

The Impact of Mass Shootings on Attitudes toward Gun Restrictions

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Abstract

Is the American public more likely to favor stricter gun legislation in the aftermath of deadly mass shootings? The authors leverage the occurrence of several mass shootings during multiple survey waves of the General Social Survey between 1987 and 2018 to examine whether exposure to a mass shooting sways public opinion on gun legislation. The results reveal that mass shootings increase support for stricter gun permits among Democrats but not for individuals of other political orientations. An exception to this finding occurs with school shootings, which mobilize broad support for firearm legislation among both Democrats and Republicans.

Keywords

mass shootings, public opinion, gun legislation

In the 1990s, there were 23 separate mass shootings with at least 4 fatalities in the United States. These shootings led to a total of 159 deaths. The first decade of the 2000s was similarly lethal, with 20 mass shootings and 171 deaths. However, figures from the most recent decade dwarf those of previous decades, with 47 mass shootings between 2010 and 2019 resulting in 482 deaths. In just the first six months of 2021, there were five mass shootings resulting in 39 fatalities.

Although there has been an intense amount of empirical scrutiny of the causes of mass shootings, typically defined as incidents involving four or more victims killed (Mother Jones 2020; Sharkey and Shen 2021), attention dedicated to the consequences has been relatively limited and has tended to focus more, for instance, on the impact on gun purchases than on attitudes and policy preferences related to gun control (Callcut et al. 2019; Liu and Wiebe 2019; Porfiri et al. 2019; Studdert et al. 2017). Accordingly, in this study we ask, Do mass shootings alter public opinion related to guns and gun control, even if fleetingly? If so, for whom do opinions change, and are some shootings more salient than others when it comes to influencing attitudes? Even temporary shifts in public opinion about gun control are worthy of scholarly attention because they may yield a rare “window of opportunity” for advancing policy change (Birkland 1998; Kingdon 1995; Semenza and Bernau forthcoming; Sharkey and Shen 2021; Zahariadis 1999). The renewed attention to gun violence in the wake of mass shootings combined with collective grief and the collective feeling of threat may

crystallize shared policy objectives related to gun control (Semenza and Bernau 2020).

Among the limited research on attitudes toward gun rights and gun control following mass shootings, Barry et al. (2013) fielded a nationally representative survey in the immediate aftermath of the Sandy Hook Elementary School massacre in December 2012 to assess views about various gun policies. They found considerable support for a range of gun laws, including 77.3 percent of respondents in favor of requiring permits from local law enforcement before a gun could be purchased (59.4 percent among gun owners and 83.5 percent among nonowners). However, Barry et al.’s research design did not permit an examination of whether attitudes toward gun control, on average, became more supportive following the horrific tragedy. Evidence from a two-wave survey effort by Kantack and Paschall (2020), administered immediately before and after the 2017 Las Vegas shooting that remains the deadliest on record, suggests that public support for gun control does not change following a mass shooting.

Prior studies are not without limitations, however, thereby potentially undermining both internal validity and

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generalizability. On the former, to identify persuasive evidence about the effect of mass shootings on attitudes toward gun control and gun rights, experimental or quasi-experimental designs are advantageous. On the latter, focusing analyses on a representative sample of mass shootings as well as survey respondents allows more generalizable conclusions about the nature of the relationship between mass shootings and attitudes toward gun restrictions as well as an assessment of heterogeneity in the relationship by characteristics of respondents and the circumstances involved.

To examine the association between mass shootings and attitudes toward gun laws, in this study we use a natural experiment that takes advantage of the fact that several mass shootings since the late 1980s have occurred during the middle of the biennial administration of the General Social Survey (GSS), a well-known nationally representative sample of adults living in U.S. households. If we assume that respondents to the GSS in the period before a mass shooting are comparable on observed and unobserved characteristics with individuals taking the survey right after the mass shooting—an assumption we will examine later in the article—then any differences in attitudes toward gun legislation between the pre- and postshooting respondents are arguably due to the shooting itself. Because our design draws upon information from a representative sample of numerous mass shootings (23 in our main analysis, spread across 12 years), our findings are more generalizable than studies focusing on the effect of a single shooting (Barry et al. 2013; Kantack and Paschall 2020). By examining the effect of multiple events, we are also able to explore whether some mass shootings (e.g., those that target school facilities) are more likely to sway individuals' attitudes on gun legislation than other attacks.

Extant Evidence

Prior research on the relationship between mass shootings and attitudes toward gun control has yielded mixed findings. Among the experimental designs, McGinty, Webster, and Barry's (2013) vignette study randomly assigned survey respondents to read different vignettes with news stories about mass shootings and then asked survey questions about respondent views of gun policies. Also included was a control group that did not read a story about mass violence. Those respondents who read a story about a mass shooting were significantly more likely to express support for a gun control policy banning large-capacity magazines compared with the control group. Although an experimental vignette study of this sort is highly informative, reading about a fictitious shooting, or even a real shooting well after the fact, is artificial compared with reacting in the immediate aftermath of a mass shooting.

The aforementioned study by Kantack and Paschall (2020) used a quasi-experimental pre-post design following the Las Vegas shooting, finding no evidence in favor of

expanding gun control. However, their analysis focused on just one shooting, and the authors noted that the Amazon Mechanical Turk samples they used differed measurably from a nationally representative sample. The pre-post design is useful, but there would be advantages to instead using a nationally representative sample as well as examining more than one shooting.

To the extent that there is an association between mass shootings and attitudes toward gun control, it may be moderated by characteristics of individuals, including political ideology. Barney and Schaffner (2019) found evidence of a polarizing effect of mass shootings, such that Democrats tend to become more supportive of gun control policies, whereas Republicans become less supportive of gun control. This finding can be explained in part by the fact that Republicans are more likely to view mass shootings as the result of troubled individuals, whereas Democrats are more likely to place fault for the shooting on societal and political forces (Joslyn and Haider-Markel 2013). However, other research fails to find a differential effect by political ideology. In Kantack and Paschall's (2020) study of the Las Vegas shooting, Democrats, Republicans, and independents did not have increasing or decreasing support for gun control following the shooting.

An important nuance for findings about political affiliation could be that support for gun control by ideology is dependent upon emotional reactions felt by individuals. Sharkey and Shen (2021) found strong emotional reactions to mass shootings among Democrats, in terms of increasing sadness and anger, and decreasing happiness, smiling, and laughter, although the effect was very short-lived and localized to individuals living in close proximity to the shooting. For Republicans, they do tend to have reduced likelihoods of smiling and laughing in the immediate aftermath of a mass shooting, yet emotional reactions to mass shootings are much more muted compared with those of Democrats (Sharkey and Shen 2021). Importantly, Joslyn and Haider-Markel (2013) found that intense feelings of anxiety about perceived threats and the unpredictability of life can counteract ideological opposition to gun control following mass shootings. In their study, political conservatives were significantly less likely to favor gun control than liberals overall, but the difference between the two groups narrowed among respondents who felt high levels of anxiety following a mass shooting.

Of import, the emotional reaction to mass shootings is a function of characteristics of the shooting, including the lethality (Sharkey and Shen 2021). Similarly, research has shown that Google search activity for "gun control" and related terms in the immediate aftermath of a mass shooting is magnified as the number of victims increases and when the shooting occurs at school locations (Semenza and Bernau 2020). Hence, the salience of a shooting, reflected in the location, number of victims, and extent of news coverage, likely affects the emotional reactions that follow and perhaps even the policy response.

With this background in mind, in this study we expect, in aggregate across all respondents for all shootings, no effect of mass shootings on attitudes toward gun permits (hypothesis 1). However, we expect this finding of no effect to be the product of counterbalancing effects across political affiliation. More specifically, we expect that Democrats will become even more supportive of gun permits in the wake of mass shootings, but not individuals of other political orientations. Hence, we expect to find a widening gap in support of gun restrictions between Democrats and independents and Republicans (hypothesis 2). An exception to our expectation about political ideology is school shootings. School shootings resulting in the death of children may so violate the norms of society and magnify the unpredictability of life and senselessness of tragedy that all political affiliations may become more likely to support laws requiring the necessity of a permit before a gun purchase can be made (Semenza and Bernau 2020). Accordingly, we do not expect to find a widening gap in support of gun restrictions between Democrats, independents, and Republicans after a school shooting (hypothesis 3).

Data and Methodology

The primary data used for this analysis is the GSS. Since 1972, the GSS has conducted representative cross-sectional surveys to gather information on the attitudes, behaviors, and attributes of individuals residing in the United States. Although initially conducted on a yearly basis, since 1994 the GSS has been administered biennially. Each survey is based on a representative sample of the U.S. population and is conducted via face-to-face interviews, with the exception of 2020 because of the coronavirus disease 2019 pandemic. For our analysis, we draw upon GSS data from 1987 to 2018 (see Table SI.1 for more information on fieldwork periods).

In addition to detailed demographic information, the GSS also regularly includes a question about individuals' support of, or opposition to, police-issued gun permits. Respondents are asked, "Would you favor or oppose a law which would require a person to obtain a police permit before he or she could buy a gun?" This is the dependent variable we use throughout our analyses. In 2018, 84 percent of individuals who identified as Democrats supported gun permits compared with just 59 percent of Republicans. Still, the vast majority of American residents favor gun permitting, which has remained true since the first administration of the GSS in 1972.

To examine whether mass shootings have an immediate impact on attitudes toward gun permits, this study combines GSS survey data with information on deadly mass shootings in the United States since 1982 involving four or more victims killed, collected by three organizations: (1) the nonprofit magazine *Mother Jones* (Mother Jones 2020), (2) the nonprofit research center The Violence Project (The Violence Project 2021), and (3) the Stanford Geospatial Center's Mass

Shootings in America project (Stanford Geospatial Center and Stanford Libraries 2020). Following the triangulation strategy of Sharkey and Shen (2021), our independent variable includes only those mass shootings that were listed in all three databases.¹ We follow this strategy because there is some subjectivity in defining incidents as mass shootings, and we suggest that using those incidents recorded in each data repository yields a more valid measure of mass shootings than using any one data source. Of the 48 total shootings recorded across the three data sets involving four or more fatalities and that overlap with GSS fieldwork periods, 23 were recorded in each database. If a shooting occurred in a given year prior to the start of the GSS survey administration, as was the case in 2018 for the mass shooting at Marjory Stoneman Douglas High School, then the shooting would not be included in our sample. Similarly, if a shooting occurred after the end of survey fieldwork, it would not be included in the sample.

Estimation Strategy

Figure 1 visualizes our empirical approach. We use the 23 incidents, denoted by the staggered, vertical line in the figure, to examine whether exposure to a recent mass shooting affects attitudes on gun permitting (see Table SI.2 for further information about each shooting). To assess whether a mass shooting affects views on gun control, we compare survey interviews fielded in the immediate aftermath of a shooting (treated group, $n = 3,243$ across 23 incidents) with survey responses in the same year prior to the shooting (control group, $n = 8,016$ across 23 incidents). The intuition behind this approach is that respondents interviewed immediately after a shooting differ from previous interviewees only in their exposure to the recent event. Thus, any change in attitudes on gun legislation between these two groups can be attributed to the impact of the shooting.

Two key assumptions are needed to substantiate such claims. First, differences between survey responses before and after a mass shooting should solely be attributable to the shooting itself and not to other temporal dynamics such as

¹Although each source has a unique definition of what constitutes a mass shooting, there is considerable overlap. For example, of the 24 shootings listed on the *Mother Jones* Web site that overlapped with the GSS survey periods, all but one were also listed in the Violence Project data set. The Stanford Geospatial Center's Mass Shootings in America project is no longer being maintained, so we rely on the two remaining data sources (*Mother Jones* and the Violence Project) to identify mass shootings for 2016 to 2018. For the years prior to 2016, each of the shootings listed in the *Mother Jones* and Violence Project data sets is also included in the Stanford Mass Shootings in America list. Two of the data sets—the Stanford Mass Shootings in America project and, since 2006, the *Mother Jones* data set—already consider shootings with three fatalities as mass shootings. To maintain consistency, we exclude these additional cases from our analysis.

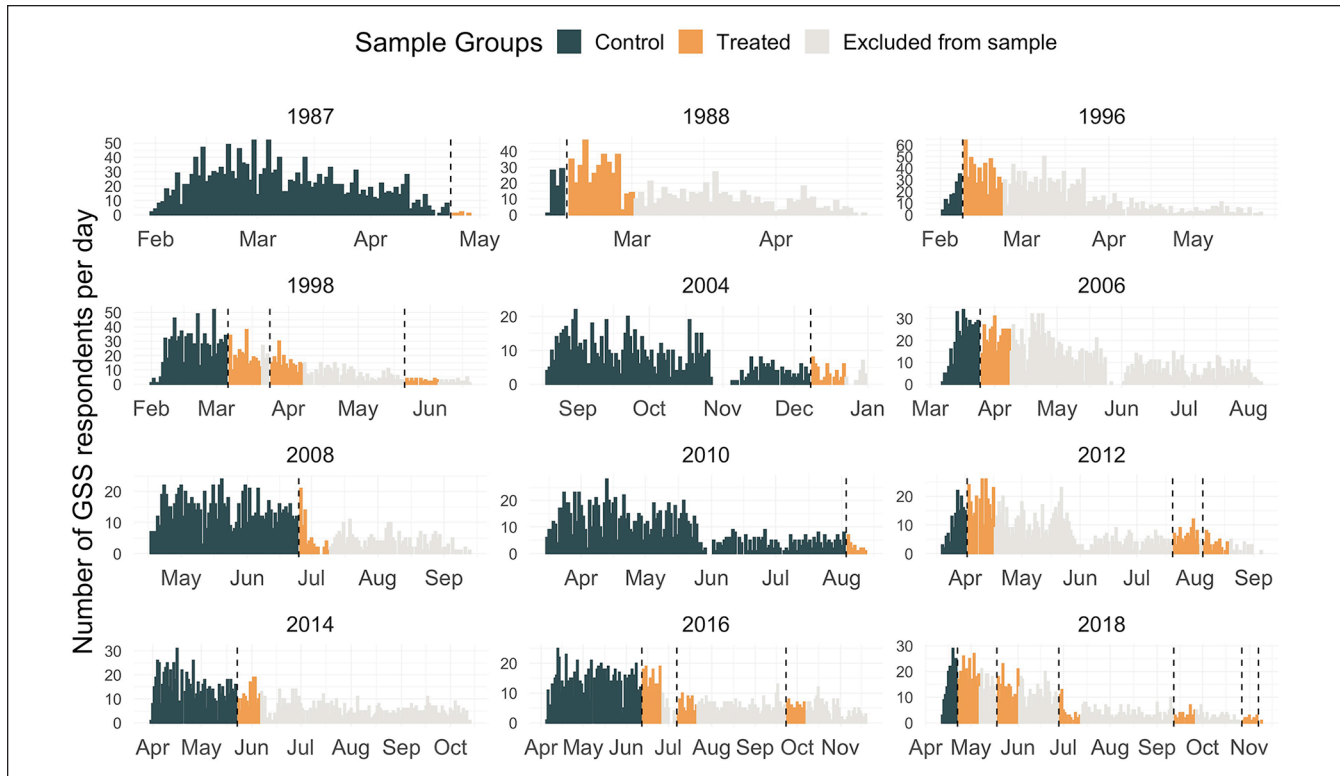


Figure 1. Treatment and control groups across all survey waves.

another major event occurring at the same time or an unrelated time trend (Muñoz, Falcó-Gimeno, and Hernández 2020). To reasonably make such a claim, we consider only respondents who were interviewed within two weeks after a mass shooting. The reason for choosing this time frame was to remain as close as possible to the date of the shooting while also obtaining a treatment group that was sufficiently large to allow robust effect estimation. That said, we examine the sensitivity of our inferences to this two-week cutoff in section SI.3.11.² To account for the pooled nature of our sample, and to take differences in attitudes over the years into consideration, we also include year fixed effects in our main specification.

Second, treatment assignment should be independent of the potential outcomes of the dependent variable. Whereas randomized experiments randomly allocate treatment, thereby ensuring that potential outcomes are independent of treatment assignment, our estimation strategy relies on the unexpected occurrence of mass shootings during GSS fieldwork periods to assign units to treatment and control groups “as good as randomly.” Geographic clustering of fieldwork or differences in reachability across survey respondents may

threaten this ignorability assumption (Muñoz et al. 2020). In Table 1 we summarize imbalances between treatment and control groups across a range of pretreatment variables known to be associated with differences in survey response. Although the treatment and control groups are substantively similar on most observed characteristics, the treatment group features slightly fewer Black and Democratic survey respondents. To adjust for these differences, we control for respondents’ race and party affiliation in the main specification and also adjust for differences in age, sex, country of origin, residence, level of education, marital status, gun ownership, and interview experience between control and treatment groups. In sections SI.3.3 and SI.3.4, we run a series of additional specifications in which we balance treatment and control groups on covariates using maximum entropy weights and the estimated propensity of treatment and reestimate all models using both year and regional fixed effects.

To estimate the effect of exposure to a recent mass shooting on attitudes toward gun legislation, we use a linear regression model, specifically a linear probability model (LPM) in which the outcome variable takes on the value of 0 or 1:

$$Y_i = \delta T_i + \mathbf{Z}_i' \beta + \gamma_t + \varepsilon_i, \quad (1)$$

where Y_i is a binary variable indicating whether an individual is in favor of police-issued gun permits, and T_i differentiates between those interviewed before ($T_i = 0$) and after ($T_i = 1$)

²As mass shootings may have occurred prior to the start of the fieldwork period, we also identify all mass shootings that occurred prior to the survey and exclude all those respondents in the control group who were interviewed within a month of any such mass shooting.

Table 1. Summary Statistics.

Variable	Control			Treated			<i>p</i>
	<i>n</i>	Mean	<i>SD</i>	<i>n</i>	Mean	<i>SD</i>	
Supports gun permits	8,016	.76	.43	3,243	.77	.42	.186 (<i>F</i>)
Party affiliation	8,016			3,243			.043 (χ^2)
Democratic		.37			.34		
Independent		.39			.40		
Republican		.24			.25		
Age (years)	8,016	47.65	17.77	3,243	47.04	17.70	.095 (<i>F</i>)
Female	8,016	.56	.50	3,243	.57	.50	.254 (<i>F</i>)
U.S. born	8,016	.90	.30	3,243	.90	.31	.616 (<i>F</i>)
Race/ethnicity	8,016			3,243			<.001 (χ^2)
Black		.18			.15		
White		.75			.76		
Other		.07			.09		
Residence	8,016			3,243			.709 (χ^2)
Urban		.61			.60		
Suburban		.28			.29		
Rural		.12			.11		
Education (years)	8,016	13.22	3.17	3,243	13.48	3.09	<.001 (<i>F</i>)
Married	8,016	.47	.50	3,243	.46	.50	.232 (<i>F</i>)
Gun ownership	8,016	.36	.48	3,243	.36	.48	.972 (<i>F</i>)
Coop. interview	8,016	.96	.19	3,243	.96	.20	.296 (<i>F</i>)

a mass shooting in a given year. Thus, δ estimates the effect of exposure to a recent mass shooting on attitudes toward gun control, conditional on pretreatment covariates \mathbf{Z}_i' . To account for differences over time, we also include year (γ_t) fixed effects.

We rely on LPMs over nonlinear alternatives such as logit or probit models to ease interpretability of the coefficient estimates. Moreover, one reason to estimate LPMs is to facilitate examination of possible heterogeneous effects, such as the effect of a mass shooting by the political affiliation of the respondent (Gomila 2021). In a logit or probit model, interaction effects are conditional on other independent variables, undermining clear interpretation. A criticism of linear models is the fact that they impose heteroskedasticity for binary dependent variables, thus violating one of the key model assumptions. To resolve this issue, we use heteroskedasticity-consistent robust standard errors (Wooldridge 2002:56). Although LPMs may result in predictions that are higher than 1 or lower than 0, this is less problematic if the purpose of the analysis is to estimate the partial effect of an independent variable on the response probability (Wooldridge 2002:455). See Friedman (2012), Pischke (2012), and Gomila (2021) for extended arguments in favor of using LPMs as an alternative to logit or probit regressions. In Appendix section SI.3.2 we instead reestimate our models using logit regressions, and the relative size and direction of estimates do not change.

Before proceeding, it is important to specify what type of treatment effect we are actually estimating. Because of the

frequency of mass shootings in the United States, all GSS survey respondents have arguably been “exposed” to prior mass shootings (i.e., earlier versions of our treatment variable). In our design, we assume that those taking the GSS survey prior to a mass shooting (our control group) received similar exposure to past occurrences of mass shootings, as those respondents taking the survey after a mass shooting (our treatment group). Because of the likelihood of earlier exposure to a mass shooting, we are arguably estimating the average marginal effect of additional treatment (i.e., an additional mass shooting), as opposed to the average treatment effect (Gaines and Kuklinski 2011). If prior exposures to mass shootings have large, enduring effects, then we may find little “additional” effect of another mass shooting (i.e., no association between our treatment and outcome variables). However, in such a scenario it would be erroneous to conclude that mass shootings have little association with attitudes toward gun control, if the initial exposure to mass shootings influences attitudes toward gun permits even if subsequent shootings did not.³ Furthermore, because not all respondents in the treatment group may be aware of the occurrence of the shooting, estimates should be interpreted as the intention-to-treat effect from an additional shooting. Accordingly, our treatment coefficients are conservative and

³In section SI.3.7 we take such potential enduring effects into account by controlling for the number of shootings in the prior 3 months.

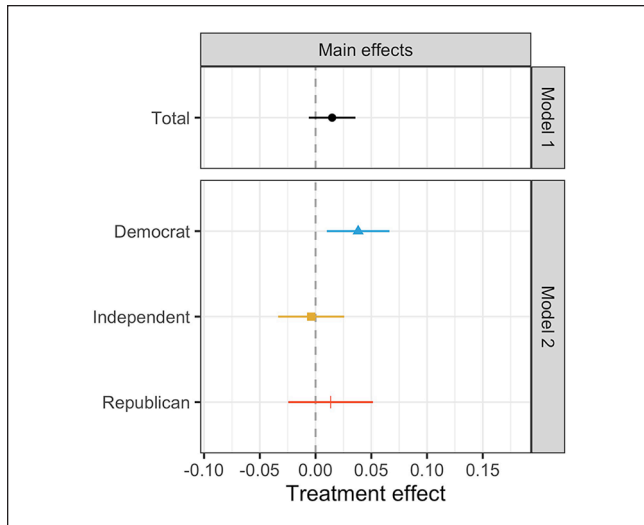


Figure 2. The effect of exposure to a recent mass shooting on average attitudes toward gun permits (total) and the effect by respondents' political affiliation (with 95 percent confidence interval).

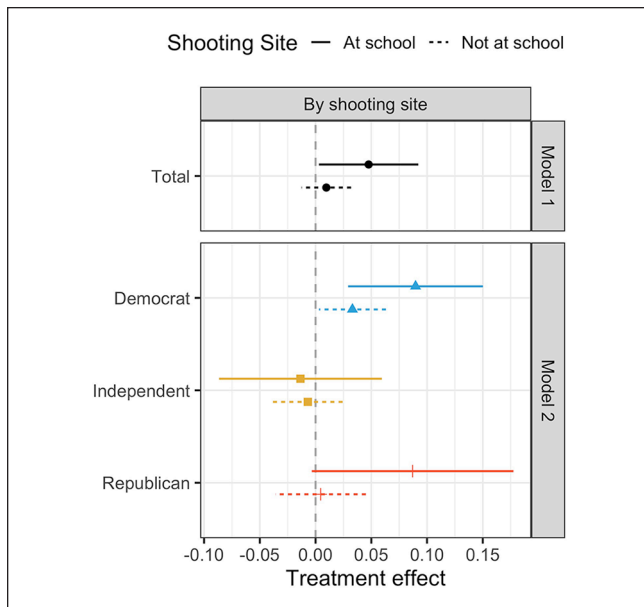


Figure 3. Treatment effect for mass shootings that occurred at schools or elsewhere, by respondents' political affiliation (with 95 percent confidence interval).

likely underestimate the true effect of being aware of the occurrence of a recent shooting. Finally, our interest in this study is whether there is an immediate effect of mass shootings on attitudes, potentially providing a window of opportunity for policy change related to gun control. It is not the intent of our analysis to examine the relative permanency of any resulting attitude changes, which would require a different type of research design.

Treatment Heterogeneity by Political Affiliation and Site

In addition to examining the effect of an additional mass shooting on attitudes toward gun legislation, we assess whether reactions to shootings differ depending on respondents' political affiliation. The GSS collects information on respondents' party affiliation across all survey periods. Participants are asked to classify themselves as one of eight categories: strong Democrat, not strong Democrat, independent (near Democrat), independent, independent (near Republican), not strong Republican, strong Republican, or other party. Using this information, we construct a three-category variable (X_i) that differentiates among Democrats, Republicans, and independents or other party supporters⁴ and interact it with the treatment variable:

$$Y_i = \delta_0 T_i + \delta_1 T_i X_i + Z_i' \beta + \gamma_i + \varepsilon_i. \quad (2)$$

Finally, we assess whether shootings that occur at schools evoke stronger attitudinal change than mass shootings elsewhere. To differentiate among shooting locations, we classify a shooting as a school shooting if it occurred at an elementary school, a middle school, or a high school.

Results

Results of the regression analyses are presented in Figures 2 and 3. The figures display the estimated coefficients and confidence intervals (95 percent) of the treatment effect across the two models (average effect and effect by political affiliation), conditioning on all other variables and between-year differences. The corresponding regression tables are listed in section SI.3.1. All estimates are derived using LPMs, so that the displayed treatment coefficients indicate the percentage-point change in the probability of favoring gun permits after having been exposed to a recent mass shooting. All inferences are based on two-tailed hypothesis tests.

Consistent with our first hypothesis, the top panel (model 1) in Figure 2 reveals that on average, exposure to a recent mass shooting does little to sway respondents' attitudes toward gun legislation. Respondents interviewed within two weeks after a mass shooting are, on average, 1.5 percentage points more likely to favor gun permits than control group respondents, though this difference is not statistically significant.

In the bottom panel (model 2) of Figure 2, we reestimate the effect of having been exposed to a mass shooting but examine whether reactions differ by political ideology. Consistent with our second hypothesis, results indicate considerable differences across political lines: already prior to a shooting, survey respondents who identify as independents

⁴See section SI.1.2 for more information on the construction and recoding of our variables.

or Republicans are 4 and 8 percentage points less likely to favor gun permits compared with supporters of the Democratic Party (see Table SI.4 for baseline coefficients). This initial gap, however, further widens following a mass shooting. Whereas Democrats react to a mass shooting by becoming 4 percentage points more likely to support gun permits, such shootings have no impact on Republicans' or independents' views on firearm legislation.

Figure 3 differentiates between the effect of school shootings (solid line) and nonschool shootings (dashed line) and suggests that mass shootings that target school facilities lead to stronger attitudinal changes. On average, individuals' probability of supporting police-issued gun permits increases by 4.8 percentage points following a school shooting, as opposed to 1 percentage point following mass shootings elsewhere (top panel, model 1).

The bottom panel (model 2) in Figure 3 repeats the analysis above, but again tests for differences by political ideology. Partially consistent with our third hypothesis, school shootings seem to evoke stronger reactions among not only Democratic but also Republican respondents, yet they have no impact on independents. Specifically, both Democratic and Republican respondents become 9 percentage points more likely to support restrictive firearm legislation following the occurrence of a mass shooting at a school, 24 percent and 19 percent standard deviation changes relative to the control group, respectively. Deadly mass shootings that occur outside of school facilities, however, only moderately increase Democrats' support for gun permits while having no effect on Republican and independent respondents' attitudes toward gun control.

We run a series of robustness checks in which we scrutinize the robustness of these estimates. We begin, in section SI.3.2, by reestimating all results using logistic regressions. In section SI.3.3 we match treatment and control groups using maximum entropy balancing (Hainmueller 2012) and propensity score weighting (Imbens and Wooldridge 2009). To adjust for other unobserved geographic confounders, we repeat the main analysis but also control for regional fixed effects in the Appendix (section SI.3.4). In section SI.3.5 we instead add monthly fixed effects to guard against seasonal changes in attitudes toward gun legislation, which may bias our results given that our control cases responded to the GSS survey earlier in a given year than did our treated cases. Given the sparseness of treated and/or control cases for some of the shootings (see Figure 1 and Table SI.2), we also reestimate our analysis excluding shootings with fewer than 20 treated or control cases (see section SI.3.6).

As mass shootings in the United States occur with relative frequency, respondents in the control group may also be exposed to earlier shootings. In section SI.3.7, we account for potential long-term effects of prior shootings by controlling for the number of mass shootings in the preceding 3 months. Given the frequent occurrence of such events, a mass shooting with four casualties may not generate much national media coverage, thereby propelling little

change in nationwide opinion about gun restrictions. In section SI.3.8, we therefore limit our analysis to only those attacks that resulted in 10 or more fatalities. While in the main results we combined political independents with respondents who support smaller political parties in the same category, in section SI.3.9 we assess the sensitivity of our inferences to this decision. Accordingly, we reestimated our models separating independents from supporters of other parties. In section SI.3.10 we broaden our definition of school shootings to include shootings at colleges and universities, which increases the number of cases from three to five. Next, in section SI.3.11, we vary the length of the treatment period from 1 to 21 days (compared with 14 days in our main specification) to assess how the treatment bandwidth affects our effect estimates. Finally, section SI.3.12 includes a thorough assessment of the stability of our results using a specification curve analyses. (Simonsohn, Simmons, and Nelson 2020). Across all of these specifications, our inferences are largely consistent with the main results presented in Figures 2 and 3.

Conclusion

Using the exogenous shock of mass shootings during the course of the administration of the GSS as a natural experiment, in this study we have sought to estimate the association between mass shootings and attitudes toward gun permits. The findings reveal that in the immediate aftermath of a mass shooting, Democrats become even more inclined to support permits to purchase a firearm, whether the shooting occurred at a school or elsewhere. In contrast, only mass shootings at schools, but not other locations, appear to motivate changes in gun permitting attitudes among Republicans, and attitudes toward gun permits do not change among political independents regardless of the site of a mass shooting. These core findings, particularly with respect to gun control views among Democrats, are robust to a vast array of sensitivity analyses and model specifications.

Because school shootings increase favorable views toward gun permits among both Democrats and Republicans, such tragedies may yield a window of opportunity for advancing gun control reforms, in part by changing the dominant focus of policy agendas (Birkland 1998). Indeed, following the Dunblane massacre in 1996 at a primary school in Stirling, Scotland, which left 16 children between the ages of 5 and 6 dead, along with their teacher, far-reaching gun control policies were passed in Great Britain that banned private ownership of handguns. Even in the United States, research reveals that mass shootings tend to lead to a bevy of new policy proposals to address the problem (Luca, Malhotra, and Poliquin 2020).

Yet despite the greater openness to gun restrictions among both Democrats and Republicans in the aftermath of U.S. school shootings as well as increased policy attention, the actual enactment of gun control policies tends to be minimal (Luca et al. 2020). For instance, following the Sandy Hook

Elementary School shooting in December 2012, Senators Joe Manchin (D-WV) and Pat Toomey (R-PA) proposed an amendment to federal legislation calling for universal background checks on gun purchases. The amendment would have closed the gun show “loophole” that allows private sellers at gun shows and via online sites to sell firearms without a background check on the buyer. However, the proposed amendment failed to overcome a Senate filibuster, and it is still the case that in most U.S. states, sales transactions taking place between private buyers and sellers do not require a background check if the seller is making only occasional sales. The volume of firearms sold through this loophole is considerable, given the expansion of Internet sales. On the most popular online marketplace, Armslist.com, roughly 2 million unique listings of firearms for sale appear on the site each year (1.6 million by private sellers and 400,000 by commercial dealers). Most of these listings are found in states that do not require private sellers to perform a background check on prospective buyers (Everytown Research & Policy 2021).

President Biden has promised to close the gun show and Internet loophole as part of a broad agenda to reduce gun violence, but extant research suggests that achievement of meaningful gun restrictions is unlikely.⁵ Indeed, much has been written about the so-called gun control paradox: the fact that most people support more restrictive gun laws, such as requiring permits to purchase a handgun, yet legislative progress has been limited. A recent Pew Research Center survey reveals that 53 percent of Americans favor stricter gun laws, including making private gun sales and sales at gun shows subject to background checks (Schaeffer 2021). In contrast, just 14 percent of respondents favored loosening restrictions. What factors, then, explain why the majority opinion so often results in ineffectual policy progress on gun control, even in the wake of mass shootings?

Goss (2008) offered a persuasive explanation for this paradoxical situation: “Gun control advocates were not nearly as successful as their opponents were in using American federalism to advance their cause” (p. 15). The reason gun control opponents appear more successful is because their views on gun restrictions are more likely to lead to issue-specific actions than is the case for proponents, such as voting for candidates who share their views on gun rights as well as contacting public officials to oppose gun restrictions or donating money to such efforts (Schuman and Presser 1977, 2013). Correspondingly, Luca et al. (2020) found that when mass shootings prompt legislative enactment, it tends to be toward weakening gun restrictions in Republican-controlled legislatures rather than tightening restrictions.

⁵See <https://joebiden.com/gunsafety/>; also see <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/07/fact-sheet-biden-harris-administration-announces-initial-actions-to-address-the-gun-violence-public-health-epidemic/>.

Nevertheless, the recent internal conflicts within the National Rifle Association and within the larger gun rights community, combined with the National Rifle Association’s ongoing legal troubles, may provide President Biden another window of opportunity to pursue the type of gun policy changes that already have widespread backing by many Americans.

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Data and Code Availability

The R code used to generate all plots, tables, and analyses in the present study is freely available at https://github.com/ArunFrey/mass-shootings/releases/tag/socius_article.

Supplemental Material

Supplemental material for this article is available online.

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