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 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, neither survivors' nor descendants' views toward refugees change after reading an ingroup- versus outgroup-protective interpretation of the "never again" imperative. Histories of victimization can thus 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, repression seeks to "destroy, in whole or in part, a national, ethnic, racial or religious group" (UN GAOR, GA Res 260A(III), 1948). 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 (Anderton, 2016). The effects of political violence can reverberate beyond the immediate pain and suffering, shaping political participation (Blattman, 2009), social cohesion (Gilligan, Pasquale and Samii, 2014), identity (Balcells, 2012), and economic development (Acemoglu, Hassan and Robinson, 2011; Besley and Reynal-Querol, 2014). These effects can be incredibly durable, persisting across generations (Acharya, Blackwell and Sen, 2016*b*; Charnysh, 2015; Homola, Pereira and Tavits, 2020).

While past studies find that exposure to violence hardens attitudes toward the perpetrators and groups associated with them (Beber, Roessler and Scacco, 2014; Hayes and McAllister, 2001; Lupu and Peisakhin, 2017), its effect on long-term attitudes toward outgroups *in general*, including those with no clear link to the historical trauma, is less understood (Dinas and Fouka, forthcoming). 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 and hyper-sensitive to *any* outgroup threats (Canetti et al., 2018; Nunn and Wantchekon, 2011). 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 own (Stürmer et al., 2006) and more aware that violence against others can spill over and affect their own safety and well-being (Cialdini et al., 1997). As such, exposure to violence may engender empathy, increasing survivors' and their descendants' support of 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 (Rogoff et al., 2003). 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 (Jennings, Stoker and Bowers, 2009). Those 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 (Bar-Tal, 2003; Sapiro, 2004) that influences perceptions of political events, regardless of personal or family exposure. Each degree of exposure — personal, family, or group — implies a different mechanism of attitude formation and transmission.

This paper 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 highly salient outgroup, Syrian refugees. We examine the association between support for Syrian refugees and histories of personal vic-

timization by comparing baseline attitudes across survivors, descendants, non-exposed Jews and non-Jews. In addition, 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.[1]

Our evidence suggests that personal-, family- and even group-level exposure to violence is 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 non-exposed Jews and non-Jews were swayed by an experimental treatment re-interpreting the "never again" imperative, survivors' and descendants' views were unchanged.

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), implementation of generalized propensity score weights to address potential covariate imbalances, 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

[1]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.

(Balcells, 2012; Dinas and Fouka, forthcoming), the foundations of intergroup prejudice and tolerance (Williamson et al., 2020; Simonovits, Kezdi and Kardos, 2018; Sirin, Villalobos and Valentino, 2016), and public opinion on immigrants and refugees (Brader, Valentino and Suhay, 2008; Hainmueller and Hopkins, 2014). 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 moments.

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 (Milner and Tingley, 2013), use of military force (Kertzer et al., 2014), and immigration (Hainmueller and Hopkins, 2014). 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 intergroup relations (Riek, Mania and Gaertner, 2006; Stephan et al., 2005). 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 (Staub, 2006). Several studies have shown that exposure to violence increases psychological distress (Canetti et al., 2013) and anxiety (Gadarian and Albertson, 2014), negatively impacting inter-group trust and increasing support for separation and exclusion (Beber, Roessler and Scacco, 2014; Nunn and Wantchekon, 2011). This heightened threat sensitivity could make survivors of violence less supportive of potentially threatening outgroups (Wohl and Branscombe, 2008), including immigrants and refugees. Indeed, studies of Holocaust survivors and descendants in Israel have found evidence of

amplified existential threat responses to contemporary political violence (Canetti et al., 2018) and a tendency to view the world as inherently hostile (Shrira, 2015).

However compelling, threat sensitivity is not the only psychological response to violence. Survivors can sometimes channel their trauma in more positive directions, exhibiting pro-social attitudes and behaviors (Macksoud and Aber, 1996; Staub and Vollhardt, 2008) and experiencing so-called "post-traumatic growth" (Tedeschi and Calhoun, 1995). For example, studies have found that individuals more exposed to violence during the Liberian civil war were more welcoming of Ivorian refugees (Hartman and Morse, 2018), Greeks with a family history of forced migration were more sympathetic to Syrian refugees (Dinas and Fouka, forthcoming), and African Americans were more supportive of Hispanic immigrants (Sirin, Villalobos and Valentino, 2016). This suggests that empathy, much like threat, can form the basis for outgroup attitudes.

A central component of empathy is the ability to not only feel sympathy for the suffering of others, but also to imagine oneself in their position and personally identify with their predicament (Davis, 2018; Stephan and Finlay, 1999). Survivors of political violence may find it easier to empathize with other victimized peoples, whose experiences resonate with their own historical treatment (Eklund, Andersson-Straaberg and Hansen, 2009; Stürmer et al., 2006). Yet survivors' support for vulnerable outgroups need not be purely altruistic (Staub and Vollhardt, 2008). This support 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 solely or 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 (Gaertner et al., 2000). Survivors may thus see support for other persecuted groups as support for those

who share a piece of their identity (Monroe, 1998).

A second reason why survivors may support other victimized groups is that they have learned firsthand that violence against others tends to spread, ultimately 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 (Cialdini et al., 1997). Survivors may still see ethnic or religious outgroups as "others," while recognizing that upholding a norm of aiding outgroups and preventing violence may be beneficial to their ingroup in the long run. In protecting other victimized groups, survivors of political violence also protect themselves.

In either case, personal histories of victimization 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. Thus, survivors of political violence may be more supportive of ethnic and religious outgroups whose experiences parallel their own.

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 (Woocher, 1986). In a 2013 PEW study of Jewish Americans, for example, 73% listed "remembering the Holocaust" as an essential part of their Jewish identity.

The impact of Holocaust exposure on outgroup attitudes is unclear, however. The few studies that compare the political views of survivors to Jews with no Holocaust background have found modest or insignificant differences across most social and economic issues (Weinfeld, Sigal and Eaton, 1981). For descendants, the picture is similarly mixed,

with researchers finding survivors' children to be more liberal (Weinfeld and Sigal, 1986), centrist (Carmil and Breznitz, 1991) and conservative (Lazar et al., 2004) than other Jews.

On the one hand, the centrality of the Holocaust 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 much harder 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 (Lipstadt, 2012; Margalit and Motzkin, 1996), provoking a backlash among individuals who resent the comparison (Ariely, 2020), and limiting the potential of perspective-taking and shared victimhood identity (Vollhardt, Nair and Tropp, 2016).

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 (2013, p. 126) 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. 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.

These two imperatives — protect the ingroup versus protect outgroups — are not mutually exclusive (Brewer, 1999), but they may come into conflict when one victimized group sees another as both victim and potential threat (Warner, Wohl and Branscombe, 2014). This tension is particularly visible in political discussions over immigrants and refugees, whom the public may perceive as simultaneously threatening (Brader, Valentino and Suhay, 2008) and deserving of sympathy (Adida, Lo and Platas, 2018). 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.[2] For Jewish Americans, an additional source of unease is the possibility that many Syrians may hold anti-Semitic or anti-Israel attitudes.[3] Prominent organizations like the American Jewish Committee publicly voiced this concern, while media reports on anti-Semitic attitudes among Syrian refugees in Germany and a "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-Semitic attitudes.

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

[2]See e.g., "How ISIS smuggles terrorists among Syrian Refugees," *Newsweek*.

[3]See e.g., "No one is vetting Syrian refugees for signs of antisemitism," *Jerusalem Post*.

protests against former 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 the 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 surveyed 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*). The survey also included a framing experiment, which randomly manipulated 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. We test five pre-registered hypotheses:

H1 **Outgroup Protection:** All else equal, Holocaust survivors and descendants will be *more* supportive of vulnerable outgroups than non-survivor populations.

H2 **Ingroup Defense:** All else equal, Holocaust survivors and their descendants will be *less* supportive of other vulnerable outgroups than non-survivor populations.

H3 **Direct Trauma:** All else equal, descendants of Holocaust survivors will be *more* supportive of other vulnerable outgroups than survivors.

H4 **Group Exposure:** All Jews, irrespective of familial exposure to the Holocaust, will respond similarly to outgroups (as compared to non-Jews).

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

The impact of these competing interpretations 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 frame, may be more susceptible to framing effects than those with more settled views (Krosnick and Abelson, 1992).

Sample

Our sample includes respondents across four levels of exposure to the Holocaust: non-Jews, non-exposed Jews, descendants of Holocaust survivors, and Holocaust survivors. 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.[4]

Our outreach through Prime Panels took place between November 24th 2017 and January 10th 2018.[5] 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.[6] 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.

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. Through multiple discussions with the museum, we secured their consent to use this service to send an invitation to participate in a research study to all registered survivors with email addresses on file. No prior academic study, to our knowledge, has used USHMM's service to reach survivors en masse.[7]

[4]See SI A1 for an in-depth discussion of sampling considerations.

[5]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.

[6]Because most American Jews descend from the European diaspora, we restricted our non-Jewish sample to Caucasian Americans. This also reduces the risk of confounding from exposure to racism, segregation and other forms of systemic discrimination.

[7]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.

One potential concern with using the USHMM database is that membership in it may 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.[8]

Using this 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.[9] This size provides sufficient power to detect a moderate-to-large size effect, but may miss very small effects (See SI A1 for detailed power analysis). However, our sample is nonetheless sufficiently powered to detect our observed effects across nearly all statistical comparisons we make. For example, Table A2.3 in the SI reports the observed Cohen's

[8]SI A4 reports observable socio-demographic characteristics across our four sub-samples.

[9]As SI A1.3 shows, almost all sample attrition occurred prior to assignment to treatment; bias due to attrition would also need to be very severe to account for observed differences across exposure groups.

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 (Personal vs. Family), these values exceed the minimum detectable effect sizes.

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. On one hand, this may suggest that survivors' personal memories of political violence are distant, limiting the long-term attitudinal effects of violence. On the other hand, past research has demonstrated that childhood exposure to trauma, especially in early childhood, has an enduring impact on personal psychology and politics (Muldoon, 2013; Shaw, 2003) and can even have enduring impacts on infants and toddlers (Slone and Mann, 2016).

Measurement

The survey's flow was 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 Syrian refugees. The survey concluded with a battery of socio-demographic questions.[10]

[10]SI A3 describes the survey flow in more detail, including considerations regarding potential priming effects (Klar, Leeper and Robison, 2020), and reports summary statistics. 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

Our experimental treatments emphasize two prominent variants of the "never again" imperative: *outgroup*- versus *ingroup*-oriented. 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

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 victimization during 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.

of "never again" that prioritizes defending fellow Jews from victimization.

Although each frame invokes a different lesson from the Holocaust, both 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."[11] The control condition presents the same two arguments, but does not mention the Holocaust or "never again."[12] Thus, we can attribute average differences in attitudes across treatment conditions only to the (different) invocations of the Holocaust and the "never 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 Likert 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 A5).

Analysis

Our analysis includes observational and experimental components. In the former, we test H1-H4 by exploring differences in attitudes across respondents with personal, fam-

[11] We include both arguments to more accurately replicate the media environment, which exposes individuals to competing frames on refugees (Chong and Druckman, 2007).

[12] 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.

ily, group, or no exposure to genocide. In the latter, we test H5 by examining the impact of our three randomized experimental treatment 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.[13] Support is highest among those with personal and family exposure (i.e. survivors, descendants), and lowest for those with no exposure (non-exposed Jews, non-Jews). The average non-Jewish respondent favored a "slight decrease" in refugees admitted to the United States, with a mean of 3.65. Non-exposed 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. These differences are thus 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 more stark. Just 32 percent of non-Jews favor any increase in admitted refugees. The statistics for non-exposed Jews, descendants and survivors are, respectively, 49, 55 and 60 percent.

While these patterns broadly support H1 (i.e. exposure to violence increases support for outgroups), caution is warranted. The subgroup means in Figure 1 are conditioned only on exposure level (e.g. survivor, descendant, non-exposed, 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.

[13] 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 A5.1 presents these results.

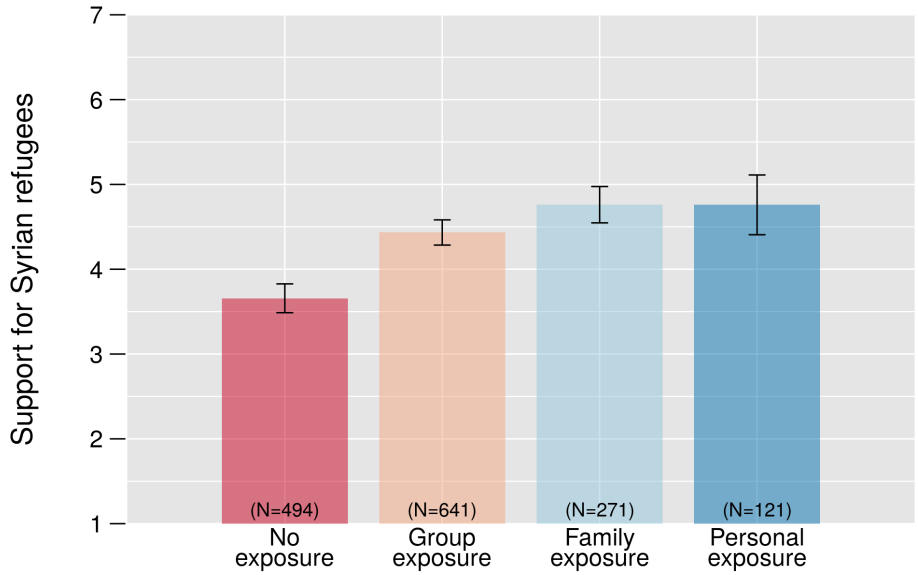

Figure 1: Support for increasing admission of Syrian refugees into U.S. Likert scale corresponds to (1) 'Greatly decrease,' (2) 'Moderately decrease,' (3) 'Slightly decrease,' (4) 'Keep same,' (5) 'Slightly increase,' (6) 'Moderately increase,' (7) 'Greatly increase.' Bar heights represent group-level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

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

$$\text{Attitudes}_i = \theta \cdot \text{Exposure}_i + \beta_1' \mathbf{x}_i^{(pre)} + \beta_2' \mathbf{x}_i^{(post)} + \text{Region}_i^{(pre)} + \text{Region}_i^{(post)} + \epsilon_i \quad (1)$$

where the dependent variable is respondent i's outgroup $Attitudes_i$, the "treatment" is i's $Exposure_i$ to the Holocaust (personal, family, group, none), $\mathbf{x}_i^{(pre/post)}$ are pre- and post-WWII covariates (age, gender, education, income, party ID, location, pre-war profession), $Region_i^{(pre/post)}$ 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.[14]

[14]For survivors, we used their family's pre-war place of residence and father's pre-war profession. For descendants, we used their relative's (father, mother, or grandparent) pre-war residence and profession. For others, we used mother's pre-war residence

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

$$E[\text{Attitudes}_i|\text{Exposure}_i = \text{“personal”}] - E[\text{Attitudes}_i|\text{Exposure}_i = \text{“none”}] = 1.72 \quad (2)$$

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 1.82 points higher than the average non-Jewish American's, 1.07 points higher than for American Jews with no survivor relatives, and .82 higher than for descendants. Descendants and non-exposed Jews were likewise more supportive than non-Jews, with average differences of .67 and .49. Although descendants' expressed levels of support fell in between those of survivors and non-exposed Jews, the differences between descendants and non-exposed Jews were not significant at the 95% confidence level.

The observed impact of Holocaust exposure on outgroup attitudes may depend, in part, on post-WWII developments, however. 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 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 the average controlled direct effect (ACDE) of violence: the effect of Holocaust exposure when mediating variables are held constant at a particular level. We use two estimation procedures, the results of which are sub-

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and father's pre-war profession, provided the parents were born before World War II. Post-war covariates also included dummies for experimental treatment group.

stantively consistent: sequential-g (reported here) and telescopic matching (SI A5.4). To facilitate pairwise comparisons across levels of exposure, we repeat both procedures for every combination of sub-samples (e.g. personal vs. family, personal vs. group, 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 (Acharya, Blackwell and Sen, 2016*a*). 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:

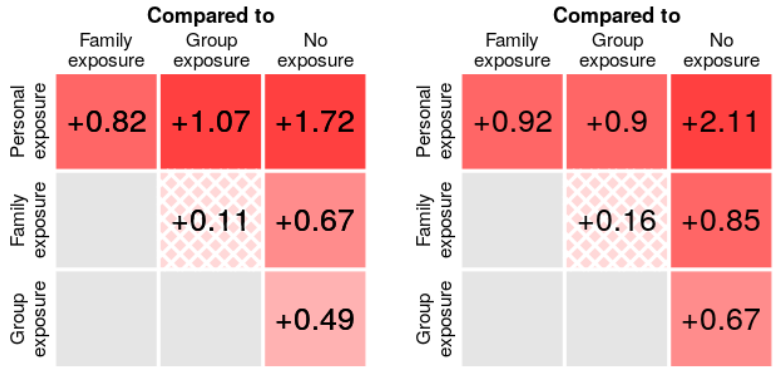
$$\widetilde{\text{Attitudes}}_i = \phi \cdot \text{Exposure}_i + \alpha' \mathbf{x}_i^{(pre)} + \text{Region}_i^{(pre)} + v_i \tag{3}$$

where $\widetilde{\text{Attitudes}}_i = \text{Attitudes}_i - \gamma(\text{Exposure}_i, \mathbf{x}_i^{(post)}, \text{Region}_i^{(post)})$ is the difference between the observed outcome and demediation function $\gamma(\cdot)$, which removes variation due to the mediator's causal effect.[15] We assess potential violations of this procedure's core sequential unconfoundedness assumption through sensitivity analysis (SI A5.7). 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 greater one's expressed support for refugees. Here, survivors were significantly more supportive than descendants, non-exposed Jews and non-Jews by .92, .9, and 2.11, respectively, on a 7-point scale. Descendants and non-exposed Jews were, in turn, significantly more supportive of refugees than non-Jews (.85 and .67). While descendants were slightly more supportive than other Jews, this difference was, again, insignificant.

Taken together, our observational analyses indicate strong support for H1 (outgroup

[15]We estimate standard errors of ϕ through nonparametric bootstrap.



(a) OLS (b) Sequential g

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).

protection), no support for H2 (ingroup defense) or H3 (direct trauma), and mixed support for H4 (group exposure). Interestingly, our estimates suggest that direct trauma does matter (H3), 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-exposed Jews as well. What explains this convergence of attitudes?

According to social learning theory (Bandura, 1969), 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 (Jennings,

Stoker and Bowers, 2009). Individuals who have more extensively participated in these family conversations are more likely to develop enduring policy views (Krosnick and Abelson, 1992). 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.

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 Holocaust tended to express more supportive outgroup attitudes than those who did not (Table 1). On average, changing the frequency of such conversations from "never" to "very often" increased support for refugees by over a point on the Likert scale. This relationship was stronger among descendants than survivors, which is not surprising: individuals with personal exposure are more likely to be "senders" than "receivers" of attitudes in the family.

Family socialization 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. 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 2). Respondents who reported being more active in their community were more likely – by half a point – to hold supportive outgroup attitudes.

Table 1: Family socialization and support for Syrian refugees. Sequential-g estimates, bootstrapped standard errors in parentheses. Coefficient estimates for pre- and post-treatment control variables not shown. P: personal exposure, F: family exposure.

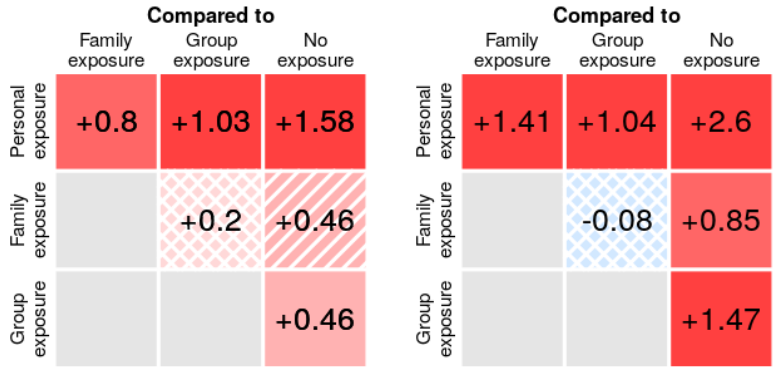
	Model 1 seq-g	Model 2 seq-g	Model 3 seq-g
Talk to family about Holocaust	1.11 (0.49)*	-0.83 (1.57)	1.12 (0.6)'
Pre-WWII covariates	Yes	Yes	Yes
Post-WWII covariates	Yes	Yes	Yes
Exposure	P, F	P	F
AIC	1002.2	322.8	701
N	246	70	176
			'p<.1,*p<.05,**p<.01,***p<.001

Table 2: Community activism and support for Syrian refugees. Sequential-g estimates, bootstrapped standard errors in parentheses. Coefficient estimates for pre- and post-treatment control variables not shown. P: personal, F: family, G: group.

	Model 1 seq-g	Model 2 seq-g	Model 3 seq-g	Model 4 seq-g
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	P, F, G	P	F	G
AIC	3242.7	324.4	705.8	2276
N	828	70	176	578
				'p<.1,*p<.05,**p<.01,***p<.001

Another possibility is that variation in wartime experiences informs survivors' and descendants' attitudes. For example, survivors who joined armed resistance groups may see refugees as more capable of helping themselves, while those who received help from non-Jews may be more supportive of aiding outgroups. There is no evidence that this variation in Holocaust experiences affects outgroup attitudes, though exploration of

these heterogeneous effects is limited by sample power.[16]



(a) OLS (b) Sequential g

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

Finally, Holocaust survivors likely hold multiple overlapping and cross-cutting identities (Brewer and Pierce, 2005) — as Jews, minorities, refugees, victims of political violence – and these other identities may drive support for other groups seeking refuge in the United States. 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* is what shapes their attitudes toward Syrian refugees, more than their status as survivors of political violence (Williamson et al., 2020). 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 (Figure 3).

[16]These results, which we omit here for space, are available on request.

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. To examine the malleability of these attitudes, we turn to our experiment, which presented respondents with outgroup and ingroup oriented "never again" frames before asking about support for refugees.

We begin with a basic split-sample analysis, regressing support for refugees on the experimental treatment for each subgroup. Because this analysis is experimental, we restrict the covariates included in the model pre-WWII covariates only. Let $\kappa(E_i = k)$ be the set of respondents with exposure $k \in \{\text{personal}, \text{family}, \text{group}, \text{none}\}$. For each respondent $j \in \kappa(k)$, we estimate

$$\text{Attitudes}_j = \theta \cdot T_j + \beta_1' \mathbf{x}_j^{(pre)} + \text{Region}_j^{(pre)} \epsilon_j \tag{4}$$

where $T_j = t$ is j's treatment assignment, $t \in \{\text{control}, \text{outgroup}, \text{ingroup}\}$. Results were consistent with a full model, which includes post-WWII covariates.

Figure 4 reveals a significant, positive effect for the outgroup-protective frame. Overall, respondents who randomly received reminders of the inclusive imperative to "never again allow such slaughter" expressed greater support for outgroups than respondents in the control condition (average increase from 3.9 to 4.5 on a 7-point scale). Importantly, this effect was driven by respondents *without* personal or family connections to the Holocaust — non-Jews (3.3 to 4.1) and Jews without survivor relatives (4.1 to 4.7). These changes are substantively meaningful, shifting views from opposition to neutrality among non-Jews, or neutrality to support among non-exposed Jews. 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 non-exposed Jews, support for Syrians actually increased under this treatment, suggest-

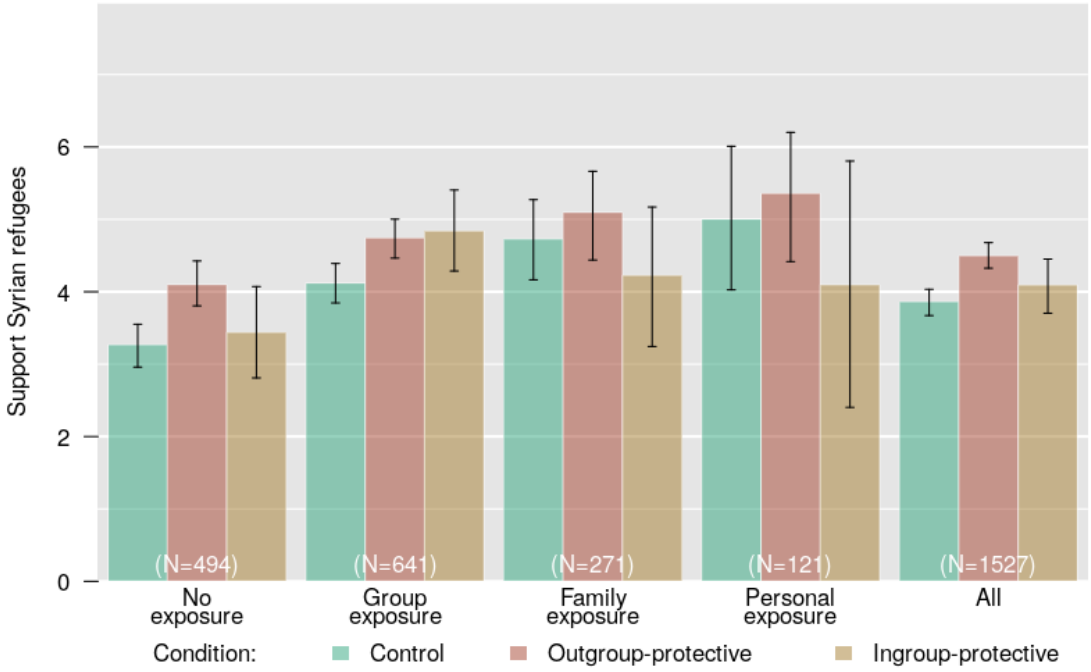


Figure 4: Effect of outgroup- and ingroup-protective primes. Bars represent average support for Syrian refugees, from 0-7. Lines represent 95% confidence intervals.

ing that less directly exposed communities might interpret this frame as another version of the outgroup-protective imperative, with European Jews as the referenced outgroup.

Neither frame had a significant impact on descendants' and survivors' outgroup attitudes. 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 both much smaller and more uncertain.[17] This is an important point – it is not just that survivors and descendants have larger confidence intervals around their attitudes – the point estimate of the difference in attitudes between control and treatment is also much smaller than the less exposed communities, suggesting that the non-significant result for these

[17]Importantly, the ineffectiveness of this frame for survivors and descendants is not evidence of a ceiling effect. Their 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.

sub-groups is not solely attributable to uncertainty from reduced power (See SI A1 for detailed power analysis). Notably, unlike non-exposed communities, descendants and (particularly) survivors, expressed somewhat reduced support for Syrians after exposure to the ingroup-protective frame, although not significantly.

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. This is an important finding, as past research has found that it is actually quite difficult to shift attitudes in favor of outgroups, but relatively easy to shift attitudes against them (Brader, Valentino and Suhay, 2008; Hainmueller and Hopkins, 2014). Here, we find the opposite: invoking the Holocaust and an inclusive interpretation of "never again" significantly shifts attitudes in favor of admitting refugees – but only among those with no personal or family exposure to the Holocaust. This finding is surprising not only because the exclusive frame is relatively ineffective in changing attitudes, but also because survivors and descendants – for whom we might expect the Holocaust and lesson of "never again" to have more personal resonance – are least moved by invocations of this historical legacy.

While these results provide tentative support for H1 (survivors and descendants are more supportive of outgroups), the inferences we can draw are limited by the nature of the exposure variable. Because we cannot randomly assign respondents to exposure categories — only to treatments — marginal covariate distributions are likely dissimilar across subgroups. Holocaust survivors differ from other respondents in many ways other than exposure: they are considerably older, were (mostly) born in Europe, and may have different gender distributions and family backgrounds.

To adjust for covariate imbalance, while accounting for the multivalued nature of exposure, we employ generalized propensity score (GPS) weights. The logic is to create

a re-weighted version of the dataset, in which more "dissimilar" respondents receive less weight (e.g. non-exposed Jews without close matches among survivors), and exposure is weakly unconfounded by observable pre-treatment factors (Imbens, 2000). The results (SI A6) are substantively similar and reinforce the possibility that more direct exposure to violence generates more rigid views that are less susceptible to persuasion.

Discussion

Experiences of violent victimization become embedded in the historical memory of oppressed peoples, profoundly impacting their future preferences. Investigating the pathways through which these experiences translate into attitudes toward outgroups can help explain variation in political behavior and predispositions to group conflict or cooperation. As our analyses show, one of the long-term effects of exposure to mass political violence may be increased support for other vulnerable groups.

This study 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 long-term political consequences of the largest genocide in modern history.

Our findings also carry important implications for the long-term effects of violence more broadly. While past research in this area has focused on long-term attitudes toward the historic perpetrators or victims of political violence, our study demonstrates that violent victimization can shape attitudes towards groups *unrelated* to the original trauma. All else equal, Holocaust survivors are more supportive of Syrian refugees than other Jewish and non-Jewish respondents, extending the political lessons of victimization to interactions with contemporary outgroups, some 70 years after the historical trauma.

Our results further indicate how these lessons may be passed down across generations. Research on the long-term effects of violence has documented the prevalence of

inter-generational political attitudes, but rarely investigates the specific pathways behind it. We find support for two distinct transmission mechanisms: family and community socialization. Descendants of Holocaust survivors whose parents or grandparents often spoke about their experiences expressed views much closer to those of their survivor relatives than descendants from families where these conversations did not occur. Likewise, Jews who reported being more involved in their local Jewish community — but had no survivor relatives — also expressed views more similar to survivors'. These findings suggest that historical experiences of victimization shape future generations, at least in part, through the specific ways in which families and communities discuss and memorialize these experiences after the violence ends.

This study also advances research on intergroup relations, and how threat perceptions and empathy might deteriorate or ameliorate them. Past studies often emphasize these two impulses as key determinants of political attitudes (e.g. Brader, Valentino and Suhay, 2008; Adida, Lo and Platas, 2018), but rarely examine how abstract lessons drawn from historical victimization shape these impulses, as we do here.[18] 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 that mandates the protection of all vulnerable outgroups rather than the protection of one's own ethnic or religious community. However, this shift in framing is only effective among those who have not directly experienced violence. Those who have experienced it, or are related to someone who has, need no additional convincing – their support for protecting vulnerable peoples has deeper roots in their own historical victimization.

Finally, our findings shed light on central public policy debates surrounding immi-

[18]Dinas and Fouka (forthcoming) and Williamson et al. (2020) are two important recent examples of work that investigates these connections in different contexts.

grants and refugees around the world today. In the past decade, concerns about increasing refugee flows and open borders have sparked fervent debates over immigration in the EU, U.S. and beyond. We find that individuals with direct personal or family experiences of violent victimization will be most supportive of those fleeing similar predicaments, but will also be least responsive to messaging aimed at changing their views. Efforts to reduce hostile outgroup attitudes or increase support for accepting refugees will therefore be most effective among those who have not experienced similar victimization themselves. To this end, mobilizing the voices of survivors may be an effective tool in activating support for victims of political violence among the broader public.

There are some important contextual limitations to our findings. First, the survivors in our sample were all young children at the time of the Holocaust. More research is needed to determine if the long-term effects of exposure to mass violence in childhood systematically differ from those of exposure in adulthood (Shaw, 2003). Second, we did not design our study to test the emotional mechanisms underlying these attitudinal shifts among non-exposed populations. It is plausible that an inclusive frame helps respondents imagine themselves in the same situation as refugees, a key component of empathy. Alternatively, an inclusive frame may induce shame or guilt by reminding non-exposed populations that they escaped victimization while others suffered. Exploring these distinct emotional mechanisms is an important task for future research.

Finally, past experiences of bloodshed likely interact with the current political context to impact attitudes. In our case, this context is post-WWII American society, where Jews are a religious minority and where Holocaust survivors have lived in relative security in a developed, democratic country. These factors likely affect how Holocaust survivors in our sample assess the threat posed by refugees, compared to survivors in Israel (Canetti et al., 2018), where Jews are both the majority and engaged in an active conflict with Arab adversaries. In these settings, "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 conflict (Vollhardt, Nair and Tropp, 2016). For example, one study of descendants of Holocaust survivors in Israel found that descendants were more likely than non-descendants to view the world as inherently "hostile" and express concern about the threat of a nuclear-armed Iran (Shrira, 2015). Thus, exclusive lessons of victimization may exert greater power on historically victimized communities when applied to present adversaries. An important future direction will be to explore the replicability of our results in other political settings, in order to better understand how past histories of victimization interact with the present threat environment to shape the long-term political legacies and lessons of violence.

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Supplementary Information

A1 Sampling

We recruited Holocaust survivors through an email circulated by the United States Holocaust Memorial Museum or a regional Holocaust Museum,[19] and recruited descendants either through the survey firm PrimePanels or various "Children of Holocaust survivors" listservs. We recruited non-exposed 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
Personal	USHMM or other museum	200
Family	PrimePanels	202
Family	listservs	115
Group	PrimePanels	710
Group	listservs	8
None	PrimePanels	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

[19] 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.

strategies varied among survivors systematically, depending on geography, pre-war integration, and pre-war economic and education backgrounds. To the extent that some 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 chose to immigrate to the U.S.

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-exposed Jewish participant), 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-exposed 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.

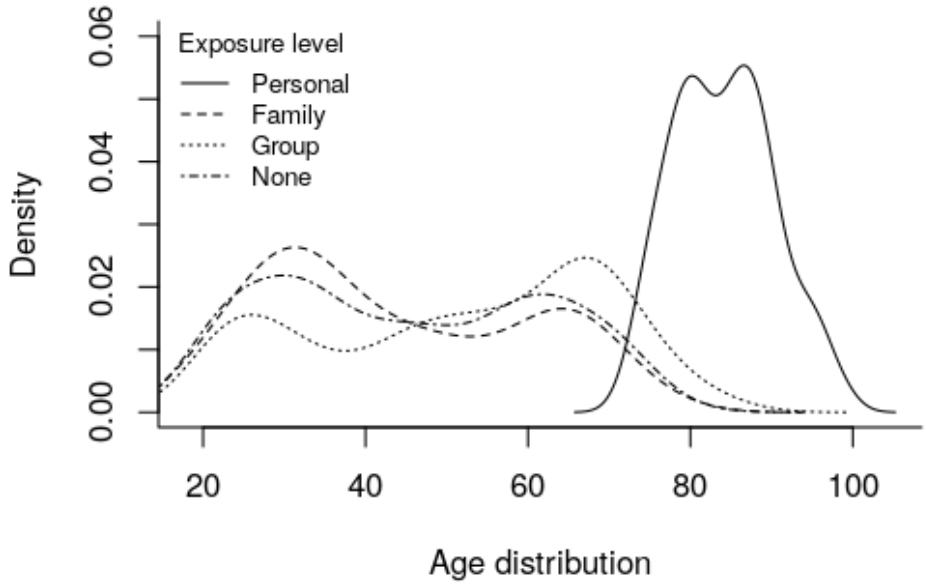


Figure A1.2: Age distribution of survey respondents.

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.

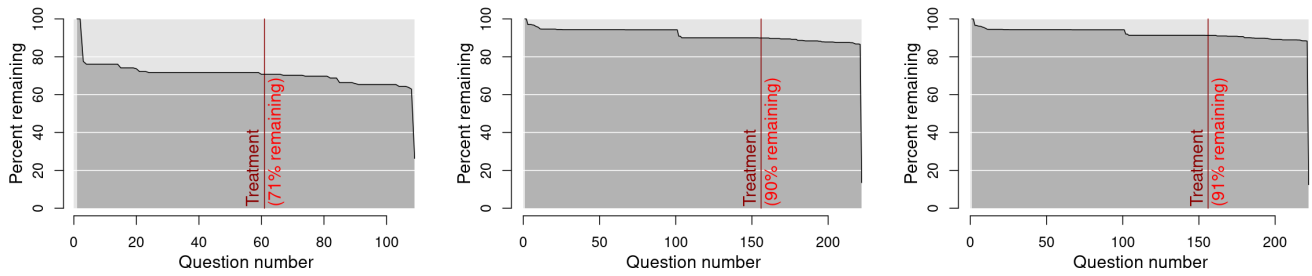
A1.2 Demand Effects

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 more support for Syrian refugees. This is the opposite of what we find in the survey — 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 took place 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.



(a) Personal exposure (b) Family or group exposure (c) No exposure

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

We can use a simple back-of-the-envelope calculation to asses 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 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 the sample, E represents one's exposure category, and π_k is the proportion of respondents with exposure level $k \in \{\text{Personal}, \text{Family}, \text{Group}, \text{None}\}$ 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, $\mathbb{E}[Y|E = \text{Personal}, s=0]$ must be no higher than 4.7. To explain differences from non-exposed Jews 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.

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 three exposure categories: personal ($n = 121$), family ($n = 271$), group ($n = 641$), and none ($n = 494$). This model includes 23 covariates, including pre- and 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 $f^2 = 0.017$.[20] 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-exposed Jews, and 169 non-Jews. This model includes 20 covariates, yielding a final sample size of $n = 425$ and an f^2 of 0.05 — 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 A2.3 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.[21] Using pairwise comparisons, our sample size allows us to pick up medium and large effects, but not

[20] Inputs for the power analysis are: 23 numerator degrees of freedom, 1278 denominator degrees of freedom, significance level of $p = .05$, and power level of .8.

[21] Cohen's d for the control: Personal-Family $d = .5$; Personal-Group $d = .49$; Personal-None $d = .46$; Family-Group $d = .37$; Family-None $d = .39$; Group-None $d = .29$.

the smallest effects – particularly when comparing survivors to descendants. Table A2.3 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 Personal vs. Family, these values exceed the minimum effect sizes in Table A2.4.

Table A2.3: Minimum effect sizes for each pairwise comparison (Cohen's d).

Exposure	Family	Group	None
Personal	$d = .31$	$d = .28$	$d = .28$
Family		$d = .20$	$d = .21$
Group			$d = .17$

Table A2.4: Cohen's d for values reported in Figure 1.

Exposure	Family	Group	None
Personal	0.01	1.53	1.94
Family		1.73	1.97
Group			1.96

A2.2 Effect of Primes on Attitudes

In a second power analysis, we compare support for Syrian refugees in each exposure category across three randomly assigned conditions: control, outgroup-oriented frame, and ingroup-oriented frame (Figure 4). Because this analysis compares randomly assigned experimental treatments, we use a smaller set of pre-WWII control variables. As Table A2.5 reports, the relative power of each model depends on the community we examine. Sample sizes are sufficiently powered to detect medium and large effects across all sub-groups, and small effects across all but the survivor and descendant samples.

Table A2.5: Power analysis for experimental analyses.

Personal	Family	Group	None	All
$f^2 = 0.13$	$f^2 = 0.06$	$f^2 = 0.02$	$f^2 = 0.03$	$f^2 = 0.01$

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'/grandparents') pre-war, wartime, and post-war experiences.[22] 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.[23] The survey concluded with a battery of socio-demographic questions.

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,

[22] 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, concentration camps and related matters, we found no cases of individuals who reported being survivors but left Europe prior to Nazis' rise to power.

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

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 frequently cite the Jewish imperative to 'never again' 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...

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 frequently cite 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,[24] 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.).

A4 Summary Statistics

Table A4.6: Summary statistics: respondent socio-demographics by exposure group.

Variable	Range				Mean				SD			
	(P)	(F)	(G)	(N)	(P)	(F)	(G)	(N)	(P)	(F)	(G)	(N)
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 (Likert)	(0,1)	(0,1)	(0.17,1)	(0,1)	0.72	0.81	0.80	0.60	0.32	0.22	0.21	0.23
Income (Likert)	(0,1)	(0,1)	(0,1)	(0,1)	0.36	0.41	0.35	0.18	0.31	0.30	0.30	0.23
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

[24] If descendants of (multiple) survivors indicated multiple pre-war residences, professions, religiosity or socio-economic status, we chose one at random.

A5 Additional Observational Analyses

A5.1 Analyses Restricted to the Control Group

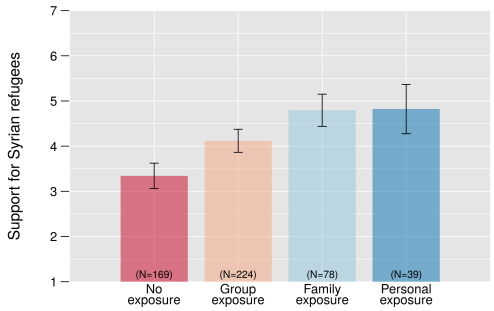
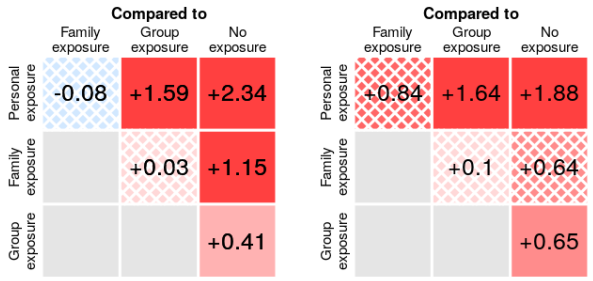


Figure A5.4: Replication of Figure 1, respondents in control group only.



(a) OLS (b) Sequential g

Figure A5.5: Replication of Figure 2, respondents in control group only.

A5.2 Alternative Measures of Outgroup Attitudes

Figure A5.6 replicates the analyses in Figure 2, with alternative measures of outgroup attitudes. These include (a) building a U.S.-Mexican border wall,[25] (b) imposing a ban on Muslim migration to the U.S.,[26] (c) establishing a "safe zone" for civilians in Syria,[27]

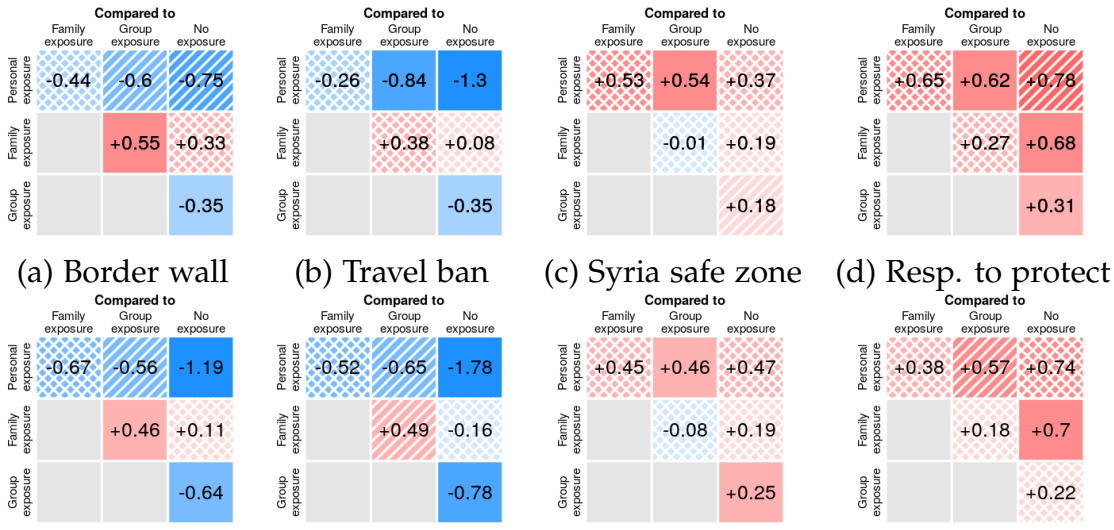
[25]Question wording: "How strongly would you support or oppose building a wall along the US-Mexican border in an attempt to stop illegal immigration?"

[26]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?"

[27]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?"

and (d) intervening in armed conflicts to protect civilians, as a general policy.[28]

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-exposed Jews and non-Jewish Americans, and marginally less supportive of the border wall. Survivors are also more supportive than non-exposed Jews of military measures to protect civilians in Syria and elsewhere. Non-exposed Jews, 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-exposed Jews. All others suggest that individuals more directly exposed to the Holocaust are more supportive of outgroups.



(a) Border wall (b) Travel ban (c) Syria safe zone (d) Resp. to protect

(e) Border wall (f) Travel ban (g) Syria safe zone (h) Resp. to protect

Figure A5.6: Alternative outgoup attitude measures, OLS (a-d) and ACDE (e-h).

[28]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?"

A5.3 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.

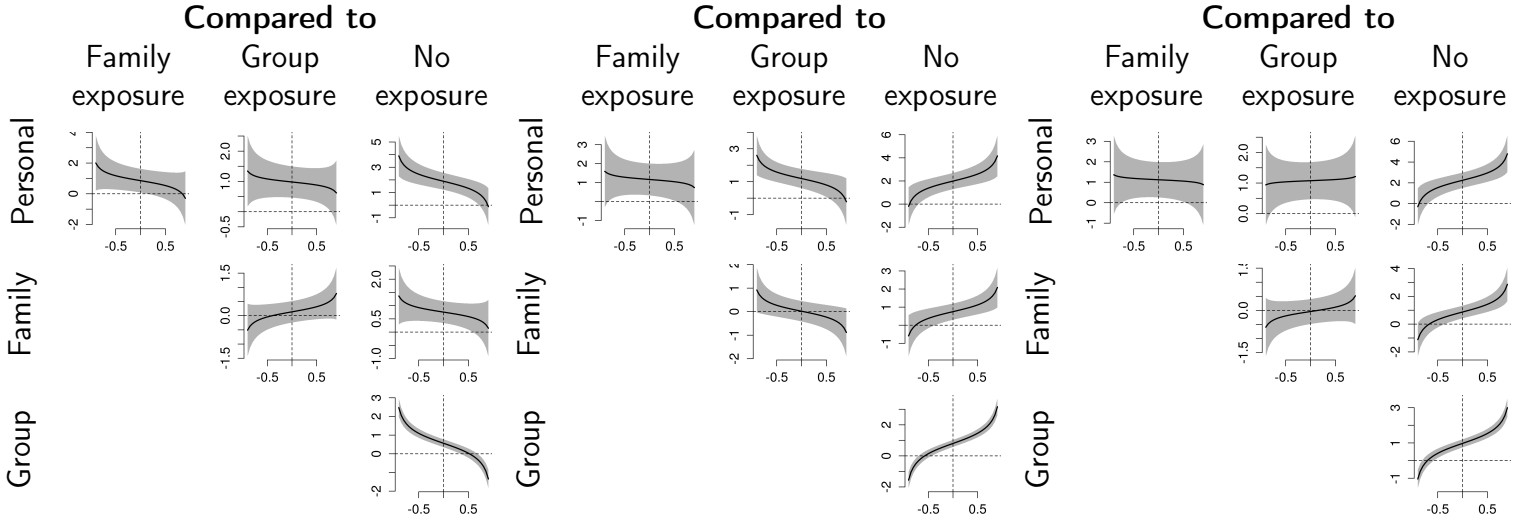
We assess violations of sequential unconfoundedness through a sensitivity analysis that evaluates how ACDE estimates change for different levels of post-treatment confounding in the mediator-outcome relationship (Acharya, Blackwell and Sen, 2016*a*, 11). The results of this analysis – for each pairwise comparison and each mediating variable – are in Figure A5.7. 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.

A5.4 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 personal, 0 if family), and M_i be the value of a mediator (e.g. 1 if Republican, 0 if

Figure A5.7: 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.



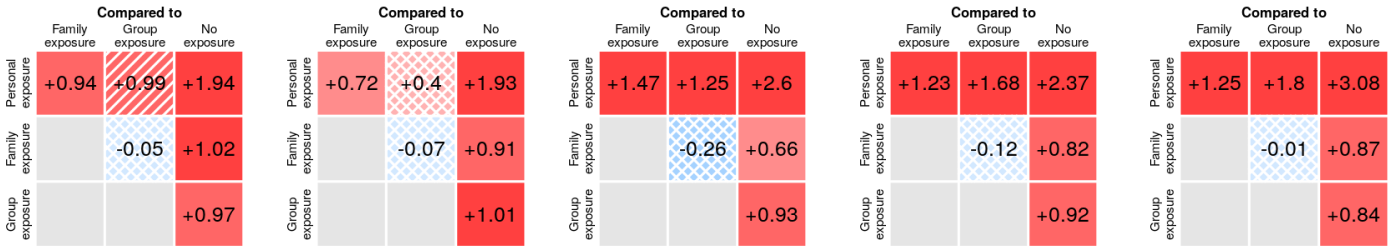
(a) Mediator: Party ID (b) Mediator: Education (c) Mediator: Income

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 A5.8 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.

A6 Additional Experimental Analyses

GPS weights take the general form $w_i = Pr(E_i)/Pr(E_i|X_i)$, where $Pr(E_{it} = k|X_i)$ is the conditional probability that respondent i has exposure level $k \in \{\text{personal}, \text{family}, \text{group}, \text{none}\}$ given pre-WWII covariates X_i. $Pr(E_{it})$ is a stabilizing factor based on the marginal prob-



(a) Party ID (b) Education (c) Income (d) Outgroup-prot. (e) Ingroup-prot.

Figure A5.8: 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).

ability of exposure (Robins, Hernan and Brumback, 2000). We calculate weights using Imai and Ratkovic (2015)'s covariate-balancing GPS estimator, and re-estimate the model in Equation 4. Figure A6.9 shows the results of this re-weighted analysis.

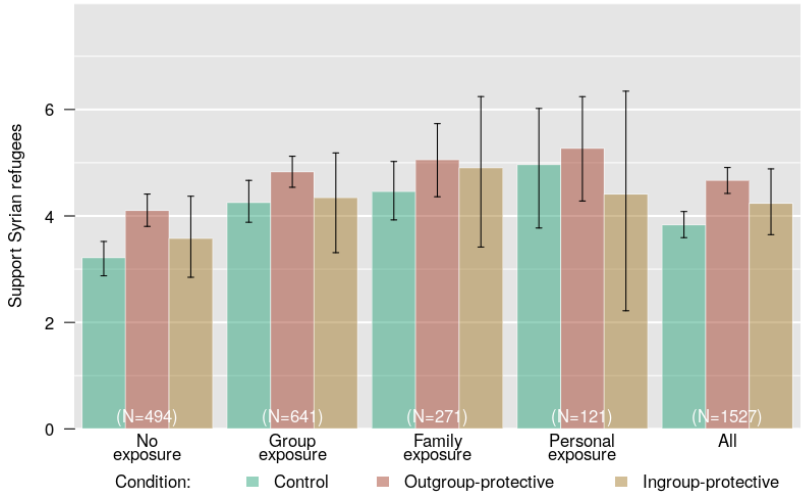


Figure A6.9: Effect of outgroup- and ingroup-protective primes, CBGPS-weighted.