

The Efforts of Policy to Reduce School Shootings, 1999-2019

by

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## ABSTRACT

Despite the concern over school shootings in the last twenty years, little has been done to prevent these events. This paper addresses the need to have a consistent definition of a school shooting. The policies that have been enacted in the eight states with the most shootings in the past 20 are categorized and compared to the number of incidences and victims. The study concludes that states need fewer reactionary policies and more policies based on systematic research; these states pass a majority of zero-tolerance, which are shown to be ineffective in preventing school shootings suggesting a need for a new approach to writing and addressing policy.

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## CHAPTER 1

### LITERATURE REVIEW

In the United States, the first school shooting dates back to the 1700s, with the earliest being an attack on a schoolhouse, killing two teachers and ten children (Duplechain & Morris, 2014). However, public perception holds that school shootings are a new phenomenon that happens all the time; some have even gone so far as to describe school shootings as an epidemic (Muschert, 2007). Since the Columbine School Shooting in 1999, the number of school shooting cases has steadily increased over time, with the most cases happening in 2018, 32 incidences with an active shooter, a record number (Center for Homeland Defense and Security, 2020).

Despite the increase in school shootings in recent years, they do not happen as often as people think, with less than 2% of school-age homicides occurring on school campuses (Muschert, 2007). Moreover, in one study, the authors found no evidence to indicate increased mass shootings over the years (Mears et al., 2017). This contradicts the commonly held belief that mass shootings are happening all the time and that schools in the United States are drastically more dangerous. Regardless, school shootings have affected many people in the United States, and people want to feel confident in sending their children to school without fear of an attack. It would follow then that school shootings need to be better understood and decreased not only for their own sake but also to better address other systemic issues.

After a school shooting, the uproar from the public drives policymakers to implement new policy, but the policies are driven by public opinion rather than by policy shown to work through studies (Herron, 2017). The lack of understanding about the root

causes and ineffective solutions to school shootings points to the overall miss information and the lack of standard narrative within the public, perpetuated by the media and experts.

One of this paper's attempts is to create a somewhat comprehensive literature review of school shootings to help facilitate effective communication and better subsequent solutions. Once with a good picture, this paper will discuss the study conducted for this paper. The study looks at the policies that states enact, the kind of policies, and the policies' relationship to the shootings during the time range. The paper will attempt to show that the addition of these policies does not stop school shootings and suggests the need for a new approach.

### **School Shootings Defined**

One of the significant issues within school shooting research is the lack of a consensus on a definition of school shootings both by the public and academics; consequently, there is disagreement about the number of school shootings cases (Elsass et al., 2016). For example, in one study, the author pointed out that once you compare the number of incidences with the trends on Google, there is far more emphasis on students' school shootings and less emphasis on widespread gun violence on campus (Kalesan, 2020). Though this is a crucial point to make, there is plenty of violence enacted on school campuses carried out by people who are also not students; the issue here points to the fact that there is a lack of a cohesive discussion of what constitutes a school shooting. If a school shooting is any violent gun event on campus, then Kalesan has a fair point in showing that the media does not discuss all the school shootings, but if we are specifying that a school shooting is gun-related violence carried out by students to kill mass numbers

of people at their school then what Kalesan is discussing is not relevant. Moreover, in Kalesan's study, he used data from Everytown Research and Policy group. This interest group utilizes data from several reputable sources (such as the CDC) and provides their data, but does not provide any details about their methodology. In addition, it uses data addressing any violence on a school campus, which calls their analysis into to question (Everytown Research & Policy, 2020). The critical distinction, to make here once again, is that if the goal is to understand why a student would go on a killing spree at their school, then we need to look at those cases specifically, and unfortunately, the term school shootings get applied too broadly, leaving it open to interpretation to include any gun-related violence on a school campus. We need to address gun violence on school campuses, but for this paper, the goal is to understand student school shootings with different motives and causes than other gun-related crimes that can happen within a community. It is a crucial distinction to make when looking at this issue and again points to the lack of standard narrative within the school shooting discussion.

In Muschert's typology, the types of school shootings include rampage shootings; mass murders; terrorist attacks; targeted shootings; or government shootings, all of which include different kinds of shooters who may or may not have been former students (2007). Muschert makes a valid argument that the media's focus with school shootings is on incidences, where shooters attack fellow students, but several kinds of violent crime can occur at school (2007). However, each of these other types of crimes has its roots in other social issues outside of the school shootings enacted by students or former students. In other words, when considering a terrorist attack on a school, would the motives of the shooter be the same as a school shooter who was a current or former student? For most



cases, we would consider the two motives differently, and when studying terrorist incidences, we could include a terrorist attack at a school because the motives would be similar, such as political reasons. Moreover, when looking at a school shooting that occurred with a shooter who was a former or current student, it would only happen at that school, and the motives would be limited to those cases, such as mental health or social isolation. Ultimately, should we consider causes such as government shootings or terrorist attacks at school as part of the school shooting type if they would also get considered for studies done about those respective crimes?

Muschert's discussion brings to light an important point that by discussing what violent offenses happen on school campuses and categorizing them, we can delve into the cases that are most relevant to the study of school shootings. Furthermore, it is essential to understand what the wider population considers a school shooting because it changes the reporting on violence at a school, how people perceive those incidences, and how policy can prevent the crime; unfortunately, this paper does not delve into that area.

However, as discussed, there is still a variance in definition, and government agencies and national organizations use definitions that validate incidences to the public that otherwise would not be considered a school shooting (Elsass et al., 2016). These broad definitions inflate the statistics of cases (Elsass et al., 2016) and increase the perceived frequencies of the events (discussed more in the media section). Some of the many definitions include; the U.S. Department of Education, which defines a school shooting as:

Any incident where (i) a current student or recent former student attacked someone at his or her school with lethal means (e.g., a gun or knife); and, (ii)

where the student attacker purposefully chose his or her school as the location of the attack. (Vossekuil et al., 2002, p. 7)

The Center for Disease Control defines it as:

A case is defined as a fatal injury (e.g., homicide, suicide, or legal intervention) that occurs on school property, on the way to/from school, or during or on the way to/from a school-sponsored event. Only violent deaths associated with U.S. elementary and secondary schools, both public and private, are included. (Centers for Disease Control, 2014)

The Everytown for Gun Safety define school shootings as:

Incidents were classified as school shootings when a firearm was discharged inside a school building or on school or campus grounds, as documented by the press or confirmed through further inquiries with law enforcement.

Incidents in which guns were brought into schools but not fired or were fired off school grounds after having been possessed in schools, were not included. (Everytown for Gun Safety, 2014).

For this study, the definition, which other researchers often adopt (Elsass et al., 2016), is proposed by Katherine Newman in her book *Rampage: The Social Roots of School Shootings*. Newman defines school shootings as shootings that:

Take place on a school-related public stage before an audience; involve multiple victims, some of whom are shot simply for their symbolic significance or at random; and involve one or more shooters who are students or former students of the school. (2004, p. 50)

This definition encapsulates not just where the events happen but who the shooters are, who the victims are, and the surface level motive for attention that these shooters often have. Now with an adequate definition, the conversation will move to what is considered the common cause of school shootings.

## **Causes**

There are many theories on the causes of school shootings. Several believe that bullying results in school shootings. After the Columbine shooting, a standard narrative was that school shootings resulted from bullying (Mears et al., 2017). As already discussed, school shootings had been going on before Columbine, but Columbine drew on the public's attention a great deal more than past events and set the kinds of conversations that would circulate school shootings; this included the idea that school shooters were students that got bullied in school (2017). As one study from Florida State University points out, bullying is not the root cause of a student conducting a school shooting because many students get bullied but never go on a massacre at their school (2017). Moreover, there is little evidence that all other school shooters got bullied, which was their drive to attack a school (2017).

A common theme throughout this discussion on school shootings is that school shootings and the shooters have more deeply rooted issues that stem from multiple causes beyond an individual getting bullied (Mears et al., 2017). Though bullying does not directly link to school shootings, bullying in and of itself does have negative impacts on the bullied and the bully themselves, and effective implementation of bully prevention programs can have an overall positive impact on people's wellbeing (2017).

The public has attributed several other factors to school shootings, such as goth culture, violent video games, and music but similar to bullying, many of these factors have little to no statistical significance (Mears et al., 2017). Although many of these ideas have been circulated and perpetuated by the media to the point where most of the public and policymakers believe these are the causes and have taken steps against them, which is an issue because social science research has shown that there are other contributing factors to cause school shootings (2017).

Social scientists have attributed school shootings to mental health; shooter identity; access to guns; family abuse or neglect; youth social dynamics; issues with the school; community cohesion; community climate; educational issues; masculinity; political climate; past physical or sexual victimization; suicidal ideation; loner identity; and a culture of violence (Muschert, 2007; Mears et al., 2017). However, none of these have shown to have a correlation to school shootings (Mears et al., 2017). Perhaps, many causes, but no one cause, or reason incites an incident; however, access to a gun is required (Muschert, 2007). Some experts have postulated multifactor theories; unfortunately, these theories remain hard to test and only stand to amplify myths and misconceptions about shootings by validating spurious variables (Mears et al., 2017).

### ***Shooter Characteristics***

Before the Columbine shooting in 1999, the FBI began working on a research project to develop a risk assessment for school shootings; after Columbine, the FBI speed-up their process to get out their threat assessment resource and released it in 2000. The resources provide a means to identify the risk level; low, medium, or high risk (2000). The assessment has a four-pronged model that breaks down a potential threat

based on the suspect's (or students') personality, family dynamics, school dynamics, and social dynamics. Each of these factors is broken down into more specific traits, but for all of them, they should not be taken in isolation or as tell sign because a student can have some or all of these traits and never attack their school while someone with none of these traits may still attack (2000; Mears et al., 2017). The purpose of the study is to help officials identify and help at-risk students. The study provides suggestions for schools such as to inform students and parents of school policies. However, it also prepossesses having a threat assessment coordinator, an assessment team, and coordinating with the police, promoting school policies that create a more control-based approach to school safety, which is problematic; discussed more in the policy section.

Another issue with some of the shooter characteristics proposed by researchers is how do you adequately determine whether the shooter had these traits. Shooters may all experience bad parenting, but what constitutes bad parenting; neglect, corporal punishment? How does one judge good or bad parenting unbiasedly, especially after their child commits such an act? Much less, how does one operationalize such a thing as bad parenting (Mears et al., 2017).

**Masculinity.** One of the attributed causes of school shootings has been masculinity, which can break out into a few different types. On one side, the feeling of emasculated or rejection from male peers, then another is hyper-masculinity, while the third is a feeling of male entitlement. Though these are all based on gender roles within society, the three are distinct in that emasculation is related to bullying, hyper-masculinity would be an expression of one's perceived gender expression requirements, and male entitlement results from not getting what they perceived society owed them.

In one study, the author looked at 31 different school shootings and found that all shooters experienced emasculating experience based on reports from classmates and staff (Farr, 2018). However, this study had two issues; for one, the study looked at how people's perceptions of the shooter could introduce bias or misrepresent the shooter, especially after the fact. Secondly, what the author categorized as emasculating; such as emasculating bullying, rejections by a girlfriend, and marginalization (Farr, 2018) are experiences that most young men experience, which points to the shooters having other problems such as a lack of coping mechanisms or lack of support to deal with these issues.

Similarly, in a study by Kalish and Kimmel, the authors found that in three cases, the shooters felt an attack on their masculinity, and due to male entitlement, these shooters felt that they must exact revenge for their preserved slights (2010). Moreover, the shooters felt like they were failing in their male identity and therefore should commit suicide (Kalish & Kimmel, 2010), which fits Durham's theories on suicide and falls into egoistic suicide or a social outcast suicide. This study only looks at three cases and consequently is not necessarily representative of all cases. It does support the idea that shooters often have mental health issues.

### ***Technologies Effect***

Technology is attributed as one of the causes of schools' shootings, though much of this argument relates to other causes such as exposure to violent images, videos, and music or the copycat phenomena that occurs after these events (Muschert, 2007; Mears et al., 2017). Raitanen and Oksanen found an online culture that obsesses over the Columbine shooters, a majority of participants were harmless but within this culture is a

whole sub-culture that actively researches and supports one another in their attempts to copy the Columbine shooters (2018). This sub-culture also further gives other perpetrators fame and potentially can contribute to the copycat phenomena (2018).

### ***Population and Spending***

One study found that school shootings are far more likely to happen in areas with large populations, with already high homicide rates, in lower-income areas, and had a larger proportion of African Americans (Kalesan, 2020). In conjunction with other research on school shootings, the authors of "Alone and adrift: The association between mass school shootings, school size, and student support" found that the schools that had shootings had higher populations and lower teacher-to-student ratios than the state averages (Baird et al., 2017). The study also determined that a shooter was significantly more likely to have recently moved from a school with a smaller population to a larger one (2017). Baird concludes that schools need to provide more support to incoming students, particularly students transferring schools (2017).

One of the significant issues facing the public-school system is the low funding, and this has been an issue for several years, with 38 different educational strikes between 2010 to 2019 (United States Bureau of Labor Statistics, 2020). This lack of funding, however, can influence school shootings as discussed in the article "The contextual Correlates of School Shootings," where the author examines macro-environmental characteristics to evaluate which are a risk factor to increase the likelihood of a shooting happening. The study looked at several characteristics, but the author found that schools with high enrollment with a significantly disadvantaged population are at a greater risk of having a school shooting (Fridel, 2019). The study also concludes that areas at high risk

for other crimes are also at a higher risk for a school shooting (2019). Somewhat counter-intuitively, when the pre-pupal spending exceeds a threshold, the school has a higher likelihood of having a school shooting; this is maybe due to the area's low income, the spending is not going toward more educators but to other administrative or infrastructure costs (2019). Overall, this article supports the need to have a higher teacher-to-student ratio to diminish crime and an optimum amount of spending. Issues with spending and population are critical and seldom discussed. Low teacher-to-student ratios at schools are detrimental and may be the key to the solution.

### **Media Coverage**

One of the many challenges of studying school shootings is determining how the public's perspective of these events sways public policy, which is often influenced by the media. The news reports the most on sensationalized events, which is why rare events like school shootings get heavily reported (Elsass et al., 2016). School shootings are often designed to cause multiple deaths and are therefore highly publicized on the media, which as a byproduct, can have an adverse effect not only on the community in which it occurs but also on the people consuming the news (2016). After a school shooting, people can experience an increased sense of fear and anxiety about another attack happening at their school or community (2016). Based on surveys from before and after Columbine, people felt less safe after the event (2016).

Furthermore, the media can drive the misconception that these events happen regularly with continued broadcasting for weeks, months, and even years after the event (Elsass et al., 2016). By doing so, the media sensationalizes the event, playing into the



bias or availability heuristic; the human cognitive bias, which disproportionately thinks that something happens more just because they see it frequently.

Another aspect related to the coverage of school shootings, as with other crimes, is the Rashomon Effect or the differences observers have when viewing an event (Muschert, 2007). The Rashomon Effect is associated with eyewitnesses' unreliability, which can overly sway our understanding of events like school shootings (2007) and other crimes in general, which can significantly misrepresent incidences for not only the general public but also for researchers.

Beyond the Rashomon Effect's influence is how the mass media misrepresents or provides information that directly contradicts research conducted by social scientists, leading to misleading the public about shootings, such as its causes shootings and shooter characteristics (Muschert, 2007). Although the Society of Professional Journalists' Code of Ethics encourages news media members to seek truth and report it, the code also emphasizes moral imperatives to "balance the public's need for information against potential harms" and "avoid pandering to lurid curiosity" (Dahmen, 2018, p.164). This does not seem to be the case, however, because, despite an increase in concern and fear over school shootings, there has been a decline in violent deaths at schools (Muschert, 2007), and in a study of over 564 news articles mentioning school shootings, there were only three mentions of the violent crime rates within the U.S. which further skews the public's perception on crime and school shootings to be worse than they are (Elsass et al., 2016).

Lastly, the way a report depicts an event can create copycats or people who want to imitate the attack. Through content analysis of 4,934 photographs from 9 days of

newspaper coverage, the study made several key findings on the overall prominence of photos use changes during the three days following mass shootings and comparisons between perpetrators and victims' photos. In particular, the study found empirical evidence that on a photos-per-individual basis, the coverage gave more attention to perpetrators than to individual victims by a ratio of 16 to 1 (Dahmen, 2018). Given contagion effects or potential copycat issues, this study's findings raise severe concerns about current practices in news media publication of perpetrator (2018). Unfortunately, since the news broadcasts this way, it gives shooters notoriety, fame, or that is infamy, which is what many of them want (Teves, 2019).

### **Policy**

The media's coverage of school shootings and its effect on the population makes it important to talk about the effect this relationship has on policy. A study found that public policy and legislation were more reflective of public perception, fluid by media coverage, about solutions rather than research supported provisions (Herron, 2017), so as a byproduct of the inaccurate report can create ineffective policy. Moreover, after a school shooting, due to people's outrage, it is easier to gain support for implementing gun control measures and other policies that are not necessarily effective or re-implement existing policy (Newman & Hartman, 2019). For example, though Columbine garnered a great deal of attention and a push to implement policy or some school protections, the incident only ushered in existing policy into the schools (Birkand & Lawrence, 2009).

### ***Gun Control***

One of the leading causes of school shootings is related to gun control. Having access to a gun is a requirement for a school shooting, so it follows that gun control

measures would provide a clear solution. Studies have shown that gun control has some effect on school shootings. For example, rifles and shotguns correlate with a higher casualty rate (Livingston et al., 2019), so banning these types of guns can decrease the number of people killed during an attack. Another study found that an assault weapon ban would reduce the fatalities during school shootings by 54.4%, but other gun control laws, like concealed carry laws, private sale background checks, and federal dealer background checks, had no statistical significance (Gius, 2018; Kleck, 2009).

Additionally, a study found that the child-access-prevention (CAP) laws decreased gun caring and gun threatening or injury among youth (Anderson & Sabia, 2018). Conversely, however, CAP laws have been shown to do little to prevent school shootings (2018). A separate study found that gun control measures have little effect on school shootings; the study also points out that guns can be found on the black market and through other means (Mears et al., 2017).

### ***School Policy***

The federally enacted gun control act, Gun-Free-School Act (GFSA), required that schools implement regulation on guns in schools; however, with this act, some states introduce policies that resemble zero-tolerance policies or heavily policing policies. Zero-tolerance policies include cameras, police on campus, gates, and metal detectors; which are shown to increase student suspensions and acting out in general (Borum et al., 2010; Jonson, 2017). Many of the zero-tolerance policies have also had little effect on the number of school shootings (Mears et al., 2017). Another analysis found that the school resource officer (another zero-tolerance policy) did little to prevent an attack (Livingston

et al., 2019). Some experts even go as far as to say that these measures contradict the best practices for healthy student development (Borum et al., 2010).

Despite the concerns with highly restrictive and observant policies, most schools in the US have implemented such restrictions, such as locker searches, required staff in the hallways, locked doors during school hours, and visitor sign-in (Borum et al., 2010). Despite a push for more safety measures, a study of 56 schools and law enforcement agencies where shootings occurred had little to no school safety information readily available to the public (Butkus, 2020).

One of the most pervasive of the heavily restrictive policies is the process of profiling and identify students with “warning signs,” but studies have shown that even the best profiling models will also identify students who are no risk to the school at all; nevertheless, policymakers still push such measures (Borum et al., 2010).

Contradictory to the zero-tolerance policies, experts have suggested improving schools by promoting a prosocial culture; incorporating the community into the school; increased communication with families; risk assessments at schools; support groups for at-risk youth; better teachers-to-student ratio; and more funding for higher quality education could reduce school shootings. As Mears et al. point out, little empirical research suggests that these methods work (2017). However, is this due to little statistical correlation or little research done on these topics?

A survey of teachers found that a majority in the Massachusetts area viewed the school policies in place as ineffective, damaging to their relationship with students, not in congruence with their concerns, disrespectful of teacher’s role in society, and a threat to their work (Hera, 2020). Unfortunately, teachers in this area felt that their education and

professional development did little to make them confident in their ability to have a meaningful effect to changes in policy (2020).

## **Solutions**

Thus far in the paper, a few solutions have been explicitly mentioned or, at the very least, implied, yet to be mentioned, however, is a solution that closely relates or, at the very least, gives ground to this paper's eventual suggestions. In Elsass's article, the authors suggest evaluating school shootings from a psychological or biological perspective and propose that a new paradigm might be necessary when evaluating these events (2016). Within this lies a potential working theory relating to a biological perspective, in which there is a caring capacity in schools and when that capacity is reached, schools can no longer meet each student's needs, making those students feel socially isolated and inadequate.

## CHAPTER 2

### THE STUDY

For this study, the nine different states were specifically chosen based on the number of cases that each state has had since 1999. This study looks at the kinds of policies implemented and whether these states' policies fit with what social scientists and researchers suggest are the best types of policies to implement.

#### **Methods**

The research project began with obtaining a comprehensive data set from the Center for Homeland Defense and Security on the school shootings in the United States since the 1970s (2020). The challenge with this data set is that the Center for Homeland Defense and Security collects data on all gun violent events on school campus, reported by the news, which has been shown to introduce inaccuracy from the media. The data had to be sorted to accurately reflect not only the events under study but the timeline under examination.

From this group, the cases that do not fit into the definition of school shooting used within this study, which, as discussed in the literature review, is a shooting that:

Take place on a school-related public stage before an audience; involve multiple victims, some of whom are shot simply for their symbolic significance or at random; and involve one or more shooters who are students or former students of the school. (Newman, 2004, p. 50)

This definition required reading the cases and eliminating incidences that did not include a shooter who was a student or former student; happen on school property; occur during school hours or school events; or were associated with other crimes.

The removal of several irrelevant columns became essential so that the only columns remaining were; month, year, date, school, city, State, total victims (inured and killed), summary, category, narrative, and link to the sources. The Center for Homeland Defense and Security obtained their data collection from reports posted in the media; introducing some bias due to inaccuracies in reporting on school shootings is possible. The interpretations used by the Center for Homeland Defense and Security may also introduce bias, so it became essential to read the narrative and summary of each event and remove events that did not fit with the definition.

Next, the states where the most shootings occurred were analyzed. California, Florida, Georgia, Illinois, Michigan, New York, Ohio, Pennsylvania, and Texas were selected because they each had over ten shootings over the 20 years so of the study. New York was eventually removed from the study because its official legislative codes are not available.

For this study, the policies included all the school or education codes (legislation, bills, etc.) passed and enacted between 1999 and 2019; if a policy was passed in 2019 but not in place till 2020, it was excluded from the study (the dates used for the policies in this study were the date they were in effect). Moreover, any policy relating to higher education was not included in the study because it focuses on K-12 education. For each State, the purpose was to find all relevant education codes related to preventing school shootings, including safety, bullying, mental health, discipline, and any other policy relating to zero-tolerance policies. Searcher terms in each State's master education code; safety, security, bullying, guns, firearms, weapon, mental health, punishment, reprimand, and discipline were used to find these policies. Once added to the data set, the applicable

policies included information about the policy included: State, date enacted, title, the kind of policy, summary, and link to the source in the data set.

The policies were categorized by the type of policy: bullying prevention, culture building, discipline, employee responsibility, gun control, safety, and zero-tolerance policies. Some of these are self-explanatory, such as gun control, discipline, and bullying prevention; however, the others require explanation. Culture building included any policies that create healthier learning environments and are focused on cultural issues, including sex education, safe spaces, supporting at-risk students, classroom culture requirements, suicide prevention, and mental health. Safety involves measures relating to safety, funding for safety, emergency plans, and safety drills. Zero-tolerance policies include ‘extreme’ safety measures (cameras, lockers searches, etc.); law enforcement measures; safety officers on campus; extreme discipline measures; pre-discipline measures; and a separate curriculum for students with discipline issues. Employee responsibility involved adding new responsibilities, requirements, or training to teachers and other school support staff beyond their regular duties.

## **Results**

Once the policies were collected, the two data sets (shooting events and policies) were compared using data visualization software (Tableau). Several figures below help develop a picture of the relationships and how many shootings happened after enacted policies and policies enacted after the shootings—additional figures look at the type of policies enacted during this time frame.

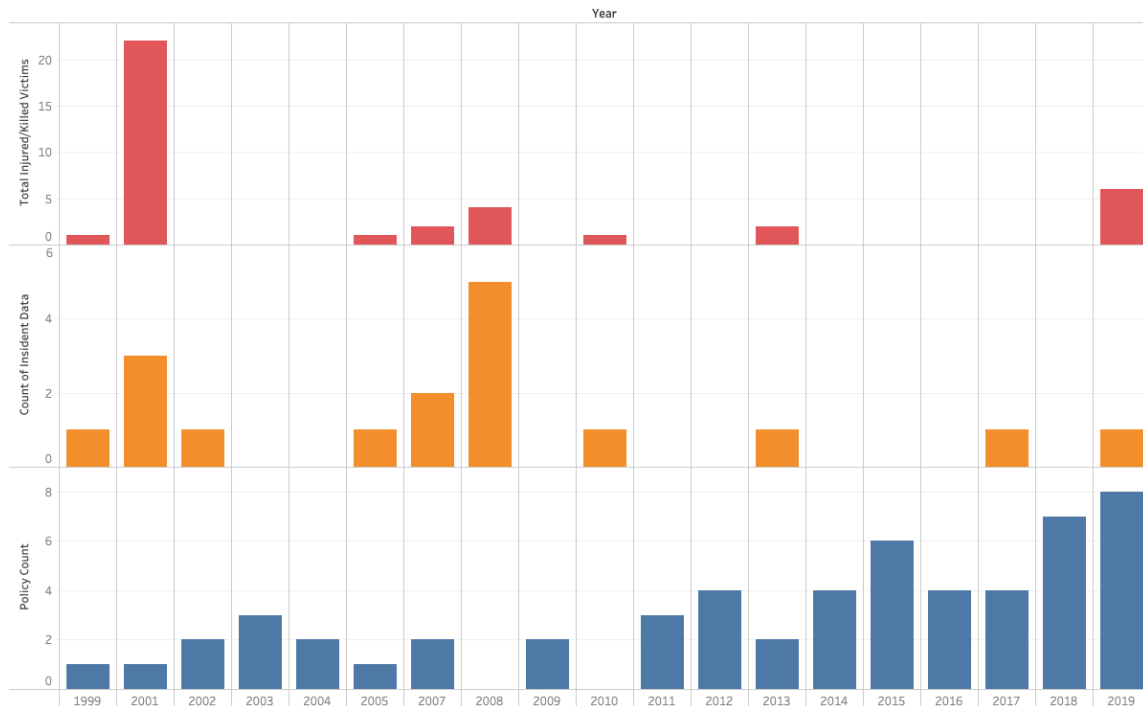
### ***California***



After the 2001 shooting, with 15 victims, more policies were passed in the three years following the shooting than previous years with seven compared to two in 1999 through 2001, policies went back down between 2005 to 2006 with only one shooting during that time. The number of policies passed after the two 2007 shooting has steadily increased. In 2008, California had the most shootings in a year with five incidences, so the increase in policies follow. California saw the most policies after the 2019 shooting, which had the most victims since the 2001 shooting. To reference this information, refer to Figure 1. Most California policies focused on culture-building, but there were several zero-tolerance and safety policies (see Figure 9).

**Figure 1**

*California's Incidence and Victims Compared to Policies Passed From 1999 to 2019*



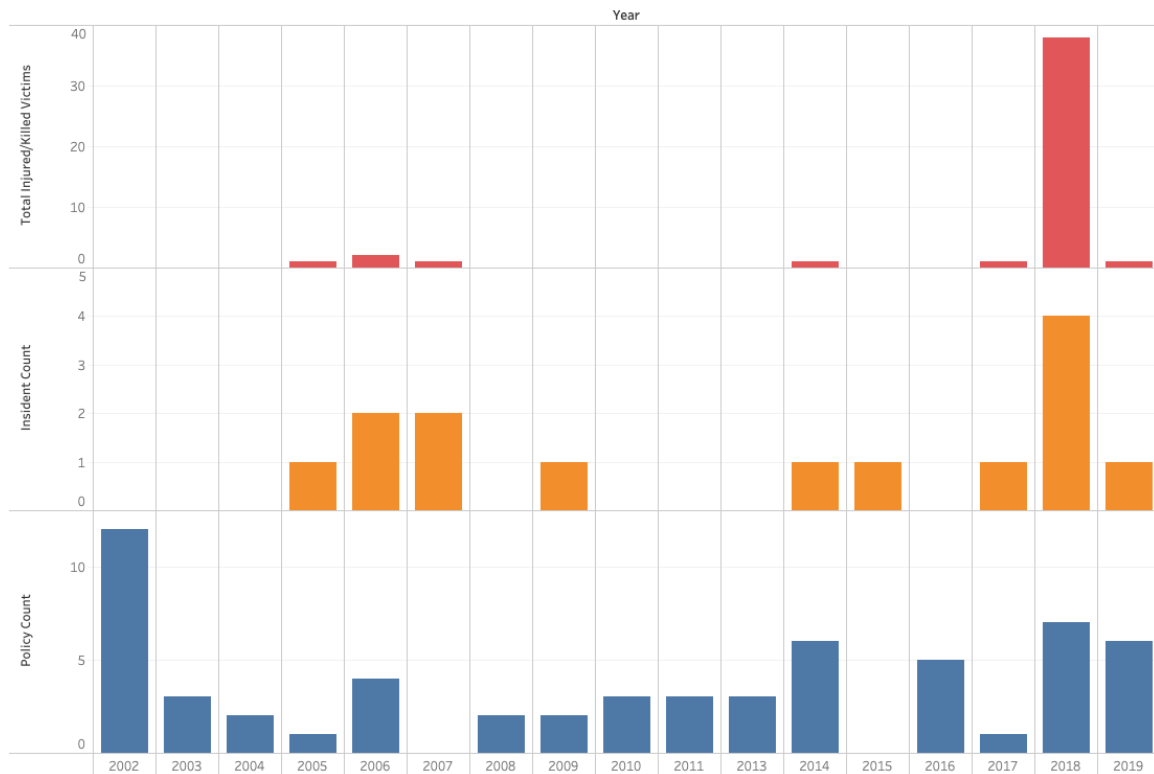
*Note.* There are three different scales used for each of the y-axes.

### ***Florida***

Despite not having an earlier shooting than in 2005, Florida passed the most policies in 2002. Most shootings had few victims except for 2018, with 34 victims; 2018 also had three other shootings that year; consequently, 2018 had the most policies. The rate of policies passed during the time range stayed relatively the same throughout the time, and a majority of those policies were discipline related though there were several policies passed relating to culture building and zero-tolerance. For more information about the policies passed concerning the incidences, see Figure 2, and refer to Figure 9 for information on the kinds of policies passed.

**Figure 2**

*Florida's Incidence and Victims Compared to Policies Passed From 1999 to 2019*



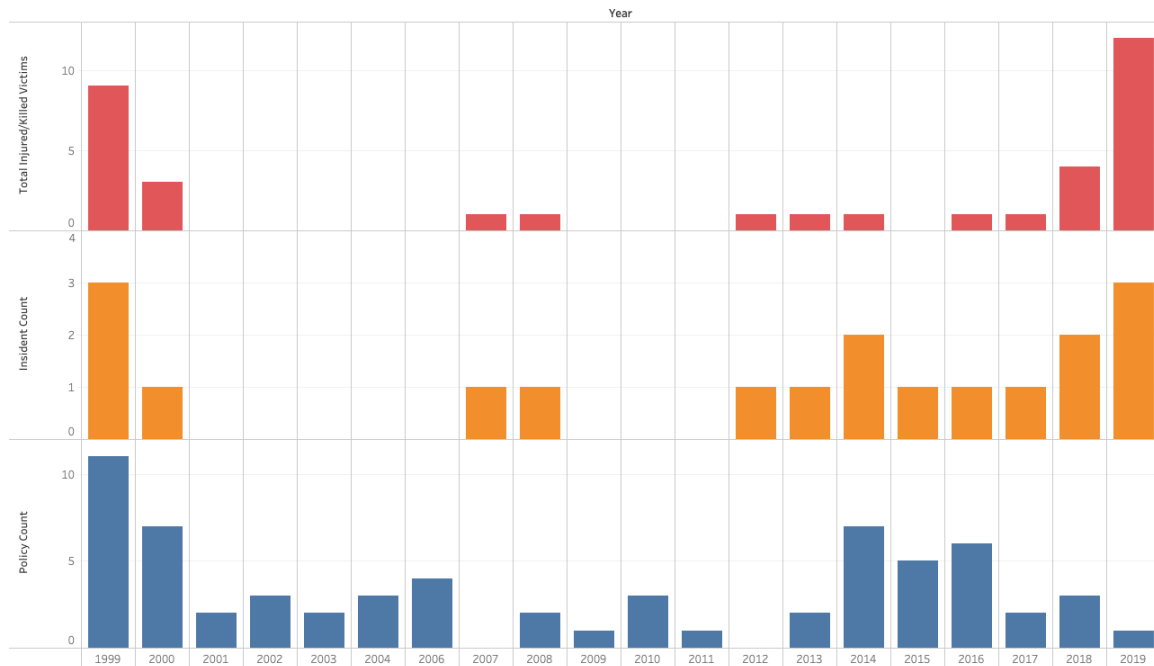
*Note.* There are three different scales used for each of the y-axes.

### ***Georgia***

After the three shootings in 1999, a substantial number of policies passed in the following two years. Again, following the two shootings in 2014, there was an increase in policies for the next two years. In 2019, there were three shootings, yet only one policy got passed after the event; additionally, all the policies leading up to 2019 did little to prevent the attacks. Figure 3 explores the relationship between the number of policies passed; the incidences and policies passed. During these years, Georgia predominantly passed policies on bullying, but discipline was close behind (see Figure 9).

**Figure 3**

*Georgia's Incidence and Victims Compared to Policies Passed From 1999 to 2019*



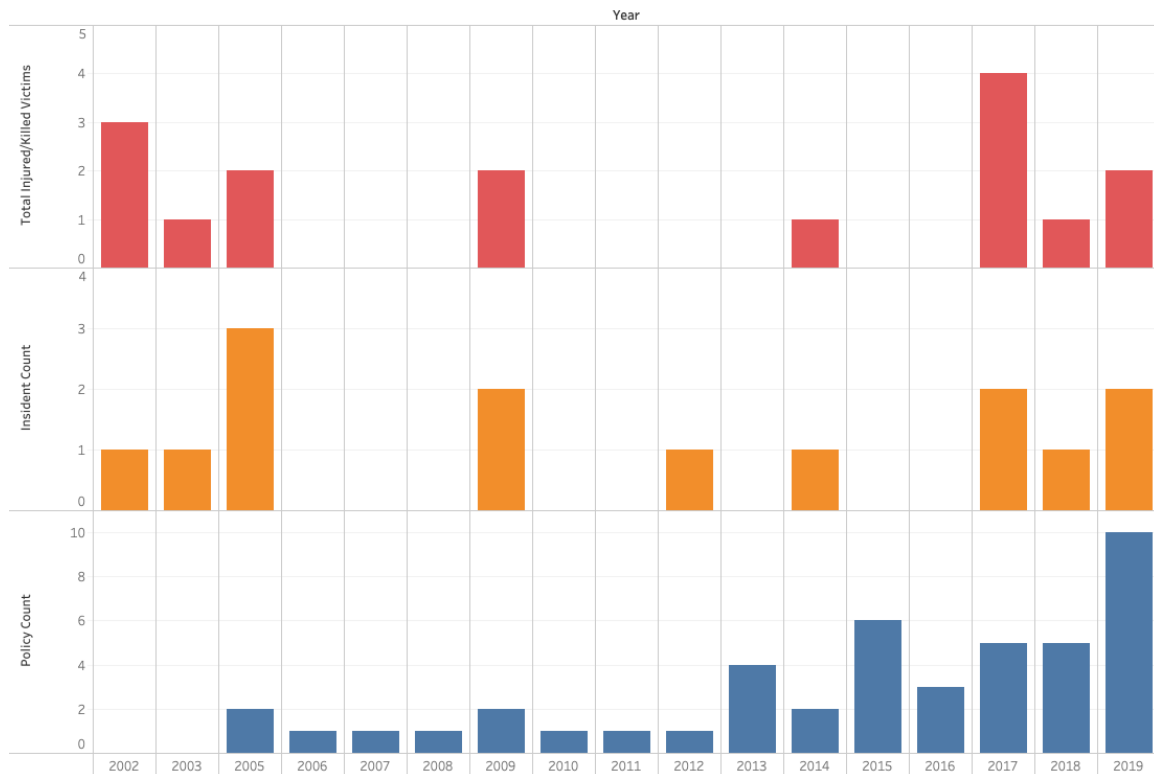
*Note.* There are three different scales used for each of the y-axes.

### ***Illinois***

Illinois followed a similar pattern as some of the other states where an increase in policies would follow a shooting, and towards 2017, 2018, and 2019 there were an increase in incidences, fatalities, and ultimately policies. (refer to Figure 4). Most of their policies focused on culture-building, but several policies passed on zero-tolerance, safety, and bullying policies (see Figure 9).

**Figure 4**

*Illinois's Incidence and Victims Compared to Policies Passed From 1999 to 2019*



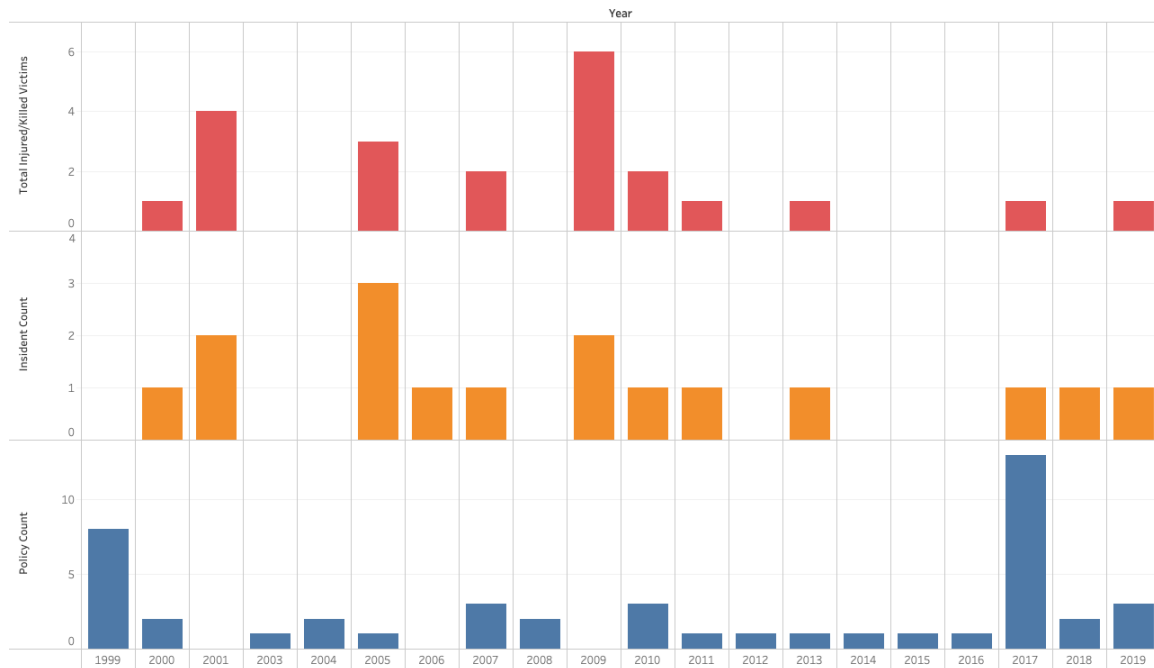
*Note.* There are three different scales used for each of the y-axes.

### ***Michigan***

In 2017 a majority of policies were passed despite only one shooting in 2017. Several policies passed in 1999, possibly a reaction to Columbine; there is no shooting in 1999 in Michigan; however, the one in 1998 could account for this. For more information about the policies, incidences, and victims in Michigan, refer to Figure 5. From 1999 to 2017, there was a steady passing of policies (see Figure 5), but most of the policies passed in 1999 and 2017 focused on zero-tolerance; in general, Michigan mostly had zero-tolerance policies (refer to Figure 9). Michigan also had little to nothing for mental health.

**Figure 5**

*Michigan's Incidence and Victims Compared to Policies Passed From 1999 to 2019*



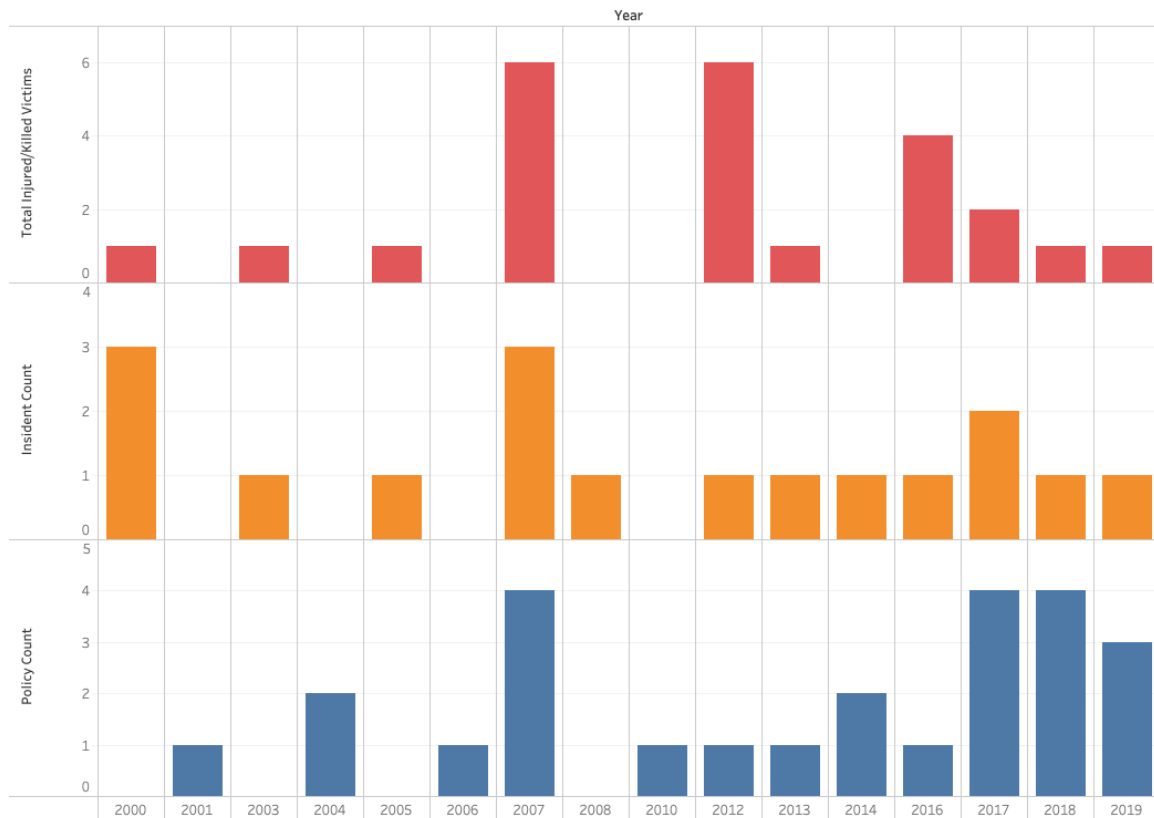
*Note.* There are three different scales used for each of the y-axes.

### **Ohio**

After the 2007 shooting, there was an increase in policies that year; the same goes for after the 2017 shooting (see Figure 6). Otherwise, Ohio did not pass many policies, but 17 out of the 25 passed were zero-tolerance policies (refer to Figure 9 for more information).

**Figure 6**

*Ohio's Incidence and Victims Compared to Policies Passed From 1999 to 2019*



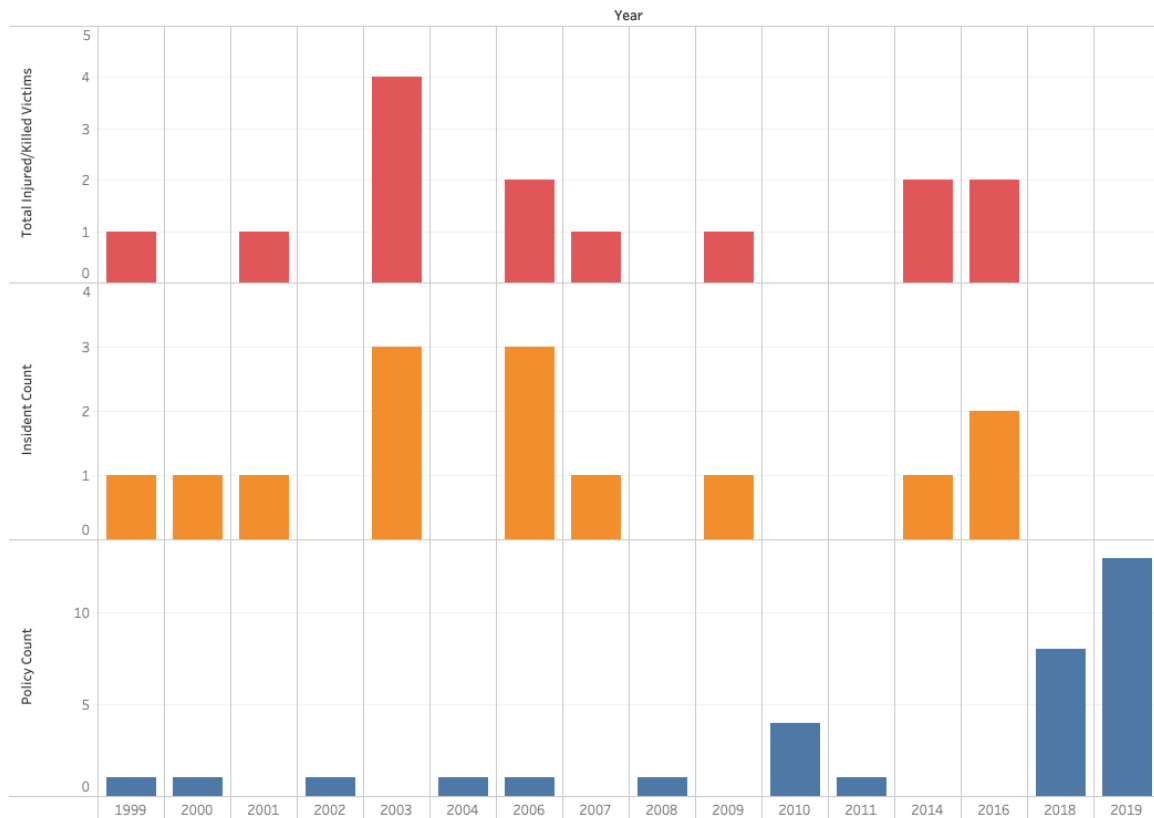
*Note.* There are three different scales used for each of the y-axes.

### ***Pennsylvania***

Despite the shootings in 2003 and 2006, Pennsylvania did not pass many policies till 2018 and 2019, even after shootings in 2016 (see Figure 7). Additionally, most of Pennsylvania's policies were zero-tolerance focused, and safety followed close behind; 27 of Pennsylvania's 32 policies in this study involved safety and zero-tolerance policies (refer to Figure 9).

**Figure 7**

*Pennsylvania's Incidence and Victims Compared to Policies Passed From 1999 to 2019*



*Note.* There are three different scales used for each of the y-axes.

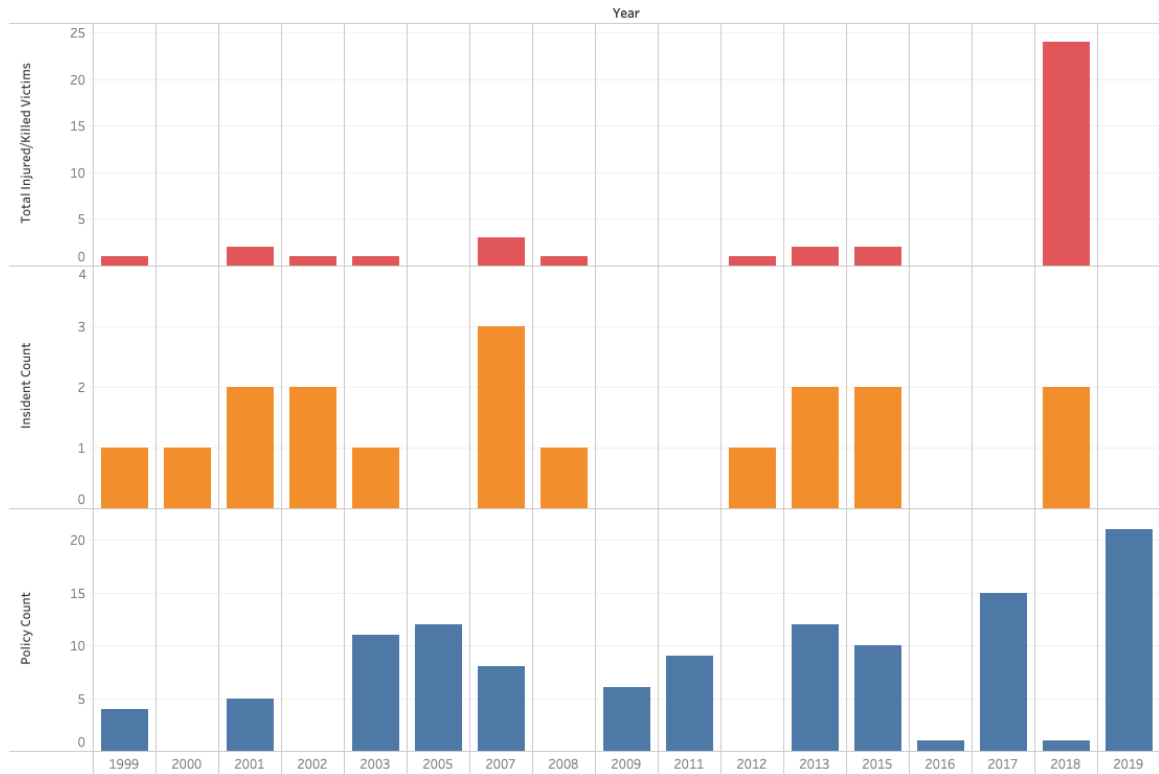
### ***Texas***

Texas overwhelmingly passed zero-tolerance policies throughout the years, and in 2019 after the most victim-inducing shooting of 2018, Texas passed even more zero-tolerance policies and more policies than any other year. The state also passed several policies after the 2001 and 2002 shootings but nothing new after 2007. Overall though, Texas consistently passed several policies throughout the years. Refer to Figure 8 and Figure 9 to compare the incidences, victims, policies, and policy types.



**Figure 8**

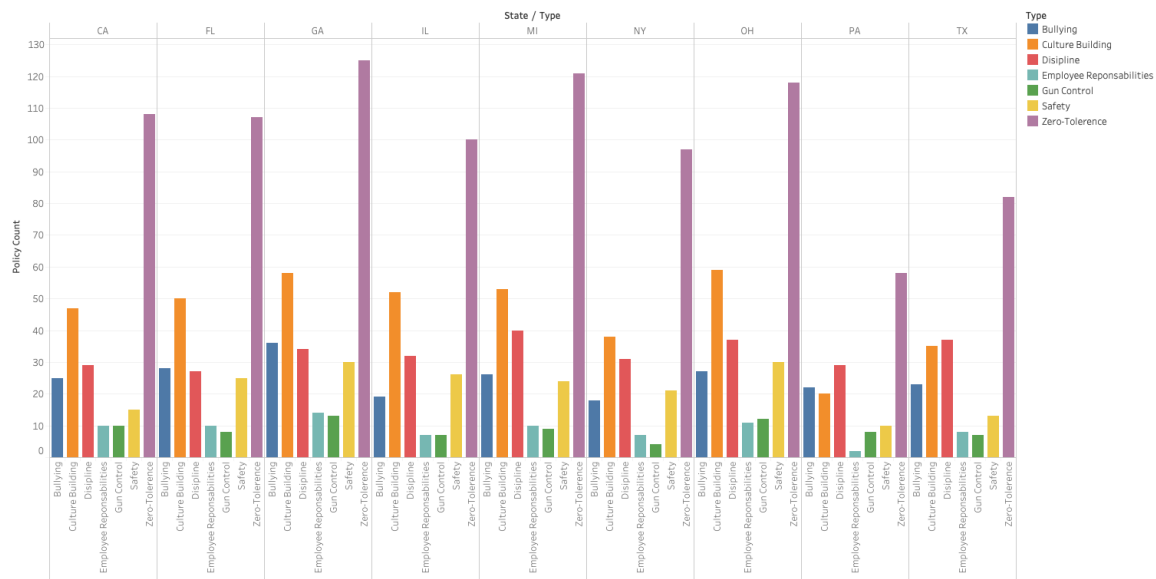
*Texas's Incidence and Victims Compared to Policies Passed From 1999 to 2019*



*Note.* There are three different scales used for each of the y-axes.

**Figure 9**

*The Types of Policies Enacted Broken Down by State*

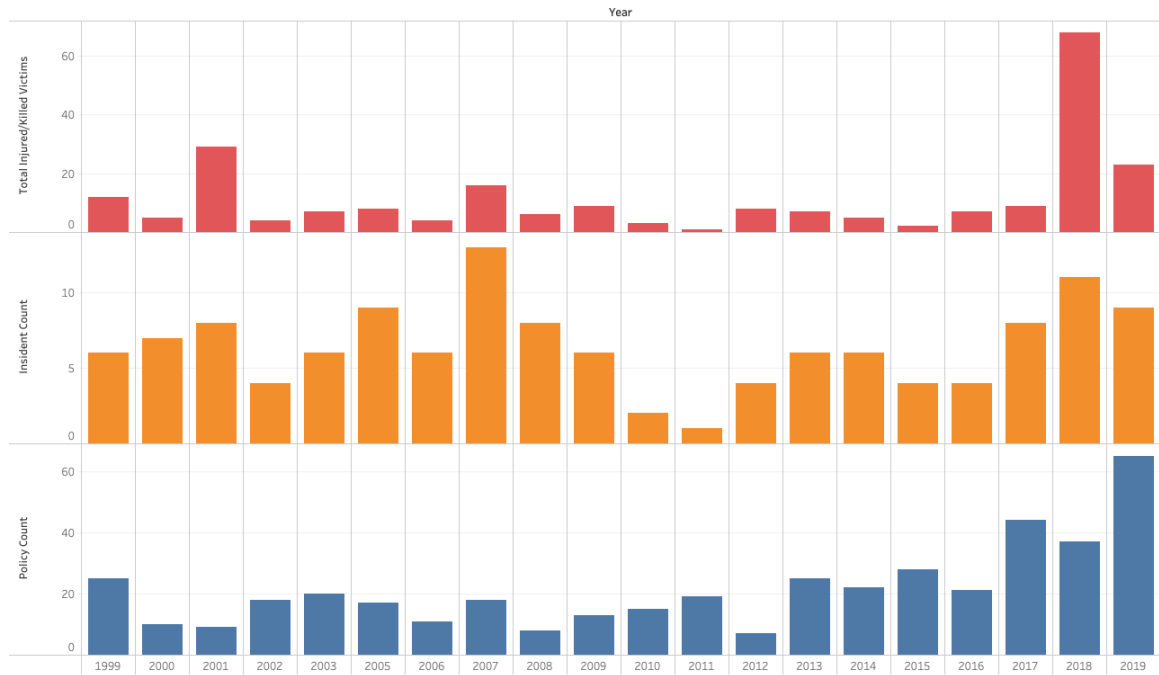


**Overall Analysis**

Despite 122 policies passed from 1999 to 2006, there were still 14 incidences in 2007; again, 220 policies passed from 2007 to 2017, yet 11 incidences and 70 victims in 2018 demonstrated how ineffective these policies were in preventing these events. Figure 10 further explores this relationship and demonstrates how ineffective these policies genuinely are. Moreover, these states still passing policies in 2019, after the 2018 shootings, similar to older policies. Florida and Texas had the most fatal incidences during the time range in 2018 with 34 and 23, respectively. Florida and Texas also both have a majority of their policies focused on zero-tolerance and discipline. A majority of the policies, in general, were zero-tolerance based, 177 out of 457 policies, while the second most was culture building (see Figure 11). Nearly none of the states provided more funding to pay more to teachers, counselors (some exceptions), nor other administration and staff.

**Figure 10**

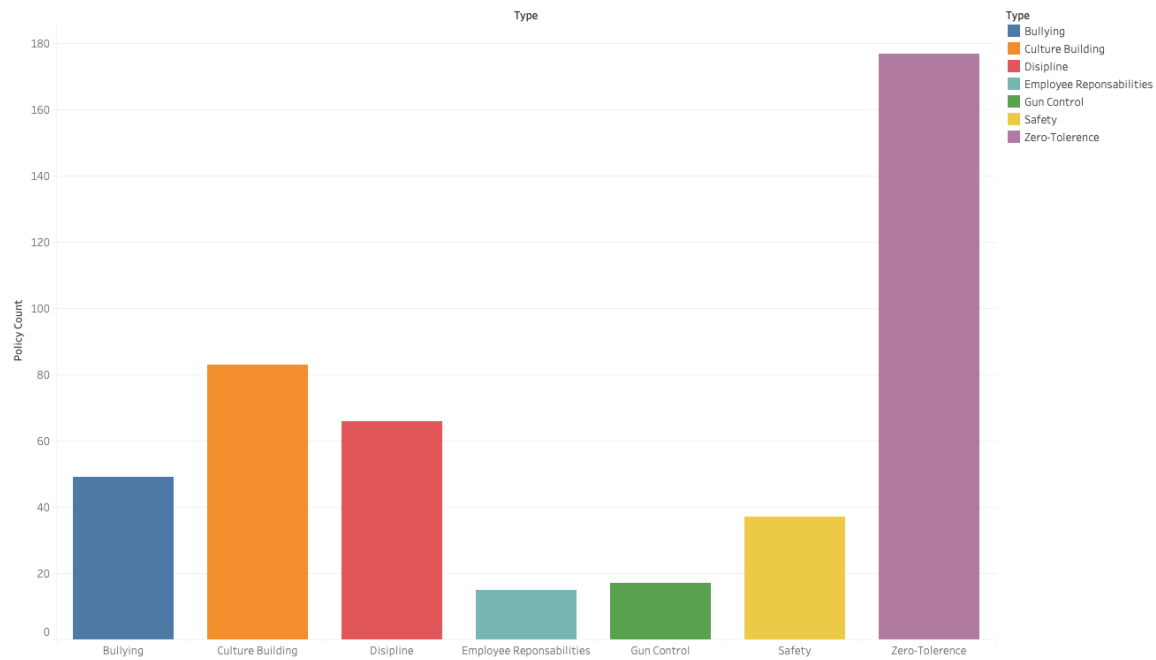
*Comparison of the School Shooting Cases, Victims and Policies Enacted Per Year*



*Note.* There are three different scales used for each of the y-axes.

**Figure 11**

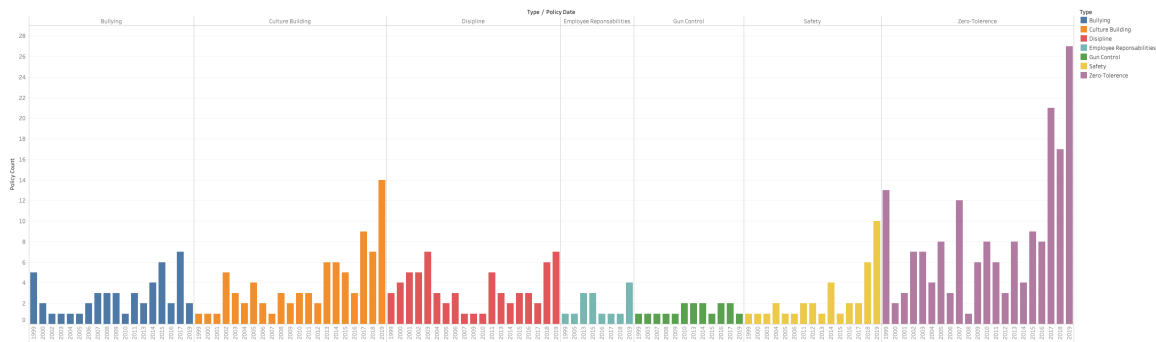
*Policies Enacted Broken Down by Policy Type*



There is little to conclude about the ultimate patterns, except that more policies are implemented after a shooting, which fits the literature. Additionally, the policies put in place before 2018 were ineffective in preventing the incidences and high number of victims in 2018. Moreover, the policies that states enact focus on zero-tolerance policies, which do not have positive outcomes, as discussed in the literature review. What is more, in 2019 (the year with the most polices passed) had a majority of zero-tolerance policies passed (refer to Figure 12). Clearly, more research is needed.

**Figure 12**

*Policy Count by Type and Year Enacted*



It should be noted that some bias and inaccuracies were introduced into the collection of the policies because the data required interpretation from the collector and more interpretation for the kind of policy type.

**Conclusion**

An area where this and other studies on school shootings falter is addressing whether the media adequately represent the school shootings; this could include the general facts about the event and could also include whether the media accurately depicts shootings that happen in a predominantly black neighborhood as actual school shootings rather than as gang violence or another kind of violent crimes. Researchers should also explore whether shootings with a female shooter are described as school shootings rather than some other kind of crime. These issues relate to how identity politics can play into how we understand a particular social phenomenon; what is essential to establish is if this is an issue in white communities or society as a whole, to determine if school shooting results from the shooter's feeling of racial entitlement, and similarly to entitlement based on masculinity.

Another potential study could evaluate whether having comprehensive sex and gender education or education on race and white privilege could diminish school shootings in the United States. School shootings are a complex issue and relate to other deep-rooted issues within society, and other studies have already shown that for some shooters, it is a feeling of deserving fame or notoriety, so pinpointing the specifics of those entitlement feelings is vital to understand how to prevent school shootings.

However, returning to the working theory that the causes for school shootings are the result of the American school system functioning beyond their caring capacity, where the educational system within the United States has historically been underfunded. Education is already a massive expenditure, so discussing these and other school issues in economic terms does nothing to decrease a routinely gouged budget. Instead of investing more money into the educational system, it is easy to place the blame issues and ask our already overextended educational professions to extend themselves even further. However, decreasing class sizes, hiring more teachers, and providing more support staff will not only help schools in general but most importantly, it will provide the much-needed support to students who are struggling and might otherwise go into a rampage.

If the supposed causes for school shootings are related to feelings and issues that many young people face, and as the study has shown, the policies currently have failed to prevent these events. Nevertheless, teachers are underpaid, classroom sizes continue to grow, and there appears to be an oversight in the support provided for our young people. Students of all backgrounds will experience similar feelings as some of these shooters, and there is an apparent oversight in providing the support and coping mechanisms to address these issues. Some states in this study had measures in place to create support and

build a positive culture within the schools, but most that did add more responsibilities on the teachers, counselors, and school administrative team with little to no talk on increasing the salaries or spending for those services at the schools. A future study, to build on this theory, should consider the teacher-to-student ratio and per pupil spend in each state; additionally, looking at comparisons with other nations with little to no school shooting events and looking at the education of educators as well as the average salaries of educators in each state.

We may never know who may become a school shooter (Mears et al., 2017), which in and of itself may be accurate, but if the question is how do we prevent someone from becoming a shooter, then that point is irrelevant because the solution lies in eliminating the kind of environment that would create the shooter in the first place. As suggested by some researchers, the provision that should adequately address school shootings is assistance to youth and their families at risk, counseling services, lower teacher-to-student ratio, improved school facilities, and overall providing more school funding (2017). If we want to prevent students from going on a rampage, we need further research and less reactionary policies. Reactionary policies are not the answer to school shootings. Moreover, we need to ensure that we create classrooms and schools that treat every student with dignity, respect, and worthy of being included; providing support and community to everyone.

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