Never Again: The Holocaust and Political Legacies of Genocide*

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Do individuals previously targeted by genocide become more supportive of other victimized groups? How are these political lessons internalized and passed down across generations? To answer these questions, we leverage original survey data collected among Holocaust survivors in the United States and their descendants, Jews with no immediate family connection to the Holocaust, and non-Jewish Americans. We find that historical victimization is associated with increased support for vulnerable outgroups, generating stable political attitudes that endure across generations. Holocaust survivors are most supportive of aiding refugees, followed by descendants, especially those who grew up discussing the Holocaust with their survivor relatives. An embedded experiment demonstrates the steadfastness of these attitudes: unlike non-Jews or Jews without survivor relatives, survivors' and descendants' views toward refugees do not change after reading an ingroup- versus outgroup-protective interpretation of the "never again" imperative. Histories of victimization can play an ameliorative role in intergroup relations.

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In the 20th Century, government violence and repression claimed the lives of tens of millions of people, by either directly killing them or by placing them in situations where they were likely to starve, fall ill and die. In its most extreme form, genocide, this repression seeks to "destroy, in whole or in part, a national, ethnical, racial or religious group, as such." Since the end of World War II, social scientists have documented over 40 cases of genocide and at least 100 non-genocidal campaigns of mass killing. The effects of political violence can reverberate beyond the immediate pain and suffering, shaping political participation, social cohesion, identity, and economic development. These effects can be incredibly durable, persisting across generations.

While past studies find that exposure to violence hardens attitudes toward the perpetrators and groups associated with them,⁸ its effect on long-term attitudes toward outgroups *in general*, including those with no clear link to the historical trauma, is less understood.⁹ How do survivors internalize and pass on political lessons that shape their approach to intergroup relations?

One possibility is that the trauma of violent victimization impacts subsequent social and political cognitions. This may, in turn, heighten perceived threats to the ingroup, making survivors myopically focused on protecting their own ethnic or religious group

^{1.} UN GAOR, GA Res 260A(III), 1948.

^{2.} Anderton 2016. This statistic is a subject of some debate, as it depends both on one's definition of genocide (e.g. what "in whole or in part" means) and one's reading of individual cases.

^{3.} Blattman 2009.

^{4.} Gilligan, Pasquale and Samii 2014.

^{5.} Balcells 2012.

^{6.} Acemoglu, Hassan and Robinson 2011; Besley and Reynal-Querol 2014.

^{7.} Acharya, Blackwell and Sen 2016b; Charnysh 2015; Homola, Pereira and Tavits 2020.

^{8.} Beber, Roessler and Scacco 2014; Hayes and McAllister 2001; Lupu and Peisakhin 2017.

^{9.} Dinas and Fouka forthcoming.

and hyper-sensitive to *any* outgroup threats.¹⁰ If so, survivors and their descendants may be *less* willing to help victimized outgroups in the future, particularly if they believe these groups also represent a threat.

A second possibility is that experiences of violent victimization help generate an appreciation for the personal costs of violence. Shared experiences of victimization may create a sense of kinship between otherwise dissimilar ethnic and religious groups, making survivors more likely to support outgroups whose experiences are historically resonant with their own¹¹ and more aware that violence against others can spill over and affect their own safety and well-being.¹² As such, exposure to violence may engender empathy, increasing survivors' and their descendants' support for victimized outgroups.

The level of conviction one attaches to outgroup attitudes may depend on the proximity of one's exposure to the traumatic event: whether it is firsthand and intimate or remote and indirect. While survivors may internalize long-term political lessons through their personal experience of victimization, everyone else must acquire these lessons through indirect channels. Descendants of survivors, for example, may inherit their parents' attitudes through family socialization: so-called "dinner table" interactions that foster a convergence in political behaviors and preferences. Hose without survivor relatives may acquire these attitudes through community-level socialization: when violence is a group-level trauma — targeting victims for membership in a community rather than individual actions — narratives of past victimization may coalesce into a collective memory that influences perceptions of political events, regardless of

^{10.} Canetti et al. 2018; Nunn and Wantchekon 2011.

^{11.} Stürmer et al. 2006.

^{12.} Cialdini et al. 1997.

^{13.} Rogoff et al. 2003.

^{14.} Jennings, Stoker and Bowers 2009.

^{15.} Bar-Tal 2003; Sapiro 2004.

personal or family exposure. ¹⁶ Each degree of exposure — personal, family, or group — implies a different mechanism of attitude formation and transmission.

This article investigates the potentially competing lessons of political violence and their transmission across generations in the context of the Holocaust and the abstract principle of "never again." Using an original survey of American Jews — including hundreds of Holocaust survivors and their descendants, a very difficult-to-reach population — we analyze variation in attitudes toward a politically salient outgroup, Syrian refugees. We examine the association between support for Syrian refugees and histories of personal victimization by comparing baseline attitudes across survivors, descendants, non-descendant Jews and non-Jews. We analyze the relative malleability of this support in each population using a randomly assigned experimental treatment that presents the "never again" imperative as primarily focused on *ingroup*- versus *outgroup*-protection.¹⁷

Our evidence suggests that personal-, family- and group-level exposure to violence are associated with increased support for victimized outgroups, but the extent of this support depends on the level of exposure. We find that Holocaust survivors were much more likely to support accepting Syrian refugees into the United States than all other groups. Descendants expressed similar attitudes, particularly if they grew up in households that frequently discussed the Holocaust. Both groups were more supportive of refugees than respondents with no direct family connection to the Holocaust. Pre-exposure family demographics cannot fully explain these differences, nor can variation in wartime experiences or post-exposure factors like educational attainment, income or partisan politics. Survivors' and descendants' views were quite stable: while

^{16.} Community socialization could, of course, also indirectly foster family socialization if family members bring community narratives into household conversations.

^{17.} The hypotheses, sampling procedure, measures, and analysis plan for this study were pre-registered with EGAP/OSF prior to completion of data collection: https://osf.io/gc8xn/?view_only=1022199229e5447fbd0b9a4d0a150ff4.

non-descendants and non-Jews were significantly swayed by an experimental treatment re-interpreting the "never again" imperative, survivors and descendants were not.

These results are robust to a variety of statistical tests and alternative explanations, including tests for confounders across exposure categories (e.g. different immigration histories), multiple adjustments to account for post-treatment bias, and the sensitivity of results to potential biases in survey attrition patterns, among others.

Together, these findings contribute to research on the long-term effects of violence, ¹⁸ the foundations of intergroup prejudice and tolerance, ¹⁹ and public opinion on immigrants and refugees. ²⁰ We build on this research by showing how countervailing ingroup- and outgroup-protective considerations can inform the political attitudes of victimized groups. We also conduct the largest-ever survey of outgroup attitudes among Holocaust survivors — an increasingly hard-to-reach population that carries the living memory of one of history's darkest chapters.

Exposure to Violence and Outgroup Attitudes

Outgroup attitudes can shape the public's policy preferences on a range of foreign and domestic issues, including support for humanitarian aid,²¹ use of military force,²² and immigration.²³ Yet there is much we do not know about how attitudes towards outgroups come about, why they persist, and how exposure to violence may affect them.

Past research has often highlighted the deleterious role of threat perceptions in in-

^{18.} Balcells 2012; Dinas and Fouka forthcoming.

^{19.} Williamson et al. 2020; Simonovits, Kezdi and Kardos 2018; Sirin, Villalobos and Valentino 2016.

^{20.} Brader, Valentino and Suhay 2008; Hainmueller and Hopkins 2014.

^{21.} Milner and Tingley 2013.

^{22.} Kertzer et al. 2014.

^{23.} Hainmueller and Hopkins 2014.

tergroup relations.²⁴ Groups that have experienced purposeful, violent victimization may be particularly sensitive to new potential threats, developing long-term feelings of vulnerability and seeing other groups as dangerous.²⁵ Several studies have shown that exposure to violence increases psychological distress²⁶ and anxiety,²⁷ negatively impacting inter-group trust and increasing support for separation and exclusion.²⁸ This heightened threat sensitivity could make survivors of violence less supportive of outgroups such as immigrants and refugees, if they also believe these outgroups may pose a potential threat. ²⁹ Indeed, studies of Holocaust survivors and descendants in Israel have found amplified existential threat responses to contemporary political violence³⁰ and a tendency to view the world as hostile.³¹ To the extent that trauma increases threat perceptions, our first hypothesis expects a heightened desire to protect the ingroup.

H1 **Ingroup Defense:** All else equal, Holocaust survivors and their descendants will be *less* supportive of other vulnerable outgroups than non-survivor populations.

The impact of this trauma may depend on the proximity of one's exposure: whether one experienced violence personally, or indirectly through their family or group. If the ingroup-defensive impulse is indeed strongest for those most intimately familiar with violence, then we should expect descendants of survivors to exhibit less threat-sensitivity and wariness toward aiding outgroups than their parents or grandparents.

^{24.} Riek, Mania and Gaertner 2006; Stephan et al. 2005.

^{25.} Staub 2006.

^{26.} Canetti et al. 2013.

^{27.} Gadarian and Albertson 2014.

^{28.} Beber, Roessler and Scacco 2014; Nunn and Wantchekon 2011.

^{29.} Wohl and Branscombe 2008.

^{30.} Canetti et al. 2018.

^{31.} Shrira 2015.

H2 **Direct Trauma:** All else equal, descendants of Holocaust survivors will be *more* supportive of other vulnerable outgroups than survivors.

An alternative possibility is that personal (or even family) exposure is less salient in cases of mass violence, where all members of a group are potential targets. To the extent that genocide constitutes political violence directed towards an entire ethnic or religious group, this particular form of victimization may lead all group members (e.g. all Jews) to converge in their attitudes. In this case, we would expect all group members to respond similarly to outgroups, irrespective of their personal connection to the original trauma.

H3 **Group Exposure:** All Jews, irrespective of familial exposure to the Holocaust, will respond similarly to outgroups (as compared to non-Jews).

Threat sensitivity is not, however, the only psychological response to violence. Survivors can sometimes channel their trauma in more positive directions, exhibiting prosocial attitudes and behaviors³² and experiencing so-called "post-traumatic growth."³³ Recent studies have found that individuals and groups more exposed to discrimination, violence and displacement tend to be more welcoming of refugees and migrants.³⁴ This suggests that empathy, much like threat, can form the basis for outgroup attitudes.

A core component of empathy is the ability to not only sympathize with the suffering of others, but also to imagine oneself in their position and identify with their predicament.³⁵ Survivors of violence may find it easier to empathize with other victimized peoples, whose experiences resonate with their own historical treatment.³⁶ Yet this sup-

^{32.} Macksoud and Aber 1996; Staub and Vollhardt 2008.

^{33.} Tedeschi and Calhoun 1995.

^{34.} Dinas and Fouka forthcoming; Sirin, Villalobos and Valentino 2016.

^{35.} Davis 2018; Stephan and Finlay 1999.

^{36.} Eklund, Andersson-Straaberg and Hansen 2009; Stürmer et al. 2006.

port need not be purely altruistic.³⁷ It can emerge for two reasons, both of which are broadly empathetic, but also potentially beneficial to the ingroup.

First, violence may reshape survivors' understanding of their ingroup. Instead of viewing their identity as predominantly tied to an ethnic or religious background, survivors' social identity becomes, in part, rooted in their experience of victimization. As a result, they come to see other victimized populations as more similar to themselves and as members of a new "fellow stigmatized" ingroup.³⁸ Survivors may thus see support for other persecuted groups as support for those who share a piece of their identity.³⁹

A second reason why survivors may support other victimized groups is that they have learned firsthand that violence against others tends to spill over, threatening the security of the ingroup. In this sense, seemingly empathetic support for outgroups may reflect a re-assessment of one's self-interest as dependent on others' welfare. Survivors may still see ethnic or religious outgroups as "others," while recognizing that upholding norms of aiding outgroups and preventing violence may be beneficial to their ingroup. In protecting other victimized groups, survivors of mass violence also protect themselves.

In either case, personal histories of victimization would play an important role in shaping support for victimized outgroups, either by aligning survivors' identities more closely with fellow victims, or bringing potential spillovers of political violence into sharper relief. Our third hypothesis thus expects survivors of political violence to be more supportive of ethnic and religious outgroups whose experiences parallel their own.

H4 **Outgroup Protection:** All else equal, Holocaust survivors and descendants will be *more* supportive of vulnerable outgroups than non-survivor populations.

^{37.} Staub and Vollhardt 2008.

^{38.} Gaertner et al. 2000.

^{39.} Monroe 1998.

^{40.} Cialdini et al. 1997.

The Holocaust and "Never Again"

The Holocaust is an important context in which to study the impact of violent victimization on long-term political attitudes toward outgroups. Germany's murder of six million European Jews in 1932-1945 has a unique place in Jewish collective memory, forming an essential component of the so-called "civil religion" of modern diaspora Jewry. In a 2020 Pew study of Jewish Americans, for example, 76% listed "remembering the Holocaust" as an essential part of their Jewish identity.

The centrality of this experience to contemporary Jewish life and collective memory might make the Holocaust seem like a most-likely case for the intergenerational transmission of attitudes. Yet the Holocaust also represents a hard test for the ameliorative role of empathy in intergroup relations. Because of its unique scale and devastation, Holocaust survivors and their descendants may see others' experiences of victimization as categorically incomparable to their own, ⁴² provoking backlash among those who resent the comparison, ⁴³ and limiting the potential of perspective-taking. ⁴⁴

The direction in which Holocaust exposure might affect outgroup attitudes is unclear. The few studies that compare the views of survivors to Jews with no Holocaust background have found modest or insignificant differences across most social and economic issues. For descendants, the picture is similarly mixed, with researchers finding survivors' children to be more liberal, centrist and conservative than other Jews.

^{41.} Woocher 1986.

^{42.} Lipstadt 2012; Margalit and Motzkin 1996.

^{43.} Ariely 2020.

^{44.} Vollhardt, Nair and Tropp 2016.

^{45.} Weinfeld, Sigal and Eaton 1981.

^{46.} Weinfeld and Sigal 1986.

^{47.} Carmil and Breznitz 1991.

^{48.} Lazar et al. 2004.

The expression "never again" illustrates the Holocaust's complicated political legacy. While many non-Jewish observers interpret this phrase as a call to prevent future genocides, it in fact carries multiple meanings for the Jewish community, each with different implications for Jews' interactions with outgroups. In a study of Israeli society, Klar, Schori-Eyal and Klar find that "never again" has at least four distinct interpretations: (1) never be a passive victim; (2) never forsake your brothers; (3) never be a passive bystander; and (4) never be a perpetrator. ⁴⁹ The first two are *ingroup* focused, emphasizing the defense of Jews against external threats. The latter two are *outgroup* focused, stressing the need to protect other victims, regardless of who they are.

These conflicting interpretations – "never again allow *others* to be victimized" or "never again will *we* be victimized" – convey divergent lessons for the choice between helping others and saving one's group. An ingroup focused interpretation calls on Jews to defend themselves, and never again "go like lambs to the slaughter." For example, many see Israel's robust defense force as the fulfillment of a promise to defend Jews against those who would harm them. An outgroup focused interpretation instead sees "never again" as a call to prevent violence and injustice wherever and to whomever they occur. The campaign against genocide in Darfur by Jewish World Watch, whose mission statement explicitly invokes the Holocaust, is one such example.

The prevalence of these two competing imperatives – protect the ingroup versus protect outgroups – means that the "never again" lesson may be channeled differently depending how the lesson is framed and applied to a specific outgroup. Though these two goals are not mutually exclusive,⁵⁰ they may come into conflict when one victimized group sees another as both victim and potential threat.⁵¹ Our final hypothesis follows:

^{49.} Klar, Schori-Eyal and Klar 2013, 126.

^{50.} Brewer 1999.

^{51.} Warner, Wohl and Branscombe 2014.

H5 **Framing Lessons:** Framing the political lessons of exposure to violence differently can shift support toward vulnerable outgroups, such that: a) Inclusive, outgroupprotective "never again" frames will *increase* support; and b) Exclusive, ingroupprotective "never again" frames will *decrease* support.

The impact of these competing interpretations, however, may vary by personal and family histories of Holocaust exposure. For example, survivors may find these frames more personally resonant. Alternatively, because survivors have more direct experiences with violence — and more opportunities to share and process these experiences — their views may be more established. Meanwhile, those who hold "shallow" attitudes, having less extensively engaged with the question before receiving the treatment, may be more susceptible to these types of framing effects than those with more settled views. ⁵²

This tension in interpreting the lesson of never again as in-group versus out-group focused is particularly visible in political discussions over immigrants and refugees, whom the public may perceive as simultaneously threatening⁵³ and deserving of sympathy.⁵⁴ Refugees fleeing the Syrian Civil War (2011-) are a prime example. In refugee-receiving states, attitudes have oscillated between a desire to protect victims of state violence, and a desire to protect the local population from them. For example, one frequently-cited security concern is that extremists or terrorists may hide among the refugees.⁵⁵ For Jewish Americans, an additional source of unease is the possibility that many Syrians may hold anti-Semitic or anti-Israel attitudes.⁵⁶ Prominent organizations like the American Jewish Committee publicly voiced this concern, while media reports on anti-Semitic attitudes

^{52.} Krosnick and Abelson 1992.

^{53.} Brader, Valentino and Suhay 2008.

^{54.} Adida, Lo and Platas 2018.

^{55.} See e.g., "How ISIS smuggles terrorists among Syrian Refugees," Newsweek.

^{56.} See e.g., "No one is vetting Syrian refugees for signs of antisemitism," Jerusalem Post.

among Syrian refugees in Germany and the "new European anti-semitism" fueled by waves of Muslim migration have further reinforced this narrative. Thus, American Jews may perceive Syrian refugees as potentially dangerous on multiple fronts, threatening them as Americans due to their perceived association with extremism and terrorism and as Jews due to their perceived anti-Semitism.

Invocations of the Holocaust and its moral lessons are prevalent among Jewish Americans on both sides of the refugee issue. For example, a widely circulated image from protests against President Donald J. Trump's temporary ban on immigration from several Muslim-majority countries in 2017 showcased a Jewish man with his son alongside a Muslim man and his daughter, holding the sign "We've seen this before, Never Again." Yet Jewish Americans opposed to accepting Syrian refugees have also invoked the lessons of the Holocaust. For example, an editorial published in the prominent Jewish magazine *Tablet* asked whether Jews endanger themselves by helping "anti-Semites" immigrate to America, noting that – unlike most Syrian refugees – European Jews were "the objects of genocide rather than the collateral victims of civil war."

Syrian refugees are thus a particularly salient outgroup on which to gauge the relative influence of competing "never again" imperatives on Jewish political attitudes. An inclusive, outgroup focused interpretation would make accepting refugees a moral imperative, even at the risk of harm to the ingroup. An exclusionary interpretation would advance a more cautious view, aimed at protecting the ingroup against external threats.

Research Design

We examine these potential long-term effects of exposure to genocide on political attitudes with original survey data, including an embedded experiment, conducted from Summer 2017 to Winter 2018. We survey individuals from four populations living in the United States: Holocaust survivors (personal exposure), children and grandchildren of

survivors (family exposure), Jews with no immediate family connection to the Holocaust (group exposure), and non-Jewish Americans (no exposure).⁵⁷ The survey also includes a framing experiment, which randomly manipulates the interpretation of "never again" as emphasizing ingroup versus outgroup protection (or neither) before asking subjects about their support for Syrian refugees and other outgroups.

Sample

Our sample includes respondents across four levels of exposure to the Holocaust: Holocaust survivors, descendants of Holocaust survivors, non-descendant Jews, and non-Jews. To recruit this difficult-to-reach sample, we used a combination of three sources:

1) the online survey panel firm Prime Panels, 2) the national database of survivors on file at the United States Holocaust Memorial Museum, and 3) email listservs from regional Holocaust museums and descendant online community groups.⁵⁸

Our outreach through Prime Panels took place between November 24th 2017 and January 10th 2018.⁵⁹ It yielded a sample of 912 American Jews, 202 of whom reported a direct family tie to the Holocaust (parent or grandparent) and 517 non-Jewish Americans. We recruited an additional 115 descendants (and 8 non-descendant Jews) using regional Holocaust museum listservs, groups within the second and third generation survivor community, and referrals from relatives who took the survey.⁶⁰ Because most

^{57.} We rely on self-reported measures of Holocaust exposure and religious identity: 1) "Are you a Holocaust survivor"; 2) "Was anyone in your immediate family a Holocaust survivor", 3) "Do you currently identify as Jewish". If all three are no, then the individual is placed in the non-Jewish category. It is possible that some respondents in our non-Jewish sample may have been born Jewish but no longer self-identify as such or that some respondents in our Jewish sample were not born Jewish but converted later. There is also a small number of self-identified survivors (7%) and descendants (4%) who do not currently identify as Jewish by religion (similar to the rate in the broader American Jewish population, according to Pew).

^{58.} See SI A1 for an in-depth discussion of sampling considerations.

^{59.} Prime Panels (Cloud Research) draws on hundreds of online panels, with a combined subject pool of over 10 million. This enables sampling of harder-to-reach populations.

^{60. 47% (148)} of sampled descendants were second generation, and 53% (167) were third.

American Jews descend from the European diaspora, we restricted our non-Jewish sample to White Americans, allowing us to achieve more balance on respondents' countries of family origin across the Jewish and non-Jewish samples. This restriction reduces the risk of confounding from exposure to racism, segregation and other forms of systemic discrimination. This helps us isolate the effects of one particular group's victimization (Jews and the Holocaust) as compared to groups that have, by and large, *not* faced a recent history of group victimization (white Americans).

We drew the survivor sample largely from the United States Holocaust Memorial Museum's Registry of Holocaust Survivors, which contains information on over 208,000 Holocaust survivors from around the world, including some 2000 for whom email addresses are available. The Registry defines survivors as "any persons, Jewish or non-Jewish, who were displaced, persecuted, or discriminated against due to the racial, religious, ethnic, social, and political policies of the Nazis and their collaborators between 1933 and 1945." Thus, the USHMM database (and our sample) includes survivors who suffered a variety of forms of victimization at the hands of the Nazis, which is theoretically important. While the popular image of a typical Holocaust survivor centers on survivors of concentration camps, these individuals in fact represent only a small fraction of total survivors. Through multiple discussions with the museum, we secured their consent to use their Registry to invite U.S.-based survivors (with email addresses on file) to participate in a research study. No prior academic study, to our knowledge, has used USHMM's service to reach survivors en masse. 62

One potential concern with using the USHMM database is that membership in it may

^{61.} Finkel 2017.

^{62.} USHMM circulated our survey on Wednesday, October 18th 2017. By October 20th, we had an open rate of 41.5% and a click rate through to the survey of 12.4%. These metrics are quite respectable by polling standards, particularly given our subjects' advanced age and the likelihood that many emails may be outdated and no longer in use. The industry average for political email surveys is a 22.2% open and 2.2% click rate.

be associated with political attitudes. For example, survivors with more leftist political leanings may have been more likely to provide their contact information to a museum whose work involves preventing future genocides. This is unlikely for several reasons. First, survivors join the database primarily to track down lost relatives. The main goals of the registry are not ideological, but are rather to 1) document all victims of the Holocaust and 2) help survivors locate lost family and friends using a Third Party Contact Service. If survivors or descendants find a name they believe to be a relative, they forward a request to the museum, which, in turn, notifies the other listed survivor.

Second, our data show no indication that survivors recruited through USHMM are disproportionately likely to identify with the Democratic party. The partisan distribution of our survivor sample is 66% Democrat, 17% Independent and 17% Republican. According to Pew, the partisan distribution of American Jews is 70% Democrat, 8% Independent and 22% Republican. Thus, although it is possible that our respondents are more politically *active* than other Jews, they are not more liberal or conservative.

Another potential concern with focusing on survivors residing in the United States is that survivors in the U.S. are likely different than those elsewhere. For example, it is possible that, after 1945, survivors who were more wary of political violence came to the U.S., whereas those who were more risk-acceptant immigrated to Israel. Moreover, it is likely that past and present victimization interact to affect political attitudes in distinct ways. Jewish populations living in other countries where they are either not a minority (e.g. Israel) or are at significant risk of harm from ongoing conflicts, repression, or widespread anti-Semitism may internalize the lessons of the Holocaust in quite different ways. We cannot explicitly test these differences using our data, which only includes U.S. respondents, but this is an important scope condition of our study. We restrict our conclusions regarding long-term effects of the Holocaust to victimized communities who

fled mass violence and now live as a minority community in a relatively safe country.⁶³

Using the USHMM database, we collected surveys from 200 Holocaust survivors in the U.S. Of these, 142 reached the experiment and 121 answered our central dependent variable.⁶⁴ This size provides sufficient power to detect a moderate-to-large size effect, but may miss very small effects (see power analysis in SI A1). However, it is sufficiently powered to detect our observed effects across nearly all statistical comparisons.⁶⁵

The survivors in our sample ranged in age from 72 to 99 (in 2017), with a median of 84, meaning most were children during World War II. This may suggest that survivors' personal memories of political violence are distant, limiting the long-term attitudinal effects of violence. However, past research has demonstrated that childhood exposure to trauma, especially in early childhood, has an enduring impact on personal psychology and politics⁶⁶ and can even have enduring impacts on infants and toddlers.⁶⁷

Measurement

The survey proceeded as follows. Holocaust survivors and descendants, identified by a screener question at the beginning, answered several questions about their (or their parents'/grandparents') pre-war, wartime, and post-war experiences. Next, we assigned all respondents to one of three treatment conditions, as described below. After treatment, subjects answered questions about intergroup attitudes, beginning with attitudes about

^{63.} We take a deeper look at the implications of our study for other political contexts below.

^{64.} As SI A1.3 shows, almost all sample attrition occurred prior to assignment to treatment; bias due to attrition would need to be very severe to account for observed differences across exposure groups.

^{65.} For example, Table A2.4 in the SI reports the observed Cohen's *d* values from our data (standardized versions of the values in Figure 1) alongside the minimally detectable Cohen's *d*, given our sample size. In all paired comparisons besides survivors to descendants, these values exceed the minimum detectable effect sizes. In our experimental analysis, we are sufficiently powered to detect all main effects, but may be underpowered for smaller interaction effects (see SI A2).

^{66.} Muldoon 2013; Shaw 2003.

^{67.} Slone and Mann 2016.

Syrian refugees. The survey concluded with a battery of socio-demographic questions.⁶⁸

Our experimental treatments emphasized two prominent variants of the "never again" imperative: *outgroup*- versus *ingroup*-oriented. We compared these two frames to a control condition with no reference to "never again." The outgroup-oriented frame reminded subjects of the ill-fated Saint Louis ocean-liner, which carried German Jews fleeing the Nazis, and which the United States turned away. The survey then told subjects that "advocates of admitting more Syrian refugees cite the imperative to *never again turn a blind eye to such slaughter,*" invoking the interpretation of "never again" that emphasizes protecting anyone at risk of violent victimization. In contrast, the ingroup-oriented frame reminded subjects of past threats to the ingroup: how Hitler stoked anti-Semitic views in Germany, leading to anti-Jewish pogroms and, eventually, the Holocaust. The survey then stated that "advocates of restricting the entrance of Syrian refugees cite the imperative to *never again go like lambs to the slaughter,*" invoking a more exclusive interpretation of "never again" that prioritizes defending fellow Jews. 69

Although each frame invokes a different lesson from the Holocaust, all three provide the same information and (counter-)arguments regarding the current political issue: "Advocates of admitting Syrian refugees worry they may die if not admitted, while advocates of restriction worry that extremists or terrorists may hide among the refugees." The control condition presents the same two arguments, but does not mention the Holocaust or "never again." Thus, we can attribute average differences in attitudes across treatment conditions only to the (different) invocations of the Holocaust and the "never

^{68.} SI A3 describes the survey flow in more detail, including considerations regarding potential priming effects (Klar, Leeper and Robison, 2020), and summary statistics.

^{69.} See A3 for full treatment wording.

^{70.} We include both arguments to more accurately replicate the media environment, which exposes individuals to competing frames on refugees (Chong and Druckman, 2007).

^{71.} To avoid order effects, we used two variants of the control condition (randomly assigned): with (1) "advocates of admitting" first, and (2) "advocates of restricting" first.

again" imperative, rather than to different information provided about Syrian refugees.

Our central dependent variable is support for admitting Syrian refugees into the United States. Following treatment, subjects were asked, "Do you think the number of Syrian refugees admitted to the United States should be increased or decreased?" We recorded their responses on a 7-point scale. We also asked about policy measures relevant to other outgroups, including support for a travel ban on Muslims entering the U.S., the U.S.-Mexican border wall, and whether the U.S. has a responsibility to protect civilians in war. Results were substantively similar across these measures, though — likely because these policies were so explicitly tied to (former) President Trump's policy agenda — more strongly linked to partisan affiliations (SI A4).

Table 1 reports summary statistics for all respondents who reached our dependent variable. SI A1.4 reports disaggregated summary statistics across our four sub-samples.

Analysis

Our analysis includes observational and experimental components. In the former, we test H1-H4 by exploring differences in attitudes across respondents with personal, family, group, or no exposure to genocide. In the latter, we test H5 by examining the impact of our randomized experimental treatments on outgroup attitudes.

Differential Exposure to Genocide & Outgroup Attitudes

Descriptive statistics indicate a positive relationship between Holocaust exposure and support for outgroups. Figure 1 reports mean levels of support for Syrian refugees among respondents in the four groups.⁷² Support is highest among those with personal and family exposure (i.e. survivors, descendants), and lowest for those with no exposure (non-descendant Jews, non-Jews). The average non-Jewish respondent favored a

^{72.} Restricting these analyses to the control condition, which was our pre-registered plan, yields similar results, but with reduced power to detect smaller effect sizes (SI A2). SI A4.1 presents these results.

Table 1: Summary statistics: respondent demographics and personal/family histories. Includes only respondents who reached our main dependent variable.

Variable	Range	Mean	SD	Missing	N
Age	(18,98)	51.18	19.80	10%	1527
Party ID (Republican)	(0,1)	0.40	0.36	3%	1527
Sex (male)	(0,1)	0.40	0.49	3%	1527
Education (1: no high school to 7: grad degree)	(1,7)	5.37	1.49	3%	1527
Income (1: <\$50,000 to 5: >\$250,000)	(1,5)	2.21	1.17	7%	1527
Exposure: Non-Jew	(0,1)	0.32	0.47	0%	1527
Exposure: Non-descendant	(0,1)	0.42	0.49	0%	1527
Exposure: Descendant	(0,1)	0.18	0.38	0%	1527
Exposure: Survivor	(0,1)	0.08	0.27	0%	1527
Pre-WWII: E. Europe	(0,1)	0.17	0.37	0%	1527
Pre-WWII: Primary	(0,1)	0.04	0.18	0%	1527
Pre-WWII: Manufacturing	(0,1)	0.06	0.23	0%	1527
Pre-WWII: Services	(0,1)	0.20	0.40	0%	1527
Pre-WWII: Information	(0,1)	0.10	0.30	0%	1527
Immigrant Grandparents	(0,1)	0.65	0.48	0%	1527
WWII: Helped by Non-Jews	(0,1)	0.53	0.48	78%	1527
WWII: Sent to ghetto	(0,1)	0.58	0.47	77%	1527
WWII: Sent to camp	(0,1)	0.46	0.48	76%	1527
WWII: Armed Resistance	(0,1)	0.15	0.34	77%	1527

"slight decrease" in refugees admitted to the United States, with a mean of 3.65. Non-descendant Jews, on average, favored keeping the number of refugees the same, with a mean of 4.43. Descendants and survivors, however, favored a "slight increase," both with means of 4.76.⁷³ These differences are substantively important, representing a gradual shift from opposition to support as exposure to the Holocaust becomes more direct.

If we dichotomize this variable, with 1 representing support for at least a "slight increase" in refugees (5 or higher), the difference becomes starker. Just 32 percent of non-Jews favor any increase in admitted refugees. The statistics for non-descendant Jews, descendants and survivors are 49, 55 and 60 percent. Survivors show the highest mean support for refugees, in line with the "outgroup protection" hypothesis. As one

^{73.} Second and third generation descendants had similar average attitudes (4.80, 4.74).

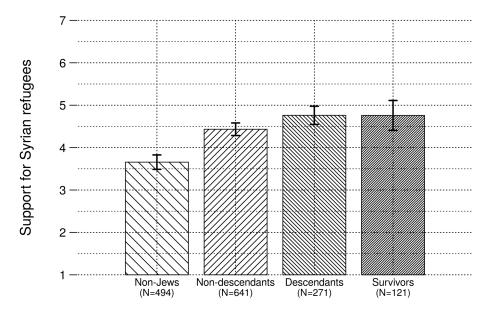


Figure 1: Support for increasing admission of Syrian refugees into U.S. Scale corresponds to (1) 'Greatly decrease,' (2) 'Moderately decrease,' (3) 'Slightly decrease,' (4) 'Keep same,' (5) 'Slightly increase,' (6) 'Moderately increase,' (7) 'Greatly increase.' Bar heights represent group-level means, lines are bootstrapped 95% confidence intervals.

survivor noted in open-ended comments, "My family and I were lucky enough to escape France in June 1940... Obviously the word 'refugee' has a great deal of meaning for me."

While these patterns broadly support the idea that exposure to violence increases support for outgroups (H4), caution is warranted. The subgroup means in Figure 1 are conditioned only on exposure level (e.g. survivor, descendant, non-descendant Jew, non-Jew), and do not account for potential confounding factors like partisanship, education, income, age, and family history. For this, we conduct a more rigorous series of tests.

To examine how exposure to genocide might impact outgroup attitudes, we first consider a linear model, which regresses support for Syrian refugees on respondents' level of exposure, personal attributes and family history. Our baseline specification is

$$Attitudes_{i} = \theta \cdot Exposure_{i} + \beta_{1}' \mathbf{x}_{i}^{(pre)} + \beta_{2}' \mathbf{x}_{i}^{(post)} + Region_{i}^{(pre)} + Region_{i}^{(post)} + \epsilon_{i}$$
 (1)

where the dependent variable is respondent i's outgroup $Attitudes_i$, the "treatment" is i's

*Exposure*_i to the Holocaust (survivor, descendant, non-descendant, non-Jew), $\mathbf{x}_i^{(pre/post)}$ are pre-WWII (age, gender, pre-war profession) and post-WWII (education, income, party ID, location) covariates, $Region_i^{(pre/post)}$ are fixed effects for pre- and post-WWII family residence locations (in Europe and U.S., respectively), and ϵ_i are i.i.d. errors.⁷⁴

Figure 2a reports average differences in support for refugees across exposure categories, holding other variables constant. For example, the upper-right quantity is

 $E[Attitudes_i | Exposure_i = survivor] - E[Attitudes_i | Exposure_i = non-Jew] = 1.72$ (2) with conditional expectations based on coefficient estimates from equation (1).

These results confirm that support for Syrian refugees is higher among respondents more directly exposed to the Holocaust, holding a variety of confounding factors constant. The average survivor's expressed support was 1.72 points higher than the average non-Jewish American's, 1.07 higher than for Jews with no survivor relatives, and 0.82 higher than for descendants. Descendant and non-descendant Jews were more supportive than non-Jews, with average differences of 0.67 and 0.49. Although support among descendants fell in between that of survivors and non-descendant Jews, differences between descendants and non-descendants were insignificant at the 95% confidence level.

The observed impact of Holocaust exposure on outgroup attitudes may depend, in part, on post-WWII developments. Survivors and descendants may have made different educational and professional choices after the war, or became disproportionately more likely to support Democrats or Republicans. The results in Figure 2a hold with and without post-exposure variables in the model, but neither approach fully resolves the

^{74.} For survivors, we used their family's pre-war place of residence and father's pre-war profession. For descendants, we used their survivor relative's (father, mother, or grandparent) pre-war residence and profession. For descendants with multiple survivor relatives, we selected one relative's information at random. For non-descendant Jews and non-Jews, we used mother's pre-war residence and father's pre-war profession, provided the parents were born before World War II. If parents were not born prior to WWII, we used grandparents' residence and profession.

issue. Conditioning on post-exposure covariates can induce post-treatment bias into estimates of direct effects, but excluding them can induce omitted variable bias.

To address this concern, we estimate average controlled direct effects (ACDE): the effects of Holocaust exposure when mediating variables are held constant at a particular level. We use two estimation procedures, the results of which are substantively consistent: sequential-g (reported here) and telescopic matching (SI A4.4). To facilitate pairwise comparisons across exposure levels, we repeat both procedures for every combination of sub-samples (e.g. survivors vs. descendants, survivors vs. non-Jews, etc.).

Sequential-g estimation transforms the dependent variable by removing from it the effect of post-exposure covariates, and estimates the effect of exposure on this demediated outcome.⁷⁵ In the first stage, we use our baseline specification (eq. 1) with the full set of covariates. We then partition the covariates into pre-WWII (family background, age, gender) and post-WWII (everything else), and fit a second stage model with a demediated outcome and only pre-exposure covariates:

$$\widetilde{\text{Attitudes}}_i = \phi \cdot \text{Exposure}_i + \alpha' \mathbf{x}_i^{(pre)} + \text{Region}_i^{(pre)} + v_i$$
 (3)

where $\widetilde{\text{Attitudes}}_i = \operatorname{Attitudes}_i - \gamma(\operatorname{Exposure}_i, \mathbf{x}_i^{(post)}, \operatorname{Region}_i^{(post)})$ is the difference between the observed outcome and demediation function $\gamma(\cdot)$, which removes variation due to the mediator's causal effect. We assess potential violations of this procedure's sequential unconfoundedness assumption through sensitivity analysis (SI A4.3). As we show, unmeasured confounding would have to be quite severe to overturn our results, with correlation between mediator and outcome errors nearing -1 or 1.

Figure 2b reports ACDE estimates from our sequential-g analysis, which are completely consistent with Figure 2a: the more direct one's exposure to the Holocaust, the

^{75.} Acharya, Blackwell and Sen 2016a.

^{76.} The mediators in this analysis include all post-WWII covariates ($\mathbf{x}_i^{(post)}$, Region_i^(post)). We estimate standard errors of ϕ through nonparametric bootstrap.

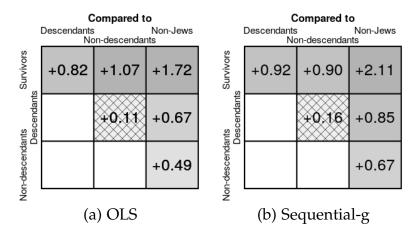


Figure 2: Exposure to genocide and outgroup attitudes. Values are average differences in support for admitting more Syrian refugees to U.S. between groups in the rows and columns: θ coefficients for OLS (eq. 1) and ϕ (ACDE) coefficients for sequential-g (eq. 3). Darker shades indicate larger differences. Diagonal lines indicate that differences are insignificant at the 95% (single) or 90% confidence level (double).

greater one's expressed support for refugees. Here, survivors were significantly more supportive than descendants, non-descendant Jews and non-Jews by 0.92, 0.9, and 2.11, respectively, on a 7-point scale. Descendant and non-descendant Jews were, in turn, significantly more supportive of refugees than non-Jews (0.85 and 0.67). While descendants were slightly more supportive than other Jews, this difference was, again, insignificant.

Taken together, our observational analyses indicate strong support for H4 (outgroup protection), no support for H1 (ingroup defense) or H2 (direct trauma), and mixed support for H3 (group exposure). Interestingly, our estimates suggest that direct trauma does matter (H2), but in the opposite direction than predicted, making survivors *more* supportive of victimized outgroups than their descendants. Descendants, meanwhile, express views that are more supportive than non-Jews, but not necessarily more supportive than Jews with no family connection. This suggests the Holocaust is, at least partially, a group-level trauma affecting descendants and non-descendants alike.

Mechanisms of Intergenerational Transmission

The results thus far indicate that genocide exposure has an enduring impact on outgroup attitudes, affecting not only the views of survivors, but potentially those of their descendants and non-descendant Jews as well. What explains this convergence of attitudes?

According to social learning theory,⁷⁷ children acquire political attitudes in part by emulating those around them, particularly parents and other relatives. Intergenerational transmission of attitudes becomes more likely when parents see an issue as highly salient and have opportunities to make their opinions known.⁷⁸ Individuals who have more extensively participated in these family conversations are more likely to develop enduring policy views.⁷⁹ If survivors' attitudes diffuse in part through family socialization, then we should expect descendants whose family members more regularly engaged in discussions about the Holocaust to adopt attitudes more similar to their survivor relatives.⁸⁰

To test this possibility, we asked survivors and descendants how often they had discussed their Holocaust experiences with family, friends and children after the war. Responses were on a 5-point scale, from "Never" to "Very often – at least once a week." We regressed support for Syrian refugees on responses to this question, using the same sequential-g specifications as before. We ran these models on a combined sample of survivors and descendants, as well as each group separately.

Households that regularly discussed the experiences of their survivor relatives during the Holocaust tended to express more supportive outgroup attitudes than those who did not (Table 2). On average, changing the frequency of such conversations from "never"

^{77.} Bandura 1969.

^{78.} Jennings, Stoker and Bowers 2009.

^{79.} Krosnick and Abelson 1992.

^{80.} While our pre-analysis plan cites socialization as a potential explanation of similarities between survivors and descendants, it does not advance it as a separate hypothesis. The analyses in this section should thus be read as more exploratory than exhaustive.

to "very often" increased support for refugees by over a point. This relationship was stronger among descendants than survivors, which is unsurprising: those with personal exposure are more likely to be "senders" than "receivers" of attitudes in the family.

Awareness of family members' historic experiences during the Holocaust may help explain the convergence of attitudes between descendants and survivors, but not why Jewish respondents without family exposure were more supportive of refugees than non-Jewish Americans. This difference, as we have shown, is consistent across model specifications, and is not attributable to post-exposure factors like partisanship or education. As such, it is possible that broader community socialization, including opportunities for social learning in local Jewish education, religious services and other community events, are responsible for the prevalence of these attitudes.⁸¹ To explore this pathway, we asked respondents how active they were in their local Jewish community (from "extremely active" to "not at all"), and regressed support for refugees on this measure. This community pathway explains at least part of the group exposure effect (Table 3). Respondents who reported being more active in their community were more likely — by half a point — to hold supportive outgroup attitudes.⁸²

Open-ended survey responses provide anecdotal support for both types of socialization; they also provide important context and nuance. Multiple survivors mentioned their own efforts to memorialize the Holocaust and communicate its lessons to future generations, including writing memoirs "dealing with my experiences during the Holocaust and how they shaped my life," and speaking "at many schools and organizations,

^{81.} Another possibility that we cannot exclude due to the nature of our survey design is that Jewish families *without* Holocaust backgrounds also engaged in "dinner table" conversations about the Holocaust. These conversations, however, would be different than those in survivor and descendant families, in that these conversations are themselves a product of community socialization, focusing on broader group victimization during the Holocaust rather than parents' or grandparents' direct experiences.

^{82.} While we interpret community activism as exposure to group socialization, this measure – like family dinner-table conversations – captures both serendipitous participation and conscious self-selection. This precludes a causal interpretation of these results.

Table 2: Family socialization and support for Syrian refugees. Sequential-g estimates, bootstrapped standard errors in parentheses. Coefficient estimates for control variables not shown. S: survivors, D: descendants.

	Model 1	Model 2	Model 3			
Talk to family about Holocaust	1.11 (0.49)*	-0.83 (1.57)	1.12 (0.6)'			
Pre-WWII covariates	Yes	Yes	Yes			
Post-WWII covariates	Yes	Yes	Yes			
Exposure	S, D	S	D			
AIC	1002.2	322.8	701			
N	246	70	176			
Significance (two-tailed): 'p<.1,*p<.05,**p<.01,***p<.001						

Table 3: Community activism and support for Syrian refugees. Sequential-g estimates, bootstrapped standard errors in parentheses. Coefficient estimates for control variables not shown. S: survivors, D: descendants, ND: non-descendants.

	Model 1	Model 2	Model 3	Model 4			
Active in Jewish community	0.53 (0.21)*	-0.43 (1.05)	0.62 (0.48)	0.42 (0.27)			
Pre-WWII covariates	Yes	Yes	Yes	Yes			
Post-WWII covariates	Yes	Yes	Yes	Yes			
Exposure	S, D, ND	S	D	ND			
AIC	3242.7	324.4	705.8	2276			
N	828	70	176	578			
Significance (two-tailed): 'p<.1,*p<.05,**p<.01,***p<.001							

so never to forget." Comments from other Jewish respondents indicated that these signals found an attentive audience — both inside the family and in the broader community. Descendants recalled how their interactions with survivor relatives "greatly influenced & shaped our family life." Some descendants also suggested that conversations with parents are not the only conduit for such socialization to take place:

My father didn't discuss the war when I was a child but after he retired he became very involved in documenting the fate of every Jew in his home town. He also wrote a detailed autobiography and is active in supporting efforts to

record the history of the Holocaust in his country.

Open-ended comments from non-descendant Jews indicate that sharing and learning these personal histories were a key part of their education and upbringing as active members of the Jewish community. As one respondent recalled, "My Hebrew teacher was a Holocaust survivor, and has written two books on the Holocaust." Another went further, linking community socialization to the perceived salience of refugee policy:

Even though I didn't descend from Holocaust survivors, I shared in the collective memory as a conservative Jew growing up. ... I liked how you connected the Holocaust to the current Syrian (and Iraqi) refugee crisis.

Socialization is not the only potential source of variation in outgroup attitudes. Another possibility, also cited in open-ended comments, is that differential wartime experiences inform survivors' and descendants' attitudes. For example, survivors who joined armed resistance groups may see refugees as more capable of helping themselves. As one survivor noted, "the Jewish Holocaust is not to be compared with Syrian refugees, Syrian militia has weapons to fight." Similarly, those who received help from non-Jews may be more supportive of aiding outgroups, unlike those who felt personally neglected or abandoned. One such survivor remembered being "on the run from country to country... I was deprived of schooling for 6 years... I came to the US thoroughly vetted, a process that took a full year. This after waiting for my quota for 6 years! Current immigrants should also be thoroughly vetted." As far as we can tell, however, these personal anecdotes did not coalesce into a broader statistical pattern. We found no quantitative evidence that variation in Holocaust experiences affects outgroup attitudes, though exploration of these heterogeneous effects is limited by sample power (see SI A4.5).

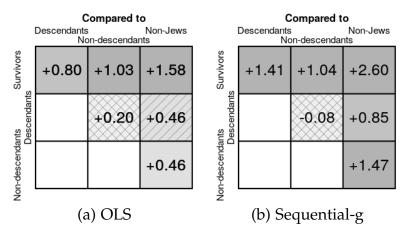


Figure 3: Exposure to genocide and outgroup attitudes, controlling for immigration.

Finally, as some of these qualitative comments indicate, Holocaust survivors likely hold multiple overlapping and cross-cutting identities survivors likely hold multiple overlapping and cross-cutting identities as Jews, minorities, refugees, victims of violence — and these other identities may drive support for other groups seeking refuge in the U.S. Because we find large and significant differences across subgroups of Jewish respondents, being Jewish or a minority cannot by itself be what drives heterogeneity in this case. However, it is possible that Holocaust survivors' experiences as *immigrants* shapes their attitudes toward Syrian refugees, more than their status as survivors of political violence. To examine this possibility, we augmented our OLS and sequential-g specifications to include immigration history as a post-treatment covariate, coded 1 if at least one of the respondent's grandparents were born outside the U.S., and 0 otherwise. If immigration is what drives the observed patterns of support, then differences between Jewish subgroups (and between Jews and non-Jews) should dissipate after we make this adjustment. Yet these differences remain large and significant, even when accounting for immigrant backgrounds of non-survivor populations (Figure 3).

^{83.} Brewer and Pierce 2005.

^{84.} Williamson et al. 2020.

Exposure to Violence, Framing and Attitude Malleability

While respondents with more direct experiences of violence — and more opportunities to discuss them — tend to hold more supportive views toward outgroups, it is less clear how deeply-held and stable these views are. ⁸⁵ To examine the malleability of these attitudes, we next turn to our experiment, which presented respondents with outgroupand ingroup-oriented "never again" frames before asking about support for refugees.

To assess the effect of these frames on outgroup attitudes overall, we begin by regressing support for refugees on the experimental treatment each respondent received:

$$Attitudes_i = \theta \cdot T_i + \epsilon_i \tag{4}$$

where $T_i = t$ is i's treatment assignment, $t \in \{\text{control}, \text{outgroup}, \text{ingroup}\}$. Because assignment is random, we do not include covariates in this base specification. However, results do not significantly change if we add covariates and regional fixed effects (SI A5).

To test potential heterogeneous treatment effects by exposure group, we also considered an expanded model that interacts treatment assignment with Holocaust exposure:

$$Attitudes_i = \theta \cdot T_i + \phi \cdot Exposure_i + \gamma \cdot T_i \times Exposure_i + \epsilon_i$$
 (5)

where Exposure_i = k is i's group. We considered two versions of this model: a 3×4 interaction, where $k \in \{\text{survivor}, \text{descendant}, \text{non-descendant}, \text{non-Jew}\}$, and a simplified, 3×2 interaction, where $k \in \{\text{survivor} \text{ or descendant}, \text{non-descendant} \text{ or non-Jew}\}$.

Figure 4 reports estimates from all three models, ordered left to right. The treatment-only model (left) reveals a significant, positive effect for the outgroup-protective frame, in line with H5. Overall, respondents who randomly received reminders of the inclusive imperative to "never again allow such slaughter" expressed more support for outgroups

^{85.} Kustov, Laaker and Reller 2021.

^{86.} Combining survivors and descendants into one category results in larger per-condition sample sizes, and therefore higher statistical power.

than respondents in either the control condition (average difference of 0.6, from 4.0 to 4.6) or ingroup-protective condition (difference of 0.5, from 4.1 to 4.6). The ingroup-protective frame, however, did not significantly shift attitudes relative to the control.

Breaking these effects down by exposure category, the outgroup-protective frame appears to have had a particularly strong impact on respondents *without* personal or family connections to the Holocaust. The 3×4 interaction model (center) estimates an effect of 0.8 relative to the control for non-Jews (3.3 to 4.1) and 0.6 for Jews without survivor relatives (4.2 to 4.8). These changes are substantively meaningful, shifting views from opposition to neutrality among non-Jews, or neutrality to support among non-descendant Jews. The 3×2 model (right), which combines these two groups into one, estimates an increase of 0.7 relative to the control (3.8 to 4.5). Interestingly, the "lambs to the slaughter" ingroup-protective frame had little resonance for these two communities, neither of whom subsequently become less supportive of Syrians. For these non-exposed communities, support for Syrians, if anything, slightly increased under this treatment, suggesting that less directly exposed communities might interpret this frame as another version of the outgroup-protective imperative, with Jews as the referenced outgroup.

Survivors and descendants responded differently to the experimental treatments. While the direction of the outgroup-oriented frame's effect was the same for survivors and descendants as for less-exposed groups, its magnitude was smaller and more uncertain. The 3×4 model indicates (statistically insignificant) increases of 0.4 for survivors (4.8 to 5.2) and 0.2 for descendants (4.8 to 5.0), in contrast to the statistically significant increases of 0.8 and 0.6 for non-Jews and non-descendant Jews. Coefficient estimates on the multiplicative interaction term ($\hat{\gamma}$) indicate that the treatment effect was numerically smaller for all Jewish groups relative to non-Jews, and significantly smaller in the case of descendants: the outgroup-protective effect for descendants was 0.62 points smaller than it was for non-Jews. The 3×2 model, which offers greater statistical power by pool-

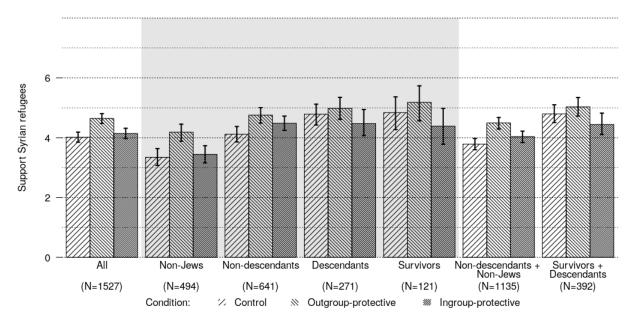


Figure 4: Effect of outgroup- and ingroup-protective primes. Bars represent average support for Syrian refugees, from 0-7. Lines represent 95% confidence intervals. Predicted values based on estimates from three models, from left to right: treatment only (eq. 4), 3×4 treatment-exposure interaction (eq. 5), 3×2 treatment-exposure interaction (eq. 5).

ing survivors and descendants together, confirms that the outgroup-protective effect was significantly lower (by 0.5) for these exposed populations.⁸⁷ The outgroup-protective effect was 0.7 for non-descendants and non-Jews (3.8 to 4.5), but only 0.2 for survivors and descendants (4.8 to 5.0). Importantly, this is not evidence of a ceiling effect: survivors and descendants' mean support for refugees was not at the top of the scale — they *could* have expressed more support in this treatment condition, but didn't.

Notably, we also observe some heterogeneity in exposed versus non-exposed communities' responses to the in-group protective frame: while non-Jews and non-descendant Jews exposed to this frame exhibited somewhat increased support for Syrian refugees, this frame appeared to slightly *decrease* descendants' and survivors' support, relative to the control. In the 3×4 model, confidence intervals are too large to permit definitive conclusions, although the point estimates for the effect are negative for both survivors

^{87.} See SI A2 for a discussion of power considerations for detecting interaction effects.

(-0.4, from 4.8 to 4.4) and descendants (-0.3, from 4.8 to 4.5). In the 3×2 model, due in part to larger per-condition sample sizes, there is a significant difference (of -0.6) between ingroup-protective effect estimates for non-descendants and non-Jews (0.2, from 3.8 to 4.0) compared to survivors and descendants (-0.4, from 4.8 to 4.4).

This reduction in support is theoretically interesting, and may indicate that the ingroup-protective frame has differential resonance for those with personal and family histories of victimization. This treatment sought to tap into the Jewish community's concerns about continuing anti-Semitism and the risk it poses to them. Jewish respondents whose families were victimized in the past may therefore interpret this frame in a more threatening way than less-exposed respondents, who might view the text as a weaker version of the outgroup-protective frame. As one descendant in the ingroup-protective condition commented, "I want to help refugees but not at the expense of our security."

By and large, however, our experimental evidence suggests that those more directly exposed to genocide hold more established views on vulnerable outgroups: they support protecting them. An outgroup-oriented frame of "never again" significantly increased support for refugees, but only among respondents less directly exposed to the Holocaust. The ingroup-protective frame had more resonance for survivors and descendants, somewhat reducing their support for refugees. Yet, even in this condition, survivors and descendants nonetheless remained more supportive of refugees than the less exposed groups. These are important findings, as past research has found that it is difficult to shift attitudes in favor of outgroups, but relatively easy to shift attitudes against them. Here, we find that invoking the Holocaust with an outgroup-protective interpretation of the "never again" imperative can shift attitudes in favor of refugees – particularly among those with no personal or family histories of victimization. In contrast, evoking

^{88.} Brader, Valentino and Suhay 2008; Hainmueller and Hopkins 2014.

an ingroup-protective interpretation somewhat reduces support for refugees, but only among those who *do* have personal and family histories of victimization.

External Validity

Our study took place in a specific context: a developed, democratic country (post-WWII U.S.), where Jews are a religious minority and where Holocaust survivors have lived in relative physical security. Each of these factors may affect how formerly victimized populations assess the threat posed by outgroups. As such, there are several dimensions of generalizability or, more accurately, transportability, that are important to consider. While the nature of our data does not permit a direct statistical probe, past research allows us to posit informed hypotheses regarding the transportability of our findings.⁸⁹

First, we expect our findings to be highly transportable to other time periods. We fielded our study in 2017, when issues of immigration and refugees were politically salient, due to the Trump Administration's pursuit of a temporary "Muslim Ban." However, the centrality of immigration and refugees as political issues is not a new phenomenon in the U.S. ⁹⁰ and research conducted during other presidential administrations has found similar associations between empathy (threat) and support for (opposition to) migrants. ⁹¹ Moreover, recent replication studies conducted during the COVID-19 pandemic have found no major differences in effect size or direction of experimental findings, compared to studies conducted prior to the pandemic. ⁹² This is encouraging both for survey research in general and the temporal robustness of our findings here.

Second, we expect these findings to be broadly transportable to other outgroups, be-

^{89.} Our discussion here adopts the UTOS (Cronbach and Shapiro 1982) and M-STOUT criteria (Findley, Kikuta and Denly 2021) for transportability: mechanisms, settings, treatment, outcomes, unit, time.

^{90.} Hainmueller and Hopkins 2014.

^{91.} e.g. Sirin, Villalobos and Valentino 2016; Brader, Valentino and Suhay 2008.

^{92.} Peyton, Huber and Coppock 2020

yond Syrian refugees. Anecdotally, the Jewish community has invoked the Holocaust and its lessons when discussing genocide against the Rohingya in Myanmar, the ethnic cleansing of Uighurs in China, and the detention of Hispanic migrants on the U.S. southern border. This is a dimension of transportability that we can also indirectly examine using our data: we asked respondents about support for the so-called "Muslim Ban" and for a border wall along the U.S.-Mexican border. If the outgroup protection hypothesis is broadly transportable across different outgroups, we would expect negative relationships between genocide exposure and support for the border wall and the travel ban. This is, indeed, what we find (SI A4.2, Figure A4.6). Survivors are less supportive of the travel ban than non-descendants and non-Jewish Americans, and marginally less supportive of the border wall. Non-descendants, in turn, are less supportive of the wall and travel ban than non-Jewish Americans. The only deviant result is that descendants are somewhat *more* supportive of the border wall and travel ban than non-descendant Jews. All other results suggest that more direct exposure to the Holocaust is associated with more support for other vulnerable outgroups.

Third, because the Holocaust is one of the deadliest instances of orchestrated state violence in the modern era, it is useful to think about the transportability of our findings to victims of other genocides and campaigns of mass violence. Researchers studying other historically victimized groups have found congruent results to those here: previously victimized communities exhibit a high degree of support for other vulnerable communities. For example, Greeks who were forcibly relocated from Turkey are more likely to support donating to Syrian refugees, Black and Hispanic Americans are more likely to support civil rights for immigrant detainees in the U.S., 4 and Liberians who expe-

^{93.} Dinas and Fouka forthcoming.

^{94.} Sirin, Villalobos and Valentino 2016.

rienced violence during the civil war exhibit less bias against Ivorian refugees.⁹⁵ These findings suggest that the phenomenon of historically victimized communities supporting other victims is not unique to the Holocaust or only to communities living in wealthy, developed democracies like the United States.

One area where we expect our findings to be *less* transportable is among Jewish communities living in other countries, most notably in Israel, which is home to 46% of the global Jewish population. Our theory suggests that a key mechanism leading victimized groups to support other vulnerable outgroups is the empathy that a history of victimization engenders. However, past experiences of bloodshed likely interact with the current threat environment to influence levels of outgroup empathy. American Jews face a very different current threat environment than Jews in Israel, where they are both the majority and engaged in an active conflict with Arab and/or Muslim adversaries. In settings like Israel, "competitive victimhood" – in which belligerents view their own side's suffering as worse than the adversary's – can be a powerful factor shaping political attitudes, potentially limiting the role of empathy and shared victim identities in overcoming intergroup conflict. In such societies, *exclusive* lessons of victimization, drawing on heightened perceptions of threat, and the such several greater political power.

Moreover, Holocaust education and remembrance plays a much more central role in Israeli society than it does in the United States: in Israel, high school students take annual trips to Poland, Holocaust Memorial Day is a national day of mourning, and Holocaust survivors receive monetary support from the government. In this setting,

^{95.} Hartman and Morse 2018.

^{96.} Jewish Agency.

^{97.} Canetti et al. 2018.

^{98.} Vollhardt, Nair and Tropp 2016.

^{99.} Shrira 2015.

it is likely that the entire Israeli-Jewish population shares the trauma of the Holocaust and internalizes its lessons in similar ways. ¹⁰⁰ As such, differences in attitudes between survivors, descendants, and non-descendant Jews are likely to be less profound.

An important future application of this work will thus be to explore the transportability of American Jewry's lessons from the Holocaust to this and other contexts where violent conflicts are still being fought in order to understand if past histories of victimization interact with present threats to differentially shape intergroup attitudes.

Future studies should also examine the emotional underpinnings of attitudinal shifts among *non-exposed* populations. Though our study highlights the potential importance of empathy in shaping the outgroup attitudes of survivors and descendants, the specific emotional mechanisms underlying attitudinal changes among the *non-exposed* may be different. For example, an inclusive frame may help respondents imagine themselves in the same situation as refugees, a key component of empathy. However, an inclusive frame may induce shame or guilt by reminding non-exposed populations that they escaped victimization while others suffered. Exploring these emotional mechanisms is an important task, as they point to different potential interventions for changing attitudes.

Discussion

Our study demonstrates how experiences of violent victimization become embedded in the historical memory of oppressed peoples, profoundly impacting their future preferences. As we show, one of the long-term effects of exposure to mass violence may be increased support for other vulnerable groups.

This finding advances our understanding of political violence and its enduring effects in several ways. As the first large-scale social science survey of Holocaust survivors' political attitudes, our effort has important descriptive value, providing insight into the

^{100.} Canetti et al. 2018.

long-term political consequences of one of the largest genocides in modern history. Our findings also carry important implications for the long-term effects of violence more broadly. While past research has focused on long-term attitudes toward the historic perpetrators or victims of violence, our study demonstrates that violent victimization can shape attitudes towards groups *unrelated* to the original trauma.

Our results further show how these lessons may endure across generations. Research on the long-term effects of violence has documented the prevalence of inter-generational political attitudes, but the pathways behind their formation remain opaque. Exploratory analyses indicate support for two transmission mechanisms: family and community socialization. Our findings suggest that historical experiences of victimization shape future generations, in part, through the specific ways in which families and communities discuss and memorialize these experiences after the violence ends.

More generally, our study advances research on intergroup relations, and how threat perceptions and empathy might deteriorate or ameliorate them. Past studies have emphasized these two impulses as key determinants of political attitudes, 101 but rarely examine how abstract lessons drawn from historical victimization shape these impulses. 102 Using a framing experiment, we show that support for victimized outgroups can indeed be mobilized by presenting the moral lessons of past violence in an inclusive way. However, this shift in framing is most effective among those who have not directly experienced violence. Those who have, or are related to someone who has, need no additional convincing — their empathy for vulnerable peoples has deeper roots. While reminders of threats to the ingroup may somewhat temper this support, they remain firmly more supportive than those without personal or family histories of victimization.

^{101.} e.g. Brader, Valentino and Suhay 2008; Adida, Lo and Platas 2018.

^{102.} Dinas and Fouka forthcoming and Williamson et al. 2020 are two important recent examples of work that investigates these connections in different contexts.

Finally, our findings shed light on public policy challenges surrounding immigrants and refugees around the world today. In the past decade, concerns about refugee flows and open borders have sparked fervent debates over immigration in the European Union, United States, and beyond. We find that efforts to reduce hostile outgroup attitudes may be most effective among those who have not experienced similar victimization themselves. To this end, mobilizing the empathetic voices of survivors may be an effective tool in activating support for victims of political violence among the broader public.

References

Acemoglu, Daron, Tarek A Hassan and James A Robinson. 2011. "Social Structure and Development: A Legacy of the Holocaust in Russia." *The Quarterly Journal of Economics* 126: 895–946. doi: 10.3386/w16083.

Acharya, Avidit, Matthew Blackwell and Maya Sen. 2016a. "Explaining causal findings without bias: Detecting and assessing direct effects." *American Political Science Review* 110, no. 3: 512–529. doi: 10.1017/s0003055416000216.

Acharya, Avidit, Matthew Blackwell and Maya Sen. 2016b. "The political legacy of American slavery." *The Journal of Politics* 78, no. 3: 621–641. doi: 10.2139/ssrn.2538616.

Adida, Claire L, Adeline Lo and Melina R Platas. 2018. "Perspective taking can promote short-term inclusionary behavior toward Syrian refugees." *Proceedings of the National Academy of Sciences* 115, no. 38: 9521–9526. doi: 10.1073/pnas.1804002115.

Anderton, Charles H. 2016. *Economic Aspects of Genocide, Mass Killings, and Their Prevention*. Oxford University Press chapter Datasets and Trends of Genocides, Mass Killings, and Other Civilian Atrocities. doi: 10.1093/acprof:oso/9780199378296.001.0001.

- Ariely, Gal. 2020. "Historical analogies under dispute: Reactions of Israeli Jews to Holocaust analogies and the plight of African asylum seekers." *Memory Studies*. doi: 10.1177/1750698020907942.
- Balcells, Laia. 2012. "The consequences of victimization on political identities: Evidence from Spain." *Politics & Society* 40, no. 3: 311–347. doi: 10.1177/0032329211424721.
- "Social-learning Bandura, Albert. 1969. theory of identificatory processes." Handbook of socialization theory and research 213: 262. https://archive.org/details/handbookofsocial0000gosl.
- Bar-Tal, Daniel. 2003. Collective memory of physical violence: Its contribution to the culture of violence. In *The role of memory in ethnic conflict*. Springer pp. 77–93. doi: 10.1057/9781403919823_5.
- Beber, Bernd, Philip Roessler and Alexandra Scacco. 2014. "Intergroup Violence and Political Attitudes: Evidence from a Dividing Sudan." *The Journal of Politics* 76, no. 3: 649–665. doi: 10.1017/S0022381614000103.
- Besley, Timothy and Marta Reynal-Querol. 2014. "The legacy of historical conflict: Evidence from Africa." *American Political Science Review* 108, no. 02: 319–336. doi: 10.1017/s0003055414000161.
- Strezhnev. 2018. Blackwell, Matthew "Telescope and Anton Flexible Effects." Matching: Α Approach to Estimating Direct https://mattblackwell.org/files/papers/tm_imc.pdf.
- Blattman, Christopher. 2009. "From Violence to Voting: War and Political Participation in Uganda." *American Political Science Review* 103, no. 2: 231–247. doi: 10.1017/s1352325209090211.

- Brader, Ted, Nicholas A Valentino and Elizabeth Suhay. 2008. "What triggers public opposition to immigration? Anxiety, group cues, and immigration threat." *American Journal of Political Science* 52, no. 4: 959–978. doi: 10.1111/j.1540-5907.2008.00353.x.
- Brewer, Marilyn. 1999. "The Psychology of Prejudice: Ingroup Love or Outgroup Hate?" *Journal of Social Issues* 55: 429–444. doi: 10.1111/0022-4537.00126.
- Brewer, Marilynn B and Kathleen P Pierce. 2005. "Social identity complexity and outgroup tolerance." *Personality and Social Psychology Bulletin* 31, no. 3: 428–437. doi: 10.1177/0146167204271710.
- Canetti, Daphna, Brian J Hall, Carmit Rapaport and Carly Wayne. 2013. "Exposure to political violence and political extremism." *European Psychologist*. doi: 10.1027/1016-9040/a000158.
- Canetti, Daphna, Gilad Hirschberger, Carmit Rapaport, Julia Elad-Strenger, Tsachi Ein-Dor, Shifra Rosenzveig, Tom Pyszczynski and Stevan E Hobfoll. 2018. "Collective trauma from the lab to the real world: The effects of the holocaust on contemporary Israeli political cognitions." *Political Psychology* 39, no. 1: 3–21. doi: 10.1111/pops.12384.
- Carmil, Devora and Shlomo Breznitz. 1991. "Personal Trauma and World View—Are extremely stressful experiences related to political attitudes, religious beliefs, and future orientation?" *Journal of Traumatic stress* 4, no. 3: 393–405. doi: 10.1002/jts.2490040307.
- Charnysh, Volha. 2015. "Historical Legacies of Interethnic Competition: Anti-Semitism and the EU Referendum in Poland." *Comparative Political Studies* 48, no. 13: 1711–1745. doi: 10.1177/0010414015598921.
- Chong, Dennis and James N Druckman. 2007. "Framing public opinion in com-

- petitive democracies." American Political Science Review 101, no. 4: 637–655. doi: 10.1017/s0003055407070554.
- Cialdini, Robert B, Stephanie L Brown, Brian P Lewis, Carol Luce and Steven L Neuberg. 1997. "Reinterpreting the empathy–altruism relationship: When one into one equals oneness." *Journal of Personality and Social Psychology* 73, no. 3: 481. doi: 10.1037/0022-3514.73.3.481.
- Cohen, Jacob. 1992. "A power primer." *Psychological bulletin* 112, no. 1: 155. doi: 10.1037/0033-2909.112.1.155.
- Cronbach, Lee J and Karen Shapiro. 1982. *Designing evaluations of educational and social programs*. Jossey-Bass,. doi: 10.2307/2068975.
- Davis, Mark H. 2018. *Empathy: A social psychological approach*. Routledge. doi: 10.4324/9780429493898.
- Dinas, Elias and Vasiliki Fouka. forthcoming. "Family History and Attitudes Toward Outgroups: Evidence from the Syrian Refugee Crisis." *Journal of Politics*. doi: 10.2139/ssrn.3102093.
- Eklund, Jakob, Teresia Andersson-Straaberg and Eric M Hansen. 2009. ""I've also experienced loss and fear": Effects of prior similar experience on empathy." *Scandinavian journal of psychology* 50, no. 1: 65–69. doi: 10.1111/j.1467-9450.2008.00673.x.
- Findley, Michael G, Kyosuke Kikuta and Michael Denly. 2021. "External Validity." *Annual Review of Political Science* 24: 365–393. doi: 10.1146/annurev-polisci-041719-102556.
- Finkel, Evgeny. 2017. *Ordinary Jews: choice and survival during the Holocaust*. Princeton University Press. doi: 10.23943/princeton/9780691172576.001.0001.

- Gadarian, Shana Kushner and Bethany Albertson. 2014. "Anxiety, immigration, and the search for information." *Political Psychology* 35, no. 2: 133–164. doi: 10.1111/pops.12034.
- Gaertner, Samuel L, John F Dovidio, Gaertner Samuel et al. 2000. *Reducing intergroup bias: The common ingroup identity model*. Psychology Press. doi: 10.4324/9781315804576.
- Gilligan, Michael J, Benjamin J Pasquale and Cyrus Samii. 2014. "Civil war and social cohesion: Lab-in-the-field evidence from Nepal." *American Journal of Political Science* 58, no. 3: 604–619. doi: 10.1111/ajps.12067.
- Hainmueller, Jens and Daniel J. Hopkins. 2014. "Public Attitudes Toward Immigration." *Annual Review of Political Science* 17, no. 1: 225–249. doi: 10.1146/annurev-polisci-102512-194818.
- Hartman, Alexandra C. and Benjamin S. Morse. 2018. "Violence, Empathy and Altruism: Evidence from the Ivorian Refugee Crisis in Liberia." *British Journal of Political Science* pp. 1–25. doi: 10.1017/S0007123417000655.
- Hayes, Bernadette C and Ian McAllister. 2001. "Sowing dragon's teeth: Public support for political violence and paramilitarism in Northern Ireland." *Political Studies* 49, no. 5: 901–922. doi: 10.1111/1467-9248.00346.
- Homola, Jonathan, Miguel M Pereira and Margit Tavits. 2020. "Legacies of the Third Reich: Concentration Camps and Out-group Intolerance." *American Political Science Review* 114, no. 2: 573–590. doi: 10.1017/s0003055419000832.
- Jennings, M. Kent, Laura Stoker and Jake Bowers. 2009. "Politics across Generations: Family Transmission Reexamined." *The Journal of Politics* 71, no. 3: 782–799. doi: 10.1017/S0022381609090719.

- Kertzer, Joshua D, Kathleen E Powers, Brian C Rathbun and Ravi Iyer. 2014. "Moral support: How moral values shape foreign policy attitudes." *The Journal of Politics* 76, no. 3: 825–840. doi: 10.1017/s0022381614000073.
- Klar, Samara, Thomas Leeper and Joshua Robison. 2020. "Studying identities with experiments: Weighing the risk of posttreatment bias against priming effects." *Journal of Experimental Political Science* 7, no. 1: 56–60. doi: 10.1017/XPS.2019.26.
- Klar, Yechiel, Noa Schori-Eyal and Yonat Klar. 2013. "The "Never Again" state of Israel: The emergence of the Holocaust as a core feature of Israeli identity and its four incongruent voices." *Journal of Social Issues* 69, no. 1: 125–143. doi: 10.1111/josi.12007.
- Krosnick, Jon A and Robert P Abelson. 1992. "The case for measuring attitude strength in surveys." *Questions about questions: Inquiries into the cognitive bases of surveys* pp. 177–203. doi: 10.7758/9781610445269.
- Kustov, Alexander, Dillon Laaker and Cassidy Reller. 2021. "The stability of immigration attitudes: Evidence and implications." *The Journal of Politics* 83, no. 4: 1478–1494. doi: 10.2139/ssrn.3322121.
- Lazar, Alon, Julia Chaitin, Tamar Gross and Dan Bar-On. 2004. "Jewish Israeli teenagers, national identity, and the Holocaust." *Holocaust and Genocide Studies* 18, no. 2: 188–204. doi: 10.1093/hgs/dch061.
- Lipstadt, Deborah E. 2012. *Denying the Holocaust: The growing assault on truth and memory*. Simon and Schuster. doi: 10.5860/choice.31-2256.
- Lupu, Noam and Leonid Peisakhin. 2017. "The legacy of political violence across generations." *American Journal of Political Science* 61, no. 4: 836–851. doi: 10.1111/ajps.12327.

- Macksoud, Mona S and J Lawrence Aber. 1996. "The war experiences and psychosocial development of children in Lebanon." *Child development* 67, no. 1: 70–88. doi: 10.2307/1131687.
- Margalit, Avishai and Gabriel Motzkin. 1996. "The uniqueness of the Holocaust." *Philosophy & Public Affairs* 25, no. 1: 65–83. doi: 10.1111/j.1088-4963.1996.tb00076.x.
- Milner, Helen V and Dustin Tingley. 2013. "Public opinion and foreign aid: A review essay." *International Interactions* 39, no. 3: 389–401. doi: 10.1080/03050629.2013.784090.
- Monroe, Kristen Renwick. 1998. *The heart of altruism: Perceptions of a common humanity*. Princeton University Press. doi: 10.1515/9781400821921.
- Muldoon, Orla T. 2013. "Understanding the impact of political violence in childhood: A theoretical review using a social identity approach." *Clinical psychology review* 33, no. 8: 929–939. doi: 10.1016/j.cpr.2013.07.004.
- Nunn, Nathan and Leonard Wantchekon. 2011. "The slave trade and the origins of mistrust in Africa." *The American Economic Review* 101, no. 7: 3221–3252. doi: 10.3386/w14783.
- Peyton, Kyle, Gregory A Huber and Alexander Coppock. 2020. "The generalizability of online experiments conducted during the COVID-19 pandemic.". doi: 10.31235/osf.io/s45yg.
- Riek, Blake M, Eric W Mania and Samuel L Gaertner. 2006. "Intergroup threat and outgroup attitudes: A meta-analytic review." *Personality and social psychology review* 10, no. 4: 336–353. doi: 10.1207/s15327957pspr1004_4.
- Rogoff, Barbara, Ruth Paradise, Rebeca Mejía Arauz, Maricela Correa-Chávez and Cathy

- Angelillo. 2003. "Firsthand learning through intent participation." *Annual review of psychology* 54, no. 1: 175–203. doi: 10.14417/ap.126.
- Sapiro, Virginia. 2004. "Not Your Parents' Political Socialization: Introduction for a New Generation." *Annual Review of Political Science* 7: 1–23. doi: 10.1146/annurev.polisci.7.012003.104840.
- Shaw, Jon A. 2003. "Children exposed to war/terrorism." *Clinical child and family psychology review* 6, no. 4: 237–246. doi: 10.1023/b:ccfp.0000006291.10180.bd.
- Shrira, Amit. 2015. "Transmitting the sum of all fears: Iranian nuclear threat salience among offspring of Holocaust survivors." *Psychological Trauma: Theory, Research, Practice, and Policy* 7, no. 4: 364. doi: 10.1037/tra0000029.
- Simonovits, Gábor, Gabor Kezdi and Peter Kardos. 2018. "Seeing the world through the other's eye: An online intervention reducing ethnic prejudice." *American Political Science Review* 112, no. 1: 186–193. doi: 10.1017/s0003055417000478.
- Sirin, Cigdem V, José D Villalobos and Nicholas A Valentino. 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, no. 3: 893–908. doi: 10.1086/685735.
- Slone, Michelle and Shiri Mann. 2016. "Effects of war, terrorism and armed conflict on young children: a systematic review." *Child Psychiatry & Human Development* 47, no. 6: 950–965. doi: 10.1007/s10578-016-0626-7.
- Staub, Ervin. 2006. "Reconciliation after genocide, mass killing, or intractable conflict: Understanding the roots of violence, psychological recovery, and steps to-

- ward a general theory." *Political Psychology* 27, no. 6: 867–894. doi: 10.1111/j.1467-9221.2006.00541.x.
- Staub, Ervin and Johanna 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. doi: 10.1037/a0014223.
- Stephan, Walter G, C Lausanne Renfro, Victoria M Esses, Cookie White Stephan and Tim Martin. 2005. "The effects of feeling threatened on attitudes toward immigrants." *International Journal of Intercultural Relations* 29, no. 1: 1–19. doi: 10.1016/j.ijintrel.2005.04.011.
- Stephan, Walter G and Krystina Finlay. 1999. "The role of empathy in improving intergroup relations." *Journal of Social issues* 55, no. 4: 729–743. doi: 10.1111/0022-4537.00144.
- Stürmer, Stefan, Mark Snyder, Alexandra Kropp and Birte Siem. 2006. "Empathymotivated helping: The moderating role of group membership." *Personality and Social Psychology Bulletin* 32, no. 7: 943–956. doi: 10.1177/0146167206287363.
- Tedeschi, Richard G and Lawrence G Calhoun. 1995. *Trauma and transformation*. Sage. doi: 10.4135/9781483326931.
- Vollhardt, Johanna Ray, Rashmi Nair and Linda R Tropp. 2016. "Inclusive victim consciousness predicts minority group members' support for refugees and immigrants." *Journal of Applied Social Psychology* 46, no. 6: 354–368. doi: 10.1111/jasp.12368.
- Warner, Ruth H, Michael JA Wohl and Nyla R Branscombe. 2014. "When do victim group members feel a moral obligation to help suffering others?" *European Journal of Social Psychology* 44, no. 3: 231–241. doi: 10.1002/ejsp.2010.

- Wayne, Carly and Yuri Zhukov. 2022. "Replication Data for: 'Never Again: The Holocaust and Political Legacies of Genocide'." World Politics Dataverse. doi: 10.7910/DVN/ZAIGIN.
- Weinfeld, Morton and John J Sigal. 1986. "The effect of the Holocaust on selected sociopolitical attitudes of adult children of survivors." *Canadian Review of Sociology/Revue canadienne de sociologie* 23, no. 3: 365–382. doi: 10.1111/j.1755-618x.1986.tb00404.x.
- Weinfeld, Morton, John J Sigal and William W Eaton. 1981. "Long-term effects of the Holocaust on selected social attitudes and behaviors of survivors: A cautionary note." *Social Forces* 60, no. 1: 1–19. doi: 10.2307/2577929.
- Williamson, Scott, Claire L Adida, Adeline Lo, Melina R Platas, Lauren Prather and Seth H Werfel. 2020. "Family Matters: How Immigrant Histories Can Promote Inclusion." *American Political Science Review* pp. 1–8. doi: 10.1017/s0003055420001057.
- Wohl, Michael JA and Nyla R Branscombe. 2008. "Remembering historical victimization: collective guilt for current ingroup transgressions." *Journal of Personality and Social Psychology* 94, no. 6: 988. doi: 10.1037/0022-3514.94.6.988.
- Woocher, Jonathan S. 1986. *Sacred survival: The civil religion of American Jews*. Bloomington: Indiana University Press. ISBN: 0253350417.
- Zhang, Yiran, Rita Hedo, Anna Rivera, Rudolph Rull, Sabrina Richardson and Xin M Tu. 2019. "Post hoc power analysis: is it an informative and meaningful analysis?" *General psychiatry* 32, no. 4. doi: 10.1136/gpsych-2019-100069.

Supplementary Information

A1 Sampling

We recruited Holocaust survivors through an email circulated by the United States Holocaust Memorial Museum or a regional Holocaust Museum,¹⁰³ and recruited descendants either through the survey firm PrimePanels or various "Children of Holocaust survivors" listservs. We recruited non-descendant Jews and non-Jews through PrimePanels. Table A1.2 reports the number of U.S.-based respondents sampled from each exposure group.

Table A1.2: Sample sizes by recruitment method.

Exposure	How recruited?	N
Survivors	listserv	200
Descendants	PrimePanel	202
Descendants	listserv	115
Non-descendants	PrimePanel	710
Non-descendants	listserv	8
Non-Jews	PrimePanel	517

A1.1 Selection Bias

Because ours is not a probability-based, nationally-representative sample — which is nearly impossible to achieve, given the advanced age of remaining survivors — our sampling procedures have several implications for generalizability and selection bias.

First, people who survived the Holocaust may be systematically different from those who perished. As Finkel (2017, p. 5) notes, "even if under impossible constraints, each and every Jewish person had to decide how to react to Nazi persecution." Survival strategies varied among survivors systematically, depending on geography, pre-war integration, and pre-war economic and education backgrounds. To the extent that some

^{103.} We contacted all 17 regional Holocaust museums in the U.S. Of these, six – in Florida, Ohio, Illinois, Pennsylvania, Michigan, and New York – circulated our survey to their survivor and descendant listservs. Recruitment began in July 2017.

survival strategies had better success rates than others, some Jews became systematically more likely to survive than others. The semi-random nature of survival makes it impossible to rule out survivorship bias, in that those who survived may have developed different long-term attitudes than the dead might have adopted, had they survived. Of course, this is a challenge for *any* study in this area.

A second source of selection bias stems from the advanced age of Holocaust survivors who, by definition, were born in or before 1945. We cannot rule out the possibility that survivors who died young held systematically different attitudes from the survivors in our sample, or that survivors' attitudes have changed over their lifespan. Thus, our results can only point to a snapshot in time: how survivors' experience in the Holocaust have shaped their attitudes *in old age*. We see this not as a limitation of the study, but as a feature. It is precisely these truly long-term attitudes in which we are interested.

Third, survivors in the United States are different than those elsewhere. For example, it is possible that, after 1945, survivors who were more wary of political violence came to the U.S., whereas those who were more risk-acceptant immigrated to Israel. This is an important scope condition of our study – we restrict our conclusions regarding long-term effects of the Holocaust to individuals who immigrated to relatively safe countries.

Fourth, survivors who joined the USHMM listserv and have email addresses on file may be different than survivors who did not. As noted in the main text, the biggest concern here is that survivors on the listserv are politically more liberal than those who opted out. We find no evidence of a partisan skew in our sample: the partisan distribution of our survivor sample roughly matches that of other Jews in the U.S.

Although we cannot rule out the possibility that survivors with a different demographic makeup may hold different attitudes from those in our sample, the survivors who are in our sample did not significantly differ from other Jewish survey participants on socio-demographic metrics other than age. The average survivor in our sample

was middle class (mean of 2.45 on a 5-point scale, compared to 2.39 for the average non-descendant), well-educated (mean of 5.34 on a 7-point scale, compared to 5.78) and about equally likely to be Republican as the non-descendant Jew (32% vs. 35%). That said, as Figure A1.2 confirms, the age distribution of survivors is quite distinct from that from other sub-samples, with common support limited to respondents in their 70's.

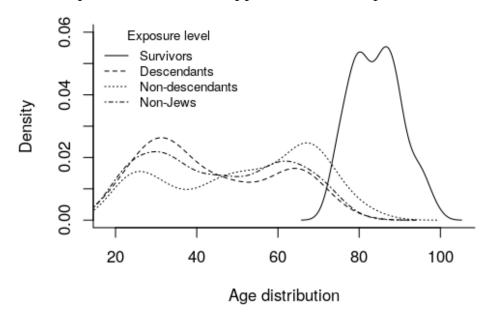


Figure A1.2: Age distribution of survey respondents.

Taken together, these sampling considerations lead to the following scope conditions for our results. Our findings apply to survivors of political violence who 1) suffered victimization as children, 2) emigrated to the United States following the violence, 3) live in relative comfort and security in the present, and 4) were sufficiently healthy to reach advanced age. While the intrinsic importance of this hard-to-reach population does not negate these limitations, we believe that the unique nature of this subject pool and the unprecedented size of our sample are sufficiently compelling to justify our analysis.

A1.2 Demand Effects

An additional concern with our recruitment method is that, because survivors and descendants recognize they were recruited *because of* their survivor or descendant status,

there may be demand effects, where they feel obligated to respond to questions in a more inclusive way. If that were true, we would expect that, when presented with an explicitly outgroup-protective "never again" frame, survivors and descendants should express significantly more support for Syrian refugees. However, we find that survivors' and descendants' views were not significantly affected by either frame, whereas the less exposed populations (Jews and non-Jews) were.

A1.3 Sample Attrition

Finally, it is possible that survivors who chose to fill out the entire survey may be different from those who quit part-way. Figure A1.3 reports the proportion of respondents that reached each survey question, including the proportion remaining at the time of experimental treatment. Because the survey flow differed slightly across subgroups to accommodate specialized questions about personal and family background, we report these patterns separately for each sample. Survivors had the highest attrition, with 71% of respondents reaching treatment, compared to 90-91% for other groups.

A potential concern is that survivors' high attrition rate may reflect discomfort with the "never again" prime and its implicit comparison between the Holocaust and the plight of Syrian refugees. If this is true, then the observed effect of the outgroup-protective prime may be due to less "empathetic" survivors leaving the survey before measurements were made. There is little evidence of such a pattern. Most attrition among survivors occurred at the very beginning of the survey, following the informed consent form and screener questions, long before the treatment was administered. There is no evidence that survivors (or any other group) left the survey en masse shortly after treatment.

We can use a simple calculation to assess how severe bias due to attrition would need to be to account for attitudinal differences between survivors and other respondents. Suppose that "true" group means in each exposure category are weighted sums of the

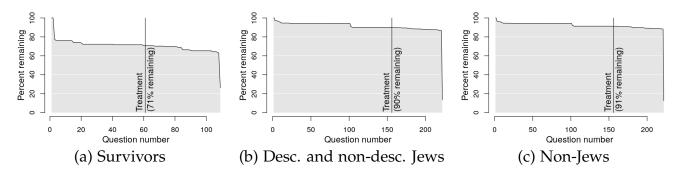


Figure A1.3: Patterns of sample attrition among survey respondents.

attitudes of respondents in sample and those who dropped out:

$$\mathbb{E}[Y|E = k] = \mathbb{E}[Y|E = k, s = 1]\pi_k + \mathbb{E}[Y|E = k, s = 0](1 - \pi_k)$$

where s is an indicator equal to 1 for individuals in sample, E represents one's exposure category, and π_k is the proportion of respondents with exposure $k \in \{\text{Survivor}, \text{Descendant}, \text{Non-descendant}, \text{Non-Jew}\}$ who completed the survey. $\mathbb{E}[Y|E=k,s=1]$ represents the observed in-sample group means in Figure 1; $\mathbb{E}[Y|E=k,s=0]$ is unobserved. If there is no bias due to attrition, then $\mathbb{E}[Y|E] = \mathbb{E}[Y|E,s=1] = \mathbb{E}[Y|E,s=0]$.

In order for sample attrition to fully explain differences between survivors and other exposure groups in Figure 1, average support for refugees in the incomplete survivor surveys would need to be lower than those in sample. To account for observed differences between survivors and descendants, $\mathbb{E}[Y|E=\text{Survivor},s=0]$ must be no higher than 4.7. To explain differences from non-descendants and non-Jews, the numbers are 3.7 and 1 — well outside the 95% confidence region of survivors' in-sample mean of 4.8. With the exception of the already-small differences between survivors and descendants, it is highly unlikely that sample attrition alone can account for the patterns we observe.

A1.4 Summary Statistics

Table A1.3: Summary statistics: respondent socio-demographics by exposure group. S: survivors; D: descendants; ND: non-descendants; NJ: Non-Jews.

Variable		Range			Mean				SD			
	(S)	(D)	(ND)	(NJ)	(S)	(D)	(ND)	(NJ)	(S)	(D)	(ND)	(NJ)
Age	(72,99)	(18,78)	(18,86)	(18,81)	84.12	43.63	51.68	45.32	6.14	16.37	18.10	16.89
Party ID (Republican)	(0,1)	(0,1)	(0,1)	(0,1)	0.30	0.35	0.33	0.54	0.32	0.35	0.35	0.35
Sex (male)	(0,1)	(0,1)	(0,1)	(0,1)	0.57	0.39	0.38	0.38	0.50	0.49	0.49	0.49
Education	(1,7)	(1,7)	(2,7)	(1,7)	5.31	5.88	5.79	4.58	1.91	1.34	1.25	1.41
Income	(1,5)	(1,5)	(1,5)	(1,5)	2.43	2.63	2.40	1.73	1.24	1.22	1.19	0.92
Pre-WWII: E. Europe	(0,1)	(0,1)	(0,1)	(0,1)	0.27	0.59	0.03	0.01	0.45	0.49	0.17	0.08
Pre-WWII: Primary	(0,1)	(0,1)	(0,1)	(0,1)	0.07	0.11	0.00	0.01	0.26	0.31	0.06	0.10
Pre-WWII: Manufacturing	(0,1)	(0,1)	(0,1)	(0,1)	0.15	0.13	0.01	0.03	0.36	0.33	0.11	0.17
Pre-WWII: Services	(0,1)	(0,1)	(0,1)	(0,1)	0.25	0.35	0.12	0.13	0.43	0.48	0.32	0.33
Pre-WWII: Information	(0,1)	(0,1)	(0,1)	(0,1)	0.15	0.15	0.06	0.07	0.36	0.36	0.23	0.25
Immigrant Grandparents	(1,1)	(0,1)	(0,1)	(0,1)	1.00	0.95	0.74	0.36	0.00	0.23	0.44	0.48

A2 Power Analysis

A2.1 Effect of Holocaust Exposure on Attitudes

We run our main model specification (Equation 1, Figure 2a) on a sample of n = 1527 respondents across four exposure categories: survivor (n = 121), descendant (n = 271), non-descendant (n = 641), and non-Jew (n = 494). This model includes 19 covariates, including pre-/post-war demographics, and dummies for exposure category and treatment. Including these variables reduces our total effective n to 1301 due to missingness.

A power analysis suggests that this design is capable of detecting effect sizes as small as $f^2 = 0.016$. Cohen (1992) suggests f^2 values of 0.02, 0.15, and 0.35 represent small, medium and larger effect sizes, respectively. Thus, our study is sufficiently powered to pick up significant differences even on relatively small effects.

In a robustness check of our main analysis, we run the model on the subsample of n=510 respondents assigned to the *control condition only*, as was our pre-registered plan: 39 survivors, 78 descendants, 224 non-descendant Jews, and 169 non-Jews. This

^{104.} Inputs for the power analysis are: 19 numerator degrees of freedom, 1282 denominator degrees of freedom, significance level of p = 0.05, and power level of 0.8.

model includes 16 covariates, yielding a final sample size of n = 425 and an f^2 of 0.047 — allowing us to detect medium and large effects, but not small effects.

To illustrate the relative power of each pairwise comparison in our main analysis, Table A2.4 reports the minimum effect size d (Cohen, 1992) we can detect using a t-test comparing mean differences in attitudes across any two sub-samples, where d values of 0.2, 0.5, and 0.8 represent small, medium, and large effect sizes. 105 Using pairwise comparisons, our sample size allows us to pick up medium and large effects, but not the smallest effects – particularly when comparing survivors to descendants. Table A2.5 reports observed Cohen's d values from our data — mean differences in support for refugees between each pair of groups divided by their pooled standard deviation. These are standardized versions of the values in Figure 1. In all paired comparisons besides Survivor vs. Descendant, these values exceed the minimum effect sizes in Table A2.4.

pairwise comparison (Cohen's *d*)

Table A2.4: Minimum effect sizes for each Table A2.5: Cohen's d for values reported in Figure 1.

Exposure	Desc.	Non-desc	Non-Jew	Exposure	Desc.	Non-desc	Non-Jew
Survivor	0.31	0.28	0.28	Survivor	0.01	1.53	1.94
Desc.		0.2	0.21	Desc.		1.73	1.97
Non-desc			0.17	Non-desc			1.96

Effect of Primes on Attitudes A2.2

Our second set of analyses examines the effect of our experimental treatment on attitudes toward Syrian refugees across these four groups. The main model specification is a linear model regressing support for refugees on our 3-level treatment variable. However, our results hold with the full set of control variables (as we show on pp. A18-A20).

^{105.} Cohen's d for the control only: Survivor–Descendant d = 0.5; Survivor–Non-descendant d = 0.49; Survivor–Non-Jew d = 0.46; Descendant–Non-descendant d = 0.37; Descendant–Non-Jew d = 0.39; Non-descendant–Non-Jew d = 0.29.

For the full sample, our sample size provides enough statistical power to detect effects as small as $f^2 = 0.006$, which Cohen (1992) defines as "small" effects.¹⁰⁶

To calculate power for our supplementary interaction models, we use the Superpower R package for a) a 3×4 ANOVA design and b) a 3×2 ANOVA design.¹⁰⁷ We specify the observed n for each of the categories (e.g. survivor-control, survivor-inclusive, survivor-exclusive, etc.), the observed μ for our dependent variable for each category, and the full sample standard deviation for our dependent variable (sd=1.96), with a significance level of $\alpha=.05$. Effect sizes are reported as partial ETA-squared, η_p^2 . Table A2.6 lists power levels (scaled 0-100) and minimally detectable effect sizes for the 3x4 model as compared to the observed η_p^2 in our results.

Table A2.6: Power analysis for linear model with 3×4 interaction effect

Effect	Power	Minimum Detectable Effect Size	Observed Effect Size
Condition	98.5	0.01	0.02
Group	100	0.1	0.1
Condition \times Group	51.9	0.01	0.005

Results indicate that the study is sufficiently powered to observe the main effects of treatment and exposure, but *not* of the interaction of the two. A non-significant interaction effect may therefore be indicative of low statistical power, rather than a true null.

We repeated the power analysis for a 3×2 interaction model, which collapses the four exposure categories into two (survivors + descendants vs. non-descendants + non-Jews). These results, shown in Table A2.7, indicate that a 3×2 design allows us to detect smaller effect sizes. However, our study remains underpowered, with only a slightly

^{106.} Breaking the power analysis out by subgroup, sample sizes are sufficiently powered to detect small effects among non-descendant Jews ($f^2 = 0.015$) and non-Jews ($f^2 = 0.019$), but only medium effects for the smaller survivor ($f^2 = 0.081$) and descendant ($f^2 = 0.036$) samples.

^{107.} Note: These power analyses for interactive models were conducted after the study. These types of post-hoc power analyses rely on identifying population-level parameters with sample-specific statistics and so are somewhat less valuable than prospective ones (Zhang et al., 2019).

better-than-even (52%) chance of correctly rejecting the null hypothesis of no interaction effect. Still, as we report in pp. A18-A20, our models were nonetheless able to detect significant interaction effects in a 3×2 design.

Table A2.7: Power analysis for linear model with 3×2 interaction effect

Effect	Power	Minimum Detectable Effect Size	Observed Effect Size
Condition	96.6	0.01	0.02
Group	100	0.02	0.02
Condition × Group	52.3	0.005	0.003

A3 Survey Design

A3.1 Survey Flow

The survey proceeded as follows. Holocaust survivors and descendants, so identified by a screener question, first answered several questions about their (or parents' or grandparents') pre-war, wartime, and post-war experiences. We asked these questions prior to treatment to ensure proper branching. Next, we assigned all respondents to one of three treatment conditions, as described below. After treatment, subjects answered questions about various intergroup attitudes, beginning with their attitudes about Syrian refugees.

Respondents who indicated they were Jewish answered additional questions pertaining to potential social pathways by which political attitudes might transmit across generations: involvement in the Jewish community, Holocaust education and remembrance activities. Non-survivors then answered questions about their parents' backgrounds. The survey concluded with a battery of socio-demographic questions.

^{108.} While social desirability bias may exist in this self-reported measure (e.g. over-reporting of relatives as survivors, due to the broad nature of the term), this should be relatively rare. For example, using follow-up questions about forced transport to ghettos, camps and related matters, we found no cases of individuals who reported being survivors but left Europe prior to Nazis' rise to power.

^{109.} Descendants answered questions about their *non*-survivor parent(s), since they would have provided information on survivor relatives at the beginning of the survey.

One potential concern with our survey flow is that it asks Holocaust survivors and their descendants, but not non-exposed populations, to recall details about their (or their relatives') experiences in the Holocaust prior to receiving treatment. Practically, it was important to ask these questions at the outset to properly branch subsequent survey sections and collect enough information on pre-war demographic covariates to fully specify our model and assess patterns of attrition (SI A1.3). Yet there is some recent evidence that priming immigrant histories has a small positive effect on support for immigration (Williamson et al., 2020), and reflecting on the Holocaust may conceivably prime survivors and descendants to be more supportive of refugees.

This is plausible, but likely inconsequential for our results. First, it is doubtful that such effects would be large enough to account for the differences we find across populations. Priming effects from past immigration studies have found effect sizes equivalent to a 0.06-0.08 standard deviation shift (Williamson et al., 2020) – far smaller than the differences we find between survivor/descendant populations and the non-exposed groups. Moreover, what we are priming in this study are not immigration histories, but historical victimization. Making one's experience in the Holocaust more salient could theoretically increase support for refugees (e.g. by reminding survivors of the horrors refugees are fleeing), but it could just as easily increase suspicion of outgroups by recalling past trauma and enhancing threat perceptions.

A3.2 Treatment

Our experimental treatment emphasized either an outgroup or ingroup oriented interpretation of the "never again" imperative. A control condition emphasized neither.

1. Outgroup focused, inclusive: In 1939, the St. Louis ocean-liner carried German Jewish refugees fleeing the worsening situation in Germany to the United States. However, due to strict immigration quotas at the time – and despite knowledge about the

danger Jews faced in Nazi Germany – the refugees were sent back to Germany where many died in the Holocaust. Today, advocates of admitting more Syrian refugees to the United States <u>frequently cite the Jewish imperative to 'never again'</u> <u>turn a blind eye to such slaughter, warning that many Syrians may die if they are not admitted to the US, while those opposed warn that extremists and terrorists may hide among the refugees. What do you think...</u>

- 2. *Ingroup focused, exclusive:* In 1933, Hitler rose to power by stoking anti-Semitic views in Germany, arguing that Jews were an inferior, corrupt race bent on world domination. The spread of these attitudes among the German population was the precursor of the violence to come leading to anti-Jewish pogroms and, eventually, the Holocaust and near destruction of European Jewry. Today, advocates of restricting the entrance of Syrian refugees to the United States <u>frequently cite</u> the Jewish imperative to 'never again' go like lambs to slaughter, warning that extremists and terrorists may hide among the refugees, while those opposed warn that many Syrians may die if they are not admitted to the US. What do you think...
- 3. *Control:* Advocates of admitting more Syrian refugees to the United States frequently warn that many Syrians may die if they are not admitted to the US. On the other hand, those opposed warn that extremists and terrorists may hide among the refugees. What do you think...

To avoid order effects, we used two versions of the control. The second version reverses the order of these two statements so that the anti-immigrant statement comes first.

A3.3 Additional Covariates

We also measure several covariates that could potentially confound our analysis or otherwise moderate the relationship between exposure and attitudes towards refugees.

For those with ties to the Holocaust, measured covariates included: pre-war residence

of the survivor's family, pre-war profession of the survivor's family, pre-war religiosity of the survivor's family, pre-war socio-economic status of the survivor's family, whether they (or their parent/grandparent) were forced to move to a ghetto, sent to a concentration camp, served in an underground movement, or were under captivity at war's end, whether they (or their parent/grandparent) received aid from non-Jews that helped them survive the Holocaust, and how often they (or their parent/grandparent) spoke about the Holocaust when they (or their children) were growing up.

For all Jews, we asked whether they were Reform, Conservative, Orthodox, Other, or Non-Jewish, how active they were in their local Jewish community, and how active they were in Holocaust education. For all respondents, we collected information on political interest, political ideology, party ID, age, gender, income, education, and parents' background (age, religiosity, SES, country of origin, profession, immigration to U.S.).

We did not ask respondents whether they self-identify as Ashkenazi, Mizrahi or Sephardi. However, we can (roughly) approximate these proportions by using countries of family origin as a proxy variable, with the assumption that Jewish families from European countries could be classified as Ashkenazi. In our data 58% of survivors grew up in Western Europe, 40% in Eastern Europe, and less that 1% each in North Africa, the Middle East or Central Asia. Among descendants, 26% had survivor relatives from Western Europe, 69% from Eastern Europe, 5% from both Western and Eastern Europe, and less than 1% from North Africa and other regions. Among the broader non-descendant Jewish sample, 84% marked both parents' countries of origin as the United States, meaning they were at least third-generation Americans. Of the remaining non-descendants, 8.5% had parents from Eastern Europe, 3% from Western Europe, 2.5% from the Americas (excluding U.S.), 2% from the Middle East and North Africa and less than 1% from other

^{110.} If descendants of (multiple) survivors indicated multiple pre-war residences, professions, religiosity or socio-economic status, we chose one at random.

regions. If we assume that *all* of the non-descendants with parents from outside Europe are Mizrahi and Sephardi, while their proportions among third-generation American Jews is similar to that in the broader U.S. Jewish population (1% and 3% according to a recent Pew Survey, with 6% identifying as some combination), then the maximum percentage of Sephardi and Mizrahi Jews in the non-descendant sample is 12.9%. Making a similar calculation for survivors and descendants, we estimate the maximum share of Mizrahi or Sephari Jews in those samples to be less than one percent each.

A4 Additional Observational Analyses

A4.1 Analyses Restricted to the Control Group

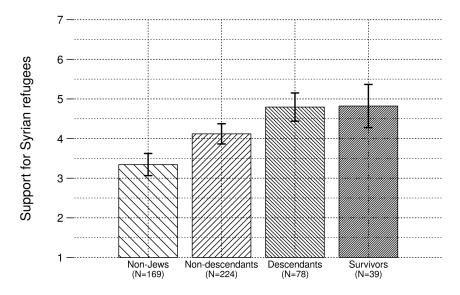


Figure A4.4: Replication of Figure 1, respondents in control group only.

^{111.} https://www.pewforum.org/2021/05/11/jewish-americans-in-2020/

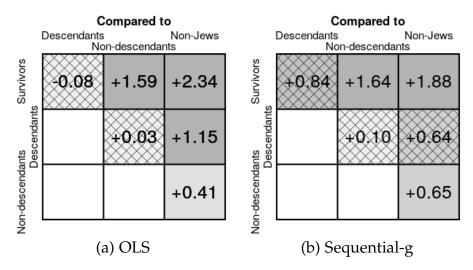


Figure A4.5: Replication of Figure 2, respondents in control group only.

A4.2 Alternative Measures of Outgroup Attitudes

Figure A4.6 replicates the analyses in Figure 2, with alternative measures of outgroup attitudes. These include (a) building a U.S.-Mexican border wall,¹¹² (b) imposing a ban on Muslim migration to the U.S.,¹¹³ (c) establishing a "safe zone" for civilians in Syria,¹¹⁴ and (d) intervening in armed conflicts to protect civilians, as a general policy.¹¹⁵

If the outgroup protection hypothesis is correct, we should expect negative relationships between genocide exposure and support for the border wall and travel ban, and positive relationships with support for "safe zones" and responsibility to protect. This is, indeed, what we find. Survivors are less supportive of the travel ban than non-descendants and non-Jewish Americans, and marginally less supportive of the border wall. Survivors are also more supportive than non-descendants of military measures to

^{112.} Question wording: "How strongly would you support or oppose building a wall along the US-Mexican border in an attempt to stop illegal immigration?"

^{113.} Wording: "How strongly would you support or oppose a temporary ban on Muslim immigrants to the United States in order to reduce the chance of a terrorist attack?"

^{114.} Wording: "How strongly would you support or oppose the United States establishing a safe zone in Syria for civilians fleeing ISIS and the Assad regime?"

^{115.} Wording: "Do you think the United States has or does not have a responsibility to intervene in armed conflicts to stop the killing of civilians?"

protect civilians in Syria and elsewhere. Non-descendants, in turn, are less supportive of the wall and travel ban than non-Jewish Americans, and more supportive of a responsibility to protect civilians. The only deviant result is that descendants are *more* supportive of the border wall and travel ban than non-descendants. All others suggest that individuals more directly exposed to the Holocaust are more supportive of outgroups.

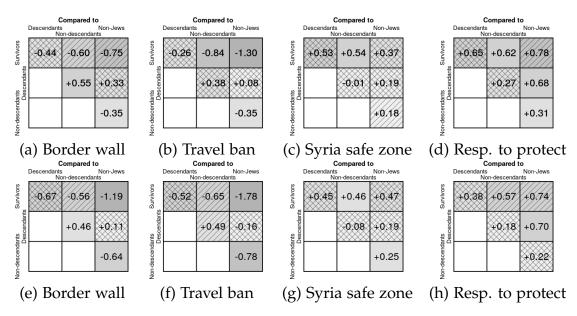


Figure A4.6: Alternative outgoup attitude measures, OLS (a-d) and ACDE (e-h).

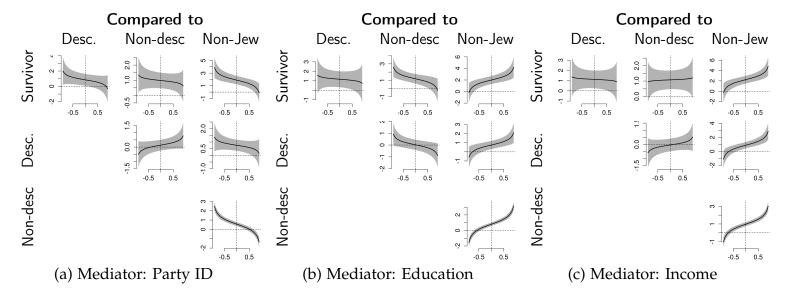
A4.3 Sensitivity Analysis of ACDE Estimates

Sequential-g estimation rests on two assumptions. First is sequential unconfoundedness, which requires that there are no omitted variables for the effect of treatment on the outcome (conditional on pretreatment confounders), and no omitted variables for the mediator's effect on the outcome (conditional on treatment, pretreatment and intermediate confounders). Second is the assumption of no intermediate interactions, meaning that the effect of the mediator on the outcome is independent of intermediate confounders.

We assess violations of sequential unconfoundedness through a sensitivity analysis that evaluates how ACDE estimates change for different levels of post-treatment confounding in the mediator-outcome relationship (Acharya, Blackwell and Sen, 2016a, 11).

The results of this analysis – for each pairwise comparison and each mediating variable – are in Figure A4.7. The black lines represent ACDE estimates (vertical axes) at different levels of correlation between mediator and outcome errors (horizontal axes). Our main ACDE estimates correspond to values where this correlation is zero. These results show that, in most cases, the unmeasured confounding for the mediator's effect would have to be quite severe (approaching $\rho = 1$ or -1) to change our substantive results.

Figure A4.7: Sensitivity analysis of sequential-g ACDE estimates. Black lines show the estimated ACDE (vertical axes) at different levels of correlation between mediator and outcome errors (horizontal axes). Gray areas show 95% confidence intervals.



A4.4 Telescopic Matching

In addition to sequential-g estimation, we estimated ACDE's with telescopic matching. This procedure uses nonparametric matching to impute counterfactual outcomes for fixed values of each mediating variable, and uses these imputations to estimate the direct effect of exposure, holding mediating variables constant (Blackwell and Strezhnev, 2018).

Because telescopic matching requires binary treatments and mediators, we dichotomize all covariates (e.g. above/below median education, etc.) and treatment assignments, splitting the sample into pairwise comparisons. Let E_i be i's exposure category (e.g. 1 if

survivor, 0 if descendant), and M_i be the value of a mediator (e.g. 1 if Republican, 0 if Democrat). We match respondents with $M_i = 1$ to others with $M_i = 0$, but similar values of $\mathbf{X}_i^{(pre)}$ and identical exposure E_i . After imputing potential outcomes for matched respondents, we perform a second matching stage with respect to E_i , minimizing imbalance on $\mathbf{X}_i^{(pre)}$. The ACDE estimate is $\hat{\tau} = \frac{1}{N} \sum_i^N \left(\widehat{\text{Attitudes}}_{i10} - \widehat{\text{Attitudes}}_{i00} \right)$, where $\widehat{\text{Attitudes}}_{i10}$ ($\widehat{\text{Attitudes}}_{i00}$) are i's imputed attitudes under $E_i = 1$ (0) and $M_i = 0$.

Figure A4.8 reports ACDE estimates separately for three potential mediators — party identification, education and income — along with dummy variables indicating experimental treatment group. Differences across exposure categories are generally of similar magnitude and direction as those in Figure 2 in the main text.

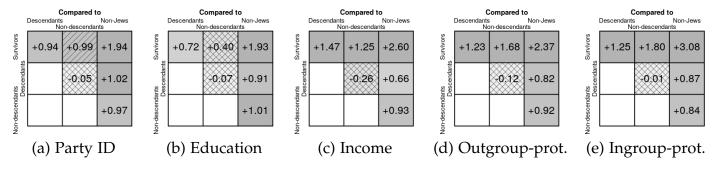


Figure A4.8: Telescopic matching estimates of ACDE of genocide exposure on outgroup attitudes. Values represent average differences in support for increasing admission of Syrian refugees between groups in the rows and columns, while holding each mediating variable constant. Darker shades indicate larger differences. Diagonal lines indicates that differences are insignificant at the 95% (single) or 90% confidence level (double).

A4.5 Wartime Experiences and Out-Group Attitudes

Tables A4.8-A4.11 report the results of analyses to detect potential heterogeneities due to wartime experiences: whether survivors or families of descendants received help from non-Jews (52% of survivors and 53% of descendants in sample), whether they had been relocated to a ghetto (48%, 64%), interned in a camp (32%, 53%), or had joined armed resistance groups (5%, 22%). These self-reported personal and family experiences do not significantly influence outgroup attitudes in any model.

Table A4.8: Wartime experiences (received help from out-group member) and support for Syrian refugees. OLS and sequential-g estimates, bootstrapped standard errors in parentheses. Coefficient estimates for pre- and post-treatment control variables not shown. S: survivors, D: descendants.

Model type	Model 1 OLS	Model 2 OLS	Model 3 OLS	Model 4 seq-g	Model 5 seq-g	Model 6 seq-g	
Helped by out-group	0.33 (0.29)	0.47 (0.37)	-0.27 (0.49)	0.57 (0.26)	0.65 (0.35)	0 (0.41)	
Pre-WWII covariates	Yes	Yes	Yes	Yes	Yes	Yes	
Post-WWII covariates Exposure	No S, D	No D	No S	Yes S. D	Yes D	Yes S	
AIC	726.3	411.8	317	742.7	410.2	346.8	
N	1 <i>7</i> 7	103	74	177	103	74	
Significance (two-tailed): 'p<.1,*p<.05,**p<.01,***p<.001							

Table A4.9: Wartime experiences (relocated to ghetto) and support for Syrian refugees.

Model type	Model 1 OLS	Model 2 OLS	Model 3 OLS	Model 4 seq-g	Model 5 seq-g	Model 6 seq-g		
Relocated to ghetto	0 (0.3)	0.51 (0.42)	-0.53 (0.48)	-0.04 (0.29)	0.51 (0.4)	-0.65 (0.44)		
Pre-WWII covariates	Yes	Yes	Yes	Yes	Yes	Yes		
Post-WWII covariates	No	No	No	Yes	Yes	Yes		
Exposure	S, D	D	S	S, D	D	S		
AIC	727.6	411.9	315.9	748.4	413.2	342.7		
N	177	103	74	177	103	74		
		Significance (two-tailed): 'p<.1,*p<.05,**p<.01,***p<.001						

A5 Additional Experimental Analyses

In addition to the experimental results in Figure 4, we considered model specifications that include demographic and pre-WWII covariates (Table 1), and regional fixed effects:

$$\begin{aligned} & \text{Attitudes}_i = \theta \cdot T_i + \beta_1' \mathbf{x}_j^{(pre)} + \text{Region}_j^{(pre)} + \epsilon_i \\ & \text{Attitudes}_i = \theta \cdot T_i + \phi \cdot \text{Exposure}_i + \gamma \cdot T_i \times \text{Exposure}_i + \beta_1' \mathbf{x}_j^{(pre)} + \text{Region}_j^{(pre)} + \epsilon_i \end{aligned}$$

where the first equation is an expansion of the treatment-only model in equation 4, and the second is an expansion of the $(3\times4 \text{ and } 3\times2)$ interactive model in equation 5. Figure A5.9a shows estimates from these expanded specifications, ordered left to right, which are numerically close to those in Figure 4 in magnitude and significance.

Table A4.10: Wartime experiences (interned in camp) and support for Syrian refugees.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6		
Model type	OLS	OLS	OLS	seq-g	seq-g	seq-g		
Interned in camp	0.07 (0.31)	0.03 (0.38)	0.29 (0.57)	0.11 (0.28)	0.11 (0.35)	0.3 (0.53)		
Pre-WWII covariates	Yes	Yes	Yes	Yes	Yes	Yes		
Post-WWII covariates	No	No	No	Yes	Yes	Yes		
Exposure	S, D	D	S	S, D	D	S		
AIC	727.6	413.5	317	747.7	415.3	344.3		
N	177	103	74	177	103	74		
	Significance (two-tailed): 'p<.1,*p<.05,**p<.01,***p<.001							

Table A4.11: Wartime experiences (fought in armed resistance movement) and support for Syrian refugees.

Model type	Model 1 OLS	Model 2 OLS	Model 3 OLS	Model 4 seq-g	Model 5 seq-g	Model 6 seq-g	
Active in resistance	-0.04 (0.42)	0.06 (0.42)	-0.62 (1.44)	0.6 (0.45)	0.42 (0.45)	1.57 (1.23)	
Pre-WWII covariates	Yes	Yes	Yes	Yes	Yes	Yes	
Post-WWII covariates	No	No	No	Yes	Yes	Yes	
Exposure	S, D	D	S	S, D	D	S	
AIC	727.6	413.5	317.1	744.3	414.8	343.3	
N	177	103	74	177	103	74	
	Significance (two-tailed): 'p<.1,*p<.05,**p<.01,***p<.001						

Figure A5.9: Experimental analyses, with covariates included.

