



# Biased hate crime perceptions can reveal supremacist sympathies

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**People may be sympathetic to violent extremism when it serves their own interests. Such support may manifest itself via biased recognition of hate crimes. Psychological surveys were conducted in the wakes of mass shootings in the United States, New Zealand, and the Netherlands (total  $n = 2,332$ ), to test whether factors that typically predict endorsement of violent extremism also predict biased hate crime perceptions. Path analyses indicated a consistent pattern of motivated judgment: hate crime perceptions were directly biased by prejudicial attitudes and indirectly biased by an aggrieved sense of disempowerment and White/Christian nationalism. After the shooting at a synagogue in Pittsburgh, Pennsylvania, disempowerment-fueled anti-Semitism predicted lower perceptions that the gunman was motivated by hatred and prejudice (study 1). After the shootings that occurred at two mosques in Christchurch, New Zealand, disempowerment-fueled Islamophobia similarly predicted lower hate crime perceptions (study 2a). Conversely, after the tram shooting in Utrecht, Netherlands (which was perpetrated by a Turkish-born immigrant), disempowerment-fueled Islamophobia predicted higher hate crime perceptions (study 2b). Finally, after the Walmart shooting in El Paso, Texas, hate crime perceptions were specifically biased by an ethnonationalist view of Hispanic immigrants as a symbolic (rather than realistic) threat to America; that is, disempowered individuals deemphasized likely hate crimes due to symbolic concerns about cultural supremacy rather than material concerns about jobs or crime (study 3). Altogether, biased hate crime perceptions can be purposive and reveal supremacist sympathies.**

hate crimes | disempowerment | intergroup conflict | prejudice

Just hours before the 2018 mass shooting at the Tree of Life synagogue in Pittsburgh, Pennsylvania, the alleged gunman, a radical nationalist who derided the Jewish “infestation,” exclaimed, “... I can’t sit by and watch my people get slaughtered. Screw your optics, I’m going in.” He claimed to be acting on behalf of his “people,” even while admitting that his means were extreme. The perpetrators of the shootings at two mosques in Christchurch, New Zealand, and a Walmart in El Paso, Texas, similarly claimed to be crusading against White replacement by immigrant “invaders.” Such incidents of violent extremism are widely perceived to be hate crimes, in that they were motivated by prejudice or bias against the minority group that was targeted (1, 2). Perpetrators of hate crimes often claim to be acting in defense of some group, such as a nation’s dominant majority, whom they perceive to provide social support for their (prejudiced) cause (3). If perpetrators are motivated by perceived social support to engage in intergroup conflict, a key question is whether there are, indeed, members of the public who sympathize with, or at least “understand,” the perpetrator’s cause. If such sympathizers exist, it would be useful to know what motivates them and how they express their support.

Radical nationalism, prejudicial ideologies, and hate crimes are resurgent in Western democracies (4, 5), and a long history of subdued public responses to the lynching of Blacks and gay

bashing, as well as the anti-Semitism of 1930s Germany that precipitated the Holocaust, suggests that members of a dominant majority often sympathize with a perpetrator’s prejudicial cause (3, 6). Yet, overt expressions of prejudice are nonnormative, and not everyone commits to radical movements that encourage such expressions (7, 8). Casual sympathizers may thus sublimate their support for the cause through normative channels, such as via reluctance to recognize likely hate crimes against minority groups—but also eagerness to claim a hate crime occurred when the perpetrator is from such a group. Such a contingent recognition of hate crimes could be motivated by both symbolic and realistic concerns.

After mass violence, people make self-serving attributions about their cause (9, 10). The present research examines public responses to mass shootings that involve minorities, to test whether the psychology of a sympathizer involves (de-) emphasizing the perceptions of violent extremism when it benefits the sympathizer’s own group. Prior work suggests that one’s attitudes and motivations affect the perception of wrongdoing in intergroup contexts (11), but it is unclear how such factors affect perceptions of a wrongdoer’s motives. Our general aim is to test

## Significance

**Some mass shooters openly express intent to target ethnic and racial minorities, but members of the public still do not agree on whether the gunman was indeed motivated by prejudice and/or hatred. The present research finds that members of a dominant majority often express uncertainty about hate crimes when they privately sympathize with the perpetrator’s cause; specifically, aggrieved members of a dominant majority do not want to acknowledge the victimhood of minority groups. The tendency to deemphasize hate crimes can be traced back to each individual’s own frustrations with society and resentment of other groups. Ultimately, the same general process that explains support for violent extremism, around the world, may also explain supremacist sympathies in modern Western democracies.**

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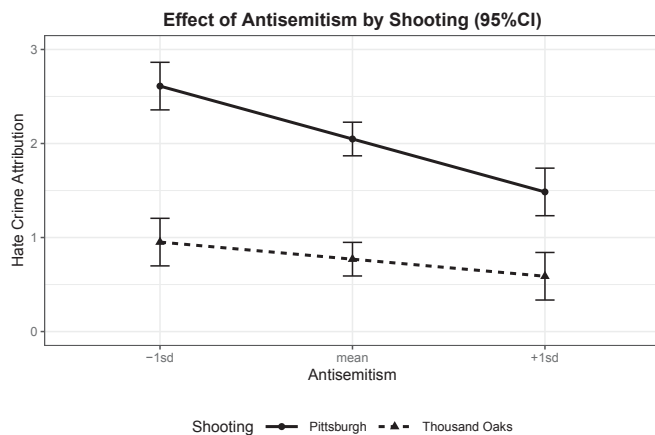
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Data deposition: A repository of the data necessary to reproduce, analyze, and interpret all findings in this paper is available at Open Science Foundation: <https://osf.io/p9yca/>. The annotated code (including software information) for all studies and the metaanalysis is available at <https://osf.io/jvy8t/>. The full repository can be accessed at <https://osf.io/jwft2/>.

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**Fig. 1.** Hate crime perceptions after both the Pittsburgh and Thousand Oaks shootings (within subjects), as a function of between-subjects differences in anti-Semitic prejudice. Error bars are 95% confidence intervals.

whether violence perpetrated against (or by) members of a minority group leads people to perceive the violence through the lens of intergroup conflict; individuals who are prejudiced against the minority group will make either softer or harder claims that a mass shooting was motivated by hatred and prejudice, depending on how such recognition would bear on their worldview and interests. Our specific aim is to articulate a psychological process that drives biased hate crime perceptions, including whether certain prejudices can be traced back to grievances that oneself and similar others have been taken advantage of by other, illegitimate groups (7, 12). Mitigating one's perception of a hate crime could be a normative means to sublimate one's grievances, with the aim to undermine public condemnation of the crime and deny special victim status to a group that one prefers to see disempowered.

### Prejudice and Nationalism as Means to an End

Multiple psychological theories converge on the conclusion that prejudice against other groups is often motivated. For example, the frustration-aggression hypothesis suggests that goal frustrations (especially ones experienced collectively) motivate the scapegoating of other groups and the justification of aggression against them (13–18). Theories of intergroup conflict similarly suggest that in rigid intergroup contexts, disempowered people are motivated to elevate their (collective) self-esteem through outgroup derogation and in-group bias (19, 20). Research in motivation science links such processes to frustrated psychological needs, which are often more symbolic than materialistic (21–25).

Analogously, psychological research on public endorsement of violent extremism suggests that a deprived sense of significance (i.e., losses of control, worth, status, etc.), motivates individuals to embrace radical networks or social movements that espouse narratives of asserting superiority over other people and groups (26, 27). A recent study suggests that frustrated individuals capitalize on mass shootings to pursue significance, observing that after mass shootings, disempowered US gun owners were the most likely to endorse heroic narratives of vigilante gun use against bad guys (28).

These tendencies need not reflect extremism by members of a minority but can be translated to the majority as a normative expression of grievance. Social identity theory (19) identifies a general process through which ordinary people might seek esteem and significance by embracing the collective concerns, norms, and values of their groups—increasing both identification with the majority as well as vilification of minorities. For example, British Whites, who were experimentally led to believe that

their majority status was threatened by immigration, subsequently reported increased concern for British culture, which in turn predicted greater antiimmigrant prejudice (29). The significance quest theory of violent extremism similarly argues that people pursue significance through social groups, but they can also do so as individual agents who seek to self-affirm by demonstrating their commitment to a particular value. Altogether, people's sense of disempowerment or insignificance in society may motivate them to sympathize with causes that seek to (re) assert the significance of the majority, often through espousing prejudicial narratives against minorities.

Ultimately, prejudicial biases and radical nationalism may be traced back to a motivation that is largely concerned with symbolic supremacy, which can be distinguished from realistic group conflict and competition for material resources. This may be manifested in denying of victim status and, hence, moral superiority to a disliked or vilified group (11, 30–32). When violence is perceived through the lens of intergroup conflict, victim status becomes treated like a prize in a zero-sum game that members of a dominant majority seek to “win” for themselves (33). In this vein, many Whites perceive racial equality to come at the expense of their own social standing (34, 35), facilitating claims of “White genocide” (36). Biased recognition of hate crimes may thus be a means to affirm the significance of the majority. This could motivate disempowered individuals to minimize hate crime recognition when members of a minority group are victimized, yet maximize such claims when the perpetrator is member of a minority group.

### The Present Research

Psychological surveys were conducted in the wakes of mass shootings in Western democracies around the world. Each study tested whether hate crime perceptions vary by individuals' sympathy for a given side of the intergroup conflict exemplified by the shooting; that is, hate crime perceptions would be lower among individuals who endorse a prejudicial narrative against the victim group but higher among individuals who harbor prejudice against the perpetrator's group. To test theories of frustration, intergroup conflict, and support for violent extremism, path analyses further tested whether hate crime perceptions are indirectly biased by perceived disempowerment in society and embracement of radical nationalist social movements. The disempowered could adopt prejudicial narratives either from such a collective, or individually from their prevailing social and cultural context.

The studies are presented in their chronological order. All data were collected prior to analysis. Each study was approved by the University of Groningen's Ethical Committee for Psychology, and all participants gave informed consent. Full surveys and full data analytic details are provided in *SI Appendix*.

### Study 1: Pittsburgh Synagogue Shooting/Thousand Oaks Bar Shooting

In late 2018, Americans suffered two consecutive mass shootings: the Pittsburgh synagogue shooting (11 killed and 6 injured), wherein the gunman expressed anti-Semitic prejudices online prior to the attack, and a week later, a shooting in a country-western bar in Thousand Oaks, California (12 killed and 10 to 12 injured), where the gunman had not declared any particular prejudices. Given that a convenience sample had been recruited to complete a survey after the Pittsburgh synagogue shooting, we recontacted the same participants to also assess their perceptions of Thousand Oaks. The first hypothesis was that anti-Semitic prejudice would negatively predict hate crime perceptions after the Pittsburgh synagogue shooting (a likely hate crime against Jewish people) but not after the Thousand Oaks bar shooting. This would provide discriminant validity to the notion that biased hate crime perceptions pertain to victimhood denial to a despised

**Table 1. Summary of (beta) parameter estimates [95% CIs] and metaanalysis**

	Pittsburgh <sup>¶</sup>	Christchurch	Utrecht	Metaanalysis <sup>†</sup>
<b>Direct effects</b>				
Disempowerment → prejudice	0.29*** [0.21, 0.37]	0.17*** [0.08, 0.25]	0.24*** [0.15, 0.32]	0.21*** [0.14, 0.29]
Disempowerment → radical nationalism	0.12* [0.02, 0.22]	0.47*** [0.40, 0.54]	0.45*** [0.37, 0.53]	0.35*** [0.13, 0.57]
Radical nationalism → prejudice	0.41*** [0.33, 0.49]	0.22*** [0.13, 0.30]	0.40*** [0.32, 0.49]	0.32*** [0.19, 0.44]
Prejudice → hate crime perception	-0.20** [-0.32, -0.07]	-0.10* [-0.18, -0.02]	0.19*** [0.09, 0.30]	-0.13*** [-0.18, -0.08] <sup>‡</sup>
Disempowerment → hate crime perception	-0.07 [-0.18, 0.03]	-0.11* [-0.19, -0.02]	0.02 [-0.08, 0.12]	-0.06* [-0.11, -0.01] <sup>‡</sup>
Radical nationalism → hate crime perception	-0.09 [-0.20, 0.02]	-0.04 [-0.13, 0.05]	0.06 [-0.05, 0.17]	-0.05* [-0.10, -0.002] <sup>‡</sup>
<b>Indirect effects<sup>§</sup></b>				
Disempowerment → radical nationalism → hate crime perception	-0.01 [-0.03, 0.001]	-0.02 [-0.07, 0.03]	0.03 [-0.02, 0.08]	-0.01 [-0.03, 0.001] <sup>‡</sup>
Disempowerment → prejudice → hate crime perception	-0.05** [-0.11, -0.02]	-0.02* [-0.04, -0.0004]	0.05** [0.02, 0.08]	-0.03** [-0.06, -0.01] <sup>‡</sup>
Disempowerment → radical nationalism → prejudice → hate crime perception	-0.01* [-0.02, -0.001]	-0.01* [-0.02, -0.0003]	0.03** [0.01, 0.06]	-0.01* [-0.03, -0.003] <sup>‡</sup>

\* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ .

<sup>†</sup>The metaanalysis is a random effects model metaanalysis of studies 1 to 2b. Bootstrapped results for direct effects are in *SI Appendix, A, Meta Analysis*. All relevant paths remained reliable in the bootstrapped results.

<sup>‡</sup>In the metaanalysis, for the indicated parameters, effect estimates from Utrecht had to be reverse coded to be appropriately compared to Pittsburgh and Christchurch (i.e., effect  $\times [-1]$ ).

<sup>§</sup>All indirect effects are bootstrapped. The significance levels are based on bias-corrected bootstrap SEs (42) and should be considered in conjunction with confidence intervals.

<sup>¶</sup>As described previously, the reported paths for study 1 are controlling for gender and its interactions. See *SI Appendix, A*, for metaanalyses with and without controlling for gender in all studies; in brief, all metaanalytic effects remained the same.

group, rather than a general rationalization of mass violence. To link biased hate crime perceptions to the psychology of intergroup conflict and support for violent extremism, the second hypothesis was that disempowerment would indirectly predict hate crime perceptions via its effects on radical nationalism and/or anti-Semitic prejudice.

**Method.**

**Participants.** Three hundred eighty US adults (222 women and 158 men), recruited from Amazon’s Mechanical Turk, completed both waves of a repeated-measures survey, first following the 2018 Pittsburgh synagogue shooting (data collected 4 to 5 d after the shooting) and then following the 2018 Thousand Oaks bar shooting that occurred a week later (data collected 3 to 10 d after the shooting).

**Procedure.**

**Hate crime perception.** Participants were initially recruited to provide attributions about the perpetrator’s motivations for the Pittsburgh synagogue shooting but were then recontacted to also provide their attributions about the Thousand Oaks bar shooting. Participants were asked, “What might have motivated the gunman to commit the mass shooting in \_\_\_\_\_ Pittsburgh [Thousand Oaks]?” Eight possible motives were given, based on mass media reports at the time, each rated on a Likert-type scale (from “-3 = very doubtful” to “+3 = very possible”). The key motivation of interest was “Hatred of others; prejudice.” Unsurprisingly, attributions of “Hatred of others; prejudice” were higher for Pittsburgh ( $M_{Pitt} = 2.36$ ,  $SD_{Pitt} = 1.27$ ) than Thousand Oaks ( $M_{Th.Oaks} = 1.49$ ,  $SD_{Th.Oaks} = 1.58$ ),  $t(379) = 9.12$ ,  $P < 0.001$ . After Pittsburgh, scores on this item were also higher than the scores on other possible motives (all  $t$  values  $> 6.52$ ,  $P$  values  $< 0.001$ ), and its correlations with the other possible motives were modest ( $r = 0.12$  to  $r = 0.38$ ).

**Prejudice.** Participants completed an eight-item anti-Semitism scale (37). Example items include “Jews act in a secret way” and “Jews would like to rule the world” (rated 1 = strongly disagree to 6 = strongly agree). Antisemitism scores were generally low with a right-skewed distribution ( $M = 2.19$ ,  $SD = 1.20$ ,  $\alpha = 0.95$ ).

**Disempowerment.** Participants completed a three-item scale assessing perceived disempowerment in society, which had previously been

shown to predict US gun owners’ pursuit of significance after mass shootings (28). The items were, “Not much is done for people like me in America” (rated 1 = disagree strongly to 5 = agree strongly), “When I compare myself to other Americans, my group is worse off” (rated 1 = disagree strongly to 5 = agree strongly), and “Recent events in society have increased my struggles in daily life” (rated 1 = not at all to 5 = a great deal;  $M = 2.62$ ,  $SD = 1.05$ ,  $\alpha = 0.79$ ).

**Religious nationalism.** As an indicator of embracement of a radical social movement, we used a six-item measure of Christian nationalism from the Baylor Religion Survey (38). Christian nationalists seek to make Christianity the official religion of the United States, and its sacralization of politics promotes, for instance, unusually high commitment to gun freedom even in the wake of mass shootings (39). Example items include, “The federal government should declare the United States a Christian nation” and “The federal government should allow the display of religious symbols in public spaces” (rated 1 = strongly disagree to 5 = strongly agree,  $M = 3.00$ ,  $SD = 0.92$ ,  $\alpha = 0.89$ ).

**Results and Discussion.**

**Direct effect of anti-Semitism.** Anti-Semitism was hypothesized to predict (lower) hate crime perceptions after the Pittsburgh synagogue shooting but not the Thousand Oaks bar shooting. A mixed linear model was applied, treating anti-Semitism as a continuous, between-subjects factor (standardized) and hate crime attributions as a within-subjects factor (Pittsburgh vs. Thousand Oaks). Results indicated a positive direct effect of the (Pittsburgh) mass shooting,  $F(1, 378) = 84.16$ ,  $P < 0.001$ ,  $\eta^2_p = 0.182$ ; a negative direct effect of anti-Semitism,  $F(1, 378) = 20.30$ ,  $P < 0.001$ ,  $\eta^2_p = 0.067$ ; and importantly, a two-way interaction,  $F(1, 378) = 5.37$ ,  $P = 0.021$ ,  $\eta^2_p = 0.014$ . As illustrated in Fig. 1, hate crime perceptions were generally higher for Pittsburgh than for Thousand Oaks. However, as indicated by the significant two-way interaction, the negative simple slope of antisemitism was only reliable for Pittsburgh,  $b = -0.36$ ,  $t(378) = -5.68$ ,  $P < 0.001$ , 95% CI [-0.48, -0.23], and not for Thousand Oaks,  $b = -0.14$ ,  $t(378) = -1.69$ ,  $P = 0.092$ , 95% CI [-0.30, 0.02]. Although people generally attributed the Pittsburgh synagogue shooting to hatred

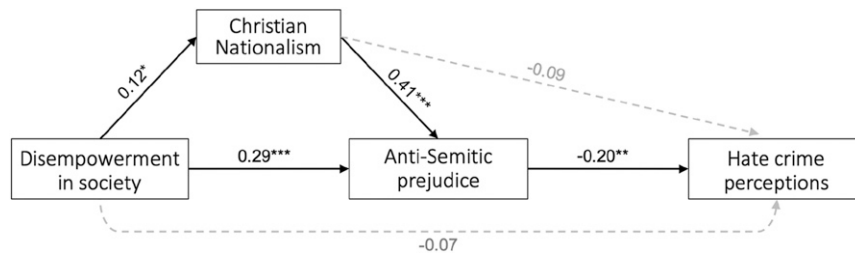


Fig. 2. Pittsburgh study standardized parameter estimates. \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ .

and prejudice, people with higher anti-Semitic prejudice did so significantly less strongly.\*

**Indirect effects of disempowerment.** Disempowerment was hypothesized to indirectly predict hate crime predictions via Christian nationalism and anti-Semitic prejudice. A mediation analysis was conducted using the PROCESS macro (40).<sup>†</sup> Full results are displayed in Table 1 and Fig. 2. Disempowerment indirectly predicted hate crime perceptions via anti-Semitism (disempowerment → antisemitism → hate crime perception),  $B = -0.07$ , 95% boot CI [-0.12, -0.02], and slightly via radical nationalism (disempowerment → Christian nationalism → antisemitism → hate crime perception),  $B = -0.01$ , 95% boot CI [-0.03, -0.001].

Altogether, the link between prejudice and hate crime perceptions could be partially traced back to an aggrieved sense of disempowerment in society.<sup>‡</sup> This provides preliminary support for our theorizing. However, study 1 was limited by the use of a convenience sample and focus on religious nationalism rather than ethnic nationalism. After the data were collected for Pittsburgh, investigative journalism revealed that the gunman had expressed both White nationalist and Christian nationalist views (43). We thus shifted our empirical focus to ethnic nationalism in the subsequent studies.

### Studies 2a and 2b: Christchurch Mosque Shootings and Utrecht Tram Shooting

The next studies sought to replicate the model in different mass shooting contexts, which all directly pertained to White nationalism. In 2019, the Christchurch mosque shootings occurred in New Zealand (51 killed and 49 injured), perpetrated by an avowed White nationalist. A week later, a shooting occurred in Utrecht, Netherlands (three killed and seven injured) perpetrated by a Turkish-born immigrant.

If hate crime perceptions reflect an attempt to assert the grievances of the majority, then disempowerment-fueled prejudice should bias hate crime perceptions in opposing directions for the two shootings. In New Zealand, the victims were immigrants from Muslim-majority (Islamic) countries, so anti-Islamic prejudice (Islamoprejudice) should negatively predict hate crime perceptions (study 2a). The pattern of data for the Christchurch shootings should thus replicate the pattern observed after the

Pittsburgh shooting. However, in the Netherlands, the perpetrator was a Turkish-born immigrant (study 2b), providing a context in which disempowered Whites may seek to win victim status for themselves (33). So, after Utrecht, majority members' sense of disempowerment should predict heightened emphasis that the gunman was motivated by hatred and prejudice. Therefore, in the Netherlands, Islamoprejudice should positively predict perceptions that the Utrecht shooting was a hate crime. In either case, any proximal effects of Islamoprejudice should be distally predicted by disempowerment and ethnic (White) nationalism.

### Study 2a: Christchurch Mosque Shootings

#### Method.

**Participants.** Six hundred thirty-seven White (ethnic European) New Zealand adults were recruited by Qualtrics Panels 6 to 30 d after the 2019 Christchurch mosque shootings (199 women and 438 men). A prescreen was used to recruit gun owners (50.4%) and nonowners (49.6%), but gun ownership had no bearing on the results. Given our interest in White nationalism, an additional  $n = 146$  were excluded for being of a non-White ethnic background.<sup>§</sup> An additional  $n = 37$  were excluded for providing unusable data (straight lining; duplicate IP addresses), and two were missing data on the dependent variable.

#### Procedure.

**Hate crime perception.** Participants gave their attributions about the gunman's motives via the same questionnaire used in study 1. Scores on "Hatred of others; prejudice" ( $M = 2.38$ ,  $SD = 1.10$ ) were higher than all of the other motivations (except perhaps for ideology:  $z = 2.52$ ,  $P = 0.07$ , which did not significantly differ after multitest alpha correction; all other  $z$  values  $> 3.96$ ,  $P$  values  $< 0.001$ ). The hate crime perception shared small-to-medium correlations with the other motivations ( $r = 0.09$  to  $r = 0.50$ ).<sup>¶</sup> The scores were left skewed (65% gave the highest rating, "+3: very possible"); the analyses used bias-corrected bootstrapped intervals, which corrects for such nonnormality.

**Islamoprejudice.** For the proximal predictor, participants completed a six-item subset of the Islamoprejudice scale (44). Example items include "The Islamic world is backward and unresponsive to new realities" and "Islam shares the same universal ethical principles as other major world religions" (reverse-scored). Each item was rated 1, disagree strongly, to 5, agree strongly ( $M = 2.68$ ,  $SD = 0.87$ ,  $\alpha = 0.77$ ).

**Disempowerment.** For the distal predictor, participants completed the same three-item scale used in study 1 ( $M = 2.49$ ,  $SD = 1.06$ ,  $\alpha = 0.78$ ).

\*To protect against model misspecifications due to nonnormal data, we also performed a robust mixed linear model, which mirrored the reported results (see SI Appendix for details).

<sup>†</sup>Christian nationalism advocates for traditional gender norms (41), so the path analysis controlled for gender. Gender (male = 1) moderated the two distal paths: *disempowerment* → *Christian nationalism* ( $B = 0.21$ , [0.10, 0.32],  $P < 0.001$ ) and *disempowerment* → *antisemitism* ( $B = 0.62$ , [0.40, 0.83],  $P < 0.001$ ); gender did not moderate the proximal path: *anti-Semitism* → *hate crime perceptions* ( $B = -0.01$ , [-0.32, 0.30],  $P = 0.950$ ). Gender had no relevant effects in the other studies and will not be discussed further (see SI Appendix for details).

<sup>‡</sup>Theoretically, prejudice could also predict disempowerment; in Study 1, however, reversing the causal order of disempowerment and antisemitism yielded no reliable indirect effects on hate crime perceptions (all confidence intervals crossed 0). A cross-lagged design could afford a better test of such reciprocal effects.

<sup>§</sup>Non-White participants were excluded because White nationalism explicitly excludes non-Whites, and thus any responses to the scale were uninterpretable.

<sup>¶</sup>In the Christchurch survey, hate crime perceptions correlated more strongly with "ideology",  $r(630) = 0.50$ ,  $P < 0.001$ , and "power, attention, and significance",  $r(632) = 0.42$ ,  $P < 0.001$ . Apparently, the shooting was specifically perceived as an ideological hate crime motivated by significance. However, an extended path model showed that *hate* remained the dominant dependent variable in the model; including the other attributions as dependent measures had no bearing on the interpretation of the results.

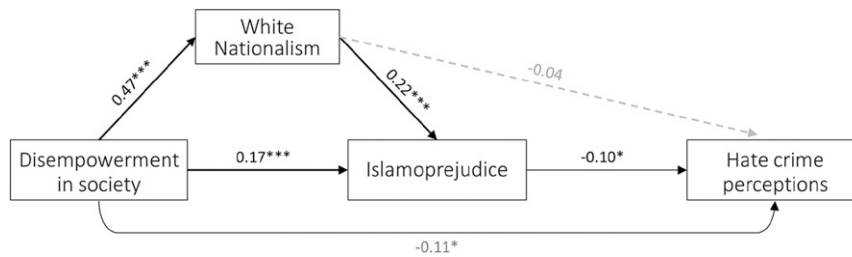


Fig. 3. Christchurch study standardized parameter estimates. \* $P < 0.05$ , \*\*\* $P < 0.001$ .

**Ethnic nationalism.** As an indicator of embracement of a radical social movement, we assessed endorsement of White nationalism, which is conceptually composed of three components: 1) a strong sense of White identity, 2) a belief in the importance of White solidarity, and 3) a sense of White victimization (45). We used a three-item scale from the 2016 American National Election Studies (46) that assessed White nationalism: “How important is your race/ethnicity to your sense of identity,” “How important is it that Whites work together to change laws that are unfair to Whites?” (each rated 1 = not at all important to 5 = extremely important), and “How much discrimination do Whites face in New Zealand?” (rated 1 = none at all to 5 = a great deal,  $M = 2.52$ ,  $SD = 1.01$ ,  $\alpha = 0.64$ ).

**Results and Discussion.** Hate crime perceptions were subjected to the same path analysis used in study 1. Results indicated the same pattern that was observed for Pittsburgh (Table 1 and Fig. 3): Islamoprejudice directly predicted hate crime perceptions,  $B = -0.10$ , 95% CI  $[-0.18, -0.02]$ , and disempowerment indirectly predicted hate crime perceptions via two paths—disempowerment  $\rightarrow$  Islamoprejudice  $\rightarrow$  hate crime perception,  $B = -0.02$ , 95% boot CI  $[-0.04, -0.0004]$ , and disempowerment  $\rightarrow$  White nationalism  $\rightarrow$  Islamoprejudice  $\rightarrow$  hate crime perception,  $B = -0.01$ , 95% CI  $[-0.02, -0.0003]$ .<sup>#</sup> This replicates the expected pattern when disempowerment-fueled prejudice is directed against the victim group.

### Study 2b: Utrecht Tram Shooting

#### Method.

**Participants.** Four hundred seventy-eight Dutch adults were recruited, by the Dutch online research firm Flycatcher, 4 to 7 d after the 2019 Utrecht tram shooting (229 women, 248 men, and 1 other). Twenty-four non-White respondents were excluded from the analysis. An additional  $n = 36$  provided unusable data (duplicate IPs or straight lining), and 6 were missing data on the dependent variable. The study was conducted in Dutch. All scales were translated by two native Dutch speakers.

**Procedure.** The Utrecht study was a direct replication of the Christchurch study. Mean scores on the perceived extent to which the gunman was motivated by “Hatred of others; prejudice” were lower than attributions of Pittsburgh or Christchurch ( $M = 1.62$ ,  $SD = 1.33$ ). Its correlations with the other motivations were modest ( $r = 0.11$  to  $r = 0.41$ ).

Participants also completed the same independent measures used in the Christchurch study: Islamoprejudice ( $M = 2.88$ ,  $SD = 0.88$ ,  $\alpha = 0.83$ ), disempowerment in society ( $M = 2.41$ ,  $SD = 1.10$ ,  $\alpha = 0.79$ ), and White nationalism ( $M = 2.34$ ,  $SD = 0.79$ ,  $\alpha = 0.61$ ).

<sup>#</sup>There was also a direct effect of disempowerment on hate crime perceptions (Table 1). This was not observed in Study 1 (Pittsburgh) and Study 2b (Utrecht), but was observed again in Study 3 (El Paso).

**Results and Discussion.** The path analysis yielded the same patterns as in the previous studies (Table 1 and Fig. 4), but in this study, Islamoprejudice had a positive (rather than negative) direct effect on hate crime perceptions,  $B = 0.19$ , 95% CI  $[0.09, 0.30]$ . Disempowerment indirectly predicted hate crime perceptions in a positive fashion: disempowerment  $\rightarrow$  Islamoprejudice  $\rightarrow$  hate crime perception,  $B = 0.05$ , 95% boot CI  $[0.02, 0.08]$ , and disempowerment  $\rightarrow$  White nationalism  $\rightarrow$  Islamoprejudice  $\rightarrow$  hate crime perception,  $B = 0.03$ , 95% boot CI  $[0.01, 0.06]$ .

Altogether, the results replicate the patterns of the previous studies but with the notable exception that the anti-Islamic prejudice predicted higher hate crime perceptions. Apparently, disempowered individuals emphasize hate crimes when the perpetrator is a member of a vilified minority, even though they deemphasize hate crimes when the victims are members of that minority.

### Study 3: El Paso Walmart Shooting/Dayton Bar Shooting

The prior studies suggest that disempowerment fuels the prejudice that biases hate crime perceptions. The general pattern is supported by a metaanalysis (Table 1). The final study tests whether disempowerment biases hate crime perceptions due to symbolic concerns about supremacy, which can be distinguished from realistic concerns about lost jobs or increased crime.

In August 2019, Americans suffered two mass shootings in the span of 24 h: the El Paso Walmart shooting (22 killed and 24 injured), wherein the gunman expressed White nationalist, anti-Hispanic immigrant prejudices prior to the attack, and the downtown shooting in Dayton, Ohio (9 killed and 27 injured), where the gunman had not declared any such prejudice. We tested whether El Paso hate crime perceptions were linked to disempowered individuals perceiving Hispanic immigrants as a realistic threat or a symbolic threat to the United States. Rather than separately measure White nationalism and anti-Hispanic prejudice, we measured symbolic threat and realistic threat because they represent two qualitatively distinct indicators of ethnonationalist prejudice. That is, both kinds of threat are related to in-group identification and prejudice (47), but whereas realistic threat is rooted in material concerns about Hispanic immigrants stealing jobs and increasing crime, symbolic threat is rooted in intangible concerns about group identity, differences in culture, and which group is “best” (13, 47, 48). The significance quest theory assumes that support for violent extremism is often motivated by symbolic concerns rather than material concerns (7, 25, 27), and thus, the effects of disempowerment should run through symbolic threat and not realistic threat.

#### Method.

**Participants.** Eight hundred thirty-seven White, US adults were recruited by Qualtrics Panels, 4 to 13 d after the El Paso and Dayton shootings (410 women and 427 men). A prescreen was used to recruit gun owners (50.3%) and nonowners (49.7%), but gun ownership had no bearing on the results.

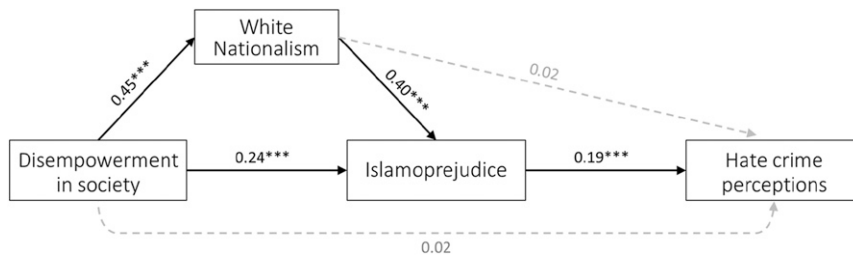


Fig. 4. Utrecht study standardized parameter estimates. \*\*\* $P < 0.001$ .

### Procedure.

**Hate crime perceptions.** Participants gave attributions about both the El Paso and Dayton gunmen, in counterbalanced order, as per the previous studies. Ratings of the El Paso gunman on “hatred of others; prejudice” were higher than ratings of the other possible motives for the El Paso shooting (all  $z$  values  $> 6.56$ ,  $P$  values  $< 0.001$ ; correlations:  $r = 0.05$  to  $r = 0.46$ ); the El Paso hate crime perception was also higher than the Dayton hate crime perception ( $M_{El\ Paso} = 2.27$ ,  $SD = 1.09$ ;  $M_{Dayton} = 1.78$ ,  $SD = 1.36$ ;  $t[836] = 12.38$ ,  $P < 0.001$ ).<sup>||</sup>

**Symbolic and realistic threat of Hispanic immigrants.** To provide discriminant validity, nationalist concerns about symbolic and realistic threat were assessed using items from the American National Election Survey (46) and the European Social Survey (49). The questions began with “Hispanic people who come to live here, generally. . .,” followed by four randomized items, each rated on a 10-point scale with different endpoint labels: two pertained to realistic threat (“1: take jobs away” to “10: create new jobs” and “1: make crime problems worse” to “10: make crime problems better”), and two pertained to symbolic threat (“1: harm America’s culture” to “10: benefit America’s culture” and “1: undermine the cultural life” to “enrich the cultural life”). Items were reverse coded such that higher scores represented higher threat ( $M_{symbolic} = 4.20$ ,  $SD = 2.28$ ,  $r = 0.86$ ;  $M_{realistic} = 5.16$ ,  $SD = 1.96$ ,  $r = 0.67$ ).

Disempowerment in society was assessed in the same manner as the previous studies ( $M = 2.26$ ,  $SD = 0.86$ ,  $\alpha = 0.71$ ).

### Results and Discussion.

**Direct effect of symbolic threat.** Initial regression analyses indicated that symbolic threat (standardized) negatively predicted the El Paso hate crime perception,  $b = -0.27$ ,  $t(835) = -7.28$ ,  $P < 0.001$ , 95% CI  $[-0.34, -0.19]$ ; the effect persisted even when controlling for the Dayton hate crime perception,  $b = -0.17$ ,  $t(834) = -5.04$ ,  $P < 0.001$ , 95% CI  $[-0.23, -0.11]$ . There was no such effect for the Dayton hate crime perceptions when controlling for El Paso,  $b = -0.04$ ,  $t(834) = -0.95$ ,  $P = 0.34$ , 95% CI  $[-0.12, 0.04]$ .<sup>\*\*</sup>,<sup>††</sup> Realistic threat had no bearing on the results. The symbolic threat of Hispanic immigrants specifically predicted the El Paso hate crime perception, independently of the Dayton hate crime perception and realistic threat.

**Indirect effects.** A path analysis indicated that disempowerment indirectly predicted the El Paso hate crime perception via its effect on symbolic threat (Fig. 5). There was an indirect effect of

<sup>||</sup>Given the nonnormality of the attributions, we also performed a nonparametric Wilcoxon signed rank test with continuity correction, which mirrored the results of the paired samples  $t$  test,  $V = 52530$ ,  $P < 0.001$ .

<sup>\*\*</sup>Although results initially indicated that symbolic threat affected the Dayton hate crime rating,  $b = -0.23$ ,  $t(835) = -4.90$ ,  $P < 0.001$ , 95% CI  $[-0.32, -0.14]$ , this effect was fully subsumed by the El Paso rating. The two ratings were highly correlated ( $r = 0.58$ ,  $P < 0.001$ ), likely indicating a common method bias germane to cross-sectional studies.

<sup>††</sup>El Paso hate crime perceptions were strongly left skewed, but data transformation did not meaningfully alter the results. Full details are in the *SI Appendix*, including tests of within-subject differences.

disempowerment  $\rightarrow$  symbolic threat  $\rightarrow$  El Paso hate crime perception,  $B = -0.07$ , 95% boot CI  $[-0.10, -0.03]$ , but no indirect effect of disempowerment  $\rightarrow$  realistic threat  $\rightarrow$  El Paso hate crime perception,  $B = 0.004$ , 95% boot CI  $[-0.03, 0.04]$ .

Altogether, the disempowered were less likely to perceive the El Paso shooting to be a hate crime, and this was specifically due to heightened symbolic concerns related to group supremacy, not any realistic concerns about jobs or crime.

### General Discussion

This research suggests that hate crime perceptions can be biased by grievance and prejudice, befitting psychological theories of intergroup conflict, the social identity theory and the significance quest theory of violent extremism.<sup>‡‡</sup> Prejudice against Jewish, Islamic, and Hispanic groups was a proximal predictor of hate crime recognition. The effects of prejudice could be partially traced back to an aggrieved sense of disempowerment in society, radical (ethnic or religious) nationalism, and the perceived symbolic threat posed by the other group.

The research offers a process model to explain the psychological precursors of hate crime denialism, linking it to competition for victimhood status.<sup>§§</sup> It advances research on how psychological threats and frustrations predict ethnonationalism, scapegoating, and displaced aggression (18, 50–52) and shows how factors that are common to the psychology of violent extremism and intergroup conflict can be used to make specific predictions about extremist sympathies in modern Western democracies (19, 27, 53). Theories of intergroup conflict generally explain how members of a majority might normatively express their grievances through prejudice and victimhood denial. The significance quest theory in particular explains how support for violent extremism traces back to a psychological need rooted in symbolic concerns. It also describes how a deprived sense of significance could motivate people either to embrace a radical social movement that advocates for a significance-lending cause or to self-affirm by demonstrating individual commitment to a cherished value. In either case, when individuals’ grievances connect to that of the perpetrator, they may judge the latter’s violence in a way that protects and/or advances the shared cause. From such a motivational perspective, any seeming equivocation or indifference about hate crimes is not simply incidental but purposive and goal-directed.

<sup>‡‡</sup>Both Social Identity Theory (SIT) and Significance Quest Theory (SQT) link the attainment of self-worth (esteem, significance) to a positive evaluation of their group. SQT suggests, moreover, that such in-group favoritism has to do with the in-group values, whose support lends one significance and worth. It also suggests that it is the support of important values that lends one worth, rather than of one’s group per se that lends one worth (e.g., in some cases one may want to emphasize one’s loathing for one’s group if the latter was seen to betray important values). These latter implications, however, are beyond the present scope.

<sup>§§</sup>Throughout this paper, the hate crime perceptions were presumed to have consequences for the legitimacy of victimhood (i.e., rejecting victimhood of the outgroup and claiming victimhood of the in-group). These two are not necessarily independent; both serve to elevate one’s own group (e.g., claiming in-group victimhood emphasizes the guilt of the out-group perpetrator, and vice versa).

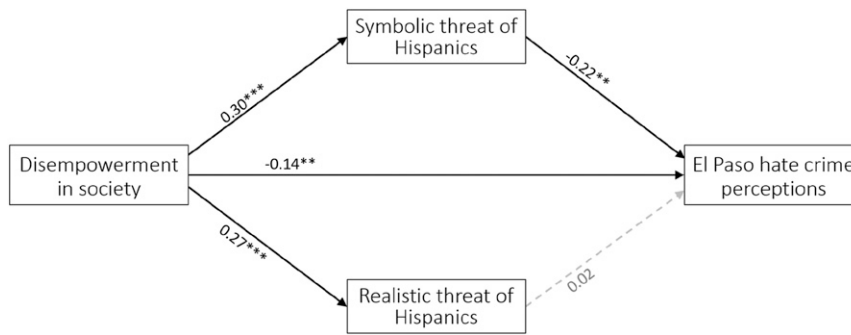


Fig. 5. El Paso study standardized parameter estimates. \*\* $P < 0.01$ , \*\*\* $P < 0.001$ .

Causal claims are limited by the use of surveys rather than laboratory simulations, but the methods were suited to the real-world context of this research.<sup>14</sup> The observed effects were also small and subtle, manifesting in softer agreement with the possibility of a hate crime, rather than outright denial. However, it would be nonnormative to flagrantly deny victimization in the immediate aftermath of a striking human tragedy. Subtle expressions are to be expected in societies that normatively decry violence against unarmed civilians. Perhaps the same process that predicts sympathizers also predicts committed supporters, those who might express the strongest denial, but such individuals may be comparatively rare (8, 54). Future research can determine the conditions in which a biased hate crime perception indicates entry-level radicalization and when it simply indicates the everyday self-regulation of a cherished social identity or value system.

Future research could also articulate the nature of the observed biases and prejudices. The differences in hate crime perceptions seem to reflect a motivational bias because the perpetrators of the White supremacist shootings publicly declared a prejudice and because our findings consistently linked perceptions of the shootings to participants' sense of disempowerment. However, perceivers who embrace nationalist movements may also become exposed to different information about a shooting, suggesting that the "bias" could be partly informational. That being said, if disempowerment motivates individuals to embrace the movement, such selective exposure could be intentional.

With regards to the prejudice, each study tested a specific prejudice against one group in particular, but it is not clear

whether the expressed prejudices reflect deeply held beliefs or were merely opportunistic and colored by transient frustrations. Frustrated individuals might be opportunistic with their prejudices, depending on how this serves their significance concerns. A stated prejudice could also reflect a more generalized disposition: in studies 2 and 3, White nationalism predicted both Islamophobia and anti-Hispanic prejudice; accordingly, Altemeyer (55, 56) observed that right-wing authoritarianism predicts general prejudice against all "different" groups, ostensibly because they all reflect means to the same end: to assert supremacy of one's own group.

To conclude, this research suggests there are sympathizers among the public who are reluctant to recognize hate crimes (unless the perpetrator is a member of a despised minority), in part because they want recognition for their own sense of victimization that lends them value and significance. Such sympathy can be subtle and expressed indirectly. Hence, perpetrators and sympathizers need not openly collude, or even agree on the means, to advance the shared goal of preventing the empowerment of other groups. Future perpetrators of mass violence may interpret the downplaying of hate crimes as tacit social support for their cause.

#### Data Availability Statement

A repository of the data necessary to reproduce, analyze, and interpret all findings in this paper is available at <https://osf.io/p9yca/>. The annotated code (including software information) for all studies and the metaanalysis is available at <https://osf.io/jvy8t/>. The full repository can be accessed at <https://osf.io/jwft2/>.

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<sup>14</sup>It is also unclear whether there might be order effects: In both studies that examined two mass shootings, Study 1 (Pittsburgh/Thousand Oaks) and Study 3 (El Paso/Dayton), it was always the case that the nonhate crime shootings occurred second.

- G. S. Morgan, D. C. Wisneski, L. J. Skitka, The expulsion from Disneyland: The social psychological impact of 9/11. *Am. Psychol.* **66**, 447–454 (2011).
- R. A. Berk, Thinking about hate-motivated crimes. *J. Interpers. Violence* **5**, 334–349 (1990).
- K. M. Craig, Examining hate-motivated aggression: A review of the social psychological literature on hate crimes as a distinct form of aggression. *Aggress. Violent Behav.* **7**, 85–101 (2002).
- Federal Bureau of Investigation, *Crime in the U.S. 2017 (CIUS) - Table 5*, (Uniform Crime Reporting, 2017).
- Anti-Defamation League, ADL Hate Crime Map (2019). <https://www.adl.org/adl-hate-crime-map>. Accessed 1 May 2019.
- C. Petrosino, Connecting the past to the future. *J. Contemp. Crim. Justice* **15**, 22–47 (1999).
- A. W. Kruglanski et al., The psychology of radicalization and deradicalization: How significance quest impacts violent extremism. *Polit. Psychol.* **35**, 69–93 (2014).
- C. McCauley, S. Moskalenko, Understanding political radicalization: The two-pyramids model. *Am. Psychol.* **72**, 205–216 (2017).
- M. Noor, N. Kteily, B. Siem, A. Mazziotta, "Terrorist" or "mentally ill": Motivated biases rooted in partisanship shape attributions about violent actors. *Soc. Psychol. Personal. Sci.* **10**, 485–493 (2019).
- M. R. Joslyn, D. P. Haider-Markel, Gun ownership and self-serving attributions for mass shooting tragedies. *Soc. Sci. Q.* **98**, 429–442 (2017).

- N. Shnabel, A. Nadler, A needs-based model of reconciliation: Satisfying the differential emotional needs of victim and perpetrator as a key to promoting reconciliation. *J. Pers. Soc. Psychol.* **94**, 116–132 (2008).
- K. van den Bos, *Why people radicalize: How perceived injustice fuels radicalization, extremism and terrorism*, (Oxford University Press, New York, 2018).
- G. W. Allport, *The Nature of Prejudice*, (Perseus Books, 1954).
- N. Tausch et al., Explaining radical group behavior: Developing emotion and efficacy routes to normative and nonnormative collective action. *J. Pers. Soc. Psychol.* **101**, 129–148 (2011).
- L. Berkowitz, J. A. Green, The stimulus qualities of the scapegoat. *J. Abnorm. Soc. Psychol.* **64**, 293–301 (1962).
- E. L. Cowen, J. Landes, D. E. Schaet, The effects of mild frustration on the expression of prejudiced attitudes. *J. Abnorm. Psychol.* **58**, 33–38 (1959).
- J. Dollard, N. E. Miller, L. W. Doob, O. H. Mowrer, R. R. Sears, *Frustration and Aggression*, (Yale University Press, 1939).
- I. Fritsche, P. Jugert, The consequences of economic threat for motivated social cognition and action. *Curr. Opin. Psychol.* **18**, 31–36 (2017).
- H. Tajfel, J. Turner, "An integrative theory of intergroup conflict" in *The Social Psychology of Intergroup Relations*, W. G. Austin, S. Worchel, Eds. (Brooks/Cole, 1979), pp. 33–47.

20. W. Stroebe, A. W. Kruglanski, D. Bar-Tal, M. Hewstone, *The Social Psychology of Intergroup Conflict: Theory, Research and Applications*, W. Stroebe, A. W. Kruglanski, D. Bar-Tal, M. Hewstone, Eds. (Springer, Berlin, 1988).
21. R. M. Ryan, E. L. Deci, *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*, (Guilford Publications, 2017).
22. E. T. Higgins, "Regulatory focus theory" in *Handbook of Theories of Social Psychology: Volume 1*, P. A. M. van Lange, A. W. Kruglanski, E. T. Higgins, Eds. (SAGE Publications, 2012), pp. 483–504.
23. A. H. Maslow, A theory of human motivation. *Psychol. Rev.* **50**, 370–396 (1943).
24. R. W. White, Motivation reconsidered: The concept of competence. *Psychol. Rev.* **66**, 297–333 (1959).
25. N. P. Leander et al., Frustration-affirmation? Thwarted goals motivate compliance with social norms for violence and nonviolence. *J. Pers. Soc. Psychol.*, 10.1037/pspa0000190 (2020).
26. K. Jasko et al., Social context moderates the effects of quest for significance on violent extremism. *J. Pers. Soc. Psychol.*, 10.1037/pspi0000198 (2019).
27. A. W. Kruglanski et al., Terrorism—A (self) love story: Redirecting the significance quest can end violence. *Am. Psychol.* **68**, 559–575 (2013).
28. N. P. Leander et al., Mass shootings and the salience of guns as means of compensation for thwarted goals. *J. Pers. Soc. Psychol.* **116**, 704–723 (2019).
29. L. Shepherd, F. Fasoli, A. Pereira, N. R. Branscombe, The role of threat, emotions, and prejudice in promoting collective action against immigrant groups. *Eur. J. Soc. Psychol.* **48**, 447–459 (2018).
30. D. Sullivan, M. J. Landau, N. R. Branscombe, Z. K. Rothschild, Competitive victimhood as a response to accusations of ingroup harm doing. *J. Pers. Soc. Psychol.* **102**, 778–795 (2012).
31. M. Noor, N. Shnabel, S. Halabi, A. Nadler, When suffering begets suffering: The psychology of competitive victimhood between adversarial groups in violent conflicts. *Pers. Soc. Psychol. Rev.* **16**, 351–374 (2012).
32. N. Shnabel, J. F. Dovidio, "Mixed emotional needs of Israeli Jews as a potential source of ambivalence in their response to the Iranian challenge" in *The Yale Papers: Antisemitism in Comparative Perspective*, C. A. Small, Ed. (Institute for the Study of Global Antisemitism and Policy, 2009), pp. 337–346.
33. I. Simantov-Nachlieli, N. Shnabel, S. Halabi, Winning the victim status can open conflicting groups to reconciliation: Evidence from the Israeli-Palestinian conflict. *Eur. J. Soc. Psychol.* **45**, 139–145 (2015).
34. J. Sidanius, F. Pratto, *Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression*, (Cambridge University Press, 1999).
35. R. P. Eibach, T. Keegan, Free at last? Social dominance, loss aversion, and White and Black Americans' differing assessments of racial progress. *J. Pers. Soc. Psychol.* **90**, 453–467 (2006).
36. I. F. Young, D. Sullivan, Competitive victimhood: A review of the theoretical and empirical literature. *Curr. Opin. Psychol.* **11**, 30–34 (2016).
37. M. Bilewicz, M. Winiewski, M. Kofta, A. Wójcik, Harmful ideas, the structure and consequences of anti-Semitic beliefs in Poland. *Polit. Psychol.* **34**, 821–839 (2013).
38. P. Froese et al., *American Values, Mental Health, and Using Technology in the Age of Trump: Findings from the Baylor Religion Survey, Wave 5*, (Baylor University, 2017).
39. A. L. Whitehead, L. Schnabel, S. L. Perry, Gun control in the crosshairs: Christian nationalism and opposition to stricter gun laws. *Socius* **4**, 1–13 (2018).
40. A. F. Hayes, *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, (Guilford Press, 2013).
41. A. L. Whitehead, S. L. Perry, Is a "Christian America" a more patriarchal America? Religion, politics, and traditionalist gender ideology. *Can. Rev. Sociol.* **56**, 151–177 (2019).
42. Y. Rosseel, lavaan: An R package for structural equation modeling. *J. Stat. Softw.* **48**, 1–36 (2012).
43. R. Lord, How Robert Bowers went from conservative to white nationalist. Pittsburgh Post-Gazette, 11 November 2018. <https://www.post-gazette.com/news/crime-courts/2018/11/10/Robert-Bowers-extremism-Tree-of-Life-massacre-shooting-pittsburgh-Gab-Warroom/stories/201811080165>. Accessed 7 July 2020.
44. R. Imhoff, J. Recker, Differentiating Islamophobia: Introducing a new scale to measure Islamoprejudice and secular Islam critique. *Polit. Psychol.* **33**, 811–824 (2012).
45. G. Hawley, The Demography of the Alt-Right, research brief. <https://ifstudies.org/blog/the-demography-of-the-alt-right>. Accessed 1 May 2019.
46. American National Election Studies, *User's Guide and Codebook for the ANES 2016 Time Series Study*, (University of Michigan and Stanford University, 2017).
47. W. G. Stephan et al., The role of threats in the racial attitudes of Blacks and Whites. *Pers. Soc. Psychol. Bull.* **28**, 1242–1254 (2002).
48. D. T. Campbell, "Ethnocentric and other altruistic motives" in *Nebraska Symposium on Motivation Bd. 13*, D. Levine, Ed. (University of Nebraska Press, 1965), pp. 283–311.
49. European Social Survey, *ESS Round 7 Source Questionnaire*, (Centre for Comparative Surveys, City University London, 2014).
50. N. P. Leander, T. L. Chartrand, On thwarted goals and displaced aggression: A compensatory competence model. *J. Exp. Soc. Psychol.* **72**, 88–100 (2017).
51. Z. K. Rothschild, M. J. Landau, D. Sullivan, L. A. Keefer, A dual-motive model of scapegoating: Displacing blame to reduce guilt or increase control. *J. Pers. Soc. Psychol.* **102**, 1148–1163 (2012).
52. D. Sullivan, M. J. Landau, Z. K. Rothschild, An existential function of enemyship: Evidence that people attribute influence to personal and political enemies to compensate for threats to control. *J. Pers. Soc. Psychol.* **98**, 434–449 (2010).
53. A. W. Kruglanski, J. J. Bélanger, R. Gunaratna, *The Three Pillars of Radicalization: Needs, Narratives and Networks*, (Oxford University Press, 2019).
54. M. Dugas, A. W. Kruglanski, The quest for significance model of radicalization: Implications for the management of terrorist detainees. *Behav. Sci. Law* **32**, 423–439 (2014).
55. B. Altemeyer, B. Hunsberger, Authoritarianism, religious fundamentalism, quest, and prejudice. *Int. J. Psychol. Relig.*, 10.1207/s15327582ijpr0202\_5 (1992).
56. B. Altemeyer, *Enemies of Freedom: Understanding Right-Wing Authoritarianism*, (Jossey-Bass, 1988).