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Should firearms be allowed in K-12 public schools? An analysis of law enforcement's perceptions of armed teacher policies

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Abstract

Mass shootings in schools generate both widespread public concern and a demand to "do something." Among the most controversial of responses are policies permitting teachers and staff to conceal carry firearms at school, which have gained traction since the 2018 shooting in Parkland, FL. Polls regularly find that the public broadly, and teachers, students, and administrators specifically, do not support such a policy, but have failed to consider perceptions from law enforcement. Using a nationally drawn sample of law enforcement, the present study finds that officers overwhelmingly support armed teacher policies, but such support is contingent upon concerns related to training. School resource officers are less likely than those in other roles (e.g., patrol) to support arming teachers, as are individuals in supervisory positions.

Keywords Armed teachers · Law enforcement · School shootings · Public opinion · Gun policy · School safety

Introduction

High-profile mass shootings in U.S. K-12 schools—including at Columbine High School in Jefferson County, CO (1999) and Marjory Stoneman Douglas High School in Parkland, FL (2018)—routinely spark national dialogue about school safety in their aftermath (Madfis 2016). The nation's educational institutions remain among the safest places for students to be (Fox and Fridel 2018) and mass shootings, both in and out of schools, are statistically rare in the context of the national crime picture (Schildkraut 2021). These events, however, have led to renewed calls for policies and practices aimed at preventing such tragedies or, if one does occur, minimizing

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the loss of life. While the proposed solutions run the gamut, from emergency preparedness practices (e.g., lockdown or active shooter drills) to target hardening options like bulletproof glass and entry control access (see, generally, Schildkraut and Muschert 2019), one of the most controversial and polarizing measures proposed is arming teachers.

Armed teacher policies gained traction following the Parkland shooting when, during a meeting with families of the deceased and survivors, President Donald Trump spoke at length about permitting teachers to carry concealed weapons (Taylor 2019); the next day, he publicly supported a position statement from the National Rifle Association (NRA) touting the policy as an effective strategy to defend against school shooters (American Bar Association [ABA] 2019). Less than a month after the shooting, Florida governor Rick Scott signed the Marjory Stoneman Douglas High School Public Safety Act (Fla. S.B. 7026 2018) into law. Among its included provisions was the establishment of the Coach Aaron Feis Guardian Program, named for one of the victims. This program enables qualified school personnel to carry firearms after undergoing 144 h of training as well as extensive psychological and drug screenings (Florida Department of Education n.d.). At least eight other states have authorized similar programs, albeit with varying requirements (Erwin 2019). As of January 2020, armed teachers are permitted in some form or fashion in 28 states (RAND Corporation 2020) and around 500 school districts (Owen 2019) nationwide, despite that, with few exceptions (see 18 U.S.C. § 922(q)(2)(B)), schools are designated "gun free zones" under federal law (see also Giffords Law Center n.d.).[1]

To date, no evidence exists to support the claim that armed teacher policies achieve their intended goal of bringing school shootings to an end more quickly (ABA 2019; Minshew 2018; Rajan and Branas 2018). In fact, data collected by the Federal Bureau of Investigation (2002, 2019) indicate that no active shooter situation in a school occurring between 2000 and 2019 was stopped by an armed civilian. Public opinion on armed teacher policies remains divided (Jonson et al. 2021; Mancini et al. 2020), with a narrow majority of the general populace indicating that they do not support such programs (see, for example, Baranauskas 2020, 2021; Horowitz 2017). Further, while public opinion polls and researchers both have sought to better understand support for armed teacher policies among various segments of the population, including principals (Weiler and Armenta 2014), students (Sides 2018), and teachers (Brenan 2018; Willner 2019), one key group of stakeholders—law enforcement officers—is largely absent from this discussion.

Incorporating law enforcement into the conversation is imperative as they not only have the arduous task of responding to school shootings, but armed teacher policies also may directly impact their ability to do their job. Among other considerations, for example, is the fact that officers responding to a school shooting would have to determine who is the perpetrator and who is the Good Samaritan (armed teacher) and do so with precision in a split second to minimize increased casualties (see, for example, DeMitchell and Rath 2019). Accordingly, understanding whether

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[1] The Gun-Free School Zones Act of 1990 was passed as part of the Crime Control Act of 1990 (see § 1702). The Gun-Free Schools Act of 1994 was passed as part of the Improving America's Schools Act of 1994 (see § 14601).

these policies have the support of law enforcement is critical. The present study seeks to fill this gap by examining whether support for armed teachers exists among a national sample of law enforcement officials.

Arguments for and against arming teachers

Some proponents of armed teacher policies argue that "the only thing that stops a bad guy with a gun is a good guy with a gun" (NRA executive vice president Wayne LaPierre as quoted in Overby 2012). Following the 2012 shooting at Sandy Hook Elementary School in Newtown, CT, for example, the NRA advocated for putting armed officers in all schools nationwide (Rostron 2014; Weatherby 2015). The rationale behind the recommendation is that hardening schools makes them less attractive to potential shooters, who may be deterred by having to encounter armed personnel (Campbell 2016; DeMitchell 2014; DeMitchell and Rath 2019; Wallace 2019). An additional draw of arming teachers is that doing so would be considerably less expensive than hiring school resource officers (SROs; Nedzel 2014), which can cost upwards of $11 billion annually to have one in each of the nation's more than 130,000 public K-12 schools (Hill 2013). Moreover, having armed teachers means that in an active shooter event, the response is nearly instantaneous, which can help to neutralize threats more quickly and save lives (Campbell 2016; DeMitchell and Rath 2019; Drake and Yurvati 2018; Wallace 2019). This is especially critical as most active shooter events are over by the time law enforcement arrives on scene (Blair and Schweit 2014), but even more so in rural communities where responses may be further delayed due to fewer resources and larger geographical jurisdictions (Buerger and Buerger 2010).

Those in opposition of arming teachers base their arguments on three broad areas: (1) preservation of the educational environment, (2) liabilities and costs associated with these policies, and (3) the likely ineffectiveness of the solution at meeting its intended goals. Concern exists that introducing firearms in schools and classrooms can adversely impact relationship building between students and their educators (Ciamacca 2018; Husser et al. 2018) and may signal to students that, contrary to the evidence, they are not actually safe at school (Minshew 2018). In turn, this can promote feelings of fear, resentment, and aggression as well as anxiety and depression (Marchbanks et al. 2018; Rajan and Branas 2018). Concerns also exist related to the physical security of schools were teachers to be armed, such as the potential for guns falling into the wrong hands (Drane 2021; Drake and Yurvati 2018; Weiler and Armenta 2014), accidental discharges (Hansen 2018; Weatherby 2015), or increases in targeted violence (Frederick 1999). Weatherby (2015) further contends that the armed teacher model exposes schools and districts to legal liabilities stemming from third parties, from which they would otherwise be shielded, as a government-created risk (see also DeMitchell and Rath 2019; Rogers et al. 2018). The impact of such liabilities is compounded by insurance companies' hesitancy to issue policies to offset the heightened risk (Rostron 2014). In cases where policies are issued, they usually involve hefty premiums (McCausland 2018) that must be factored in with other financial costs associated with arming teachers including (but not limited to)

background checks, mental health screenings, licensing, training, weapons (if provided by the school or district), and storage (United Educators 2020).

Moreover, there is no evidence to suggest that armed teacher policies would reduce the occurrence or lethality of school shootings (Minshew 2018; Rajan and Branas 2018); conversely, there are reasons to believe that their presence could *increase* the damage associated with such events. For example, there is a lack of a standardized training curriculum, with decisions often left to the states or even the school districts (Richmond 2019); this leads to disparities within the skills being taught and the number of hours of instruction required. One of the many important skills taught to law enforcement during firearms training is the ability to shoot their weapons during stressful situations (sometimes referred to as mindfulness or combat breathing). To achieve the steadiness and hand–eye coordination needed to fire a gun, significant demands are placed on an individual's nervous, muscular, and skeletal systems, which are further heightened in stressful situations such as active shooter events (Vila and Morrison 1994). As a result, shooting accuracy can be adversely affected by stress, anxiety, and other negative reactions (Landman et al. 2016; Nieuwenhuys and Oudejans 2010).

Hit rates for police officers range between 23% and 54% in both real-world scenarios (Gillespie 2013; Lombardo 2016; Morrison 2006; Richards et al. 2016; White 2006) and active shooter training simulations (Hansen 2018). They also are found to be lower in situations where gunfire is being returned (Rotsker et al. 2008). Arguably, civilians, like teachers and school staff, who undergo far less extensive training would likely have even lower accuracy rates (Downey 2018; Hansen 2018; Weatherby 2015) and missed shots can lead to increased harm for those who may be caught in the crossfire (DeMitchell and Rath, 2019; National Association for School Resource Officers [NASRO] 2018). Similar concerns over collateral injuries and fatalities have been raised related to armed teacher responses to active shooter events, as even considerable training does not always translate into practiced skills in a real situation (Weatherby 2015). Moreover, it is possible that additional injuries and fatalities can result from friendly fire in cases where police cannot accurately determine who is the shooter and who is the armed teacher assisting with response as both will be carrying a gun, which is what the responding officers will be focused on (Buerger and Buerger 2010; DeMitchell and Rath 2019; NASRO 2018).

Support for armed teacher policies

Despite fervent arguments for and against such policies, the public remains almost equally divided on whether to permit educators to be armed in schools. Numerous polls have found that opposition for such policies (ranging from 48 to 59%, depending on the source) only slightly edges support for them (Bonn 2019; Horowitz 2017; Lima 2018; Montanaro 2018; Newport 2018; Rasmussen Reports 2018; see also Jonson et al. 2021; Mancini et al. 2020). Differences in support, however, are more pronounced among certain groups. Mancini et al. (2020) found that males and respondents identifying as White were significantly more likely to support teacher-carry policies comparative to females and

individuals identifying as races other than White (see also Baranauskas 2020, 2021, who found that Blacks specifically were significantly less likely to support armed teacher policies than Whites). Moreover, racial resentment—or symbolic views held by White Americans that Black Americans are given special treatment because of their race (e.g., Filindra and Kaplan 2016; O'Brien et al., 2013)—has been found to be positively associated with support for armed teacher policies (Baranauskas 2021; Burton et al. 2020; Jonson et al. 2021). Attitudes also have been found to vary based on individuals' political party affiliation (Bonn 2019; Lima 2018; Newport 2018), gun ownership status (Horowitz 2017), educational attainment (Baranauskas 2020), and income (Jonson et al. 2021).

Significant opposition to armed teachers has been found among groups most likely to be impacted by such policies. Sides (2019) found that upwards of 70% of teenagers thought having their teachers be armed would make schools less safe; other polls found that teachers shared similar beliefs (albeit at slightly lower frequencies, ranging from 58% to 66%; see Brenan 2018; Walker 2018). Teachers overwhelmingly oppose policies that would permit themselves or their peers to carry firearms in schools (Brenan 2018; Teach Plus 2018; Walker 2018; see also Willner 2019). Moreover, even if permitted to be armed, more than 80% of educators—including 63% of those identifying as gun owners—have indicated they would not do so (Walker 2018; see also Husser et al. 2018). Brenan (2018) also found that more than 70% of teachers did not believe that such a policy would be effective at limiting casualties in a shooting if one were to occur at school. Principals have weighed in as well, with a majority indicating that they would not feel comfortable with anyone other than a SRO being armed in their buildings (Chrusciel et al. 2015; Weiler and Armenta 2014), and educational organizations including the National Educators Association (Maiers 2018), American Federation of Teachers (2018), NASRO (2018), National Association of School Psychologists (2018), National Association of Elementary School Principals (2012), and National Association of Secondary School Principals (Waples 2018) also have released statements condemning policies to allow armed teachers in schools.

Less is known about support for armed teacher policies among law enforcement. One study by Chrusciel et al. (2015) found that while police executives support the placement of SROs in schools nearly unanimously, they were less likely to endorse armed teacher policies. In fact, just one out of every four officers in their sample expressed support for arming teachers, while a majority disagreed that it would benefit the schools. It bears noting that this study analyzed only officers in executive positions and may not be reflective of those individuals in non-supervisory roles. Still, given law enforcement's unique position as first responders to incidents of school violence, including (but not limited to) active shooters, additional inquiry is needed not only about whether they support armed teacher policies but also what factors may be influencing such attitudes.

Method

The present study is guided by two research questions. First, *do law enforcement officers support armed teacher policies?* Based on previous research assessing support among the public and law enforcement alike, coupled with the potential tactical challenges for response to active shooter events outlined, we hypothesized that the officers in our sample would not generally support such a policy. Second, *what factors influence officers' support for armed teacher policies?* Drawing upon the findings from Mancini et al. (2020), we hypothesized that males and Whites would be more supportive of arming teachers than females and officers identifying as races other than White. The exploratory nature of our study also allowed us to consider potential differences based on other factors, including the officers' assignment and region where the department is located, not previously examined in other studies.

Data for the present study were collected as part of a larger cross-sectional web-based survey delivered to law enforcement officers (LEOs) via Qualtrics. Upon receiving IRB approval in the Fall of 2020,[2] a national law enforcement training center provided a random sample of LEOs from a list of previous nationwide trainees who had attended some form of instructional session in the previous three years. Invitations to complete the survey were sent via email to approximately 3900 potential participants. Following the initial invitation, two additional reminders also were sent via email and the survey remained open for collection for one month. Partially completed surveys were received from 405 LEOs, with 375 answering questions related to the primary dependent who were included in the subsequent analysis. Post hoc power analysis conducted via G*Power 3.1.9.7 revealed that a sample of 375 respondents was sufficient to detect an effect within our model ($f^2 = 0.25$, Power $= 1.00$).

Participants

Table 1 presents the descriptive data for both the dependent and independent measures. The majority of respondents (92%) were male and identified as White (82%). Although demographically similar, both groups were slightly overrepresented compared to LEOs nationally (88% male, 73% White; see Hyland and Davis 2019). The mean age of respondents was 42.88 years. Respondents were predominantly from local law enforcement offices ($n = 295$ or 82%, as compared to 80% nationally per Hyland and Davis 2019), while the remainder worked for state or federal agencies. The majority of respondents (56%) served in a patrol or school resource officer (SRO) capacity, and there was wide variability in the department sizes represented. A slight majority (55%) were current supervisors (i.e., oversaw at least one other law enforcement officer). Approximately, one-third worked in urban agencies, and surveys were completed by respondents from 44 states representing all four geographic regions as defined by the U.S. Census Bureau.[3] It bears noting that the South was

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[2] This project was approved by the Texas State University IRB under proposal # 7382.
[3] The following states were not represented in the sample: CT, NM, ND, SD, VT, WY.

Table 1 Descriptive data

	Mean (SD)	n (%)
Age	42.88 (9.90)	365
Male		336 (92.05)
White		296 (81.54)
Current supervisor		201 (55.52)
Job duty		
Patrol		171 (47.24)
SRO		32 (8.84)
Other		159 (43.92)
Department size		
<10		22 (6.38)
10–49		96 (27.83)
50–99		50 (14.49)
100–249		58 (16.81)
250–749		57 (16.52)
750+		62 (17.97)
Geographic region		
Northeast		71 (19.94)
South		187 (59.53)
Midwest		53 (14.89)
West		45 (12.64)
Urban		129 (35.64)
Favorability scale	43.39 (13.55)	375
Training considerations	7.59 (2.48)	375

slightly overrepresented in the present study, due in part to a strong response from individuals in Maryland, Delaware, and Virginia.

Although the overall response rate in the survey was approximately 10% (3900/375), we believe this randomly drawn sample provides improved generalizability when contrasted against a convenience sample from a single agency with a higher response rate. Specifically, by including respondents from 44 states, multiple job duties, and agencies of varying sizes and urbanicities, we believe our sample is better representative of the nation's LEOs. Moreover, our response rate is in line with other web-based surveys of law enforcement professionals utilizing samples from multiple agencies (e.g., Nix et al. 2019).[4]

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[4] Nix et al. (2019) state that there is no accurate metric of what constitutes a *good* or *acceptable* response rate for law enforcement surveys. They further caution that survey findings from law enforcement samples should not be dismissed due to what is traditionally considered a low response rate (Nix et al. 2019, p. 542).

Measures

The primary dependent variable, *favorability scale*, is a six-item composite measure of LEOs' support for arming teachers. Respondents were asked to rate their agreement for each item on a scale of 0 (Completely Disagree) to 10 (Completely Agree). All six item were correlated with each other ($r > 0.4$). A subsequent principal components analysis with oblimin rotation[5] showed that these six items loaded onto a single factor (Cronbach's $\alpha = 0.89$). Table 2 presents the scale items and their respective loadings. The composite scale was additive, and values ranged from 0 to 60 ($\bar{x} = 43.39$, SD $= 13.55$), with higher values representing greater support for arming teachers.

To capture how LEOs felt about the state of active shooter training for teachers, we included a variable subsequently titled *training considerations*. Respondents were asked to rate their agreement on a scale of 0 (Completely Disagree) to 10 (Completely Agree) to the statement "Teachers do not generally have the necessary training to respond to an active shooter." Descriptive analysis indicates that respondents tended to agree with the statement ($\bar{x} = 7.59$, SD $= 2.48$).

To better understand whether an officer's job function impacted their view of arming teachers, we included a measure based on their self-reported primary assignment. Respondents indicated whether they worked as patrol, SRO, detective, administration, or a member of a specific full-time task force (e.g., narcotic or gang). Responses then were aggregated and trichotomized to a variable consisting of patrol, SRO, and all other assignments, with the latter serving as the reference group. SRO specifically was included as these individuals would likely have the most frequent engagement with armed educators and therefore are uniquely positioned to assess the policy. We also asked respondents whether they served in a supervisory role and included this dichotomous variable in the model.

Other descriptive variables were included in the model, including the self-report measures for age, sex, and race. Age was included as a continuous measure. Sex and race both were dichotomized, with officers identifying as females and races other than White serving as the reference groups.[6] Respondents provided information regarding the state in which they work, which was recoded based on the Census region. This then was included in the model, with the Northeast region serving as the reference category. Finally, a measure of urbanicity was included to determine if working in a densely populated area (where backup may be close) affected favorability of arming teachers; for this, non-urban served as the reference category.

Data analysis

For each item included in the analysis, data first were screened for out-of-range values (e.g., skewness, kurtosis). Missing data in the present study ranged from 0 to

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[5] Oblimin rotation was chosen over Varimax as it does not force factors orthogonally (which is sometimes an unrealistic assumption for factors).

[6] The race variable was collapsed to two categories (White [$n = 296$; 81.54%] and Other than White [$n = 67$; 18.46%]) due to low numbers of "Other" races present in the sample.

Table 2 Dependent variable principal components analysis

Items	Factor loadings	Mean (SD)
Having armed teachers will reduce the time a shooter is active on scene	0.91	6.65 (3.09)
Armed teachers are capable of neutralizing an active shooter before police arrive on scene	0.91	6.95 (2.82)
Having armed teachers in schools will aid police in response to active shooters	0.84	8.01 (2.52)
Armed teachers are an effective strategy to defend schools against active shooters or other threats	0.82	7.99 (2.49)
The risk in having armed teachers in schools outweighs the potential benefits[a]	0.67	7.35 (2.81)
There are more effective ways for teachers to reasonably end an active shooter than with a firearm[a]	0.65	6.44 (3.12)

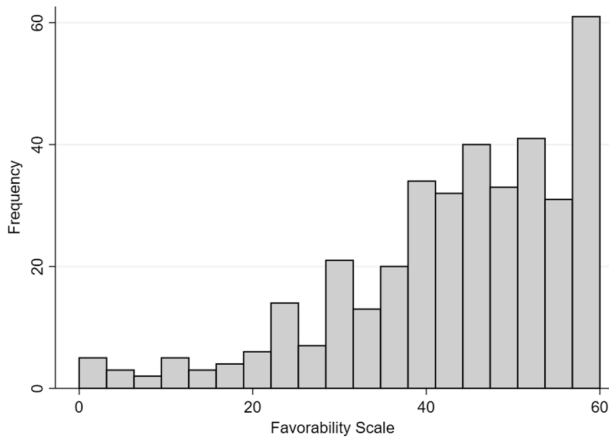Cronbach's Alpha = 0.89

[a]Reverse coded

Fig. 1 Favorability scale distribution

5.1%. Little's Test of Missing Completely at Random (MCAR) was used to assess patterns of missing data (Little and Rubin 2002; Rubin 1976). The results indicated that the data were missing completely at random (MCAR: $\chi^2 = 82.90$, $p = 0.22$). Rather than imputing data to fill the missing datapoints, we excluded responses where predictors were absent as listwise deletion is recommended as a less biased and appropriate way to handle missing data (Allison 2014). The final dataset yielded 341 responses. All analyses were conducted in Stata 16.1.

Results

Figure 1 presents the distribution of scores along the favorability scale. As the findings indicate, LEOs in the present study overwhelmingly support the idea of arming teachers. In fact, approximately 82% of respondents indicated that they held favorable views toward arming teachers (i.e., *favorability scale* > 30), which is counter to our initial hypothesis as well as support levels reported by Chrusciel et al. (2015). It also differs from previous research on attitudes among the public that indicates a lack of general support for arming teachers (e.g., Baranauskas 2020, 2021; Horowitz 2017; Jonson et al. 2021). Baranauskas (2020), for example, found approximately 45% of respondents opposed arming teachers while only 34% supported the idea, and both Mancini et al. (2020) and Jonson et al. (2021) found similar levels of support.

Next, we considered which factors predict how favorably LEOs view the idea of arming teachers. Table 3 presents the OLS results, including the coefficients, standard errors, and standardized coefficients for all independent measures. The OLS model explains 18% of the variance. This is likely because respondents overwhelmingly supported arming teachers. Simply put, the high level of support leads to less variation in the favorability dependent variable to explain. The strongest predictor

Table 3 OLS regression predicting favorability for arming teachers

	b (SE)	β
Training considerations	$-0.25\ (0.05)$***	-0.27
White	$0.72\ (0.33)$*	0.12
Age	$-0.03\ (0.01)$*	-0.12
Male	$0.29\ (0.51)$	0.03
Supervisor	$-0.75\ (0.27)$**	-0.17
Assignment		
SRO	$-1.21\ (0.54)$*	-0.15
Patrol	$-0.32\ (0.28)$	-0.07
Other[a]		
Geographic region		
West	$0.98\ (0.43)$*	0.14
Midwest	$-0.20\ (0.41)$	-0.03
South	$0.27\ (0.30)$	0.06
Northeast[a]		
Urban	$0.00\ (0.25)$	0.00
Adjusted R^2	0.18	
n	341	

*$p \leq 0.05$, **$p \leq 0.01$, ***$p \leq 0.001$.

[a]Reference group

of support is the *training considerations* variable ($\beta = -0.27$, $p \leq 0.001$). This item indicated that LEOs do not agree that teachers have the necessary training to respond to an active shooter event in general. As a result, those who feel teachers lack the necessary training to respond also express less favorable attitudes towards arming them.

Three items related to demographic factors of the respondents (*Race*, *Age*, and *Sex*) were included as possible explanatory measures. White respondents indicated significantly higher support for arming teachers compared to respondents identifying as races other than White ($\beta = 0.12$, $p \leq 0.05$), which supports our hypothesis and is consistent with previous research findings among the general public (e.g., Baranauskas 2020, 2021; Mancini et al. 2020). Conversely, age exhibited a negative slope of similar magnitude to the other variables ($\beta = -0.12$, $p \leq 0.05$), such that older respondents were less likely to express favorable attitudes toward armed teacher policies. Counter to our initial hypothesis, there were no statistically significant differences in support for armed teacher policies based on the sex of the respondent.

There were two items specific to respondents' job duties (*Supervisor* and *Assignment*). LEOs in supervisory positions were less likely to support arming teachers ($\beta = -0.17$, $p \leq 0.01$) compared to those who were not. One of the most interesting findings relates to job assignment. School resource officers were less likely to have favorable views towards arming teachers than respondents with different job duties ($\beta = -0.15$, $p \leq 0.05$). Patrol officers, however, did not significantly differ from those in other roles like administration, detective, or special unit.

Two additional items were used to examine geographic factors (*Geographic Region* and *Urban*) as potential predictors of support for armed teacher policies. We found no difference between respondents who worked in urban and non-urban based agencies, and this item displayed a small standardized coefficient. Regarding geographic regions, the West region showed an increase in favorability towards arming teachers when compared to the Northeast region ($\beta = 0.14$, $p \leq 0.05$). This could be because the West includes sparsely populated and heavily conservative states such as Montana, Idaho, Alaska, and Wyoming.

Discussion

Despite their statistical rarity, tragedies like Columbine and Parkland have led to renewed focus and discussion about how best to protect America's schools. Numerous policies, procedures, and products have been introduced in the aftermaths of these attacks (Schildkraut and Muschert 2019), most of which have been met with little resistance even with a lack of empirical support of their effectiveness in preventing or mitigating harm related to active shooter events. No such proposed solution, however, has been as controversial as armed teachers. Despite that more than half of states have implemented such policies in some form (Owen 2019; RAND Corporation 2020), particularly in the wake of Parkland, the public remains divided over the idea of introducing firearms into schools as a way to counter violence (e.g., Jonson et al. 2021). Yet one body of voices that has been largely (though not entirely; see Chrusciel et al. 2015) absent from this discussion is law enforcement, who would be charged not only with responding to active shooter events but also encountering armed teachers were they to be present in such situations.

Accordingly, we sought to fill this gap by assessing whether, and under what conditions, law enforcement officers support armed teacher policies. Specifically, we find that among LEOs, such a policy is overwhelmingly supported. In fact, the data show that more than eight out of every ten officers surveyed favor arming teachers (>50th percentile) and more than half strongly support such a policy (>75th percentile). Such a finding not only counters our initial expectations but is particularly surprising given the potential challenges officers could encounter when responding to an active shooter situation in which teachers are armed, such as having to differentiate between the perpetrator and the "good guy with the gun" (DeMitchell and Rath 2019; NASRO 2018), in addition to the more general concerns related to such policies (e.g., misplaced firearms, accidental injuries). This finding also counters the support, or rather lack thereof, found by Chrusciel et al. (2015). It is possible, however, that the differences in support between the two studies is the function of differences in sampling (drawn from a single state vs. nationally); future research should explore this further.

Notably, however, SROs differ in their level of support for armed teacher policies comparative to patrol officers or those individuals serving in another capacity. In fact, SROs generally held unfavorable views of the policy, which is particularly important as they would be the initial law enforcement contact with armed teachers

on their campuses. One potential reason for this lack of support is that SROs have a greater familiarity with the teachers in their school(s) as they typically are assigned to one or just a few campuses within a district. This provides them with insight into who may (or may not) be capable of responding in an active shooter event or possess the necessary skills for responsible firearm carrying that otherwise would be absent to an officer who never visits the school or does so only for an isolated callout.

A supplementary analysis of an open-ended question completed by 189 of the respondents (asking if they would like to comment further for added context) may provide further insight.[7] One SRO serving an urban community in Ohio, for example, noted that "I spent 18 years as an SRO, a lot of teachers have a hard enough time keeping track of phones and flash drives let alone a firearm. They do not have the training and are panicky at best." Another SRO, who worked in a rural South Carolina district, similarly noted that "Many of the teachers I've worked with are either uncomfortable around guns and/or don't want the responsibility of having one on campus." While not all SROs shared these perspectives, their direct working relationships with teachers provide a unique position through which to assess the policy, as well as its potential benefits and/or barriers to success. These points also mirror the position taken by NASRO (2018), the nation's leading resource in school-based policing, who instead argue that more funding should be made available to staff SROs instead of arming teachers.

Despite the overwhelming support among officers in the present study for arming teachers, it is not without conditions. Specifically, support for such policies is contingent on training for teachers that would enable them to be able to respond most effectively in an active shooter situation. In other words, the greater the concern the officer had about training levels, the less likely they were to support an armed teacher policy. In the same group of open-ended responses, 63.5% ($n = 120$) of the officers specifically referenced training—either the need for it (e.g., scenario-based training, practicing with law enforcement) or the potential impacts of not having it. One patrol officer from a rural department in Ohio, for example, noted that "With proper training … I feel armed teachers can be a valuable asset. Without adequate training, they can be a serious liability." Another officer, who worked for a sheriff's department serving a suburban community in Maryland, responded that

> Blue on blue shootings happen on occasion. And that is with all the training, communications, and identification that is available to us. How will we train, communicate, or identify teachers under the extreme stress of an active shooter? IF we are to arm teachers, it should be defensive in nature and not have them moving about the building "hunting" the shooter. I also have huge concerns about security of the weapon(s). Lastly, tactical skills are perishable and ever changing. There is a lot more to this than point and shoot. (Emphasis in original)

Thus, as the above quotes and subsequent results highlight, there are important considerations that must be addressed when deciding not only whether such a policy should be implemented, but also how.

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[7] Open-ended responses were coded dichotomously for any reference to training.

It is important to underscore that despite the concerns over training and the measure's relationship with support for the policy, general backing still remained high. Accordingly, there may be other factors that influence law enforcement's decision about whether to support armed teacher policies. One such consideration is the potential for armed educators to bring an event to conclusion faster since they would already be on scene when the incident began, thereby cutting down on the response time and potentially minimizing the number of casualties. Future research should explore this possibility further.

Taken together, the findings of the present study provide important considerations for the future of armed teacher policies. While the support of law enforcement for such programs may advance their adoption in school districts across the nation, policymakers and administrators must carefully weigh all concerns when considering how to implement or who should be allowed to participate. For instance, as noted, not all teachers will necessarily be capable nor want to carry a firearm at their school. Careful screening procedures must be adopted to ensure that those who are authorized under the program are in fact qualified. Similarly, teachers who wish to participate in the program must undergo thorough, scenario-based training to ensure that they have the skills necessary to respond accurately in stressful situations like active shooter events. Such training may be provided by or in conjunction with local law enforcement, which can improve collaboration and coordination between the schools and departments that will respond in times of crisis. Additional considerations, such as annual recertification, licensing, insurance, and safe storage, also must be factored into any decision to implement an armed teacher program.

The present study is not without its limitations. First, while the sample consists of officers from across the nation and represents many different types of agencies (e.g., both type and size of agency) and individual characteristics (e.g., demographics and job duties), it is possible that these respondents are not fully representative of the law enforcement perspective. We believe, however, that our diverse sample sheds light on how our nation's law enforcement officers perceive armed teacher policies better than sampling from a single department. Second, as noted, the response rate was approximately 10% but in line with previous research utilizing web-based surveys and multi-agency samples of law enforcement officers. Nix et al. (2019), for example, analyzed 497 police survey studies published across a nine-year period and found response rates averaged around 64% with some as low as 5.2%. Web-based surveys of LEOs were found to garner the lowest response rates, which also are sensitive to the number of invitations sent (e.g., more invitations are correlated with lower response rates; Nix et al. 2019). Future research may consider utilizing other collection techniques (e.g., mail or telephone questionnaires) to increase response rates. Third, our question regarding training considerations did not specifically ask about firearms instruction, which would be most relevant to an armed teacher policy. Future research should consider a more directed measure of training relative to support for arming teachers.

Finally, this survey did not ask law enforcement officers personal questions that may have an impact on results. Specifically, there was not a question asking officers if they had school-aged children, which researchers (Baranauskas 2020; Mancini et al. 2020; Jonson et al. 2021) have identified as influencing support for

arming teachers. We also did not ask about political affiliation or ideology, educational attainment, income, or racial resentment, each of which also have been found to be correlated with such attitudes (Baranauskas 2020, 2021; Burton et al. 2020; Jonson et al. 2021). For instance, police officers often vote along the Republican party line (e.g., Griffith 2016; Oriola 2020) and conservatives are more likely to support gun rights over restrictive measures (Schaeffer 2021), which may explain the overwhelming support of officers in our sample for arming teachers. Moreover, Baranauskas (2021) suggests that racial resentment also may be linked to conservative support for arming teachers, and that the implementation of such policies could disproportionately impact students of color and further this divide (see also Jonson et al. 2021). Such questions likely have important implications for contextualizing our findings and therefore should be included in future assessments of support for arming teachers, particularly among law enforcement officers.

Conclusion

As schools continue to grapple with how best to prepare for the potential for mass shootings and other forms of violence, the need for evidence-based responses becomes all the more imperative. To date, however, there is no evidence to suggest that armed teachers are an effective solution to either deterring an active shooter or minimizing the loss of life if such an event were to take place. Instead, the perceived efficacy of such a policy hinges largely on public opinion, which remains sharply divided. Notably, research has found that despite being split on the prospect of arming educators, the public overwhelmingly support armed SROs at schools (Jonson et al. 2021). This point, coupled with our findings about law enforcement's concerns over training and the unfavorable views of armed teacher policies by SROs in particular, may ultimately provide grounds for limiting the number of firearms introduced into the educational environment or who is eligible to carry them if they are (see also NASRO 2018). Future research should continue to assess not only perceptions of armed teacher policies, but also the impacts (e.g., fear, perceived risk, anxiety) that the implementation of such programs has on members of the educational community.

Declarations

References

Allison, Paul. Listwise Deletion: It's NOT Evil | Statistical Horizons. https://statisticalhorizons.com/listwise-deletion-its-not-evil. Accessed 13 June 2014

American Bar Association. Gun Violence Policy Against Arming of Teachers. Last modified January 27, 2019. https://www.americanbar.org/groups/public_interest/gun_violence/policy/19M106A/.

American Federation of Teachers. AFT Executive Council Condemns Gun Violence. https://www.aft.org/press-release/aft-executive-council-condemns-gun-violence. Accessed 21 February 21 2018.

Baranauskas, Andrew J. 2020. Public Opinion on Support for Arming Teachers with Guns in the United States. *Justice Quarterly*. https://doi.org/10.1080/07418825.2020.1849360.

Baranauskas, Andrew J. 2021. Racial Sentiment and Public Support for Arming Teachers with Guns in the United States. Race and Justice. https://doi.org/10.1177/21533687211038950.

Blair, J. Pete, and Katherine W. Schweit. 2014. A Study of Active Shooter Incidents, 2000 - 2013. Washington, DC: Texas State University and Federal Bureau of Investigation, U.S. Department of Justice. https://www.fbi.gov/file-repository/active-shooter-study-2000-2013-1.pdf.

Bonn, Tess. Majority of Voters Oppose Arming Teachers. *The Hill*, September 26, 2019. https://thehill.com/hilltv/rising/463278-majority-of-voters-oppose-arming-teachers.

Brenan, Megan. Most U.S. Teachers Oppose Carrying Guns in Schools. *Gallup*, March 16, 2018. https://news.gallup.com/poll/229808/teachers-oppose-carrying-guns-schools.aspx.

Buerger, Michael E., and Geoffrey E. Buerger. Those Terrible First Few Minutes: Revisiting Active-Shooter Protocols for Schools. *FBI: Law Enforcement Bulletin*, September 1, 2010. https://leb.fbi.gov/articles/featured-articles/those-terrible-first-few-minutes-revisiting-active-shooter-protocols-for-schools.

Burton, Alexander L., Justin T. Pickett, Cheryl Lero Jonson, Francis T. Cullen, and Velmer S. Burton Jr. 2020. Public Support for Policies to Reduce School Shootings: A Moral-Altruistic Model. *Journal of Research in Crime and Delinquency*. https://doi.org/10.1177/0022427820953202.

Campbell, Arvin. 2016. A Case for Arming Teachers and Administrators in Public Schools with Firearms. White Paper. The Bill Blackwood Law Enforcement Management Institute of Texas. https://shsu-ir.tdl.org/bitstream/handle/20.500.11875/2038/1629.pdf.

Chrusciel, Margaret M., J. Scott Wolfe, Andrew Hansen, Jeff J. Rojek, and Robert Kaminski. 2015. Law Enforcement Executive and Principal Perspectives on School Safety Measures: School Resource Officers and Armed School Employees. *Policing an International Journal of Police Strategies & Management* 38 (1): 24–39. https://doi.org/10.1108/PIJPSM-11-2014-0115.

Ciamacca, Debra. Ex-Marine, Current Teacher: Don't Arm Me With Guns, Trump | Time. *Time*, February 23, 2018. https://time.com/5172852/trump-guns-teachers-nra/.

Crime Control Act of 1990, Pub. L. No. 101–647, S. 3266, 101st Cong.

DeMitchell, Todd A. 2014. Locked Down and Armed: Security Responses to Violence in Our Schools. *Connecticut Public Interest Law Journal* 13 (2): 275–299.

DeMitchell, Todd A., and Christine C. Rath. 2019. Armed and Dangerous – Teachers? A Policy Response to Security in Our Public Schools. *Brigham Young University Education and Law Journal* 2019 (1): 63–93.

Downey, Maureen. In Gunfights, Trained Officers Have 18 Percent Hit Rate. Yet, We Want to Arm Teachers? *The Atlanta Journal-Constitution*, February 22, 2018. https://www.ajc.com/blog/get-schooled/gunfights-trained-officers-have-percent-hit-rate-yet-want-arm-teachers/mDBlhDtV6Na4wJVpeu58cM/.

Drane, Kelly. 2021. Every Incident of Mishandled Guns in Schools. San Francisco: Giffords Law Center to Prevent Gun Violence. https://giffords.org/lawcenter/report/every-incident-of-mishandled-guns-in-schools/.

Drake, Dallas A., and Erica Yurvati. 2018. Teachers with Guns: Firearms Discharges by Schoolteachers, 1980–2012. Minneapolis: Center for Homicide Research. http://homicidecenter.org/wp-content/uploads/2018/02/Teachers-with-Guns-RESEARCH-REPORT-FINAL-revised-2018.pdf.

Erwin, Benjamin. 2019. School Safety: Guns in Schools. Washington, D.C.: National Conference of State Legislatures. https://www.ncsl.org/research/education/school-safety-guns-in-schools.aspx.

Federal Bureau of Investigation. 2019. Active Shooter Incidents in the United States from 2000–2018. Washington, DC: Advanced Law Enforcement Rapid Response Training (ALERRT) Center at Texas State University and the Federal Bureau of Investigation, U.S. Department of Justice. https://www.fbi.gov/file-repository/active-shooter-incidents-2000-2018.pdf/view.

Federal Bureau of Investigation. 2002. Active Shooter Incidents in the United States in 2019. Washington, DC: Advanced Law Enforcement Rapid Response Training (ALERRT) Center at Texas State University and the Federal Bureau of Investigation, U.S. Department of Justice. https://www.fbi.gov/file-repository/active-shooter-incidents-in-the-us-2019-042820.pdf/view.

Filindra, Alexandra, and Noah J. Kaplan. 2016. Racial Resentment and Whites' Gun Policy Preferences in Contemporary America. *Political Behavior* 38 (2): 255–275. https://doi.org/10.1007/s11109-015-9326-4.

Fla. S.B. 7026, Marjory Stoneman Douglas High School Public Safety Act (2018).

Florida Department of Education. Guardian Programs, n.d. http://www.fldoe.org/safe-schools/guardian-program.stml

Fox, James A., and Emma E. Fridel. 2018. The Menace of School Shootings in America: Panic and Overrresponse. In *The Wiley Handbook on Violence in Education: Forms, Factors, and Preventions*, ed. Harvey Shapiro, 15–36. New York: Wiley/Blackwell Publishers.

Frederick, Jennifer. 1999. Do As I Say, Not As I Do: Why Teachers Should Not Be Allowed to Carry Guns on School Property. *Journal of Law & Education* 28 (1): 139–143.

Giffords Law Center to Prevent Gun Violence. Guns in Schools | Giffords, n.d. https://giffords.org/lawcenter/gun-laws/policy-areas/guns-in-public/guns-in-schools/.

Gillespie, Douglas C. Deadly Force Statistical Analysis 2008–2012: Las Vegas Metropolitan Police Department. Las Vegas: Las Vegas Metropolitan Police Department. https://www.lvmpd.com/en-us/InternalOversightConstitutionalPolicing/Documents/Deadly_Force_Statistical_Analysis_2008-2012_Final.pdf

Griffith, David. The 2016 POLICE Presidential Poll. *Police Magazine*, September 2, 2016. https://www.policemag.com/342098/the-2016-police-presidential-poll.

Hansen, Michael. 2018. There are Ways to Make Schools Safer and Teachers Stronger – But They Don't Involve Guns. Washington, DC: The Brookings Institution. https://www.brookings.edu/blog/brown-center-chalkboard/2018/02/27/there-are-ways-to-make-schools-safer-and-teachers-stronger-but-they-dont-involve-guns/.

Hill, Edward W. The Cost of Arming Schools: The Price of Stopping a Bad Guy with a Gun. *Urban Publications*, April 1, 2013. https://engagedscholarship.csuohio.edu/urban_facpub/678.

Horowitz, Julana M. Americans Opposed Allowing Teachers to Carry Guns in Schools in 2017. *Pew Research Center*, February 23, 2018. https://www.pewresearch.org/fact-tank/2018/02/23/in-2017-americans-narrowly-opposed-allowing-teachers-and-school-officials-to-carry-guns/.

Husser, Jason, Kaye Usry, Daniel Anderson, and Owen Covington. 2018. What North Carolina Teachers Think About Guns in Schools. Elon: ELON Poll. https://www.elon.edu/u/elon-poll/wp-content/uploads/sites/819/2019/02/Elon-Poll-Report-030818.pdf.

Hyland, Shelley S., and Elizabeth Davis. 2019. Local Police Departments, 2016: Personnel. Washington, DC: Bureau of Justice Statistics. https://www.bjs.gov/content/pub/pdf/lpd16p.pdf.

Improving America's Schools Act of 1994, Pub. L. 103–382, H.R. 6, 103rd Cong.

Jonson, Cheryl Lero, Alexander L. Burton, Francis T. Cullen, Justin T. Pickett, and Velmer S. Burton. 2021. An Apple in One Hand, a Gun in the Other: Public Support for Arming Our Nation's Schools. *Criminology & Public Policy* 20 (2): 263–290. https://doi.org/10.1111/1745-9133.12538.

Landman, Annemarie, Arne Nieuwenhuys, and Raôul. R.. D. Oudejans. 2016. Decision-Related Action Orientation Predicts Police Officers' Shooting Performance under Pressure. *Anxiety, Stress, & Coping* 29 (5): 570–579. https://doi.org/10.1080/10615806.2015.1070834.

Lima, Cristiano. Poll: Majority Back Stricter Gun Laws but Public Split on Arming Teachers. *Politico*, February 23, 2018. https://www.politico.com/story/2018/02/23/poll-gun-control-florida-shooting-422736.

Little, Roderick J. A., and Donald B. Rubin. 2002. *Statistical analysis with missing data*, 2nd ed. Hoboken: Wiley.

Lombardo, Joseph. 2016. Deadly Force Statistical Analysis 2011–2015: Las Vegas Metropolitan Police Department. Las Vegas: Las Vegas Metropolitan Police Department. https://www.lvmpd.com/en-us/InternalOversightConstitutionalPolicing/Documents/Use-of-Force-Statistical-Analysis_2011-2015.pdf

Madfis, Eric. 2016. 'It's Better to Overreact': School Officials' Fear and Perceived Risk of Rampage Attacks and the Criminalization of American Public Schools. *Critical Criminology* 24 (1): 39–55. https://doi.org/10.1007/s10612-015-9297-0.

Maiers, Staci. NEA: Parents, Educators 'Overwhelmingly Reject' Idea of Arming School Staff. Press release, February 21, 2018. https://www.nea.org/about-nea/press/press-releases/nea-parents-educators-overwhelmingly-reject-idea-arming-school-staff.

Mancini, Christina, Amy K. Cook, Jessica C. Smith, and Robyn McDougle. 2020. Packing Heat in the Classroom: Public Support for 'Armed Teacher' Policy. *Journal of School Violence* 19 (4): 610–622. https://doi.org/10.1080/15388220.2020.1786835.

Marchbanks, Miner P., Anthony A. Peguero, Kay S. Varela, Jamilia J. Blake, and John Major Eason. 2018. School Strictness and Disproportionate Minority Contact: Investigating Racial and Ethnic Disparities With the 'School-to-Prison Pipeline.' *Youth Violence and Juvenile Justice* 16 (2): 241–259. https://doi.org/10.1177/1541204016680403.

McCausland, Phil. Guns in Schools: Insurance Premiums Could Present Hurdle in Arming Teachers. *NBC News*, April 2, 2018. https://www.nbcnews.com/news/us-news/guns-schools-insurance-premiums-could-present-hurdle-arming-teachers-n859846.

Minshew, Lana M. 2018. From the Editorial Board: On Arming K-12 Teachers. *The High School Journal* 101 (3): 129–133. https://doi.org/10.1353/hsj.2018.0006.

Montanaro, Domenico. Who Wants to Arm Teachers? Republican Men. *NPR*, March 2, 2018. https://www.npr.org/2018/03/02/590308832/who-wants-to-arm-teachers-republican-men.

Morrison, Gregory B. 2006. Deadly Force Programs Among Larger U.S. Police Departments. *Police Quarterly* 9 (3): 331–360. https://doi.org/10.1177/1098611105276542.

National Association of Elementary School Principals. National Principals Groups Oppose Proposals to Arm School Officials. Press release, December 19, 2021. https://www.naesp.org/national-principals-groups-oppose-proposals-arm-school-officials.

National Association of School Psychologists. NASP Opposes Arming Teachers. Press release, February 22, 2018. https://www.nasponline.org/about-school-psychology/media-room/press-releases/nasp-opposes-arming-teachers.

National Association of School Resource Officers. NASRO Opposes Arming Teachers. Press release, February 22, 2018. https://www.nasro.org/news/2018/02/22/news-releases/nasro-opposes-arming-teachers/.

National Center for Education Statistics. Digest of Education Statistics, 2018, 2019. https://nces.ed.gov/programs/digest/d18/.

Nedzel, Nadia E., and Concealed Carry. 2014. The Only Way to Discourage Mass School Shootings. *Academic Questions* 27 (4): 429–435. https://doi.org/10.1007/s12129-014-9459-7.

Newport, Frank. Broad Agreement on Most Ideas to Curb School Shootings. *Gallup*, March 15, 2018. https://news.gallup.com/poll/229805/broad-agreement-most-ideas-curb-school-shootings.aspx.

Nieuwenhuys, Arne, and Raôul. R..D.. Oudejans. 2010. Effects of Anxiety on Handgun Shooting Behavior of Police Officers: A Pilot Study. *Anxiety, Stress & Coping* 23 (2): 225–233. https://doi.org/10.1080/10615800902977494.

Nix, Justin, Justin T. Pickett, Hyunin Baek, and Geoffrey P. Alpert. 2019. Police Research, Officer Surveys, and Response Rates. *Policing and Society* 29 (5): 530–550. https://doi.org/10.1080/10439463.2017.1394300.

O'Brien, Kerry, Walter Forrest, Dermot Lynott, and Michael Daley. 2013. Racism, Gun Ownership and Gun Control: Biased Attitudes in U.S. Whites May Influence Policy Decisions. *PLoS ONE* 8 (10): e77552. https://doi.org/10.1371/journal.pone.0077552.

Office of Community Policing Services. Fact Sheet: 2017 COPS Hiring Program, 2017. https://cops.usdoj.gov/pdf/2017AwardDocs/chp/Post_Award_Fact_Sheet.pdf

Oriola, Temitope. Police and Politics Have Been Dangerously Intertwined During the 2020 U.S. Presidential Election. *The Conversation*, November 5, 2020. https://theconversation.com/police-and-politics-have-been-dangerously-intertwined-during-the-2020-u-s-presidential-election-149420.

Overby, Peter. NRA: 'The Only Thing That Stops a Bad Guy with a Gun is a Good Guy with a Gun.' *NPR*, December 21, 2012. https://www.npr.org/2012/12/21/167824766/nra-only-thing-that-stops-a-bad-guy-with-a-gun-is-a-good-guy-with-a-gun.

Owen, Tess. Exclusive: How Parkland Created a Rush to Arm Teachers and School Staff Across the Country. *Vice*, January 9, 2019. https://www.vice.com/en/article/439z7q/exclusive-how-parkland-created-a-rush-to-arm-teachers-and-school-staff-across-the-country.

Rajan, Sonali, and Charles C. Branas. 2018. Arming Schoolteachers: What Do We Know? Where Do We Go from Here? *American Journal of Public Health* 108 (7): 860–862. https://doi.org/10.2105/AJPH.2018.304464.

RAND Corporation. The Effects of Laws Allowing Armed Staff in K–12 Schools, April 22, 2020. https://www.rand.org/research/gun-policy/analysis/laws-allowing-armed-staff-in-K12-schools.html.

Rasmussen Reports. Most Adults With School-Aged Kids Support Arming Teachers, February 28, 2018. https://www.rasmussenreports.com/public_content/politics/current_events/gun_control/most_adults_with_school_aged_kids_support_arming_teachers.

Richards, Jennifer S., Angela Caputo, Todd Lighty, and Jason Meisner. 92 Deaths, 2,623 Bullets: Tracking Every Chicago Police Shooting Over 6 Years. *Chicago Tribune*, August 26, 2016. https://www.chicagotribune.com/investigations/ct-chicago-police-shooting-database-met-20160826-story.html.

Richmond, Matt. With No National Standards, Policies for Arming Teachers are Often Left to the School Districts. *KERA News*, April 2, 2019. https://www.keranews.org/news/2019-04-02/with-no-national-standards-policies-for-arming-teachers-are-often-left-to-local-school-districts.

Rogers, Melanie, Ericka A. Lara, Olushola Olaitan Ovares, Tara Twyman Ogunleye, Cem Akkus, Kalpita Patel, and Marwa Fadlalla. 2018. Is Arming Teachers Our Nation's Best Response to Gun Violence? The Perspective of Public Health Students. *American Journal of Public Health* 108 (7): 862–863. https://doi.org/10.2105/AJPH.2018.304477.

Rostker, Bernard D., Lawrence M. Hanser, William M. Hix, Carl Jensen, Andrew R. Morral, Greg Ridgeway, and Terry L. Schell. 2008. Evaluation of the New York City Police Department Firearm Training and Firearm-Discharge Review Process. Washington, DC: The RAND Corporation. http://www.nyc.gov/html/nypd/downloads/pdf/public_information/RAND_FirearmEvaluation.pdf.

Rostron, Allen. 2014. School Shootings and the Legislative Push to Arm Teachers. *University of Toledo Law Review* 45 (3): 439–455.

Rubin, Donald B. 1976. Inference and Missing Data. *Biometrika* 63 (3): 581–592. https://doi.org/10.1093/biomet/63.3.581.

Schaeffer, Katherine. Key Facts About Americans and Guns. *Pew Research Center,* September 13, 2021. https://www.pewresearch.org/fact-tank/2021/09/13/key-facts-about-americans-and-guns/.

Schildkraut, Jaclyn. 2021. *Can Mass Shootings Be Stopped? To Address the Problem, We Must Better Understand the Phenomenon*. Albany: Rockefeller Institute of Government.

Schildkraut, J., and Glenn W. Muschert. 2019. *Columbine, 20 Years Later and Beyond: Lessons from Tragedy*. Santa Barbara: Praeger.

Sides, John. New Poll: Most Teenagers and Adults Think Arming Teachers is Dangerous, Favor Minimum Age for Buying Assault Rifles. *The Washington Post*, March 9, 2019. https://www.washingtonpost.com/news/monkey-cage/wp/2018/03/09/new-poll-most-teenagers-and-adults-think-arming-teachers-is-dangerous-favor-minimum-age-for-buying-assault-rifles/.

Taylor, Jessica. Trump Backs Arming Teachers During Emotional White House Listening Session. *NPR*, February 21, 2019. https://www.npr.org/2018/02/21/587775635/trump-backs-arming-teachers-during-emotional-white-house-listening-session.

Teach Plus. Teach Plus Position Statement on Gun Violence and School Safety. Press release, March 14, 2018. https://teachplus.org/news-events/press-release/teach-plus-position-statement-gun-violence-and-school-safety.

United Educators. Increased Risks and Costs of Arming Educators. *Insights* (blog), June 2020. https://www.edurisksolutions.org/blogs/?Id=3763.

Vila, Bryan J., and Gregory B. Morrison. 1994. Biological Limits to Police Combat Handgun Shooting Accuracy. *American Journal of Police* 13 (1): 1–30.

Walker, Tim. 2018. NEA Survey: Educators Say No to Arming Teachers, Favor Real Solutions to Gun Violence. Washington, DC: National Education Association. https://www.nea.org/advocating-for-change/new-from-nea/nea-survey-educators-say-no-arming-teachers-favor-real-solutions.

Wallace, Lacey N. 2019. Guns in School: Juveniles and Teachers. In *Handbook of Research on School Violence in American K-12 Education*, ed. Gordon A. Crews, 74–97. Pennsylvania: IGI Global.

Waples, Greg. Advocating For School Safety. National Association of Secondary School Principals, February 27, 2018. https://www.nassp.org/2018/02/27/advocating-for-school-safety/.

Weatherby, Danielle. 2015. Opening the Snake Pit: Arming Teachers in the War Against School Violence and the Government-Created Risk Doctrine. *Connecticut Law Review* 48 (1): 119–176.

Weiler, Spencer C., and Anthony D. Armenta. 2014. The Fourth R—Revolvers: Principal Perceptions Related to Armed School Personnel and Related Legal Issues. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas* 87 (3): 115–118. https://doi.org/10.1080/00098655.2014.891891.

White, Michael D. 2006. Hitting the Target (or Not): Comparing Characteristics of Fatal, Injurious, and Noninjurious Police Shootings. *Police Quarterly* 9 (3): 303–330. https://doi.org/10.1177/1098611105277199.

Willner, Lauren. 2019. What Do Teachers Want? Educators' Opinions About Being Armed in the Class-room to Prevent School-Based Gun Violence. White Paper. California State University Northridge. https://www.csun.edu/sites/default/files/What%20Do%20the%20Teachers%20Want_White%20Paper.pdf.

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