respond to situational cues about refugees' humanitarian needs and ingroup-outgroup status, and that dispositional empathy increases responsiveness to more vulnerable refugee profiles (H4).

5.4. Does Past Experience of Suffering Correlate with Dispositional Empathy?

⁴² It bears highlighting that dispositional empathy remains an important determinant of the willingness to help in the conjoint experiment. To show this we analyze responses to questions about willingness to help each respondent type by donating food or clothes, or money that were presented after the first round of each forced choice. In Appendix H.4, we show that helping behaviors in the conjoint experiment are explained by the same variables as in the earlier observational analyses in Table 3. Dispositional empathy has the largest magnitude across all covariates in explaining respondents' willingness to help.

In this section, we explore the correlates of dispositional empathy, focusing on one potential pathway by which it might be created or altered. The altruism born of suffering hypothesis posits that past exposure to violence increases individuals' capacity for empathy. We extend this hypothesis to include the past suffering of respondents' parents or grandparents, as the literature on the legacies of violence suggests that trauma is transmitted across generations (Charnysh and Peisakhin 2022; Lupu and Peisakhin 2017). Our key explanatory variables are three forms of family trauma: the death of relatives (35% of respondents), their displacement (21%), and the combination of the two (38%). In addition to these measures, we include other known correlates of dispositional empathy -- gender, education, and age, -- as well as controls for economic status and sectarian affiliation.

Table 5 presents the results of these correlational analyses. We find that past family experiences of violence are significantly correlated with dispositional empathy.⁴³ Specifically, a one-standard-deviation increase (48 percentage points) in the probability that a respondent's family experienced either death or displacement during WWII is associated with a 0.13 standard deviation increase in the respondent's dispositional empathy, equivalent to 0.09 points on a four-point scale.⁴⁴ This

⁴³ The question about family experiences in WWII was asked after the survey experiment where we aimed to activate the memory of suffering. As a result, the reader might be concerned that the survey experiment primed respondents to report family suffering. To alleviate this concern, we examine the self-reports of family suffering only among respondents assigned to the control condition in the experiment, who received no information treatments or primes. Among this sub-sample of respondents, the relationship between family experience of suffering and dispositional empathy is statistically significant across all specifications – these results are in Appendix K.

⁴⁴ In non-standardized terms, the findings in Table 5 indicate that respondents with a family member who died in WWII, a family member displaced in WWII, or either of the two score higher on the empathy scale by 0.11, 0.17, and 0.18 points, respectively – corresponding to approximately 8%, 12%, and 13% of the mean dispositional empathy score in our sample.

finding provides some support for the empathy born of suffering hypothesis, highlighting one potential pathway through which dispositional empathy is acquired (H2).⁴⁵

Table 5. The Correlates of Dispositional Empathy

	Dispositional empathy (1)	Dispositional empathy (2)	Dispositional empathy (3)
Family member died in WWII	0.081*** (0.030)		
Family displaced in WWII		0.106*** (0.032)	
Family member died or displaced in WWII			0.132*** (0.031)
Respondent is female	0.234*** (0.020)	0.243*** (0.020)	0.239*** (0.020)
Respondent has higher education	0.061** (0.026)	0.057** (0.027)	0.060** (0.026)
Respondent's age	0.016 (0.022)	0.018 (0.021)	0.004 (0.021)
Respondent's economic condition	0.057 (0.035)	0.065* (0.035)	0.068* (0.035)
Respondent is Catholic	-0.039 (0.039)	-0.039 (0.038)	-0.036 (0.036)
Observations	2,178	2,203	2,373
R ²	0.075	0.083	0.088

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

6. Conclusion

We set out to explore which characteristics of citizens in host communities predict greater willingness to assist refugees and how refugee characteristics influence this decision, where we distinguish between the role of dispositional empathy – a relatively stable trait shaped through socialization, lived experience, and, to a smaller extent, genetics – and situational empathy; a transient, target- and context-specific experience of understanding and sharing another person's

⁴⁵ In line with other research, we also find that women and respondents with higher education have greater levels of dispositional empathy – for details see Appendix E.

feelings. We studied the reception of refugees from the Global North (Ukrainians) and Global South (Syrians) in a large face-to-face survey in Poland; a country that thus far has received little attention from refugee-focused scholars despite coming under pressure to accept both groups.

We found that *dispositional empathy* is a key predictor of refugee assistance: individuals scoring higher on this trait are more likely to have assisted refugees in the past, to want to help them in the future, to agree to host refugees in their homes, to donate to refugee-oriented charities, and to support policies that allow more refugees to enter. This finding aligns with conclusions in psychology research that individuals high on dispositional empathy are more likely to feel empathy when unprompted, across a wide range of real-world situations (Depow and Inzlicht 2025; Rameson *et al.* 2012).

We also explored the role of *situational empathy* in eliciting helping behavior. First, we attempted to activate situational empathy in a survey experiment by drawing parallels between the historical suffering of Poles and present-day experiences of Syrians and Ukrainians. This intervention failed. Situational empathy is context-specific, and our results underscore that it might be difficult to manipulate it by drawing historical parallels in populations where the memory of past suffering is already highly salient. Where we did successfully activate situational empathy is in presenting vulnerable refugee profiles to respondents in a conjoint experiment. There we found that refugees in greater humanitarian need – single mothers and poorer, low-skilled refugees – were more likely to receive help than single men and wealthier, high-skilled individuals. By contrast, outgroup profiles – in this context, Muslims, and to a lesser degree, refugees with darker skin – were much less likely to be helped. Importantly, we also demonstrated that respondents with higher

dispositional empathy are more responsive to situational cues of vulnerability. Overall, we found that hosts have very similar preferences when it comes to their willingness to help Ukrainian versus Syrian refugees.⁴⁶

Dispositional empathy has only recently started to receive attention in political science, despite the discipline's long-standing interest in understanding prosocial behavior. Recent work highlights its role in explaining individual differences in support for welfare programs (Arceneaux 2017; Brophy and Mullinix 2024; Feldman *et al.* 2020), foreign aid (Bayram and Holmes 2020), and even political ideology (Morris 2020). That dispositional empathy matters for refugee assistance, particularly for hosting decisions, has been hypothesized and shown in the developing world (Peisakhin *et al.* 2025), and we extend this finding to a middle-income Eastern European country and across a broader set of helping behaviors. Furthermore, we establish that dispositional empathy is equally important for assistance to both Global South and Global North refugees, who differ in the degree to which they share traits with potential hosts, and that it predicts responsiveness to refugees' humanitarian needs.

Three important implications emerge from these findings. First, research on prosocial behavior should consider and measure both dispositional and situational empathy, recognizing that helping behavior occurs at the intersection of the two. While this study only begins to examine their interplay, this topic remains understudied even in psychology (e.g. Heyers *et al.* 2025; McAuliffe *et al.* 2020). Second, interventions designed to trigger situational empathy should account for context: in environments where the memory of suffering is already highly salient, perspective-

⁴⁶ Nevertheless, after controlling for all the characteristics of respondents and hypothetical refugee profiles, Ukrainians were still more likely to receive help than Syrians by five to fifteen percentage points.

taking interventions that draw on this memory might fail to elicit additional empathy. Finally, an important avenue for future research is how to cultivate dispositional empathy. Our findings on intergenerational exposure to violence suggest one possibility: sustained interactions with people who have experienced adversity. These need not be family members; regular engagement with strangers who have faced hardship can generate small but reliable gains in dispositional empathy (Beltran 2023). Repeated activation of situational empathy through perspective-taking may also strengthen dispositional empathy over time, particularly if it incorporates a diverse set of targets and is initiated during childhood and adolescence.

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Appendix for:

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

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A. Deviations from the Pre-Analysis Plan

This study was pre-registered in Open Science Foundation's EGAP registry prior to data collection: [redacted for anonymity], and we follow the pre-analysis plan closely.

In the study, we present results for all pre-registered hypotheses, though ordered differently. All hypotheses in the manuscript are pre-registered. The exception is the second part of H4: that respondents with higher dispositional empathy will be more sensitive to refugees that 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, DANAЕ. 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 quota. 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 that fits the gender and age quota, (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 WW2	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 ²	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 ²	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 WW2	0.077** (0.034)		
Family displaced in WW2		0.087** (0.035)	
Family member died or displaced in WW2			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 ²	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 ²	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, Republikańskie) 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).¹

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.

¹ 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 screen plot, indicating that the first factor has an eigenvalue of 3.99, while **Table A8** shows the separate item factor loadings (which are all ≥ 0.71). In addition, we find a Cronbach 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. Screen Plot of Eigenvalues after Factor Analysis

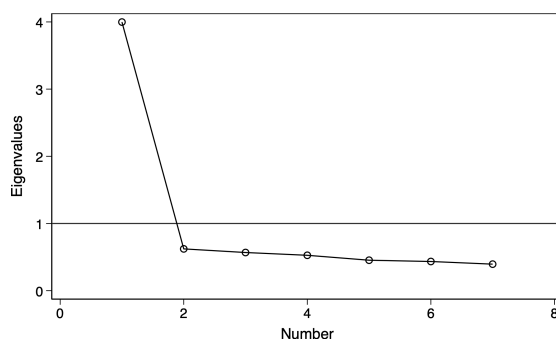


Table A8. Item Factor Loadings

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>Syrian civilians fleeing Aleppo after Russian attack in 2016.</p>	<p>Russia's military intervention in Syria 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 Syrians 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>Ukrainians civilians fleeing Kyiv after Russian attack in 2022.</p>	<p>Russia's military intervention in Ukraine 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 Ukrainians 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>Syrian civilians fleeing Aleppo after Russian attack in 2016.</p> <p>Polish civilians fleeing after the Warsaw uprising in 1944.</p>	<p>Russia's military intervention in Syria 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 Syrians 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 Syrians 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>

		Poles have first-hand experience with forced migration and military aggression that Syrians are living through now.
Ukrainian suffering + shared experience	 <p>Ukrainians civilians fleeing Kyiv after Russian attack in 2022.</p>  <p>Polish civilians fleeing after the Warsaw uprising in 1944.</p>	<p>Russia's military intervention in Ukraine 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 Ukrainians 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 Ukrainians 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 Ukrainians 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 or displaced in WW2	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.² Media references to Ukrainian refugees often included references to their blue eyes and blond hair as an indicator of Europeaness.³ 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,⁴ 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.

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

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

⁴ 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.

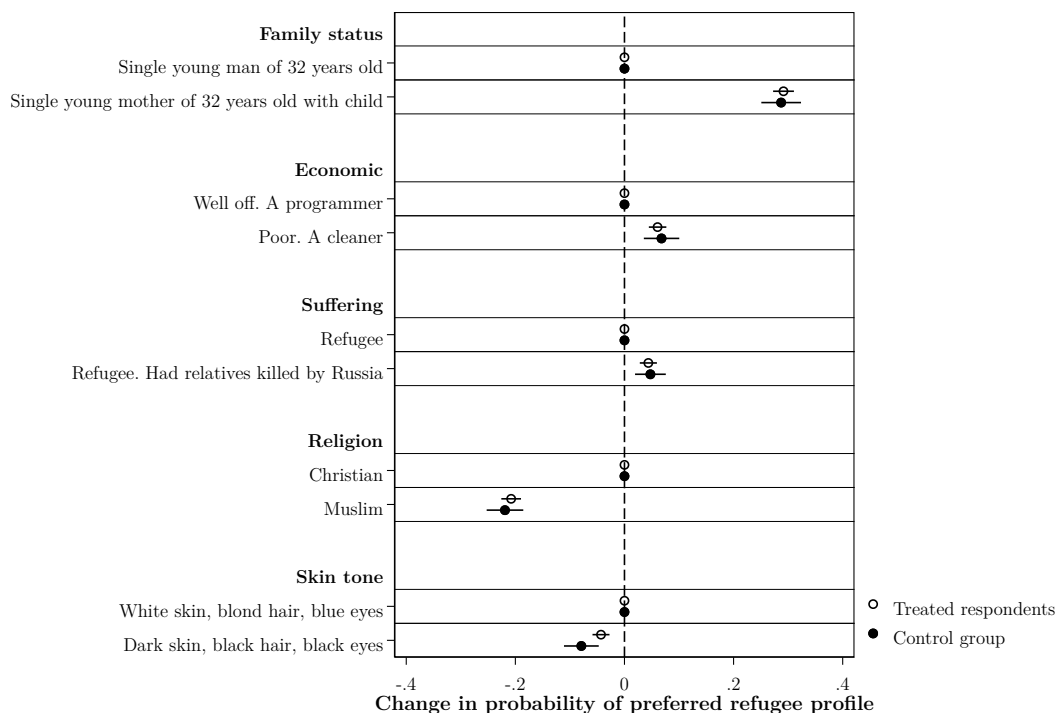
Table A13. Conjoint Experiment – Full Results

	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 ²	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 dark skin, black hair, black eyes – 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, enquired 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 or displaced in WW2	-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 ²	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	Would donate food or clothes	Would donate money
	(1)	(2)	(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 WW2	-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 ²	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 WW2	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 ²	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 or displaced in WW2	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 ²	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 ²	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 WW2	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 ²	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 WW2	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 ²	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 behaviour, 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 ²	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 ($R^2_{Y \sim D|X} = 0.08$) 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.

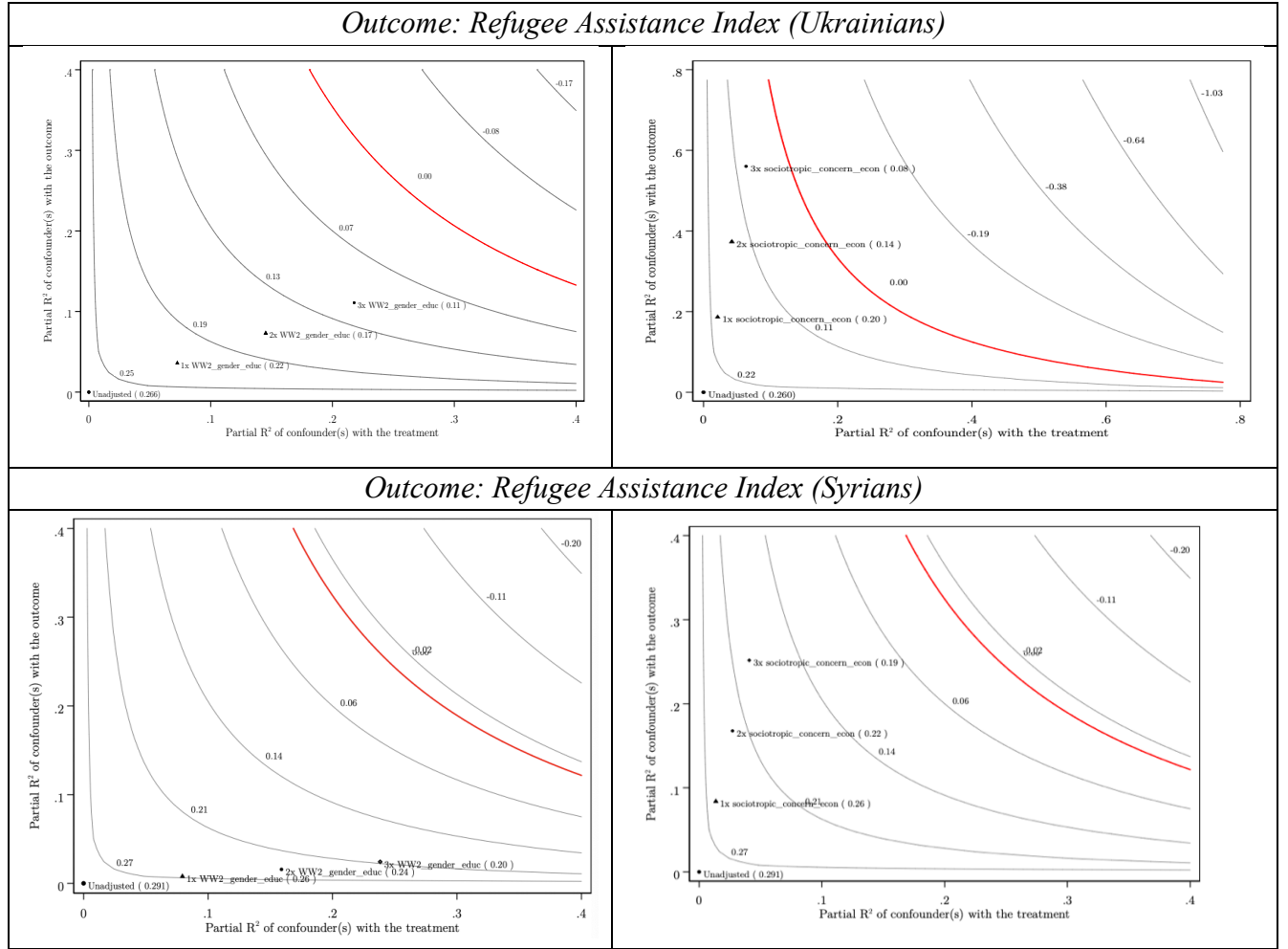
To benchmark the results from sensitivity analysis, we focus on covariates that are strongly correlated with our treatment (dispositional empathy, see Table 5) and/or outcome (refugee assistance index, see Table 3). The first category includes exposure to WWII violence, gender, and education, combined 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, $R^2_{Y \sim Z|D,X}$ and $R^2_{D \sim Z|X}$ 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 $R^2_{D \sim Z|X}$ is below the partial R^2 of dispositional empathy ($R^2_{Y \sim D|X}$). 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[†]

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

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 WW2 and respondents' levels of empathy, respectively.

Table A24. Heterogeneity by Family Suffering in WW2

	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 WW2	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 * WW2	-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 * WW2	-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. * WW2	-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. * WW2	-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 ²	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 ²	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.

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