






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Is Exposure to Conflict-Related Violence Associated With Less Intergroup Empathy? The Moderating Role of Ideology

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ABSTRACT

Exposure to conflict-related violence is one of the most harmful consequences of living amidst a violent intergroup conflict. While its potential significance is profound, the impact of exposure to conflict-related violence on intergroup empathy remains largely unexplored. The current paper aims to address this gap by proposing political ideology as a potential moderator of the exposure-empathy link. Three studies conducted among Jewish-Israeli participants reveal an interactive effect of exposure to conflict-related violence and political ideology on intergroup empathy. In Study 1, high (vs. low) exposure to conflict-related violence was associated with decreased empathy among rightists—but increased empathy among leftists—towards individual outgroup members. In Study 2, political ideology also moderated the exposure-empathy relationship: Bereaved (vs. non-bereaved) rightists exhibited significantly less intergroup empathy towards both an individual bereaved outgroup member and the outgroup as a whole, an effect not found among leftists. Study 3 revealed a similar, albeit marginally significant, interactive effect of exposure to conflict-related violence and political ideology on empathy towards individuals living in a *different* violent conflict. Finally, an internal meta-analysis provided further, more robust evidence for these effects. We discuss theoretical and practical implications of the findings and suggest future directions for research on this important issue.

Despite ongoing efforts to promote peace, violent intergroup conflicts still abound internationally, constituting one of civilization's most important challenges. Prolonged violent conflicts demand extensive psychological and material investment from involved individuals (Bar-Tal 2013; Kriesberg 1993), including the psychological toll of frequent exposure to conflict-related violence. Such exposure—including loss of loved ones (bereavement), personal injury, witnessing a violent event and/or damage to property¹—may cause psychological distress, post-traumatic stress symptoms (PSS), depression, and negative

intergroup attitudes and emotions (Canetti-Nisim et al. 2009; Canetti et al. 2014). These, in turn, fuel aggression, thereby feeding an enduring vicious cycle of violence (Bar-Tal 2013).

We propose that an important element of this cycle is the impact of exposure to conflict-related violence on intergroup empathy. Empathy plays an important role in social relations and has a well-established impact on prosocial (e.g., Batson et al. 2002) and aggressive behavior (Cikara, Bruneau, and Saxe 2011). It involves sharing and understanding others'

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emotional states (Decety and Jackson 2004) and, in the context of suffering or misfortune, comprises feelings of sympathy and compassion for the victims (Batson and Shaw 1991).

Empathy has a cognitive component, that involves taking the other's perspective (Stotland 1969), an emotional component, sometimes referred to as "affective empathy" (Zahn-Waxler, et al. 1992), and a prosocial component that refers to the motivation to alleviate another's suffering (Batson and Shaw 1991; De Waal 2008). This final component lends empathy a crucial role in preserving social cohesion and facilitating positive interpersonal and even intergroup relations (e.g., Pliskin et al. 2014). Furthermore, it is negatively correlated with prejudice (e.g., Finlay and Stephan 2000; Pedersen et al. 2004) and support for aggression (Kaukiainen et al. 1999; Shechtman and Basheer 2005), even during times of intergroup conflict escalation (e.g., Rosler, Cohen-Chen, and Halperin 2017).

Despite its documented importance, meaningful obstacles to empathy exist. Experiencing empathy has emotional, cognitive, and practical costs (see Hodges and Klein 2001), which reduce motivations to experience it (Bloom 2017; Zaki 2014). Crucially, intergroup (vs. interpersonal) empathy is even more elusive: People consistently show an intergroup empathy bias, experiencing less empathy toward outgroup members than towards ingroup members (e.g., Cikara et al. 2014; Levy et al. 2016). In intergroup conflicts, empathy biases are further intensified, as the two parties inflict intentional harm on one another and may even experience Schadenfreude (Cikara et al. 2014).

As empathy may benefit intergroup relations, understanding the conditions under which it emerges is crucial, especially in long-term conflicts that entail personal exposure to violence. Accordingly, our main research question is: **How does exposure to conflict-related violence influence levels of intergroup empathy?** More specifically, we aim to focus on the question of why, after experiencing violence, some people feel less and others feel more intergroup empathy. Intuitively, one might expect exposure to conflict-related violence to decrease intergroup empathy, but support also exists for the opposite prediction, that exposure could increase intergroup empathy. Below we review relevant literature on both potential decreases and increases in empathy following exposure to conflict-related violence, as well as relevant indications that ideology may serve as a relevant moderator determining the direction in which exposure to conflict-related violence influences empathy.

With regard to potential decreases in empathy following exposure to conflict-related violence, research has established that exposure can increase threat perceptions and psychological distress (Bhat and Rangaiiah 2015; Canetti-Nisim et al. 2009), and these, in turn, can reduce both the motivation and the cognitive resources needed to empathize with others (e.g., Hellowell and Brewin 2002; Vasterling et al. 2002). This may be especially true for intergroup empathy. First, intergroup empathy biases (e.g., Cikara et al. 2014; Levy et al. 2016) may intensify in the aftermath of exposure to violence, due to people's tendency to stick with their ingroup and distance themselves from others when coping with stress (e.g., Hohman and Hogg 2015; Jonas et al. 2002). Exposure may even lead to PSS,

thereby promoting authoritarian beliefs and ethnocentrism (Hobfoll, Canetti-Nisim, and Johnson 2006), which are associated with ingroup favoritism (Hammond and Axelrod 2006).

Research also suggests that exposure may specifically decrease empathy towards the adversary outgroup in a conflict, towards which blame for violence is often directed. First, interpretations of conflict-related violence may be shaped by societal beliefs delegitimizing the outgroup (Bar-Tal 2013), thereby reducing empathy towards it. Second, exposure may feed into a sense of victimhood, which constitutes a resource over which adversary groups compete (Noor, James Brown, and Prentice 2008; Noor et al. 2008). If individuals exposed to violence take some comfort in the sense of victimhood it grants them, they may avoid empathizing with outgroup members' suffering so as not to give up their victimhood superiority. Third, the adversary in a violent conflict poses realistic threat, which further increases intergroup biases (Maddux et al. 2008), with past victimization known to particularly inhibit empathy towards one's (past and present) enemies (Chaitin and Steinberg 2008). In conclusion, these theoretical rationale and empirical findings suggest potential reductions in intergroup empathy following exposure to conflict-related violence, and specifically empathy towards the adversary outgroup in a conflict.

While the above literature points to intergroup empathy reduction as a plausible outcome of exposure to violence, other accounts support the opposite prediction: Under certain circumstances, exposure to violence could in fact *increase* intergroup empathy. A number of theories, including Altruism Born of Suffering (ABS) (Staub 2005; Staub and Vollhardt 2008; Vollhardt 2009) and empathy born from violence (Hartman and Morse 2015), identify perspective taking, empathy and altruism as potential outcomes of experiencing trauma and adversity (Greenberg et al. 2018; Lim and DeSteno 2016; Tedeschi, Park, and Calhoun 1998). In terms of the theoretical rationale, Hartman and Morse (2015) argue that suffering may increase one's capacity for cognitively understanding others, thereby bolstering a central component of empathy: perspective taking.

Additionally, specific increases in empathy towards the adversary outgroup in the conflict may also be possible. Theorizing on ABS (Staub 2005; Staub and Vollhardt 2008), for example, examines cases in which individuals, due to suffering they endured, become more motivated to care for others. Additional concepts that support this line of thought are inclusive victim consciousness (see Vollhardt 2015) and common victimhood (Shnabel, Halabi, and Noor 2013; Shnabel, Belhassen, and Mor 2018), which refer to an acknowledgment that outgroup and ingroup members have suffered in similar ways. These perceptions may facilitate recategorization processes (Gaertner et al. 1993) leading individuals to consider the outgroup and the ingroup as one social group, of which all members are victims of the conflict. Such recategorization would make it easier and almost natural to empathize with all others within the new group, including members of the former outgroup. Indeed, highly-exposed individuals involved in the Liberian civil war later expressed more compassion for the distress of refugees from the former rival outgroup as well as altruistic helping behaviors (Hartman and Morse 2015). To conclude, both theory and

research suggest that potential increases in intergroup empathy following exposure to conflict-related violence are possible.

1 | The Ideology Moderation Hypothesis

Due to these indications that exposure to violence can either decrease or increase intergroup empathy, we need to understand what shapes the direction of the exposure-empathy association. We argue that political ideology is a prime candidate to explain these diverging outcomes for two main reasons.

First, ideological rightists and leftists² empathic tendencies following exposure may differ due to trait differences between them. Social psychologists have conceptualized political ideology as an “interrelated set of attitudes, values, and beliefs with cognitive, affective, and motivational properties” (Jost, Federico, and Napier 2009, p. 315). This view of ideology as relating to both the contents of beliefs and the needs underlying them lends itself to the assumption that ideology should influence both the affective processes underlying empathy and how individuals respond to major events in their lives—especially in political contexts such as intergroup conflict. Accordingly, we posit that leftists and rightists may experience conflict-related violent events differently. They may attribute different motives, intentions and characteristics to the outgroup and therefore may interpret the situation differently. These different interpretations may subsequently lead to different intergroup empathic responses, as evidenced in findings that rightists and leftist differ in emotion generation (Bar-Tal et al. 2009; Jost, Federico, and Napier 2009; Pliskin and Halperin 2016) and regulation (Pliskin et al. 2018; Porat, Halperin, and Tamir 2016) in the context of intergroup conflicts. In fact, Pliskin and colleagues (2018) found such differences especially in response to empathy-inducing stimuli depicting the outgroup's suffering in the conflict, with leftists experiencing this content more negatively than rightists, reflecting a stronger empathic response.

Further supporting this direction, several past findings specifically suggest ideological asymmetry in empathy, with leftists experiencing more empathy in general (Iyer et al. 2021; Morris 2020; Pliskin et al. 2014; Sparkman, Eidelman, and Till 2019), showing a greater neural empathy response (Zebarjadi et al. 2023), and extending empathy across more distant social categories than do rightists (Waytz et al. 2016). The rationale for these observed differences is that empathic concern in general, and extending empathy across social categories, may be more in line with the egalitarian aspect of leftist ideologies (Jost, Federico, and Napier 2009) and the moral foundations most important to leftist, i.e., avoiding harm and ensuring fairness (Haidt, Graham, and Joseph 2009). These differences are also documented in relation to preferences for empathy, with leftists *wanting* to feel empathy more than rightists do (Hasson et al. 2018). Relatedly, leftists are more likely than rightists to experience a sense of ideological similarity with outgroup members in a violent conflict, with perceived ideological similarity known to further promote empathy (Stevens et al. 2021).

Second, rightists and leftists may differ in their empathic tendencies following exposure to conflict-related violence specifically due to the polarizing impact of mortality salience stemming from the exposure itself (Greenberg, Solomon, and Pyszczynski 1997). Mortality salience is known to strengthen existing ideological inclinations

(Burke, Kosloff, and Landau 2013) and may thus potentially enlarge left-right differences in empathy. In the context of intractable conflicts, rightists show higher delegitimization of the adversary as a justification system (Bar-Tal 2013; Bar-Tal and Hammack 2012), manifested in experiencing less intergroup empathy (e.g., Pliskin and Halperin 2016) and generally experiencing the adversary's suffering less intensely than do leftists (Pliskin et al. 2018). If this is the default state, we would expect exposure to violence—involving greater mortality salience—to amplify the default tendencies of both ideological groups, thus further polarizing known left-right differences in empathic processes. Mortality salience may exacerbate these differences, diminishing rightists' empathy towards outgroup members through the various empathy-decreasing mechanisms identified above, and increasing leftists' empathy through the various empathy-increasing mechanisms above. Building on these findings and rationale, we expect exposed rightists to exhibit reductions in outgroup-targeted empathy and the opposite pattern for exposed leftists.

2 | The Present Research

The present research was conducted within the context of the Israeli-Palestinian conflict, a decades-long conflict that has had profound financial, physical and psychological implications for both parties. Importantly, the conflict involves a power asymmetry (Leshem and Halperin 2020), with the Israelis controlling many aspects of Palestinians' lives in the context of a military occupation. As empathy among the powerful party could mean more in terms of its downstream influence on support for conflict resolution, we focus on Israelis' empathy within this conflict.

Our goal was to examine to what extent political ideology moderates the relationship between exposure to conflict-related violence and intergroup empathy. We predicted that rightists who are more (vs. less) exposed to conflict-related violence would exhibit less empathy towards outgroup members. Conversely, we predicted that leftists who are more (vs. less) exposed would exhibit more intergroup empathy.

To test our hypotheses, we conducted three studies. Study 1 tested the interactive effect of ideology and general exposure to conflict-related violence on empathy towards members of the adversary outgroup, contrasting this with empathy directed at ingroup members. Study 2 focused on one specific, extreme form of exposure, namely bereavement, and its impact on rightists' and leftists' empathy towards a member of the adversary outgroup and towards the adversary outgroup as a whole. Study 3 introduced another type of outgroup—namely, individuals suffering from a conflict external to the one in which participants are involved—by examining the interactive effect of ideology and exposure to violence on Jewish-Israelis' empathy towards Ukrainian victims of war.

3 | Study 1: The Interactive Effect of Ideology and Exposure to Conflict-Related Violence on Intergroup Empathy

Study 1 was designed to test the above hypothesis that the impact of exposure to conflict-related violence on intergroup

empathy would be conditioned by ideology. As we thought it would be beneficial to explore whether our hypothesis and predictions are unique to intergroup empathy, we also measured empathy towards ingroup members and contrasted it with empathy towards outgroup members, but we had no specific predictions regarding intragroup empathy, which was outside our focus. The study employed a mixed within- (ingroup- vs. outgroup-directed empathy) and between- (exposure to violence; ideology along the right-left spectrum) subject design among Jewish Israelis in the context of the Israeli-Palestinian conflict. We administered the questionnaire in two waves, with T2 following a week after T1, allowing us to detach empathy responses from reports of prior exposure while also minimizing participant fatigue in any single session.

3.1 | Method

3.1.1 | Participants

A power analysis using G*Power 3.1 and specifying a small-to-moderate effect size (0.25), an alpha of 0.05, 0.85 power, four experimental groups, and the inclusion of up to three covariates (anticipating potential correlations with demographic variables as in previous studies, e.g., Shulman et al. 2021) yielded a suggested sample size of 251. We oversampled by 25% to account for potential attrition between the waves, leading us to recruit 321 participants via an online survey company. The attrition was slightly greater than anticipated, with a total of 223 Jewish Israelis completing both waves of the survey (119 female; ages 18–50, $M = 32.4$, $SD = 7.78$). The sample leaned to the right (reflecting Jewish-Israeli society), with 22.1% of participants identifying as moderately to extremely leftist, 14% as centrist, and 64% as moderately to extremely rightist. In terms of exposure, 30.5% of participants reported exposure to one type of event, 17.9% to two types, 10.3% to three types, 3.1% to four types, and 0.4% to all five types.

3.1.2 | Procedure

T1 included measures of personal exposure and political ideology, alongside additional background measures that were included for exploratory purposes (see online supplement for full details on all materials employed in this manuscript).

In T2, after several background items, each participant read two texts, counterbalanced in order, that constituted the empathy-inducing stimuli. One text described a Palestinian couple and the other a Jewish-Israeli couple, both facing hardships. Participants then reported their emotional responses—including empathy—towards each couple.

3.1.3 | Empathy-Inducing Stimuli

We used two empathy-inducing texts (based on Hasson et al. 2022). All participants reading both texts, but the presentation order and the national identity of the featured couple were counter-balanced across participants. The hardships described in the scenarios were

unrelated to the conflict, covering illness or financial crisis. We chose conflict-unrelated hardship to avoid additional emotions that may arise when hearing about the adversary's suffering at the hands of your ingroup, such as guilt. The texts were presented as excerpts from ostensibly-published news articles. The couple's identity in each scenario was manipulated by changing the names of the individuals and their place of residence to typical Jewish or Palestinian names and cities.

3.1.4 | Measures

3.1.4.1 | Exposure to Conflict-Related Violence.

Participants indicated whether they had been personally exposed to any of five forms of violence due to the conflict (Bleich, 2003; Hall et al. 2015): loss of a close person (i.e., bereavement), personal injury, injury of a close person, personally witnessing political violence, and financial loss. These differ in terms of intensity and potential impact, but are all personal forms of exposure. Following common practice (e.g., Hall et al. 2015; Hobfoll, Canetti-Nisim, and Johnson 2006; Vashdi et al. 2019), we calculated total exposure by summing the “Yes” responses, creating a scale from 0 (*no exposure*) to 5 (*exposed to all five*).³

3.1.4.2 | Ideology. In T1, participants reported their **Ideology** on a 9-point scale ranging from 1 (*extreme right*) to 9 (*extreme left*).

3.1.4.3 | Demographic Measures. In T1, participants indicated their sex, age, income, education, and whether they had recently experienced any of several difficult life event unrelated to the conflict (with responses of either “yes” or “no”). We included this last measure to allow us to control for its potential impact, but as it did not correlate with any of our main variables, we eventually did not need to adjust for it.

3.1.4.4 | Empathy Towards the Couples in the Scenarios.

Empathy was operationalized as an average of items tapping into the emotional and prosocial components of empathy⁴. At T2, after each text, participants indicated, on a scale ranging from 1 (*not at all*) to 6 (*to a great extent*), the extent to which they experienced each of five empathy-related emotional phenomena toward the target couple (empathy, sympathy, compassion, care, and indifference [reversed]) and the extent to which they would consider helping the couple (five items, e.g., raise money for them, contact them to support them). We computed a single empathy score for each target couple, as a mean of all nine items (empathy towards the Palestinian targets, Cronbach's $\alpha = 0.88$; empathy towards the Jewish-Israeli targets, Cronbach's $\alpha = 0.83$).

Participants also indicated, on a scale ranging from 1 (*not at all*) to 7 (*very much*) to what extent they felt **Empathy towards Palestinians in general** (T2).

3.2 | Results and Discussion

See Table 1 for means, standard deviations, and bivariate correlations among all relevant variables. Participant sex was

associated with empathy towards both the Jewish-Israeli ($r = 0.25, p < 0.001$) and Palestinian ($r = 0.15, p < 0.005$) targets, age was associated with empathy towards both the Jewish-Israeli ($r = 0.14, p < 0.005$) and Palestinian targets ($r = 0.14, p < 0.005$) and religiosity was associated with empathy towards the Palestinian targets ($r = 0.17, p < 0.001$). Therefore, we adjust for participant sex, age and religiosity in all analyses reported below. Unless otherwise noted, adjusting for these variables (vs. not) did not meaningfully alter the findings (all unadjusted analyses are reported in the online supplement).

As our main interest was the interactive effect of ideology \times exposure on empathy towards the outgroup, we examined the two-way interaction between exposure to violence and ideology on empathy towards the Palestinian targets using a linear regression and interaction packages in R (see the full regression model table in the Supporting Information: Table S5). Due to the rightist lean of our sample and to avoid inaccurate interpretations of the simple slopes due to the skewness of the ideology variable, we used percentiles to examine the simple slopes (16% = 2, 84% = 6) (Hayes 2012). Exposure in itself did not predict empathy towards the Palestinians targets ($b = -0.02, SE = 0.06, t = -0.34, p = 0.734$, confidence interval [CI] = [-0.14, 0.10]), but the analysis revealed a marginally-significant trend for political ideology ($b = 0.07, SE = 0.04, t = 1.94, p = 0.053, CI = [-0.00, 0.15]$). As hypothesized, we found a significant ideology \times exposure interaction ($b = 0.10, SE = 0.03, t = 3.45, p = 0.001, CI = [0.04, 0.15]$, Cohen's $f^2 = 0.05$; see Figure 1), such that exposure was associated with decreased empathy among rightists ($b = -0.20, SE = 0.08, t = -2.45, p = 0.02, CI = [-0.36, -0.04]$), and increased empathy among leftists ($b = 0.19, SE = 0.08, t = 2.30, p = 0.02, CI = [0.03, 0.36]$).

To explore the extent to which the findings were unique to intergroup empathy, we then contrasted them with empathy towards the ingroup targets using a mixed-model analysis with the lmer Test package in R. We specified political ideology and exposure as continuous between-subject predictors and the targets' identity as a binary within-subject predictor (see the full regression model table in the Supporting Information: Table S6). The analysis revealed a non-significant (albeit trending) three-way interaction between exposure, ideology and target group on empathy towards the ingroup ($b = 0.04, SE = 0.03, t = 1.68, p = 0.093, CI = [-0.01, 0.09]$). The simple slopes for rightists' and leftists' empathy towards the ingroup targets also did not reach significance, and we thus refrain from interpreting these further (see online supplement for the full analysis).

Finally, to understand whether the ideology \times exposure interaction generalized to empathy towards the outgroup in general, we ran the same two-way interaction analysis, this time predicting empathy towards Palestinians in general (see the full regression model table in the Supporting Information: Table S7). Exposure to violence did not in itself predict empathy towards Palestinians in general ($b = -0.25, SE = 0.19, t = -1.33, p = 0.186, CI = [-0.63, 0.12]$), but political ideology did ($b = 0.21, SE = 0.08, t = 2.72, p = 0.007, CI = [0.06, 0.37]$). The ideology \times exposure interaction showed a non-significant trend ($b = 0.08, SE = 0.04, t = 1.86, p = 0.064, CI = [-0.00, 0.16]$, Cohen's $f^2 = 0.01$). While the trends of the simple slopes were similar to those found for the Palestinian targets, they did not

TABLE 1 | Means, standard deviations, and Pearson correlations among variables in Study 1.

	M	SD	1	2	3	4	5	6	7	8	9	10
1. Exposure	1.13	1.15										
2. Ideology	3.82	2.08	0.04									
3. Empathy towards the Jewish-Israeli targets	4.03	0.95	0.01	-0.09								
4. Empathy towards the Palestinian targets	3.35	1.08	-0.02	0.23**	0.56**							
5. Empathy towards the Palestinians in general	3.39	1.72	0.06	0.45**	0.13	0.53**						
6. Sex (1 = male, 2 = female)	0.54	0.50	-0.09	-0.04	0.25**	0.15*	-0.03					
7. Age	32.43	7.79	0.01	0.19**	0.14*	0.14*	0.11	-0.05				
8. Education	3.01	1.61	-0.01	0.27**	-0.04	0.02	0.08	-0.06	0.33**			
9. Income	2.77	1.38	-0.10	0.19**	0.03	0.12	0.10	-0.05	0.16*	0.32**		
10. Religiosity	3.87	1.33	0.00	0.49**	-0.08	0.17**	0.30**	0.00	0.12	0.04	0.08	
11. Life events	0.45	0.50	0.02	-0.01	0.07	0.08	-0.03	0.19**	0.00	-0.11	-0.05	0.07

Note: *Correlation significant at the 0.05 level (two-tailed). **Correlation significant at the 0.01 level (two-tailed).

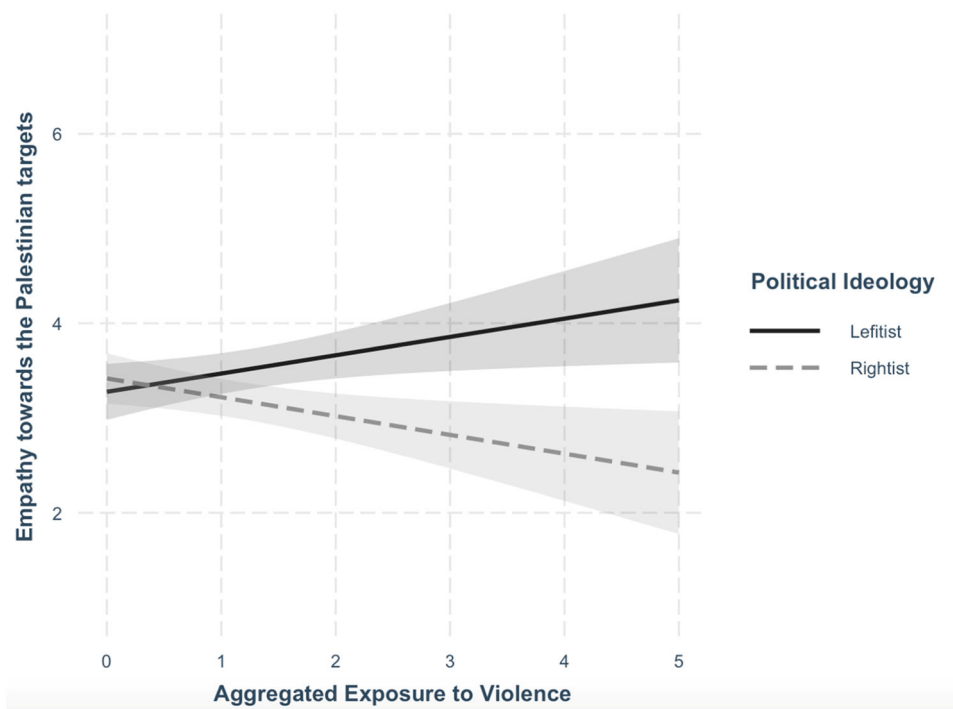


FIGURE 1 | The interactive effect of exposure to violence and ideology on empathy towards the Palestinian targets (Study 1).

reach significance and we thus refrain from interpreting them (see Supporting Information for the full analysis).

Study 1 provided initial support for our hypothesis that ideology moderates the relationship between exposure and intergroup empathy. We identified different relationships between exposure and empathy among rightists and leftists, but only in the case of empathy towards specific members of the adversary outgroup. We did, however, see indications that these trends may extend to empathy towards the outgroup as a whole. While target identity did not further moderate these findings, analysis of simple slopes revealed that the same effects are not present when the target of empathy is an ingroup member. As the effects were unique to intergroup empathy, we focus on this outcome in the following studies.

Despite its promising findings, Study 1 had several limitations. First, exposure was operationalized as the sum of different types of exposure, but some of these may have a more profound impact than others. For example, losing a loved one (bereavement), is fundamentally different from and potentially more impactful than suffering financial loss, as per indications from exploratory data analysis (see online Supporting Information). Second, the empathy-inducing stimuli were unrelated to the conflict. This was intentional, but may make the findings of Study 1 less applicable to intergroup empathy in the wake of conflict-related developments. Study 2 was designed to replicate our Study 1 findings while addressing these limitations.

4 | Study 2: The Interactive Effect of Ideology and Bereavement on Empathy Towards the Adversary in a Conflict

Considering potential differences between different kinds of exposure, and to avoid conflating potentially-different kinds of

exposure, in Study 2 we focused on only one kind of intense exposure: bereavement. Recruiting bereaved individuals is challenging, so we focused recruitment efforts on this population and subsequently matched non-bereaved individuals to our bereaved participants on other relevant criteria. To minimize participants' distress and avoid attrition following successful recruitment, we shortened the procedure substantially. Furthermore, to address a limitation of Study 1, we decided to employ an empathy-inducing stimulus that is directly related to the conflict, namely the testimony of a bereaved individual from the adversary outgroup—a stimulus that may also provoke empathy towards the outgroup as a whole. We hypothesized that ideology would moderate the bereavement-intergroup empathy relationship, such that bereaved (vs. non-bereaved) rightists will express less intergroup empathy, whereas bereaved (vs. non-bereaved) leftists will express more intergroup empathy.

4.1 | Method

4.1.1 | Participants

We recruited 96 Jewish Israelis (64 female; ages 21–70, $M = 42.41$, $SD = 13.79$). Forty-four participants were bereaved, having lost an immediate family member to the conflict. We recruited these individuals through direct appeals to relevant NGOs and through social networks, with the matching non-bereaved sample recruited using snowball sampling. All participants were asked if they had lost a family member due to the conflict, and participants from the non-bereaved sample were re-assigned to the bereaved sample if they answered yes. The sample was ideologically balanced: 41.7% of participants identified as moderately to extremely leftist, 17.7% as centrist, and 40.6% as moderately to extremely rightist. A sensitivity power analysis using G*Power 3.1 and specifying an alpha of

0.05, power of 0.8, and our sample size (96) indicated sufficient power to detect an effect size of Cohen's $f^2 = 0.08$.

4.1.2 | Procedure

Participants received a link for voluntary participation in an online study. The procedure was identical across participants, except for several questions on bereavement (elaborated below) in the demographic portion that were presented only to the bereaved. After responding to demographic questions, participants completed background measures included for exploratory purposes and then viewed a short video testimony by a bereaved Palestinian man (the empathy-inducing stimulus). Next, participants reported their empathy towards the man and towards Palestinians in general and responded to additional exploratory measures.

4.1.3 | Empathy-Inducing Stimulus

The empathy-inducing stimulus was a 2:34-min video of Jamil, a bereaved West Bank Palestinian whose 14-year-old brother was shot to death by Israeli soldiers. The video was taken from an annual memorial ceremony for all victims of the Israeli-Palestinian conflict, organized by Combatants for Peace (Social TV 2013) and was edited to include only the relevant testimony. To avoid demand characteristics as well as backlash due to the focus on a Palestinian victim, participants were told that the video was randomly selected from a pool of videos featuring people of various identities.

4.1.4 | Measures

4.1.4.1 | Bereavement. Participants stated whether they were bereaved, and those who were then responded to several questions regarding their relation to the deceased and the year the deceased died.

4.1.4.2 | Ideology. Participants reported their *Ideology* on a 7-point scale from 1 (*extreme right*) to 7 (*extreme left*).

4.1.4.3 | Demographic Measures. Participants indicated their sex, age, religiosity, and level of education.

4.1.4.4 | Empathy. On a scale ranging from 1 (*not at all*) to 6 (*very much so*), participants indicated to what extent they felt *empathy towards Jamil* for the loss he endured. They also indicated their empathy towards Palestinians from the West Bank and towards Palestinians at large, and these two items were averaged to create an *empathy towards the outgroup* score ($r = 0.68$, $p < 0.001$).

4.2 | Results and Discussion

As we wanted to ensure that the bereaved and non-bereaved sub-samples are comparable, we conducted a series of independent samples t -tests and a χ^2 for sex. The sub-samples did not differ in their political ideology ($t_{(94)} = 0.970$, $p = 0.335$), religiosity ($t_{(94)} = -0.999$, $p = 0.321$), or sex ($\chi^2_{(1,96)} = 2.53$, $p = 0.111$).

Nonetheless, the two sub-samples significantly differed in age ($t_{(94)} = 4.39$, $p < 0.001$) and education ($t_{(94)} = 2.82$, $p = 0.006$). We also examined correlations between demographic variables and our dependent variables (see Table 2), finding empathy towards Palestinians in general to be significantly correlated with age ($r = 0.22$, $p = 0.031$), religiosity ($r = -0.48$, $p < 0.001$), and education ($r = 0.23$, $p = 0.023$). Accordingly, all analyses below adjust for age, religiosity and education. Unless otherwise noted, unadjusted analyses (reported in the online supplement) did not yield meaningfully different results.

To test our hypothesis that ideology moderates the relationship between bereavement and intergroup empathy, we used linear regression and interaction packages in R. We first examined empathy towards Jamil (see the full regression model table in the Supporting Information: Table S8). We found significant main effects for both bereavement ($b = 0.90$, $SE = 0.27$, $t = 3.34$, $p = 0.001$, $CI = [0.36, 1.43]$) and ideology ($b = 0.64$, $SE = 0.11$, $t = 6.06$, $p < 0.001$, $CI = [0.43, 0.85]$) on empathy towards Jamil. Furthermore, we found a significant ideology \times bereavement interaction ($b = -0.75$, $SE = 0.17$, $t = -4.45$, $p < 0.001$, $CI = [-1.08, -0.41]$, Cohen's $f^2 = 0.14$; see Figure 2), such that bereavement was associated with decreased empathy among rightists ($b = 2.36$, $SE = 0.43$, $t = 5.47$, $p < 0.001$, $CI = [1.5, 3.22]$), but not among leftists ($b = 0.12$, $SE = 0.32$, $t = 0.37$, $p = 0.71$, $CI = [-0.51, 0.74]$).

Next, we examined whether the same variables were associated with empathy towards Palestinians in general (see the full regression model table in the Supporting Information: Table S9). We obtained significant main effects for both bereavement ($b = 0.55$, $SE = 0.24$, $t = 2.31$, $p = 0.023$, $CI = [0.08, 1.03]$) and ideology ($b = 0.51$, $SE = 0.09$, $t = 5.42$, $p < 0.001$, $CI = [0.32, 0.69]$). Once again, the ideology \times bereavement interaction was also significant ($b = -0.34$, $SE = 0.15$, $t = -2.24$, $p = 0.028$, $CI = [-0.63, -0.04]$, Cohen's $f^2 = 0.02$; see Figure 3), such that bereavement was associated with decreased empathy towards Palestinians among rightists ($b = 1.21$, $SE = 0.38$, $t = 3.14$, $p < 0.001$, $CI = [0.44, 1.97]$), but not among leftists ($b = 0.02$, $SE = 0.28$, $t = 0.72$, $p = 0.47$, $CI = [-0.36, 0.76]$). When excluding the control variables from the analysis, we did not obtain a significant main effect for bereavement. Furthermore, the interaction term only trended ($p = 0.061$), but the simple slopes within the interaction were not meaningfully different (see online Supporting Information).

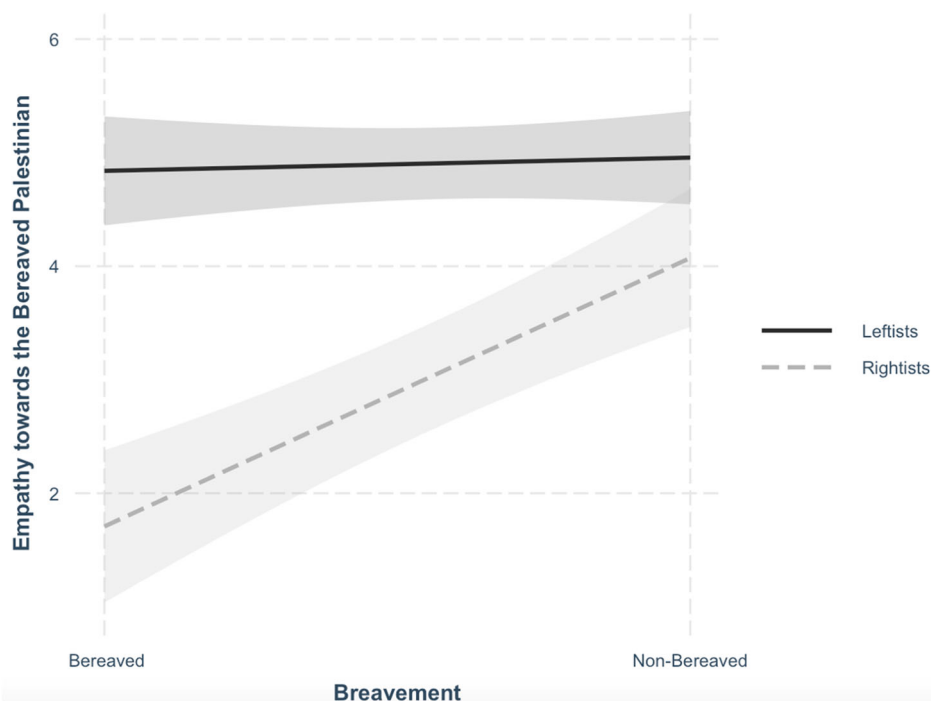
Study 2 provides partial support for our hypothesis and partially replicates the findings of Study 1. We once again found that the relationship between exposure and intergroup empathy depends on one's ideology. Nonetheless, differences between bereaved and non-bereaved individuals emerged only among rightists. Additionally, Study 2 extended the findings of Study 1 by providing tentative evidence that exposure and ideology also interactively influence empathy toward the adversary outgroup as a whole.

The partial inconsistency between Studies 1 and 2 motivated us to collect additional data to better understand if and to what extent exposure to violence is associated with levels of intergroup empathy among leftists. Accordingly, we conducted an additional study during the first weeks of the Russia-Ukraine war that began in February 2022. The study was designed to

TABLE 2 | Means, standard deviations, and Pearson correlations among variables in Study 2.

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
Bereavment (0 = bereaved, 1 = non-bereaved)	—	—	—							
Political Ideology	3.96	1.44	-0.10	—						
Empathy towards Jamil	4.29	1.47	0.25*	0.47**	—					
Empathy towards Palestinians in general	3.16	1.38	0.04	0.65**	0.49**	—				
Age	42.41	13.79	-0.41**	0.32**	0.04	0.22*	—			
Sex (0 = male, 1 = female)	—	—	-0.16	-0.00	0.05	0.03	0.04	—		
Religiosity	2.65	0.90	0.10	-0.55**	-0.16	-0.48**	-0.03	0.04	—	
Education	3.30	1.10	-0.27**	0.23*	0.01	0.23*	0.04	-0.06	-0.32**	—

Note: *Correlation is significant at the 0.05 level (two-tailed). **Correlation is significant at the 0.01 level (two-tailed).

**FIGURE 2** | The interactive effect of bereavement and ideology on empathy towards the bereaved Palestinian in the empathy inducing stimulus (Study 2).

address the inconsistencies between Studies 1 and 2 while elaborating on their results. Specifically, we examined the interactive effect of exposure and ideology on empathy toward a different kind of outgroup: individuals undergoing adversity in a different violent conflict context, namely Ukrainians impacted by the war.

5 | Study 3: The Interactive Effect of Ideology and Exposure on Empathy Towards an Outgroup Impacted by Another Conflict

The 2022 war in Ukraine allowed us to examine the question of ideology moderates the relationship between exposure to conflict-related violence and empathy towards an outgroup involved in an external violent conflict by examining Jewish-

Israelis' empathy towards Ukrainian refugees. Building on the theoretical rationale suggested above, we hypothesized that exposed (vs. non-exposed) rightists will exhibit less empathy towards Ukrainian refugees, while exposed (vs. non-exposed) leftists will exhibit more empathy.

5.1 | Method

5.1.1 | Participants

To detect a small effect (Cohen's $f^2 = 0.02$) at 85% power, a sample size of 462 participants was required. Due to the time sensitivity of the study, we specifically targeted individuals who had already provided data on their exposure to conflict-related violence for another project. Anticipating exclusions, we set a

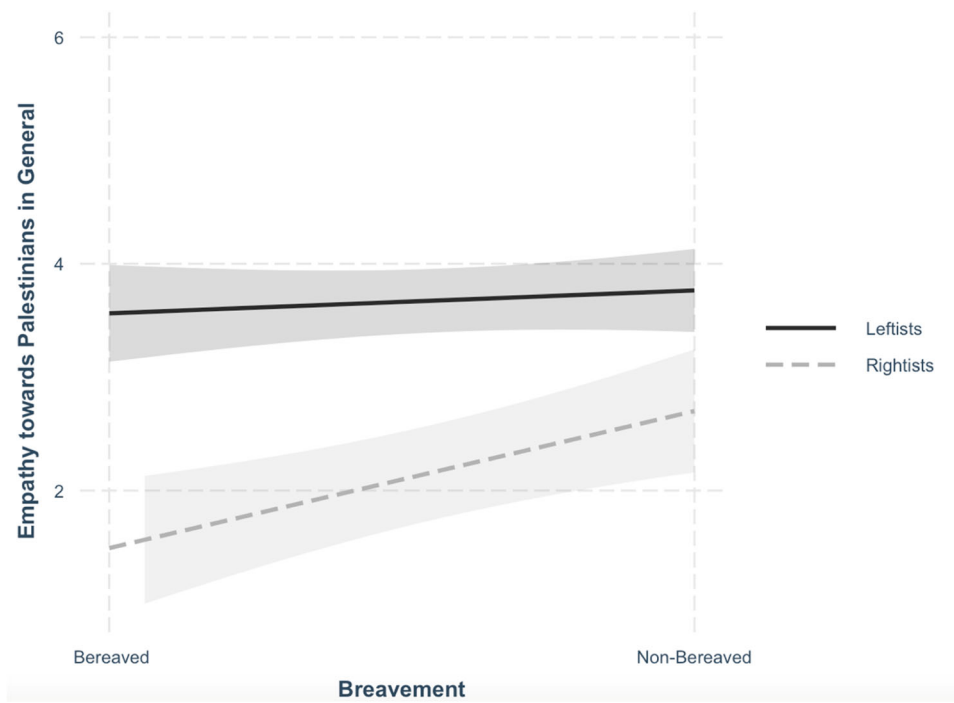


FIGURE 3 | The interactive effect of bereavement and ideology on empathy towards Palestinian in general (Study 2).

target of 600 participants, of which 598 completed the study. Of these, we excluded four for failing to pass attention checks, 10 whose completion time indicated inattentive responding, one participant who did not report his political ideology and 63 participants who participated in the study after a highly-reported terrorist attack that occurred in Israel, yielding a final sample of 520 Jewish Israelis (282 female; ages 17–60, $M = 37.87$, $SD = 12.23$). Two hundred and thirty five participants were personally exposed to violence, and the others were not. In terms of ideology, 32.5% of participants identified as moderately to extremely leftist, 24.8% as centrist, and 42.7% as moderately to extremely rightist.

5.1.2 | Procedure

We first measured emotions towards Ukrainian refugees in general and then presented participants with two fabricated news articles. One article was included for purposes of an unrelated project and focused on Israel's policy towards refugees in general, followed by items assessing participants' policy preferences and support. The other article constituted our empathy-inducing stimulus and described the hardship of a Ukrainian family. This article was followed by measures of participants' empathy. The order in which the articles were presented was counterbalanced and demographics were measured at the end of the survey. Additional measures were included throughout the study for exploratory purposes (see online Supporting Information).

5.1.3 | Empathy-Inducing Stimulus

The empathy inducing stimulus was a short news article, ostensibly published on one of Israel's biggest media outlets.

The article described the hardship of a Ukrainian family that had to leave its home and try to find refuge outside the country. The mother had escaped to the border of Poland with her two children, but the father had to stay and fight in the war. The article elaborates on the family's experiences in the preceding days, which included bombings, chaos, and sleepless nights.

5.1.4 | Measures

5.1.4.1 | Exposure. Personal exposure was pre-determined based on our recruitment strategy. 'Exposed' participants were those recruited because they had been personally exposed to at least one form of conflict-related violence (as operationalized in Study 1), and 'non-exposed' participants were those who had not personally been exposed to even one form of conflict-related violence.

5.1.4.2 | Ideology. Participants reported their *Ideology* on a 9-point scale ranging from 1 (*extreme right*) to 9 (*extreme left*).

5.1.4.3 | Demographic measures. Participants indicated their sex, age, level of education, origin, religiosity, income and personal acquaintance with Ukrainian/Russian citizens.

5.1.4.4 | Empathy. Empathy was operationalized as in Study 1, but with items adapted to the scenario. Following the article, participants indicated, on a scale ranging from 1 (*not at all*) to 6 (*to a great extent*), the extent to which they experienced each of five empathy-related emotional phenomena toward the target couple (empathy, compassion, worry, indifference [reversed] and schadenfreude [reversed]) and the extent to which they would consider assisting the family in each of the three

ways (e.g., donate money for the family). An empathy score was computed as a mean of the eight items (Cronbach's $\alpha = 0.83$).

5.2 | Results and Discussion

We first ran a series of independent samples *t*-tests and a χ^2 test to ensure the two sub-samples did not differ on key demographic variables. We found no differences in political ideology ($t_{(518)} = 0.878$, $p = 0.381$), education ($t_{(511)} = 0.691$, $p = 0.490$) or sex ($\chi^2_{(1,521)} = 0.416$, $p = 0.519$), but the two sub-samples significantly differed in religiosity ($t_{(491)} = 2.26$, $p = 0.024$) and age ($t_{(519)} = 2.79$, $p = 0.005$). Additionally, significant correlations emerged between several demographic indicators and our dependent variables (see Table 3), such that empathy was associated with sex ($r = 0.13$, $p < 0.01$), age ($r = 0.13$, $p < 0.01$), religiosity ($r = 0.34$, $p < 0.01$), and income ($r = 0.10$, $p < 0.05$). Therefore, we adjust for participant sex, age, religiosity and income in all analyses reported below. As before, unless otherwise indicated, the unadjusted analyses did not differ meaningfully from those reported below, see online supplement for full unadjusted analyses).

To examine how exposure and ideology interactively influences empathy towards the Ukrainian family, we used linear regression and interaction packages in R (see the full regression model table in the Supporting Information: Table S10). We found no significant main effects for exposure ($b = -0.25$, $SE = 0.18$, $t = -1.39$, $p = 0.166$, $CI = [-0.60, 0.10]$) or ideology ($b = 0.02$, $SE = 0.03$, $t = 0.57$, $p = 0.567$, $CI = [-0.04, 0.07]$). The ideology \times exposure interaction also did not reach significance, but revealed a trend ($b = 0.07$, $SE = 0.04$, $t = 1.82$, $p = 0.069$, $CI = [-0.01, 0.14]$, Cohen's $f^2 = 0.01$; see Figure 4). Exploratory analyses of the simple slopes revealed a trend for exposure being associated with increased empathy among leftists ($b = 0.21$, $SE = 0.12$, $t = 1.87$, $p = 0.06$, $CI = [-0.01, 0.44]$), but not among rightists ($b = -0.12$, $SE = 0.12$, $t = -1$, $p = 0.32$, $CI = [-0.35, 0.11]$) (see supplement for slight changes when excluding the control variables from the analysis).

Study 3 provided us with a unique opportunity to examine the impact of exposure on empathy towards an outgroup external to participants' own conflict, in response to real-time developments. While not reliably replicating our previous findings, the trends provide partial support for our hypothesis. Interestingly, and in line with the theoretical framework, conditional effects revealed similar trends to those seen in Studies 1 and 2, but these effects did not reach significance and were inconsistent with the effect sizes found for leftists versus rightists in Study 2. To settle the inconsistencies among the three studies, we opted to conduct an internal meta-analysis.

6 | Internal Meta-Analysis

As some similar trends were observed across the studies, but not all were significant, we turned to examine the robustness of our findings across studies by conducting an internal meta-analysis (Goh, Hall, and Rosenthal 2016). We examined the interactive effect of exposure and ideology on intergroup

empathy, by analyzing the interaction terms and the conditional effects of exposure on empathy among rightists and leftists from Studies 1–3 (see Table 4). The meta-analysis yielded a significant exposure \times ideology interaction ($Z = 2.38$, $p = 0.017$), as well as significant conditional effects for both rightists and leftists. Among rightists, exposure was negatively related to intergroup empathy ($Z = -6.48$, $p < 0.001$), and among leftists it was positively related to intergroup empathy ($Z = 3.62$, $p < 0.001$), thus fully supporting our hypotheses.

7 | General Discussion

The present research focused on the association between exposure to conflict-related violence and intergroup empathy, proposing a potential moderator of this association: political ideology. Considering that both a decrease and an increase in intergroup empathy are potential outcomes of exposure to violence, and building on the literature on political ideology, we hypothesized that exposure would be associated with differing patterns of change in empathy among ideological rightists and leftists. In three studies conducted in the context of the Israeli-Palestinian conflict, we found support for this hypothesis.

In Study 1, highly-exposed (vs. less-exposed) rightists exhibited reduced levels of empathy towards specific Palestinian targets, while leftists, on the other hand, exhibited increased levels of empathy towards them. Study 2 partially replicated the findings of Study 1, this time examining the impact of a specific kind of exposure—bereavement—on empathy for suffering endured due to the conflict. Among rightists, as in Study 1, exposed (i.e., bereaved) individuals (compared to non-bereaved individuals) expressed lower levels of empathy towards a specific member of the adversary outgroup and the outgroup as a whole. Among leftists, however, unlike in Study 1, no significant difference was found between bereaved and non-bereaved individuals in their intergroup empathy. Study 3 broadened the picture in terms of the target of empathy and examined the interactive effect of exposure and ideology on empathy towards an outgroup undergoing adversity in a different conflict context. The study only tentatively supported our hypothesis, as the trends were similar to those observed earlier, but did not reach significance. To overcome the inconsistent findings across studies, we conducted an internal meta-analysis. This analysis fully supported our hypotheses, with ideology moderating the effect of exposure on empathy, so that more exposed rightists expressed less intergroup empathy and more exposed leftists expressed more intergroup empathy.

Taken together, these studies provide important evidence that the influence of exposure to violence on intergroup empathy is different for people holding different political ideologies. This evidence emerged both from an examination of the general population and the sampling of one specific sub-set of highly exposed individuals. Furthermore, the studies encompass both empathy towards individual adversary targets and towards the group as a whole, in hardships both related and unrelated to the reality of the intergroup conflict. It also goes beyond exploring this interactive effect towards groups that are involved in the conflict and focuses on an additional target group from a different conflict context. The converging support for our

TABLE 3 | Means, standard deviations, and Pearson correlations among variables in Study 3.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Exposure	0.45	0.50							
2. Ideology	4.56	1.97	−0.04						
3. Empathy	4.28	0.87	−0.01	0.27**					
4. Sex	1.54	0.50	−0.03	0.04	0.13**				
5. Age	37.87	12.23	−0.12**	0.21**	0.13**	−0.07			
6. Religiosity	3.98	1.44	−0.10*	0.55**	0.34**	0.04	0.27**		
7. Education	3.20	1.59	−0.03	0.18**	0.03	−0.03	0.25**	0.10*	
8. Income	3.98	2.63	−0.01	0.14**	0.10*	0.05	0.06	0.13**	0.22**

Note: *Correlation is significant at the 0.05 level (two-tailed). **Correlation is significant at the 0.01 level (two-tailed).

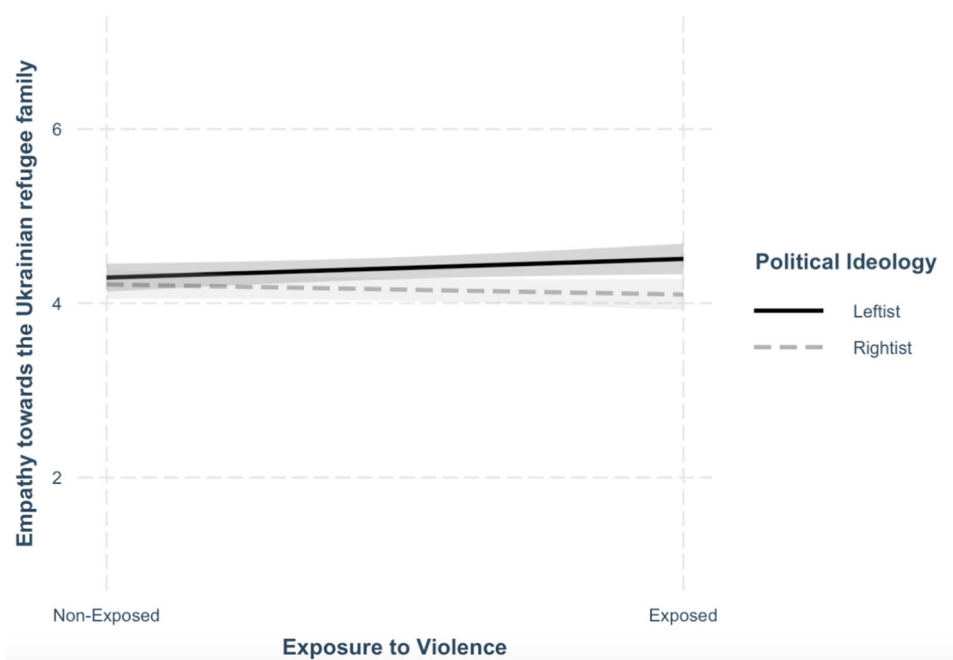


FIGURE 4 | The interactive effect of exposure and ideology on empathy towards the Ukrainian refugee family (Study 3).

TABLE 4 | Meta analysis of the interaction and simple effects of exposure and ideology on empathy towards outgroup targets.

Study	Interaction term	Simple effect for rightists	Simple effect for leftists
Study 1	0.10	−0.21	0.20
Study 2	0.25	−0.80	−0.04
Study 3	0.04	−0.06	0.12
Overall effect (<i>r</i>)	0.08	−0.22	0.12
Significance	$Z = 2.38$ $p = 0.017$	$Z = -6.48$ $p < 0.001$	$Z = 3.62$ $p < 0.001$

Note: *It will be noted that for the sake of the internal meta-analysis the coding of Study 2 was reversed.

hypotheses from all three studies, using different samples, dependent variables and target groups, increases the findings' reliability and our confidence that they capture actual real-world social phenomena.

The research has several theoretical implications—as well as potential applied implications for interventions aiming to increase intergroup empathy. First, it connects three important

literatures (those on exposure to conflict-related violence, intergroup empathy, and ideology) and employs them jointly to create a better understanding of the implications of living in the context of intractable conflict. The study broadens the boundaries of each literature by adding a specific component or context in which it has yet to be tested. Previously, the literature on exposure to violence investigated many of the potential consequences of exposure, ranging from mental health

implications (e.g., Hobfoll et al. 2011) to changes in intergroup attitudes, emotions, and behavior (e.g., Canetti-Nisim et al. 2009). Nonetheless, its impact on intergroup empathy, has not been thoroughly investigated yet. With regards to the literature on intergroup empathy, to the best of our knowledge this is the first study to connect contextual, real-life experiences to the involvement of intergroup empathy among rightists and leftists, opening the door for a richer understanding of the psychological processes underlying empathy directed at outgroup members.

Finally, the political ideology literature has documented and debated differences between individuals on both ends of the ideological spectrum along different psychological dimensions (Chambers, Schlenker, and Collisson 2013; Jost, Federico, and Napier 2009; Sibley and Duckitt 2008), including intergroup empathy (Iyer et al. 2012; Waytz et al. 2016). However, this literature has not addressed the relationship between ideology and empathy in light of major personal experiences, such as exposure to conflict-related violence. For example, our findings reveal a complexity that Waytz and colleagues (2016) did not take into account identifying differences in intergroup empathy between highly-exposed and less-exposed leftists, suggesting that the tendency to extend empathy across social categories is at least partially explained by personal life experiences.

More broadly, we can identify implications related to both intergroup relations and intragroup processes in the context of intractable conflict. Looking at the vicious cycle of violence in which conflicted societies are trapped, previous work on both the societal (Bar-Tal 2013) and individual (Canetti-Nisim et al. 2009) level implies that this cycle is inevitable and bound to be preserved. It suggests that the implications of exposure are necessarily negative in terms of intergroup emotions, thus leading to support for further violent policies. The findings of the present research suggest a more nuanced view, showing individuals on different ends of the ideological spectrum can differ in their emotional responses to conflict-related violence, at least when it comes to empathic responses towards the adversary.

Turning the spotlight onto intragroup processes, the findings suggest that the distinct reactions of leftists and rightists to conflict-related violence may intensify processes of ideological polarization. Acknowledging the suffering of outgroup members might be perceived by some group members as a sign of low loyalty to group norms and values. On the other hand, responding with no empathy to the suffering of others may be seen as immoral, at least in the eyes of some group members, and this can potentially lead to increased political polarization and prejudice (see Brandt and Crawford, 2020). Accordingly, the present research contributes to our understanding of the empathic implications of living within a violent conflict for many years (Cikara et al. 2014; Hartman and Morse 2015). It implies, in accordance with terror management theory, that the experience of such a conflict may enhance ideological polarization processes in the emotional sphere, specifically when it comes to empathic reactions.

Beyond these theoretical implications, the present research may have important applied implications. As violent incidents are prevalent in the context of intergroup conflicts, understanding their impact on levels of intergroup empathy among different

members of society may potentially inform intergroup interventions in general and specifically ones promoting intergroup empathy. In order for interventions to be more effective, they must consider the characteristics, values, perceptions, and needs of their target audiences. In accordance with the literature on wise interventions (Walton 2014), there is a growing trend of creating tailored interventions, and understanding the different dynamics of intergroup empathy among leftists and rightists may thus serve as a good foundation for establishing more effective interventions to raise empathy and assist practitioners in deciding which groups to target.

Despite its important implications, the present research also has several limitations, some of which could be addressed in future work. First, all studies used self-report measures to assess intergroup empathy, which may reflect, in part, motivated correction and potential demand characteristics. Additionally, the studies were correlational in nature, limiting our ability to draw conclusions regarding causation. To overcome this limitation, future research must also include more behavioral, physiological, and neuroscientific measurements such as picture viewing paradigms (Rae Westbury and Neumann 2008) or MEG brain activity measurement (e.g., Levy et al. 2016), as well as longitudinal paradigms that allow for within-subject comparisons of the effects of exposure to violence on empathy.

Another limitation of the present research relates to the generalizability of the findings. The studies were conducted in the same context—the Israeli-Palestinian conflict. As this unique context may have its own specific characteristics, it may be problematic to rely solely on it and generalize from it to other intergroup conflicts. Examinations of this phenomenon in other intractable conflict contexts would increase our findings' validity and may also reveal important cultural or context-dependent differences. In addition, the studies focused on the more powerful party involved in the conflict. Future studies should examine the research question among disadvantaged groups in general and among Palestinians in the context of the Israeli-Palestinian conflict in particular, as power may play an important role in empathic processes.

An additional limitation is related to the operationalization of exposure to conflict-related violence. Operationalizing exposure poses a rather meaningful challenge as it is almost impossible to quantify or compare different kinds of exposure or use them interchangeably. As described above, the first study operationalized exposure as an aggregate of different kinds of exposure. Though such operationalization has been extensively validated in the past (e.g., Hall et al. 2015; Hobfoll, Canetti-Nisim, and Johnson 2006; Vashdi et al. 2019), it may fail to accurately capture the particular added value of each type of exposure. Generally, it is challenging to capture or quantify the unique essence and impact of each kind of exposure, especially due to potential individual differences in this impact. Accordingly, future studies should build on our approach in Study 2 and examine specific kinds of exposure separately, or alternatively try to create a validated measure that attempts to quantify distinct “weights” to different types of exposure.

Finally, the inconsistent results found among leftists and rightists represent another limitation of our research. While for

rightists we found the same trend of decrease in empathy following exposure across studies, in Study 3 it did not reach significance, and the opposite trend for leftists reached significance only in Study 1. Despite the encouraging results of our internal meta-analysis, this inconsistency requires some further empirical exploration. We can speculate here as to the causes of this finding. First, perhaps there are competing processes at play among leftists driving both an increase and a decrease in empathy among them, at times canceling each other out. Exposure to violence may create a dissonance among leftists, with their negative experience contradicting what they believe or want to believe. Such dissonance can be resolved in two different ways: Individuals could adapt their views and emotions in light of the negative experience, but they could also resolve the dissonance by doubling down on their empathy toward the adversary as a means of justifying their beliefs. Finally, the lack of significant increase in empathy among bereaved leftists in Study 2 may reflect a ceiling effect, as empathy was already very high among non-bereaved leftists (approximately 5 on a 6-point scale).

In conclusion, the present research illuminates an important phenomenon, providing initial empirical indications of the moderating effect of ideology on the relation between exposure to conflict-related violence and intergroup empathy in the context of intractable conflict. The research shows that more exposed leftists and rightists exhibit different patterns of change in intergroup empathy when compared to less or non-exposed individuals holding the same ideological worldview. The findings suggest that not all individuals living in intractable conflicts are affected by exposure to the violence it entails in the same manner, and it may have different implications for intergroup empathy. Such a nuanced understanding of the role of ideology within the exposure-empathy link has far-reaching implications for the theoretical and applied understanding of intergroup conflicts, intergroup empathy, political ideology, and exposure to conflict related-violence. Harnessing this understanding may pave the way to more empathic, less violent societies.

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Ethics Statement

All studies included in the paper were approved by the ethics committee of the institute and participants were asked to give their consent to participate in the studies. Following acceptance of the article, all data and materials will be made publicly available on OSF.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Endnotes

¹Hereafter we will use the terms ‘exposure to conflict-related violence’ and ‘exposure’ interchangeably.

²We use the terms “leftists” and “rightists” throughout the manuscript for consistency, as these are common in much of the democratic world, and also in Israel, where our research is embedded. Per Thorisdottir et al. (2017), we assume that past research from other contexts, such as the U.S. where the terms “liberal” and “conservative” are commonly used, can be generalized to our context as well.

³We also explored the impact of each of these types of exposure and its interaction with ideology on empathy. See tables S1-S4 in the online supplement for these analyses.

⁴We ran a confirmatory factor analysis (CFA) to test whether these items can be combined into a single scale, despite representing two facets of empathy. We found that a second-order model in which the two facets are distinct but form a higher-order single construct fit the data well, supporting our empirical approach (for the full CFA, see Table S11 and all models in the supplemental materials).

References

- Bar-Tal, D. 2013. *Intractable Conflicts: Socio-Psychological Foundations and Dynamics*. Cambridge: Cambridge University Press.
- Bar-Tal, D., and P. L. Hammack, Jr.. 2012. “Conflict, Delegitimation, and Violence.” In *Oxford Handbook of Intergroup Conflict*, edited by L. R. Tropp, 29–52. New York, NY: Oxford University Press.
- Bar-Tal, D., A. Raviv, A. Raviv, and A. Dgani-Hirsh. 2009. “The Influence of the Ethos of Conflict on Israeli Jews’ Interpretation of Jewish—Palestinian Encounters.” *Journal of Conflict Resolution* 53: 94–118. <https://doi.org/10.1177/0022002708325942>.
- Batson, C. D., J. Chang, R. Orr, and J. Rowland. 2002. “Empathy, Attitudes, and Action: Can Feeling for a Member of a Stigmatized Group Motivate One to Help the Group.” *Personality and Social Psychology Bulletin* 28, no. 12: 1656–1666. <https://doi.org/10.1177/014616702237647>.
- Batson, C. D., and L. L. Shaw. 1991. “Evidence for Altruism: Toward a Pluralism of Prosocial Motives.” *Psychological Inquiry* 2, no. 2: 107–122. https://doi.org/10.1207/s15327965pli0202_1.
- Bhat, R. M., and B. Rangaiah. 2015. “The Impact of Conflict Exposure and Social Support on Posttraumatic Growth Among the Young Adults in Kashmir.” *Cogent Psychology* 2, no. 1: 1000077. <https://doi.org/10.1080/23311908.2014.1000077>.
- Bleich, A. 2003. “Exposure to Terrorism, Stress-Related Mental Health Symptoms, and Coping Behaviors Among a Nationally Representative Sample in Israel.” *Journal of the American Medical Association* 290, no. 5: 612–620. <https://doi.org/10.1001/jama.290.5.612>.
- Bloom, P. 2017. *Against Empathy: The Case for Rational Compassion*. Random House.
- Brandt, M. J., and J. T. Crawford. 2020. “Worldview Conflict and Prejudice.” *Advances in Experimental Social Psychology* 61: 1–66. <https://doi.org/10.1016/bs.aesp.2019.09.002>.
- Burke, B. L., S. Kosloff, and M. J. Landau. 2013. “Death Goes to the Polls: A Meta-analysis of Mortality Salience Effects on Political Attitudes.” *Political Psychology* 34, no. 2: 183–200. <https://doi.org/10.1111/pops.12005>.
- Canetti, D., E. Russ, J. Luborsky, J. I. Gerhart, and S. E. Hobfoll. 2014. “Inflamed by the Flames? The Impact of Terrorism and War on Immunity.” *Journal of Traumatic Stress* 27, no. 3: 345–352. <https://doi.org/10.1002/jts.21920>.
- Canetti-Nisim, D., E. Halperin, K. Sharvit, and S. E. Hobfoll. 2009. “A New Stress Based Model of Political Extremism: Personal Exposure to Terrorism, Psychological Distress, and Exclusionist Political Attitudes.” *Journal of Conflict Resolution* 53, no. 3: 363–389. <https://doi.org/10.1177/0022002709333296>.
- Chaitin, J., and S. Steinberg. 2008. “You Should Know Better”: Expressions of Empathy and Disregard Among Victims of Massive Social

- Trauma." *Journal of Aggression, Maltreatment & Trauma* 17, no. 2: 197–226. <https://doi.org/10.1080/10926770802344851>.
- Chambers, J. R., B. R. Schlenker, and B. Collisson. 2013. "Ideology and Prejudice: The Role of Value Conflicts." *Psychological Science* 24: 140–149. <https://doi.org/10.1177/0956797612447820>.
- Cikara, M., E. Bruneau, J. J. Van Bavel, and R. Saxe. 2014. "Their Pain Gives us Pleasure: How Intergroup Dynamics Shape Empathic Failures and Counter Empathic Responses." *Journal of Experimental Social Psychology* 55: 110–125. <https://doi.org/10.1016/j.jesp.2014.06.007>.
- Cikara, M., E. G. Bruneau, and R. R. Saxe. 2011. "Us and Them: Intergroup Failures of Empathy." *Current Directions in Psychological Science* 20, no. 3: 149–153. <https://doi.org/10.1177/0963721411408713>.
- De Waal, F. B. 2008. "Putting the Altruism Back Into Altruism: The Evolution of Empathy." *Annual Review of Psychology* 59: 279–300. <https://doi.org/10.1146/annurev.psych.59.103006.093625>.
- Decety, J., and P. L. Jackson. 2004. "The Functional Architecture of Human Empathy." *Behavioral and Cognitive Neuroscience Reviews* 3, no. 2: 71–100. <https://doi.org/10.1177/1534582304267187>.
- Finlay, K. A., and W. G. Stephan. 2000. "Improving Intergroup Relations: The Effects of Empathy on Racial Attitudes." *Journal of Applied Social Psychology* 30, no. 8: 1720–1737. <https://doi.org/10.1111/j.1559-1816.2000.tb02464.x>.
- Gaertner, S. L., J. F. Dovidio, P. A. Anastasio, B. A. Bachman, and M. C. Rust. 1993. "The Common Ingroup Identity Model: Recategorization and the Reduction of Intergroup Bias." *European Review of Social Psychology* 4, no. 1: 1–26. <https://doi.org/10.1080/1479277934300004>.
- Goh, J. X., J. A. Hall, and R. Rosenthal. 2016. "Mini Meta-Analysis of Your Own Studies: Some Arguments on Why and a Primer on How." *Social and Personality Psychology Compass* 10: 535–549. <https://doi.org/10.1111/spc3.12267>.
- Greenberg, D. M., S. Baron-Cohen, N. Rosenberg, P. Fonagy, and P. J. Rentfrow. 2018. "Elevated Empathy in Adults Following Childhood Trauma." *PLoS One* 13, no. 10: e0203886. <https://doi.org/10.1371/journal.pone.0203886>.
- Greenberg, J., S. Solomon, and T. Pyszczynski. 1997. "Terror Management Theory of Self-Esteem and Cultural Worldviews: Empirical Assessments and Conceptual Refinements." In *Advances in Experimental Social Psychology*, edited by M. P. Zanna (29, 61–130). New York: Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60016-7](https://doi.org/10.1016/S0065-2601(08)60016-7).
- Haidt, J., J. Graham, and C. Joseph. 2009. "Above and Below Left-Right: Ideological Narratives and Moral Foundations." *Psychological Inquiry* 20, no. 2–3: 110–119. <https://doi.org/10.1080/10478400903028573>.
- Hall, B. J., L. Y. Saltzman, D. Canetti, and S. E. Hobfoll. 2015. "A Longitudinal Investigation of the Relationship Between Posttraumatic Stress Symptoms and Posttraumatic Growth in a Cohort of Israeli Jews and Palestinians During Ongoing Violence." *PLoS One* 10, no. 4: e0124782. <https://doi.org/10.1371/journal.pone.0124782>.
- Hammond, R. A., and R. Axelrod. 2006. "The Evolution of Ethnocentrism." *Journal of Conflict Resolution* 50, no. 6: 926–936. <https://doi.org/10.1177/0022002706293470>.
- Hartman, A. C., and B. S. Morse (2015). "War-time Violence, Empathy, and Intergroup Altruism: Evidence From the Ivorian Refugee Crisis in Liberia." Retrieved from <http://ssrn.com/abstract=2769889>.
- Hasson, Y., E. Amir, D. Sobol-Sarag, M. Tamir, and E. Halperin. 2022. "Using Performance Art to Promote Intergroup Prosociality by Cultivating the Belief That Empathy Is Unlimited." *Nature Communications* 13, no. 7786: 7786. <https://doi.org/10.1038/s41467-022-35235-z>.
- Hasson, Y., M. Tamir, K. S. Brahm, J. C. Cohrs, and E. Halperin. 2018. "Are Liberals and Conservatives Equally Motivated to Feel Empathy Toward Others." *Personality and Social Psychology Bulletin* 44, no. 10: 1449–1459. <https://doi.org/10.1177/0146167218769867>.
- Hayes, A. F. (2012). PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling [White paper]. Retrieved from <http://www.afhayes.com/public/process2012.pdf>.
- Hellawell, S. J., and C. R. Brewin. 2002. "A Comparison of Flashbacks and Ordinary Autobiographical Memories of Trauma: Cognitive Resources and Behavioural Observations." *Behaviour Research and Therapy* 40, no. 10: 1143–1156. [https://doi.org/10.1016/S0005-7967\(01\)00080-8](https://doi.org/10.1016/S0005-7967(01)00080-8).
- Hobfoll, S. E., D. Canetti-Nisim, and R. J. Johnson. 2006. "Exposure to Terrorism, Stress-Related Mental Health Symptoms, and Defensive Coping Among Jews and Arabs in Israel." *Journal of Consulting and Clinical Psychology* 74, no. 2: 207–218. <https://doi.org/10.1037/0022-006X.74.2.207>.
- Hobfoll, S. E., A. D. Mancini, B. J. Hall, D. Canetti, and G. A. Bonanno. 2011. "The Limits of Resilience: Distress Following Chronic Political Violence Among Palestinians." *Social Science & Medicine* (1982) 72, no. 8: 1400–1408. <https://doi.org/10.1016/j.socscimed.2011.02.022>.
- Hodges, S. D., and K. J. K. Klein. 2001. "Regulating the Costs of Empathy: The Price of Being Human." *The Journal of Socio-Economics* 30, no. 5: 437–452.
- Hohman, Z. P., and M. A. Hogg. 2015. "Mortality Salience, Self-Esteem, and Defense of the Group: Mediating Role of In-Group Identification." *Journal of Applied Social Psychology* 45, no. 2: 80–89. <https://doi.org/10.1111/jasp.12277>.
- Iyer, R., S. Koleva, J. Graham, P. Ditto, and J. Haidt. 2012. "Understanding Libertarian Morality: The Psychological Dispositions of self-identified libertarians." *PLoS One* 7, no. 8: e42366. <https://doi.org/10.1371/journal.pone.0042366>.
- Jonas, E., J. Schimel, J. Greenberg, and T. Pyszczynski. 2002. "The Scrooge effect: Evidence That Mortality Salience Increases Prosocial Attitudes and Behavior." *Personality and Social Psychology Bulletin* 28, no. 10: 1342–1353. <https://doi.org/10.1177/014616702236834>.
- Jost, J. T., C. M. Federico, and J. L. Napier. 2009. "Political Ideology: Its Structure, Functions, and Elective Affinities." *Annual Review of Psychology* 60: 307–337. <https://doi.org/10.1146/annurev.psych.60.110707.163600>.
- Kaukiainen, A., K. Björkqvist, K. Lagerspetz, et al. 1999. "The Relationships Between Social Intelligence, Empathy, and Three Types of Aggression." *Aggressive Behavior* 25, no. 2: 81–89. [https://doi.org/10.1002/\(SICI\)1098-2337\(1999\)25:2<81::AID-AB1>3.0.CO;2-M](https://doi.org/10.1002/(SICI)1098-2337(1999)25:2<81::AID-AB1>3.0.CO;2-M).
- Kriesberg, L. 1993. "Intractable Conflicts." *Peace Review* 5, no. 4: 417–421. <https://doi.org/10.1080/10402659308425753>.
- Leshem, O. A., and E. Halperin. 2020. "Lay Theories of Peace and Their Influence on Policy Preference During Violent Conflict." *Proceedings of the National Academy of Sciences* 117, no. 31: 18378–18384.
- Levy, J., A. Goldstein, M. Inluf, S. Masalha, O. Zagoory-Sharon, and R. Feldman. 2016. "Adolescents Growing up Amidst Intractable Conflict Attenuate Brain Response to Pain of Outgroup." *Proceedings of the National Academy of Sciences* 113, no. 48: 13696–13701. <https://doi.org/10.1073/pnas.1612903113>.
- Lim, D., and D. DeSteno. 2016. "Suffering and Compassion: The Links Among Adverse Life Experiences, Empathy, Compassion, and Prosocial Behavior." *Emotion (Washington, D.C.)* 16, no. 2: 175–182. <https://doi.org/10.1037/emo0000144>.
- Maddux, W. W., A. D. Galinsky, A. J. C. Cuddy, and M. Polifroni. 2008. "When Being a Model Minority Is Good and Bad: Realistic Threat Explains Negativity Toward Asian Americans." *Personality and Social Psychology Bulletin* 34, no. 1: 74–89. <https://doi.org/10.1177/0146167207309195>.
- Morris, S. G. 2020. "Empathy and the Liberal-Conservative Political Divide in the US." *Journal of Social and Political Psychology* 8, no. 1: 08–24. <https://doi.org/10.5964/jssp.v8i1.1102>.
- Noor, M., R. Brown, R. Gonzalez, J. Manzi, and C. A. Lewis. 2008. "On Positive Psychological Outcomes: What Helps Groups With a History of Conflict to Forgive and Reconcile With Each Other." *Personality and*

- Social Psychology Bulletin* 34, no. 6: 819–832. <https://doi.org/10.1177/0146167208315555>.
- Noor, M., R. James Brown, and G. Prentice. 2008. “Precursors and Mediators of Intergroup Reconciliation in Northern Ireland: A new model.” *British Journal of Social Psychology* 47, no. 3: 481–495. <https://doi.org/10.1348/014466607x238751>.
- Pedersen, A., J. Beven, I. Walker, and B. Griffiths. 2004. “Attitudes Toward Indigenous Australians: The Role of Empathy and Guilt.” *Journal of Community & Applied Social Psychology* 14: 233–249. <https://doi.org/10.1002/casp.771>.
- Pliskin, R., D. Bar-Tal, G. Sheppes, and E. Halperin. 2014. “Are Leftists More Emotion-Driven Than Rightists? The Interactive Influence of Ideology and Emotions on Support for Policies.” *Personality and Social Psychology Bulletin* 40, no. 12: 1681–1697. <https://doi.org/10.1177/0146167214554589>.
- Pliskin, R., E. Halperin, D. Bar-Tal, and G. Sheppes. 2018. “When Ideology Meets Conflict-Related Content: Influences on Emotion Generation and Regulation.” *Emotion (Washington, D.C.)* 18, no. 2: 159–170. <https://doi.org/10.1037/emo0000317>.
- Pliskin, R., and E. Halperin. 2016. “Emotions and Emotion Regulation in Intractable Conflict and Their Relation to the Ethos of Conflict in Israeli Society.” In *A Social Psychology Perspective on The Israeli Palestinian Conflict*, edited by K. Sharvit, and E. Halperin, 167–184. New York: Springer.
- Porat, R., E. Halperin, and M. Tamir. 2016. “What We Want Is What We Get: Group-Based Emotional Preferences and Conflict Resolution.” *Journal of Personality and Social Psychology* 110, no. 2: 167–190. <https://doi.org/10.1037/pspa0000043>.
- Rae Westbury, H., and D. L. Neumann. 2008. “Empathy-Related Responses to Moving Film Stimuli Depicting Human and Non-Human Animal Targets in Negative Circumstances.” *Biological Psychology* 78, no. 1: 66–74. <https://doi.org/10.1016/j.biopsycho.2007.12.009>.
- Rosler, N., S. Cohen-Chen, and E. Halperin. 2017. “The Distinctive Effects of Empathy and Hope in Intractable Conflicts.” *Journal of Conflict Resolution* 61, no. 1: 114–139. <https://doi.org/10.1177/0022002715569772>.
- Shechtman, Z., and O. Basheer. 2005. “Normative Beliefs Supporting Aggression of Arab Children in an Intergroup Conflict.” *Aggressive Behavior* 31, no. 4: 324–335. <https://doi.org/10.1002/ab.20069>.
- Shnabel, N., Y. Belhassen, and S. Mor. 2018. “From Victimhood to Peace Activism: The Potential Role of Personal Loss and Inclusive Victim Beliefs.” *Group Processes & Intergroup Relations* 21, no. 8: 1144–1154. <https://doi.org/10.1177/1368430217699463>.
- Shnabel, N., S. Halabi, and M. Noor. 2013. “Overcoming Competitive Victimhood and Facilitating Forgiveness Through Re-Categorization into a Common Victim or Perpetrator Identity.” *Journal of Experimental Social Psychology* 49, no. 5: 867–877. <https://doi.org/10.1016/j.jesp.2013.04.007>.
- Shulman, D., E. Halperin, Z. Elron, and M. Reifen Tagar. 2021. “Moral Elevation Increases Support for Humanitarian Policies, but Not Political Concessions, in Intractable Conflict.” *Journal of Experimental Social Psychology* 94: 104113.
- Sibley, C. G., and J. Duckitt. 2008. “Personality and Prejudice: A Meta-Analysis and Theoretical Review.” *Personality and Social Psychology Review* 12, no. 3: 248–279. <https://doi.org/10.1177/1088868308319226>.
- Social TV. 2013. *Alternative Memorial Day 2013 (Video)*. <https://tv.social.org.il/en/alternative-memorial-day-2013>.
- Sparkman, D. J., S. Eidelman, and D. F. Till. 2019. “Ingroup and Outgroup Interconnectedness Predict and Promote Political Ideology Through Empathy.” *Group Processes & Intergroup Relations* 22, no. 8: 1161–1180. <https://doi.org/10.1177/1368430218819794>.
- Staub, E. 2005. “The Roots of Goodness: The Fulfillment of Basic Human Needs and the development of CARING, Helping and Nonaggression, Inclusive Caring, Moral Courage, Active Bystandership, and altruism born of Suffering.” In *Moral Motivation Through the Life Span*, edited by G. Carlo, and C. Edwards, 33–72. Lincoln: University of Nebraska Press.
- Staub, E., and J. Vollhardt. 2008. “Altruism Born of Suffering: The Roots of Caring and Helping After Victimization and Other Trauma.” *American Journal of Orthopsychiatry* 78, no. 3: 267–280. <https://doi.org/10.1037/a0014223>.
- Stevens, S. M., C. P. Jago, K. Jasko, and G. D. Heyman. 2021. “Trustworthiness and Ideological Similarity (But Not Ideology) Promote Empathy.” *Personality and Social Psychology Bulletin* 47, no. 10: 1452–1465. <https://doi.org/10.1177/0146167220972245>.
- Tedeschi, R., C. Park, and L. Calhoun. 1998. *Posttraumatic Growth: Positive Changes in the Aftermath of Crisis*. Mahwah: Lawrence Erlbaum.
- Vashdi, D. R., D. Navot, I. Lavi, S. E. Hobfoll, and D. Canetti. 2019. “Political Efficacy as a Buffer of the Heightened Risk of Posttraumatic Stress in Disadvantaged Communities.” *Journal of Traumatic Stress* 32, no. 4: 555–565. <https://doi.org/10.1002/jts.22426>.
- Vasterling, J. J., L. M. Duke, K. Brailey, J. I. Constans, A. N. Allain, Jr., and P. B. Sutker. 2002. “Attention, Learning, and Memory Performances and Intellectual Resources in Vietnam Veterans: PTSD and no Disorder Comparisons.” *Neuropsychology* 16, no. 1: 5–14. <https://doi.org/10.1037/0894-4105.16.1.5>.
- Vollhardt, J. R. 2009. “Altruism Born of Suffering and Prosocial Behavior Following Adverse Life Events: A Review and Conceptualization.” *Social justice research* 22, no. 1: 53–97. <https://doi.org/10.1007/s11211-009-0088-1>.
- Vollhardt, J. R. 2015. “Inclusive Victim Consciousness in Advocacy, Social Movements, and Intergroup Relations: Promises and Pitfalls.” *Social Issues and Policy Review* 9, no. 1: 89–120. <https://doi.org/10.1111/sipr.12011>.
- Walton, G. M. 2014. “The New Science of Wise Psychological Interventions.” *Current Directions in Psychological Science* 23, no. 1: 73–82. <https://doi.org/10.1177/0963721413512856>.
- Waytz, A., R. Iyer, L. Young, and J. Graham. 2016. “Ideological Differences in the Expanse of Empathy.” In *Social psychology of political polarization*, edited by P. Valdesolo, and J. Graham, 61–77. New York, NY: Routledge.
- Zaki, J. 2014. “Empathy: A Motivated Account.” *Psychological Bulletin* 140, no. 6: 1608–1647. <https://doi.org/10.1037/a0037679>.
- Zebarjadi, N., E. Adler, A. Kluge, M. Sams, and J. Levy. 2023. “Ideological Values Are Parametrically Associated With Empathy Neural Response to Vicarious Suffering.” *Social cognitive and affective neuroscience* 18, no. 1: nsad029. <https://doi.org/10.1093/scan/nsad029>.

Supporting Information

Additional supporting information can be found online in the Supporting Information section.