Research Article

Terri Mannarini*, Mario Angelelli, Enrico Ciavolino, Serena Arima, Mariano Longo, Pierpaolo Limone and Sergio Salvatore

Helping in Times of War: How Uncertainty Modulates Aid to Ukrainian Refugees through Compassion and Threat

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Abstract: The present paper focuses on the antecedents of solidarity behavior towards Ukrainian refugees, specifically examining the role of subjective uncertainty generated in public opinion by the aggression of Ukraine on feelings of compassion and perceptions of refugees as a threat. Based on pooled data from six representative samples collected in different waves during the first six months of the Russian army's invasion of Ukraine among a representative sample of adult Italian citizens (N = 6,063), the study provided support for the intensification hypothesis, suggesting that uncertainty can act as an affective amplifier. Indeed, the results showed that uncertainty increased perceptions of refugees as a threat (acting on its emotional component, i.e., anxiety), but also feelings of compassion, which is a main driver of solidarity. Moreover, compassion seemed to reduce the (perceived) threat posed by refugees on an economic, cultural, security, or political level. The pattern of relationships tested in the model proved to be stable across different areas of the country and for the first 6 months of the Russian invasion, suggesting that the empathic concern generated by the suffering of the Ukrainian population under attack did not significantly diminish its effects over the period considered.

***Corresponding author: Terri Mannarini**, Department of Human and Social Science, University of Salento, Lecce, Italy, E-mail: terri.mannarini@unisalento.it. https://orcid.org/0000-0003-3683-8035
Mario Angelelli, **Enrico Ciavolino**, **Serena Arima**, **Mariano Longo and Sergio Salvatore**, Department of Human and Social Science, University of Salento, Lecce, Italy, E-mail: mario.angelelli@unisalento.it (M. Angelelli), enrico.ciavolino@unisalento.it (E. Ciavolino), serena.arima@unisalento.it (S. Arima), mariano.longo@unisalento.it (M. Longo), sergio.salvatore@unisalento.it (S. Salvatore). https://orcid.org/0000-0002-9782-7834 (M. Angelelli). https://orcid.org/0000-0003-3955-4310 (E. Ciavolino). https://orcid.org/0000-0001-6366-1592 (S. Arima). https://orcid.org/0000-0003-2705-8459 (M. Longo). https://orcid.org/0000-0002-4583-8478 (S. Salvatore)
Pierpaolo Limone, Pegaso Online University, Napoli, Italy, E-mail: pierpaolo.limone@unipegaso.it. https://orcid.org/0000-0003-3852-4005

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1 Introduction

Among the international public, the Russian invasion of Ukraine in February 2022 has elicited a complex array of emotional responses worldwide. National polls in the nearby countries, such as Lithuania, showed that the war had a significant emotional impact on citizens, triggering anger, discouragement, and fear, as well as frustration and disappointment (DG COMM's Public Opinion Monitoring Unit, April 22, 2022). A sentiment and emotion analysis of 27,894 tweets posted by people around the world on the first day of the Russian invasion of Ukraine found that sadness was the most common and salient emotion, followed by fear and anger (Garcia and Cunanan-Yabut 2022). Less explored, with a few exceptions (Xuereb 2023), were the discrete emotions towards the Ukrainian refugees (6,196,000 according to UNHCR 2022a), whose exodus triggered a widespread solidarity response across Europe. Indeed, not only the EU activated the Temporary Protection Directive (TPD) and coordinated national governments in the reception of displaced persons by activating the 'Solidarity Platform',[1] but civil society facilitated the reception and hosting of Ukrainian refugees, with individual citizens informally mobilizing to provide assistance and meet refugees' welfare needs as best they could (Carlsen et al. 2023), especially in the first months of the emergency when the emotional impact was overwhelming (Albertari and Principe 2023). Two years into the war, public support for Ukrainian refugees remains strong, at 71 % of the EU average (DG COMM's Public Opinion Monitoring Unit, February 23, 2024).

The current study extends research on intergroup prosociality (Louis et al. 2019) by examining the psychosocial factors that promote solidarity and helping behavior toward those who are forced to flee a country under attack in a global scenario characterized by uncertainty. Indeed, the global economic, cultural, environmental, and geopolitical changes that in recent decades have challenged societies around the world and called into question the predictability of the future, have made uncertainty the hallmark of the contemporary era (Blokker and Vieten 2022; Colombo and Magri 2017; Obeng-Odoom 2021): just to name the most relevant, the financial and economic crisis that began in 2007, the migration and refugee crises in 2015, the rise of terrorism, the growing consensus of populist movements, the global pandemic, climate change, and, most recently, the armed conflicts in the Mediterranean. Migration itself, either voluntary or forced, is subject to uncertainty (Bijak and

1 The platform is available at https://home-affairs.ec.europa.eu/policies/migration-and-asylum/migration-management/migration-management-welcoming-refugees-ukraine_en.

Czaika 2020), both epistemic – scholars do not have complete knowledge of the drivers and their future evolution, as well as of the individual decision-making processes of both migrants and receivers, and must contend with measurement problems and errors in formal models – and aleatory, i.e. a component of intrinsic randomness that cannot be reduced by greater knowledge. Migration can be caused by singular, unpredictable shock events such as armed conflicts, which in turn create uncertainty in national and international migration policy decisions.

This systemic uncertainty is inevitably reflected in subjective uncertainty. The unexpected aggression of Ukraine in 2022, which adds to a scenario of policrises and shocks, was definitely perceived by the European public opinion as a specific source of fear, concern, and uncertainty, as reported in many national and cross-national surveys and polls assembled by the DG COMM's Public Opinion Monitoring Unit.[2] The main goal of our study, conducted among the general Italian public during the first six months of the Russian army's invasion of Ukraine, was to examine the role of the subjective uncertainty experienced by Italian citizens as a result of the outbreak of an armed conflict in a EU country on two antecedents of solidarity behavior toward Ukrainian refugees: compassion – i.e., one of the emotions that characterizes empathic concern – and the perceived threat posed by the same incoming refugees.

2 Uncertainty as an Affective Amplifier

Despite extensive research on uncertainty by psychologists and social scientists, uncertainty has been defined in different and often contradictory ways. One area of agreement about the nature of uncertainty is that it is more a subjective human experience than a feature of the external world (Anderson et al. 2019). Researchers have distinguished different types of uncertainty, of which two important varieties are informational uncertainty – in the form of randomness or indeterminacy of the future, ambiguity, or unintelligibility – and personal (or existential) uncertainty, which refers to a "subjective sense of doubt or instability in self-views, worldviews, or the interrelationship between the two" (van den Bos 2009, p. 198).

Uncertainty is viewed as an aversive state that organisms are motivated to reduce (see Anderson et al. 2019, for a review of the most influential models) by acquiring information and thus making the environment predictable and controllable. Because current theoretical models assume that uncertainty is aversive, research has mainly focused on uncertainty in the context of anxiety and fear,

2 See the surveys and polls assembled by the DG COMM's Public Opinion Monitoring Unit and available at https://www.europarl.europa.eu/at-your-service/en/be-heard/eurobarometer/public-opinion-on-the-war-in-ukraine.

neglecting other negative or positive emotional states. However, there is a scarcity of evidence from the literature showing that uncertainty modulates a wide range of emotions. This modulation has been found to occur in two ways. The first follows the uncertainty intensification hypothesis (Bar-Anan et al. 2009; Wilson et al. 2005), according to which uncertainty "makes unpleasant events more unpleasant (as prevailing theories suggest), but also makes pleasant events more pleasant (contrary to what prevailing theories suggest)" (p. 123). This hypothesis suggests that uncertainty enhances affective responses to both negative and positive events. The second way is more specific and detects a pattern of modulation, showing that uncertainty intensifies negative emotional states and attenuates positive emotional states (Morriss et al. 2022; van Dijk and Zeelenberg 2006). Taken together, these findings highlight the importance of uncertainty in emotional phenomena, especially in the context of war, which per se elicits a range of emotions and activates a state of uncertainty, both informational and personal.

Following the amplification hypothesis, we argue that uncertainty can increase both the empathic response, i.e., feelings of compassion for those in need, and the perception of refugees as a threat. The main argument is that uncertainty acts as an affective amplifier. Although threat is not an emotion per se, it involves an emotional response; in intergroup threat theory (ITT, Stephan et al. 2009) this is conceptualized as intergroup anxiety, which is based on the fear and expectation of feeling unsafe or uncomfortable.

3 Compassion, Threat, and Helping Behavior in the Context of Refugee Migration

In the context of humanitarian emergencies, researchers such as Thomas and McGarty (2017, 2018) have developed the conceptual distinction between two different forms of behavioral orientations, namely 'giving' and 'doing'. 'Giving', labeled as benevolent support, reflects efforts to address the disadvantage by transferring one's time, money, services, efforts, or sympathy to those in need. 'Doing', referred to as activist support, is a form of social justice-oriented action. The former is motivated and aimed at alleviating the suffering of those who are harmed or disadvantaged, while the latter is driven by a desire to change the social and political system to achieve greater equality and thus focuses on the system or third parties that perpetuate or exacerbate disadvantage.

The benevolent form of helping is a type of generosity that has been specifically addressed in the context of the refugee crises (Kende et al. 2017; Kossowska et al. 2023) and is also the one considered in our study. The relevant emotions in benevolent

support are empathy and sympathy, or compassion (Thomas and McGarty 2017, 2018), which all belong to the constellation of other-oriented emotions that characterize empathic concern: "sympathy, compassion, softheartedness, tenderness, sorrow, sadness, upset, distress, concern, and grief" (Batson 2011, p. 11). These emotions are associated with prosocial intentions and behavior, as attested by empirical evidence on empathic concern (empathy/sympathy/compassion) and prosociality (Dovidio et al. 1990; Schroeder et al. 1988), also in the context of intergroup helping and humanitarian aid offered to refugees (Albayrak-Aydemir and Gleibs 2021; Echteroff et al. 2022; Milan 2018; Politi et al. 2023; Thravalou et al. 2021). Specifically, compassion – the feeling on which we focused in our study – is part of the other-suffering family of moral emotions and among the most effective in encouraging prosociality (Haidt 2003). Although there are many definitions of compassion, they all agree that it includes being aware of someone's suffering, being touched by it, and helping or feeling motivated to help (Strauss et al. 2016). In the context of helping refugees, the notion of global compassion seems particularly appropriate, as it refers to strangers (Ekman and Ekman 2017).

While benevolent support is expected to be motivated by compassion for those who are forcibly displaced by war, the perception of these very people as a threat to host countries may discourage helping. Threat is a key concept in intergroup research, and it is experienced when members of one group perceive that another group is capable of harming them. Realistic threat, originally developed in realistic group conflict theory (LeVine and Campbell 1972), refers to perceptions of competition for material resources and harm to the power and economic well-being of the ingroup. Symbolic threat, a fundamental concept in symbolic racism theory (Kinder and Sears 1981), concerns non-material aspects such as discordant values, beliefs, norms, and worldviews between groups. The concepts of realistic and symbolic threat are also core elements of the intergroup threat theory (Stephan et al. 2009), and both types have detrimental effects on intergroup relations (Riek et al. 2006). In the context of migration, press and media discourses have contributed to the development of threatening narratives about migrants. In Italy, immigration is seen as a threat to economic development (Triandafyllidou 1999, 2013) and a burden on Italian prosperity. Migrants of all kinds are portrayed as responsible for depleting the national welfare system, compromising employment and wage conditions, and threatening the country's security (Dixon et al. 2018). Although threat perceptions are influenced by group power, group conflict, and group size, it is ultimately individuals' perceptions of immigrants, refugees, and asylum seekers as a threat that shape their attitudes toward immigration (Semyonov et al. 2006). With regard to refugees and asylum seekers in particular, threat has been found to be associated with negative attitudes towards this group in Australia (Louis et al. 2007) and in

several European countries: Denmark and Israel (Hercowitz-Amir et al. 2017); Germany (Landmann et al. 2019); Turkey (Yitmen and Verkuyten 2018); and Greece (Thravalou et al. 2021).

The interplay between compassion and immigrant threat perceptions has not been extensively explored in the literature. We build on the findings of three studies that, to the best of our knowledge, have provided valuable evidence: in the US context, Sirin et al. (2016) showed that compassion towards members of different ethnic groups remained significant in explaining positive attitudes towards immigrants, even after accounting for the influence of threat perceptions. Thravalou et al. (2021) showed that compassion had a greater influence than threat perceptions on the provision of humanitarian assistance to asylum seekers in Greece. Erisen and Uysal (2024) found that the effect of perceived threat from Syrian refugees in a Turkish population sample changed when moving from lower to higher levels of compassion towards them, and concluded that while perceived threat remains a strong predictor of opposition, feelings of care and compassion restrains its impact.

4 Study Context, Goals and Hypotheses

According to joint data from UNHCR, Italian Civil Protection, and the NGO INTERSOS (UNHCR 2022b), as of December 2022, 173,645 refugees from Ukraine had entered Italy since the beginning of the Russian invasion (February 2022), including 49,444 minors. 86 % of households expect to stay in Italy for the medium or long term. Among the minors of school age, 21 % do not attend school, and in 4 out of 10 households (39 %) there is at least one vulnerable person. Italy ranks 6th in the reception of Ukrainian refugees under temporary protection, after Poland (with more than 1,500,00 refugees), Germany, the Czech Republic, the UK, and Spain (UNHCR 2022a). Before the war, there was a large community of Ukrainian migrants in Italy: as of January 1st, 2021, 235,953 people of Ukrainian nationality, mainly composed of women (78.6 %), were present in the country.

Our study was implemented in March 2022, one month after the Russian invasion of Ukraine, with the general aim of monitoring the reactions of the Italian population to this unexpected war in Europe, and in particular: the emotional reactions to the invasion of Ukraine, the coping strategies used to deal with this disruptive event, the exercise of solidarity with the Ukrainians fleeing the country, the perceptions of threat from the Ukrainian refugees; the trust in the national and international authorities regarding their ability to resolve the conflict; and finally, the prospects for the future. We adopted a correlational design with multiple waves of data collection. In the current study, we aimed to examine the role of compassion

and perceived outgroup threat in predicting aid to the Ukrainian refugees in the context of uncertainty created by a war in a nearby country. Our study was guided by the following hypotheses, which were combined in a mediation model.

The first hypothesis focuses on the relationship between uncertainty, compassion, and threat. Based on studies showing that uncertainty increases affective responses to events (Bar-Anan et al. 2009; Wilson et al. 2005), we expected that the sense of uncertainty resulting from the exposure to an ongoing invasion of a nearby country would increase both feelings of compassion and perceptions of refugees as a threat, acting on the emotional component of threat which is considered to be anxiety (Stephan et al. 2009). The effect of uncertainty on the aforementioned emotional constructs is specified in the following hypothesis:

H1: Uncertainty has an amplification (i.e., positive) effect on both compassion and threat.

The second hypothesis focuses on the pattern of relationships between compassion, threat, and aid. We expected that feelings of compassion elicited by the exposure to the invasion of Ukraine would motivate people to engage in helping behavior toward refugees, as suggested by the evidence for the empathic concern in promoting prosociality, and that perceptions of the realistic or symbolic threat posed by refugees would discourage it, in line with research on the detrimental effects of threat on intergroup relations (Riek et al. 2006) and attitudes toward migrants and refugees. These two hypotheses are formalized as follows:

H2a: There is a positive effect of compassion on solidarity and helping behavior toward refugees.

H2b: Threat perception negatively affects helping behavior toward refugees.

Moreover, based on the beneficial consequences of empathic concern at the intergroup level (Batson and Ahmad 2009; Vanman 2016) and on studies examining the interplay between compassion and threat perception in the context of immigration (Erisen and Uysal 2024; Sirin et al. 2016; Thravalou et al. 2021), we expected compassion to mitigate the perception of threat. Specifically, compassion affects helping behavior both directly and indirectly, with the mediating effect of threat perception, with higher compassion levels leading to reduced threat perception. This assumption generates the next hypothesis to be tested:

H2c: Compassion mitigates (i.e., negatively affects) threat perception.

We used structural equation modelling to test the plausibility of the relationships between the variables these variables.

5 Methods

5.1 Procedures and Participants

A six-round survey (one round every 30 days) was conducted between March and August 2022.[3] Each round involved a representative Italian sample of approximately 1,010 (1,007–1,015) adult citizens (18–85 years old; Mean = 47.6; SD = 14.9), stratified by gender, age, and geographical area, for a total sample of 6,063 citizens (50.7 % female). The majority of the participants (58 %) had secondary education, 11.2 % primary education and 30.8 % tertiary education (according to the International Standard Classification of Education [ISCED]). In terms of geographical distribution, 45.8 % lived in the north of Italy, 23.7 % in the center, 19.4 % in the south and 11.1 % in the main islands. The main socio-demographic characteristics and their mutual associations are reported in Table S1.a in the Supplementary Material.

Participants were drawn from a panel (a set of profiled names that are periodically surveyed) and contacted by a polling company. They have provided appropriate informed consent before being administered a CAWI interview, which took 10–15 min to complete. The polling company informed participants of the purpose of the research and the procedure for completing the questionnaire, assured them that their personal information would be treated in accordance with data protection legislation, and obtained their consent.

5.2 Measures

Participants completed a self-report questionnaire that included measures of emotional reactions, coping strategies, helping behavior, perceived outgroup threat, trust in national and international authorities, and prospects for the future. For the purposes of this study, only the following measures, among those mentioned above, were considered:

Uncertainty. In relation to the Ukraine's invasion, participants were asked to rate how much uncertainty they felt on a scale from 1 (= not at all) to 5 (= very much).

Compassion. In relation to Ukraine's invasion participants were asked to rate how much compassion they felt on a scale from 1 (= not at all) to 5 (= very much).

Perceived outgroup threat. Four self-developed items were developed to measure the perception of threats posed by the incoming Ukrainian refugees to the country (Italy), rated on a scale from 1 (= not at all) to 3 (= very much). Four types of

3 The dataset, codebook, and questionnaire are available at https://data.mendeley.com/datasets/7sx9288bmx/2. Data identification number: 10.17632/7sx9288bmx.2.

threats were considered: concerns about financial burdens (realistic threat), cultural differences (symbolic threat), criminal acts (security threat), and political consequences (political threat).

Benevolent support [Aid]. Five self-developed items measured the frequency of engagement in helping Ukrainian refugees in the form of benevolent support. Participants were asked whether, in the last two weeks, they had done one or more of the following: (1) donated money to humanitarian organizations; (2) collected supplies for Ukrainian refugees; (3) welcomed/received children or Ukrainian refugee families; (4) helped to bring refugees to Italy; (5) joined as a volunteer a humanitarian organization to help Ukrainian people on the ground. The responses were dichotomous (yes/no).

5.3 Analyses

The main technique adopted in this work to assess the effects of uncertainty and emotions on prosocial behavior is structural equation modeling (SEM). A robust computational approach to quantifying such relations is based on partial least squares (PLS), which assesses the strength of the association between constructs (path coefficients) and between construct and manifest variables (loadings) without relying on technical assumptions about the statistical distributions underlying the analysis (Hair et al. 2021a). We chose PLS-SEM over covariance-based approaches (CB-SEM) to deal with deviations from distributional assumptions and adapt to the data involved in the measurement model, which include dichotomic or ordinal scales (Hair et al. 2017, Sec. 5) with few levels. Furthermore, PLS-SEM is in line with the main objective of this work, which is exploratory by nature. Indeed, the structural model we introduce is grounded in different theoretical frameworks presented in the previous sections, and the self-assessment of the manifest variables during the initial phase of the conflict does not fit well with confirmatory approaches. In this sense, the adopted PLS-SEM provides interesting conclusions in terms of exploratory research and paves the way for more insightful social and behavioral arguments.

The PLS-SEM approach lets us formalize the hypothesized relations between uncertainty, compassion, threat, and solidarity. We use a PLS bootstrap algorithm implemented in SmartPLS to obtain relevant statistics and confidence intervals to assess the significance of the indicators.

The analysis consisted of three main steps. First, the global model was estimated to assess the strength of the associations between the constructs in terms of path coefficients. PLS bootstrapping allowed us to test whether these coefficients were significantly different from 0 and, if positive, whether their signs supported or rejected the hypotheses outlined above. In this phase, we also evaluated the quality

metrics of the reliability and validity of the latent variables and decided to exclude one of the five items used to measure aid (item 4), due to its non-significant loading. The non-significance of the Aid_4 item as well as the non-significant correlations in Table S1.c do not depend on the accuracy of the estimate, which relies on a large sample size. Next, to test the stability of our model across time and space, we conducted a multi-group analysis based on partial least squares estimates (PLS-MGA), with the aim of identifying possible effects on path coefficients based on the data acquisition round (6 collections, 1 per month from March to August 2022), geographical area (3 areas: North, Center, and South & Islands), sex (female or male), age class ([18; 35],]35; 50],]50; 65], and]65; 86]), and education level (primary, secondary, or tertiary). The PLS-MGA assesses group invariance by using MICOM (Measurement Invariance of COmposite Models) to check if significant differences between groups exist and then, in the affirmative case, estimate groupwise models. MICOM sequentially tests:

- configurational invariance: the same model specification (nomological networks, indicators, data analysis procedures) should be involved in the analysis of the individual groups.
- compositional invariance: this step tests the hypothesis that the composite scores for the constructs are equal between the groups, first evaluating the correlation between the composite scores from two distinct groups, then comparing it to the correlation distribution obtained from permutations of group elements. If the original correlation is less than the quantile (at a specified level of 0.05), then we reject the configurational invariance hypothesis, which means that the latent variables that we are investigating are measured (through composite scores) differently by different groups.
- Equality of mean and variance of composites: in analogy with the previous step, MICOM tests whether the mean and/or the variance of composites coincide in the two groups using a similar approach based on permutations.

The first step is verified by default since all these specifications have been designed and implemented without referring to specific groups. The relevant MICOM step in the present analysis is the second one (compositional invariance). The lack of mean or variance invariance for composites is not considered a critical hint for group effects and is referred to as a *partial invariance*. Based on the outputs of the MICOM procedure, we estimated groupwise path coefficients to evaluate their significance and potential group differences (Ingusci et al. 2024).

In the Supplementary Material, we reported the distribution of responses for each manifest variable (Table S1.b), for the whole dataset and each collection round, and the results of correlation tests among them (Table S1.c). As for the correlations, we considered both Pearson correlations (using a total score for the Aid variable),

and Spearman correlations, which are more suited to the ordinal responses under consideration. In both cases, we obtained consistent results, with indicators associated with the same latent variable having significantly higher correlations compared to cross-correlations with the remaining correlations.

6 Results

The first step involved the estimation of the coefficients for the model shown in Figure 1. We considered PLS bootstrapping with 10,000 iterations and a nominal significance level set to 5 %. A two-tailed test was conducted based on the *t*-statistics for the different coefficients in the model in order to assess if they significantly differ from 0.

In Figure 1, we report the estimated model, where each edge is labeled by the value of the loading (for the measurement model) or path coefficient (for the structural model), along with its coefficient and its associated p-value.

More details on the path coefficients are presented in Table 1. Along with the path coefficient estimates, we report the bootstrap mean, which can be used to infer the coefficients' bias in the estimates. The bootstrap standard deviation (SD) is used to estimate the standard error and hence the t-statistics needed to assess significance. Finally, the two-tailed 95 % confidence intervals (CI) are displayed for each path coefficient.

All the coefficients are significant at the 95 % confidence level, as 0 is never included in the confidence interval (CI). These results confirm the research hypotheses stated in the introduction. The same analysis allows to derive the specific

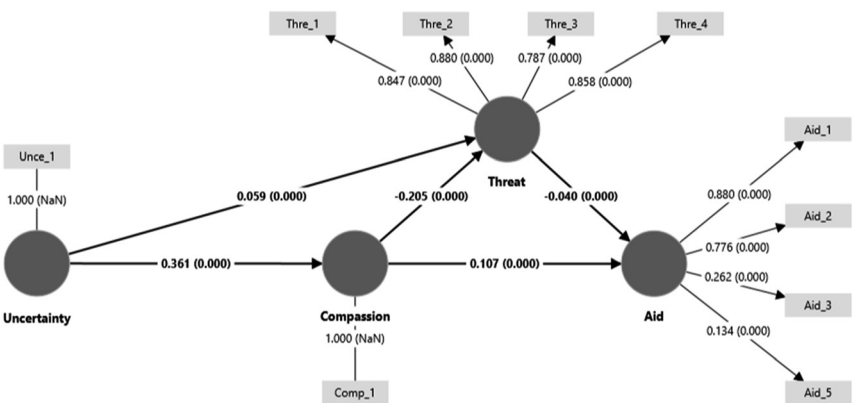

Figure 1: Coefficient estimates (and their statistical significance).

Table 1: Standardized path coefficient (direct effect) estimates along with specific indirect and total effects.

		Estimate	Bootstrap mean	Bootstrap SD	95 % CI
Direct effects	Compassion → Aid	0.1072	0.1072	0.0057	[0.0962; 0.1184]
	Compassion → Threat	−0.2048	−0.2050	0.0138	[−0.2319; −0.1774]
	Threat → Aid	−0.0402	−0.0404	0.0070	[−0.0541; −0.0263]
	Uncertainty → Compassion	0.3611	0.3612	0.0139	[0.3337; 0.3883]
	Uncertainty → Threat	0.0589	0.0589	0.0143	[0.0300; 0.0873]
Specific indirect effects	Uncertainty → Threat → Aid	−0.0024	−0.0024	0.0007	[-0.0039; −0.0011]
	Uncertainty → Compassion → Aid	0.0387	0.0386	0.0026	[0.0335; 0.0438]
	Uncertainty → Compassion → Threat → Aid	0.0030	0.0030	0.0006	[0.0019; 0.0041]
	Uncertainty → Compassion → Threat	−0.0740	−0.0740	0.0059	[−0.0856; −0.0628]
	Compassion → Threat → Aid	0.0082	0.0083	0.0016	[0.0053; 0.0114]
Total effects	Compassion → Aid	0.1155	0.1154	0.0054	[0.1046; 0.1260]
	Compassion → Threat	−0.2048	−0.2049	0.0138	[−0.2325; −0.1782]
	Threat → Aid	−0.0402	−0.0405	0.0071	[−0.0541; −0.0265]
	Uncertainty → Aid	0.0393	0.0393	0.0027	[0.0340; 0.0448]
	Uncertainty → Compassion	0.3611	0.3609	0.0136	[0.3338; 0.3878]
	Uncertainty → Threat	−0.0150	−0.0149	0.0143	[−0.0431; 0.0131]

indirect and total effects reported in Table 1 by considering the totality of the paths connecting the associated latent variables. For example, the total effect of Uncertainty on Aid is obtained by summing the combination (product) of coefficients over all the paths connecting these two constructs, finding a positive total indirect effect of $(0.3611 \cdot 0.1072) + (0.0589 \cdot (-0.0402)) + (0.3611 \cdot (-0.2048) \cdot (-0.0402)) = -0.0024 + 0.0387 + 0.0030 = 0.0393$. The comparison of direct and indirect effects gives us a more detailed view of the different contributions of uncertainty to the other constructs in the model. In particular, from the empirical correlation matrix (Table S1.c), a prevalence of a negative relationship emerges between uncertainty and threat, which are connected both directly and indirectly. On the other hand, the model in Figure 1 disentangles the contributions of uncertainty on threat, showing that the direct effect is significant and positive, but due to its limited size, it is hidden by the specific indirect effect mediated by compassion. This additional information that is not manifest in the empirical correlations is also confirmed by the assessment of effect sizes, as we shall see.

In the second step, we assessed the overall model quality metrics: Cronbach's alpha and the composite reliability indices ρ_A and ρ_C, which quantify the construct reliability for multi-item latent variables. The average variance extracted (AVE) assesses the constructs' convergent validity. The results indicated satisfactory indices for the Threat construct ($\alpha = 0.865$, $\rho_A = 0.872$, $\rho_C = 0.908$, AVE = 0.712), while the Aid construct showed lower performance ($\alpha = 0.572$, $\rho_A = 0.512$, $\rho_C = 0.624$,

AVE = 0.366). We remark that indices of composite reliability, in this case ρ_C, provide a more flexible quantification of the constructs' internal consistency than Cronbach's alpha, as it does not assume that the indicators have equal weights and reliability (see, e.g., Ingusci et al. 2024 and references therein). Differences in indicator weights are relevant, especially for the Aid variable, for which the composite reliability is a more proper choice to assess internal consistency; in turn, the different indicators' reliability is in line with the explorative approach in this research and helps distinguish the different forms of benevolent behavior mentioned in the previous sections.

To assess the discriminant validity in path models we used the HeteroTrait-MonoTrait (HTMT) matrix (Table 2), which refers to the average of correlations between the indicators associated with different latent variables, which are all significant. The choice of the HTMT criterion is strongly suggested in recent research (Hair et al. 2021b, Section 4.6) and aims at confirming that the different composites do not share a large amount of common information, just like the different scales they refer to. The correlations should not be too high, with threshold values of 0.85–0.90 as reported by Henseler et al. (2015). This criterion is met.

Multi-group analysis confirmed the invariance of the model across the different times of data collection and different geographical areas of Italy.

Although some differences between the first and last collection rounds were observed in the uncertainty and compassion single items (revealing a slight tendency to the reduction of Uncertainty and increase of Compassion over time, see Table S1.b [4]), the MGA results supported the structural stability of the direct effects

Table 2: Heterotrait-monotrait ratio (HTMT) matrix; from the 95 % confidence intervals.

	Compassion	Aid	Threat
Aid	0.2058 [0.1832; 0.2364]		
Threat	0.1953 [0.1672; 0.2225]	0.1788 [0.1552; 0.2042]	
Uncertainty	0.3611 [0.3337; 0.3883]	0.1261 [0.1080; 0.1547]	0.0399 [0.0303; 0.0580]

4 To better explore the evolution of the manifest variables, we also conducted Kruskal-Wallis tests and subsequent post-hoc tests (with Bonferroni adjustment). The results showed that the first collection round was significantly different from the following rounds in terms of uncertainty, while the last collection round significantly differed from the first three rounds. Similarly, differences in terms of compassion mainly emerged between the first two and the last four collection rounds. This temporal trend was not observed in the remaining constructs, where differences only arose for one Aid items (Aid_1, with main differences between the second and the last two collection rounds) and Threat (Thre_2 and Thre_3, with main differences between the first two and the fifth rounds).

between constructs over time. Significant differences were found in the relations Uncertainty → Compassion, whose Bonferroni-adjusted p-value coincides with the significance level (0.0050), and Compassion → Threat (adj. p-value = 0.0142). The Threat → Solidarity relation is significantly different when the first age class is compared with the second one (adj. p-value = 0.0276). A detailed view of the outcomes of PLS-MGA is presented in Table S3.a in the Supplementary Material. Furthermore, we confirm that no significant differences arise across different data collection rounds (Table S3.b). For the sake of completeness, we also tested for group invariance even for the remaining socio-demographic characteristics (Table S3.c); while no differences are detected, these results should be interpreted cautiously since the groups are unbalanced. In Table S3.d, we report the path coefficient estimates based on subsamples where a group effect was observed in the MICOM procedure.

As already stressed, the proposed approach focuses on optimizing the model in terms of predictive as well as explanatory power (Hair et al. 2017, Table 8). In Table S4.a, we report the Stone-Geisser Q^2 index evaluated for each endogenous latent variable (Sarstedt et al. 2014); the positivity of Q^2 relates to the model's predictive performance for the specific variable. The results show that Aid and Compassion are coherently reconstructed within the model. This aspect is confirmed by further tests not reported here that showed analogous predictive power even in subsamples defined by socio-demographic characteristics.

With respect to the explanatory power, the model captures a significant relationship between Uncertainty and Compassion (see Table S4.b); this aspect is particularly interesting, stressing Uncertainty as the driving emotion in the conflict context. Consequently, most of the remaining relationships are attenuated, with the notable exception of those involving Compassion, which preserve part of their explanatory power in combination with the Compassion's predictive power. It is important to connect this aspect with the significant and positive impact of Uncertainty on Threat mentioned earlier. This relationship is not clearly evident from the empirical correlations due to its small effect size, as it coexists with the stronger indirect effect mediated by Compassion.

7 Discussion

Starting from the role of uncertainty, which was the main focus of the study, our findings suggest that the feeling of uncertainty can act as a booster of the emotional response to events, according to the uncertainty intensification hypothesis (Bar-Anan et al. 2009). On the one hand, uncertainty may increase defensive reactions and

amplify the threat allegedly posed by refugees, as suggested by research inspired by intergroup threat theory (ITT, Stephan et al. 2009). On the other hand, and more interestingly, uncertainty can also increase feelings of compassion towards the same group of people who are perceived as potentially threatening. As an other-focused emotion, compassion can involve a range of different mixed emotions, depending on the condition of the "other." In the case of people in need, such as those displaced by war, it is reasonable to assume that compassion includes feelings of negative valence, such as worry, grief, and sadness, as well as feelings of closeness, bonding, and sharing.

Acts of concrete solidarity with people in need, and especially with forcibly displaced persons fleeing their country due to armed conflict, are clearly relevant in emergency situations. Our findings are consistent with previous refugee aid studies (Albayrak-Aydemir and Gleibs 2021; Echteroff et al. 2022; Politi et al. 2023; Thravalou et al. 2021) in supporting the principle that compassion for the Ukrainian people can motivate people from other countries to help them. This process has been explored in the broader literature on the role of other-focused emotions in prosociality (Batson 2011): When we feel sympathy/compassion for people who are in danger, offended, experiencing loss, etc., we are motivated to help them (Malbois 2023). In addition, our study suggests that a second way to encourage support for refugees is to reduce the (perceived) threat posed by refugees on an economic, cultural, security, or political level. This finding is consistent with studies that have found in various ways that even when refugees and immigrants are perceived as threatening, attitudes towards them can be tempered by feelings of warmth and care. Given that outgroup threat is one of the most important factors negatively influencing attitudes and behavior toward those categorized as belonging to an outgroup, this finding is significant, especially in Italy, where anti-immigrant attitudes are legitimized by evoking multiple group threats (Fernandez-Jesus et al. 2022). Nevertheless, we can speculate that European citizens, such as the Italians, were particularly inclined to feel sympathy for their fellow European Ukrainians and were particularly benevolent towards them. To support this interpretation, an Italian study (Bolzoni et al. 2023) carried out in the Piedmont region through interviews with representatives of public institutions, third sector organisations and associations, did signal forms of selective solidarity (De Coninck 2023), arguing that the solidarity response to the Ukrainian crisis was such that not only was help offered spontaneously by unorganised ordinary citizens - something that had not happened very often in the past - but also that those who helped felt that the Ukrainian refugees were 'neighbours'. Indeed, it is easier to experience compassion for refugee groups with whom we already feel close (Adida et al. 2023). This may raise the question of whether the reduction in threat would have occurred with another refugee group, perceived as more diverse and

distant. Indeed, research has shown that attitudes toward immigrants, refugees, and asylum seekers are influenced by how people view them based on race, color, religion, etc (Hainmuller and Hiscox 2010). These characteristics make a difference in terms of "deservingness" (Bjånesøy 2019) and "acceptability" (Bansak et al. 2016). Moreover, a recent study comparing attitudes toward helping Syrian, Somali, and Ukrainian asylum seekers (Xuereb 2023) suggests that white European identity becomes salient when Europeans think about asylum seekers. If Syrians and Somalis are categorized as outgroup members while Ukrainians are not, this would account for the more negative perception of non-European asylum seekers. Therefore, it is clear that our findings cannot be generalized to all refugee groups.

The path to refugee aid tested in our model proved to be stable over space (i.e., different areas of the country) and time (the first 6 months of the Russian invasion). This stability suggests that the empathic concern generated by the suffering of the Ukrainian population under attack did not significantly diminish its effects over the period considered. Indirectly, this finding also suggests that desensitization to the violence (Bushman and Anderson 2009) of war did not occur during the first 6 months of the Russian invasion, or even if it did, it did not reach the point of undermining compassionate acts of solidarity and assistance. In particular, it appears that compassion fatigue, a natural response to overexposure to violent content and images through media and social media, did not occur. In fact, the concept of compassion fatigue, which has been elaborated in the context of healthcare to refer to a decrease in compassion among workers and professionals exposed to trauma victims (Sorenson et al. 2016), has also been applied to the public's response to refugees to explain a decrease in empathy and solidarity as people become accustomed to negative representations of refugees (Aldamen 2023; Thomas et al. 2018). Of course, as time goes by and the Ukrainian invasion persists, it is likely that the public will be subjected to this kind of fatigue, an effect that could be investigated in future research.

This study opens the door for future research in several directions. Given the paucity of studies to date, one direction is to conduct further research on the role of uncertainty in influencing emotional responses over time, which is necessary to provide empirical support for the intensification hypothesis. In addition, different forms of uncertainty should be tested, such as informational and existential uncertainty. A second direction is to examine more closely and comparatively the effects of different forms of support for war refugees, such as peace activism. Indeed, while the transfer of time, money, services, and effort to those in need has a direct impact on their condition, the effects of justice-oriented and peace-oriented actions such as petitions, rallies, and peace marches are mediated by governments and diplomacy and therefore may have more indirect and delayed effects.

8 Limitations

As with all cross-sectional studies, we are fully aware that our findings are correlational and cannot prove causality, that no inferences can be made about causal processes, and that 'prediction' refers to statistical prediction within our model. In the concrete world, the pattern of relationships between the variables we have included in our study is likely to be multidirectional and non-linear. In addition, our study suffered from some measurement problems, especially with regard to the aid variable. However, it should be noted that all four items formulated to capture the notion of benevolent support showed significant loadings.[5] Moreover, we acknowledge that measuring perceived threat on a 3-point scale and uncertainty and compassion with only one item, while not entirely uncommon in social research, was not an optimal measure of the variables. These choices were made in order to make it easier for participants to complete the survey, but they undoubtedly have drawbacks. Finally, while our model shows predictive power (Q^2), which is suited to the purposes of the PLS-SEM methodology, we acknowledge that alternative models can improve factor loadings and effect sizes related to explanatory power. This work paves the way for further studies and more complex models that exploit the information in the collected data.

9 Conclusions

We live in an era of uncertainty and shocks. As long as the invasion of Ukraine continues, uncertainty is likely to be fueled not only by fear of the unpredictable consequences, but also by the difficulty of international actors to find a solution and restore peace, and by the spread of conspiracy theories (Radnitz 2023), which pollute information but are an attempt to make sense of incomprehensible or opaque societal events and adapt to rapid change (van Prooijen and Douglas 2017). Because uncertainty has been viewed as aversive in psychological research, its effects have mainly been studied in the context of fear and anxiety. However, if we assume that uncertainty can modulate a range of emotions, not exclusively negative but also mixed, as in the case of other-focused emotions, we see some unexpected effects in

5 The measurement issues with this variable might be partly due to the uneven distribution of responses: in fact, while giving money and collecting goods received 41.71 and 42.73 % of positive responses, respectively, and showed satisfactory indicator reliability, welcoming refugees into one's home and joining a humanitarian organization were much less common actions (10.62 and 5.59 %, respectively).

the context of intergroup prosociality. Indeed, while it is intuitive to associate uncertainty with defensive reactions that explain the intensification of perceived threats posed by refugees to host countries, it is less intuitive to observe a similar intensification effect on a prosocial emotion such as compassion, which not only motivates helping behavior but can also reduce threat. Reducing threat perceptions is key to developing unbiased attitudes toward migrants, refugees, and asylum seekers, especially in contexts where the social, political, and media environment conveys and disseminates threatening narratives. Therefore, preventing the erosion of compassion and sustaining it over time is also key. This feeds into the debate about the role of media, and social media in particular, in both inflaming and deflating the emotional response to individual and collective trauma by overexposing citizens to violent content and images and by spreading either threatening or dehumanizing narratives. Both of these narratives work against compassion, which involves seeing those in need as brothers and sisters. Indeed, public communication and advocacy can play a crucial role in ensuring public support for Ukrainian refugees as the war continues. On the one hand, maintaining balanced and truthful media and social media coverage of the conflict is key to keeping the public informed and engaged and also to maintaining support for refugee policy. On the other hand, advocacy campaigns promoted by NGOs and advocacy groups are also key to highlighting the humanitarian aspects of the war, such as human rights violations and the plight of displaced persons, in order to maintain compassion and solidarity.

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References

Adida, C. L., A. Lo, M. Platas, L. Prather, and S. Williamson 2023. “When Hearts Meet Minds: Complementary Effects of Perspective-Getting and Information on Refugee Inclusion.” *Working Paper*.https://www.dropbox.com/scl/fi/lxfp5zrx9pot7s3yhnql2/Nonblind-draft.pdf?rlkey=j2qswhh71wx4kn4hw87fs6x1u&dl=0.

Albayrak-Aydemir, N., and I. H. Gleibs. 2021. “Measuring Global Bystander Intervention and Exploring Its Antecedents for Helping Refugees.” *British Journal of Psychology* 112 (2): 519–48.

Albertari, G., and E. Principe. 2023. “The Relevance of Perceptions over Temporariness of Emergency and Crafted ‘Migrant’ Identities in the European Response to Migration Originating from Conflict Situations. The Case of Ukraine.” *Peace Human Rights Governance* 7 (1): 45–79.

Aldamen, Y. 2023. "Can a Negative Representation of Refugees in Social Media Lead to Compassion Fatigue? An Analysis of the Perspectives of a Sample of Syrian Refugees in Jordan and Turkey." *Journalism and Media* 4 (1): 90–104.

Anderson, E. C., R. N. Carleton, M. Diefenbach, and P. K. Han. 2019. "The Relationship between Uncertainty and Affect." *Frontiers in Psychology* 10: 2504.

Bansak, K., J. Hainmuller, and D. Hangartner. 2016. "How Economic, Humanitarian, and Religious Concerns Shape European Attitudes toward Asylum Seekers." *Science* 354 (6309): 217–22.

Bar-Anan, Y., T. D. Wilson, and D. T. Gilbert. 2009. "The Feeling of Uncertainty Intensifies Affective Reactions." *Emotion* 9: 123–27.

Batson, C. D. 2011. *Altruism in humans*. Oxford: Oxford University Press.

Batson, C. D., and N. Y. Ahmad. 2009. "Using Empathy to Improve Intergroup Attitudes and Relations." *Social Issues and Policy Review* 3: 141–77.

Bijak, J., and M. Czaika. 2020. "Assessing Uncertain Migration Futures – A Typology of the Unknown." In *QuantMig Project Deliverable D1.1*. Southampton/Krems: University of Southampton and Danube University Krems. http://quantmig.geodata.soton.ac.uk/res/files/QuantMig%20D1.1%20Uncertain%20Migration%20Futures%20V1.1%2030Jun2020.pdf.

Bjånesøy, L. L. 2019. "Effects of the Refugee Crisis on Perceptions of Asylum Seekers in Recipient Populations." *Journal of Refugee Studies* 32 (1): i219–37.

Blokker, P., and U. M. Vieten. 2022. "Fear and Uncertainty in Late Modern Society." *European Journal of Cultural and Political Sociology* 9 (1): 1–6.

Bolzoni, M., D. Donatiello, and L. Giannetto. 2023. "The Dark Side of Solidarity: Ambivalences and Double Standards in the Ukrainian Refugee Crisis in Italy." *PACO* 16 (3): 451–69.

Bushman, B. J., and C. A. Anderson. 2009. "Comfortably Numb: Desensitizing Effects of Violent Media on Helping Others." *Psychological Science* 20 (3): 273–77.

Carlsen, H. B., T. Gårdhus, and J. Toubøl. 2023. "Ukrainian Refugee Solidarity Mobilization Online." *European Societies* 26: 374–85.

Colombo, A., and P. Magri. 2017. *The Age of Uncertainty: Global Scenarios and Italy*. ISPI.

De Coninck, D. 2023. "The Refugee Paradox during Wartime in Europe: How Ukrainian and Afghan Refugees Are (Not) Alike." *International Migration Review* 57 (2): 578–86.

DG COMM's Public Opinion Monitoring Unit. 2022. Public Opinion on the War in Ukraine. https://www.europarl.europa.eu/at-your-service/files/be-heard/eurobarometer/2022/public-opinion-on-the-war-in-ukraine/en-public-opinion-on-the-war-in-ukraine-20220422.pdf.

DG COMM's Public Opinion Monitoring Unit. 2024. Public Opinion on Russia's War against Ukraine. https://www.europarl.europa.eu/at-your-service/files/be-heard/eurobarometer/2022/public-opinion-on-the-war-in-ukraine/en-public-opinion-on-the-war-against-ukraine-20240223.pdf.

Dixon, T., S. Hawkings, L. Heijbroek, M. Juan-Torres, and F. X. Demoures. 2018. Attitudes towards National Identity, Immigration and Refugees in Italy. https://www.moreincommon.com/our-work/publications/.

Dovidio, J. F., J. L. Allen, and D. A. Schroeder. 1990. "Specificity of Empathy-Induced Helping: Evidence for Altruistic Motivation." *Journal of Personality and Social Psychology* 59: 249–60.

Echterhoff, G., J. C. Becker, J. Knausenberger, and J. H. Hellmann. 2022. "Helping in the Context of Refugee Immigration." *Current Opinion in Psychology* 44: 106–11.

Ekman, P., and E. Ekman. 2017. "Is Global Compassion Achievable?" In *The Oxford Handbook of Compassion Science*, edited by E. Seppälä, E. Simon-Thomas, S. L. Brown, M. C. Worline, C. D. C. Cameron, and J. R. Doty, 41–49. Oxford: Oxford University Press.

Erisen, C., and D. M. Uysal. 2024. "Perceived Threat, Compassion, and Public Evaluations toward Refugees." *Political Psychology*. Advance online publication. https://doi.org/10.1111/pops.13010.

Fernandez-Jesus, M., A. Rochira, and T. Mannarini. 2022. “Opposition to Immigration: How People Who Identify with Far-Right Discourses Legitimize the Social Exclusion of Immigrants.” *Journal of Community & Applied Social Psychology* 33: 14–31.

Garcia, M. B., and A. Cunanan-Yabut. 2022. “Public Sentiment and Emotion Analyses of Twitter Data on the 2022 Russian Invasion of Ukraine.” In *2022 9th International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE)*.

Haidt, J. 2003. “The Moral Emotions.” In *Handbook of Affective Sciences*, edited by R. J. Davidson, K. R. Scherer, and H. H. Goldsmith, 852–870. Oxford University Press.

Hainmuller, J., and M. J. Hiscox. 2010. “Attitudes toward Highly Skilled and Low-Skilled Immigration: Evidence from a Survey Experiment.” *American Political Science Review* 104 (1): 61–84.

Hair Jr, J. F., L. M. Matthews, R. L. Matthews, and M. Sarstedt. 2017. “PLS-SEM or CB-SEM: Updated Guidelines on Which Method to Use.” *International Journal of Multivariate Data Analysis* 1 (2): 107–23.

Hair Jr, J. F., G. T. M. Hult, C. M. Ringle, and M. Sarstedt. 2021a. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Los Angeles: Sage Publications.

Hair Jr, J. F., G. T. M. Hult, C. M. Ringle, M. Sarstedt, N. P. Danks, and S. Ray. 2021b. *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*. Heidelberg: Springer Nature.

Henseler, J., C. M. Ringle, and M. Sarstedt. 2015. “A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling.” *Journal of the Academy of Marketing Science* 43: 115–35.

Hercowitz-Amir, A., R. Raijman, and E. Davidov. 2017. “Host or Hostile? Attitudes towards Asylum Seekers in Israel and in Denmark.” *International Journal of Comparative Sociology* 58 (5): 416–39.

Ingusci, E., M. Angelelli, G. A. Sternativo, A. A. Catalano, E. De Carlo, C. G. Cortese, E. Demerouti, and E. Ciavolino. 2024. “A Higher-Order Life Crafting Scale Validation Using PLS-CCA: The Italian Version.” *Behaviormetrika* 51 (1): 359–87.

Kende, A., N. A. Lantos, A. Belinszky, S. Csaba, and Z. A. Lukács. 2017. “The Politicized Motivations of Volunteers in the Refugee Crisis: Intergroup Helping as the Means to Achieve Social Change.” *Journal of Social and Political Psychology* 5: 260–81.

Kinder, D. R., and D. O. Sears. 1981. “Prejudice and Politics: Symbolic Racism versus Racial Threats to the Good Life.” *Journal of Personality and Social Psychology* 40: 414–31.

Kossowska, M., P. Szwed, E. Szumowska, J. Perek-Białas, and A. Czernatowicz-Kukuczka. 2023. “The Role of Fear, Closeness, and Norms in Shaping Help towards War Refugees.” *Scientific Reports* 13 (1): 4635.

Landmann, H., R. Gaschler, and A. Rohmann. 2019. “What Is Threatening about Refugees? Identifying Different Types of Threat and Their Association with Emotional Responses and Attitudes towards Refugee Migration.” *European Journal of Social Psychology* 49 (7): 1401–20.

LeVine, R. A., and D. T. Campbell. 1972. *Ethnocentrism: Theories of Conflict, Ethnic Attitudes, and Group Behavior*. New York: Wiley.

Louis, W. R., J. M. Duck, D. J. Terry, R. A. Schuller, and R. N. Lalonde. 2007. “Why Do Citizens Want to Keep Refugees Out? Threats, Fairness and Hostile Norms in the Treatment of Asylum Seekers.” *European Journal of Social Psychology* 37 (1): 53–73.

Louis, W. R., E. Thomas, C. M. Chapman, T. Achia, S. Wibisono, Z. Mirnajafi, and L. Droogendyk. 2019. “Emerging Research on Intergroup Prosociality: Group Members’ Charitable Giving, Positive Contact, Allyship, and Solidarity with Others.” *Social and Personality Psychology Compass* 13: 1–16.

Malbois, E. 2023. “What Is Sympathy? Understanding the Structure of Other-Oriented Emotions.” *Emotion Review* 15 (1): 85–95.

Milan, C. 2018. “Emotions that Mobilise: The Emotional Basis of Pro-asylum Seeker Activism in Austria.” In *Solidarity Mobilizations in the ‘Refugee Crisis’*, edited by D. della Porta, 183–208. Basingstoke: Palgrave.

Morriss, J., E. Tupitsa, H. F. Dodd, and C. R. Hirsch. 2022. "Uncertainty Makes Me Emotional: Uncertainty as an Elicitor and Modulator of Emotional States." *Frontiers in Psychology* 13: 777025.

Obeng-Odoom, F. 2021. *The Commons in an Age of Uncertainty: Decolonizing Nature, Economy, and Society*. Toronto: University of Toronto Press.

Politi, E., J. Gale, A. Roblain, M. Bobowik, and E. G. T. Green. 2023. "Who Is Willing to Help Ukrainian Refugees? The Role of Individual Prosocial Dispositions and Superordinate European Identity." *Journal of Community & Applied Social Psychology* 33: 940–53.

Radnitz, S. 2023. "Conspiracy Theories and Russia's Invasion of Ukraine." *Russian Analytical Digest* 299: 11–14.

Riek, B. M., E. W. Mania, and S. L. Gaertner. 2006. "Intergroup Threat and Outgroup Attitudes: A Meta-Analytic Review." *Personality and Social Psychology Review* 10: 336–53.

Sarstedt, M., C. M. Ringle, J. Henseler, and J. F. Hair. 2014. "On the Emancipation of PLS-SEM: A Commentary on Rigdon (2012)." *Long Range Planning* 47 (3): 154–60.

Schroeder, D. A., J. F. Dovidio, M. E. Sibicky, L. L. Matthews, and J. L. Allen. 1988. "Empathic Concern and Helping Behavior: Egoism or Altruism?" *Journal of Experimental Social Psychology* 24: 333–53.

Semyonov, M., R. Raijman, and A. Gorodzeisky. 2006. "The Rise of Anti-foreigner Sentiment in European Societies, 1988–2000." *American Sociological Review* 71 (3): 426–49.

Sirin, C. V., N. A. Valentino, and J. D. Villalobos. 2016. "Group Empathy Theory: The Effect of Group Empathy on US Intergroup Attitudes and Behavior in the Context of Immigration Threats." *The Journal of Politics* 78 (3): 893–908.

Sorenson, C., B. Bolick, K. Wright, and R. Hamilton. 2016. "Understanding Compassion Fatigue in Healthcare Providers: A Review of Current Literature." *Journal of Nursing Scholarship* 48 (5): 456–65.

Stephan, W. G., O. Ybarra, and K. Rios Morrison. 2009. "Intergroup Threat Theory." In *Handbook of Prejudice, Stereotyping and Discrimination*, edited by T. Nelson, 43–59. New York: Psychology Press.

Strauss, C., B. Lever Taylor, J. Gu, W. Kuyken, R. Baer, F. Jones, and K. Cavanagh. 2016. "What Is Compassion and How Can We Measure it? A Review of Definitions and Measures." *Clinical Psychology Review* 47: 15–27.

Thomas, E. F., and C. McGarty. 2017. "When Giving Isn't Enough: Responding to Humanitarian Emergencies through Benevolent and Activist Support." In *Intergroup Helping*, edited by E. van Leeuwen, and H. Zagefka, 369–88. Cham: Springer.

Thomas, E. F., and C. McGarty. 2018. "Giving Versus Acting: Using Latent Profile Analysis to Distinguish between Benevolent and Activist Support for Global Poverty Reduction." *British Journal of Social Psychology* 57 (1): 189–209.

Thomas, E. F., N. Cary, L. G. E. Smith, R. Spears, and C. McGarty. 2018. "The Role of Social Media in Shaping Solidarity and Compassion Fade: How the Death of a Child Turned Apathy into Action but Distress Took it Away." *New Media & Society* 14: 3778–98.

Thravalou, E., B. Martinovic, and M. Verkuyten. 2021. "Humanitarian Assistance and Permanent Settlement of Asylum Seekers in Greece: The Role of Sympathy, Perceived Threat, and Perceived Contribution." *International Migration Review* 55: 547–73.

Triandafyllidou, A. 1999. "Nation and Immigration: A Study of the Italian Press Discourse." *Social Identities* 5 (1): 65–88.

Triandafyllidou, A. 2013. "Migrants and the Media in the Twenty-first Century." *Journalism Practice* 7 (3): 240–47.

UNHCR. 2022a. Ukraine Refugee Situation. https://data.unhcr.org/en/situations/ukraine.

UNHCR. 2022b. Refugees from Ukraine in Italy – UNHCR Profiling Exercise. https://app.powerbi.com/view?r=eyJrIjoiNzJlZWQ0ZmItNzU3ZC00OTgxLWExMGQtYWI4YThjZjc4MGRlIiwidCI6ImU1YzM3OTgxLTY2NjQtNDEzNC04YTBjLTY1NDNkMmFmODBiZSIsImMiOjh9.

van den Bos, K. 2009. “Making Sense of Life: The Existential Self Trying to Deal with Personal Uncertainty.” *Psychological Inquiry* 20: 197–217.

van Dijk, E., and M. Zeelenberg. 2006. “The Dampening Effect of Uncertainty on Positive and Negative Emotions.” *Journal of Behavioral Decision Making* 19: 171–76.

van Prooijen, J. W., and K. M. Douglas. 2017. “Conspiracy Theories as Part of History: The Role of Societal Crisis Situations.” *Memory Studies* 10 (3): 323–33.

Vanman, E. J. 2016. “The Role of Empathy in Intergroup Relations.” *Current Opinion in Psychology* 11: 59–63.

Wilson, T. D., D. B. Centerbar, D. A. Kermer, and D. T. Gilbert. 2005. “The Pleasures of Uncertainty: Prolonging Positive Moods in Ways People Do Not Anticipate.” *Journal of Personality and Social Psychology* 88: 5–21.

Xuereb, S. 2023. “Emotions, Perceived Threat, Prejudice, and Attitudes towards Helping Ukrainian, Syrian, and Somali Asylum Seekers.” *PLoS One* 18 (9): e0290335.

Yitmen, Ş., and M. Verkuyten. 2018. “Positive and Negative Behavioural Intentions towards Refugees in Turkey: The Roles of National Identification, Threat, and Humanitarian Concern.” *Journal of Community & Applied Social Psychology* 28 (4): 230–43.

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