Chapter 7

United States Mass Shootings Placed in Context with Media and Public Discussion

Charles Schmidt

Abstract

Mass shootings: have there been over 2000 cases in the last 5 years or 314 cases in the last 134 years?

Mass shootings are a staple of modern media news and public conversation, but actual rates are easily misreported and misinterpreted. In this article, the difference between mass shooting research will be examined with examples from government agencies, university research and media coverage of the events. Firstly, the most recent crime data will be explored to frame the discussion of how mass shootings fit into the overall crime picture. Next, the issue of defining a mass shooting will be discussed with different definitions and the breakdown of why defining a mass shooting is difficult. Finally, different mass shooting studies and/or databases will be examined to show how the rates are easily confused if not placed into the correct context of each study.

Introduction

Research on mass shooting is at the forefront of the United States national debate over possible answers to mass shooting events. Empirical and peer-reviewed research is the basis for all political, public and media conversation that takes place surrounding a mass casualty event. As the media shapes the public discussion by drawing from the academic research, it is vitally important that the conclusions of the academic community are interpreted properly and within the

correct context of what each report sets out to accomplish. The research itself is riddled with complications stemming from the definitions of these events, the inclusion or exclusion of events, and the potential biases that each set of data is recorded in. Each one of these issues has the ability to shape media and public perception with incorrect or misinterpreted empirical research.

Crime data put in perspective

In order to first understand what mass shooting research sets out to accomplish, it must be mentioned how mass shootings compare in context to other violent crimes. The first issue to understand is the relatively rare nature of mass shootings in the overall crime and specifically violent crime context. In the most recent fully published Federal Bureau of Investigation's Uniform Crime Report (UCR) for 2016, a total of 9,167,220 crimes were reported to law enforcement in the United States. The majority of crimes are property crimes at 86.4%, contrarily violent crimes make up just a fraction at 13.6% of all crime reported (Crime in the U.S., 2016). The total number of violent crimes reported totaled 1,248,285; aggravated assault amounts to the majority of violent crimes at 64.3% (803,007). Homicide comparatively, comprises the smallest amount at 1.4% (approximately 17,250 crimes) of violent crimes and less than.0019% of all crimes for 2016 (Crime in the U.S., 2016)[14]. The 2016 UCR goes on to state that the long-term statistics demonstrate that the murder rate has been on an overall decline from 1997 to 2014[15], although from 2015 to 2016 the rate appears to have started on a slight upward trend (Crime in the U.S. 2016). This upward trend is upheld in the preliminary 2017 UCR statistics, as murder has risen approximately 1.5% since 2016 continuing the upward trend in murder percentage, but violent crime surprisingly has dropped.8% from 2016 (*Preliminary Semiannual Uniform Crime Report, January–June, 2017).*

The recent upward movement in murder statistics must not be confused with the long-term trends which paint a different crime picture. Examining the long-term statistics from the 2016 UCR report indicate that murder and especially violent crimes themselves are at a significantly lower rate from 20-year and even 10-year averages. The 20-year violent crime average from 1997–2016 is down

[14] Data is based on reported crimes to law enforcement agencies in 2016. The data does not include arrest or clearance rates of each crime. More data can be found at the 2016 FBI About Crime in the U.S. (CIUS) https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/cius-2016

[15] Violent crime in the United States peaked in the mid-1990's.

36.8% along with the overall murder rate which is down 22.1% in the same time period. Looking into the shorter term 10-year statistics from 2007–2016, violent crime has decreased 12.3% with murder rates down 6.0% as well[16].

What does the crime report mean?

These statistics are included in this article to disprove that the common myth that murders and mass murders are an everyday part of the United States culture. As much as media pushes the notion that crime is on the rise, the long-term statistics demonstrate a significant decrease in the last 20 years in violent crime rates. In a Congressional Research Service Report, Nathan James argues that the fluctuation of crime in recent years could be due to a newly surfaced phenomenon called the Ferguson effect. 'This theory suggests that in the wake of recent high-profile officer-involved deaths, the police have become reluctant to engage in proactive policing, thereby emboldening criminals' (James, 2015, p. 11). In this explanation for the increase, law enforcement is more cautious in the way they handle each situation for fear of accusations of racial profiling or targeting. Thus, creating a distrust between the community and the police causing tensions to boil over resulting in an increase in violent crimes. This theory could explain why the violent crime rates are swaying at the moment[17]. But, no matter what the reason for the slight rise in crime, the primary takeaway from the UCR should reflect that the violent crime rate in 2014 is at the lowest rate in since 1970 and the homicide rate is at the lowest since 1960 (James, 2015, p. 6).

Mass Shooting terminology difficulty

One interesting issue concerning mass shootings is how the terminology has developed. During this research, multiple different definitions have been found that will cause drastic differences in the results of each study. The definition controversy partially stems from the FBI in the 1980's determining a classification system to "aid law enforcement in investigation though criminal profiling and not statistical data collection purposes" (Ressler et al., as cited by Krouse &

[16] The Data is compiled from the FBI *Crime in the U.S. 2016* data UCR Report. Crime related statistics are in the context of per 100,000 inhabitants.

[17] The application of the Ferguson theory is still being studied as multiple plausible explanations exist for the increase in violent crimes/murders in the last 2–3 years.

Richardson, 2015, p. 11)[18]. Primarily, the distinction from the FBI was needed to differentiate long period serial killers from one-time event murderers (Morton et al., 2008, p. 17). The FBI later clarified a mass murder in a 2008 Report as,

> 'Generally, mass murder was described as a number of murders (four or more) occurring during the same incident, with no distinctive time period between the murders. These events typically involved a single location, where the killer murdered a number of victims in an ongoing incident' (Morton et al., 2008, p. 17)[19].

The FBI Definition of a Mass Murder is a starting point for all following mass shooter related terminology that are popularized in the media today (e.g. School shooter, Mall shooter, Rampage Shooter, Lone wolf etc.)[20]. Each one of these buzzword terms has been popularized in media reporting to attempt to categorize a rare event (i.e. mass shooting) for the public understanding. The term active shooter, on the other hand, was introduced by the Department of Homeland Security (DHS) in 2008 as part of a response guide to inform the public on how to respond to a mass shooting[21]. An active shooter situation is what the event is called during the action itself primarily for police response, opposed to a mass shooting which is the term used after the incident has taken place (Schildkraut & Elsass, 2016, p. 18). The distinction would be nominal, but as a mass shooting event is taking place the multitude of definitions is enough to overwhelm the public while the media is waiting for more information to report on as a situation evolves.

The definition issue does not stop at the media or law enforcement agencies, researchers themselves have difficulty finding a consensus on the best way to define a mass shooting although recent studies have started to become more consistent. The biggest issue throughout the research is the distinction between

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[18] To see more about the history of the changing definitions of mass murder see Chapter 2 of Schildkraut, J, & Elsass, J (2016) Mass Shootings: Media, Myths, and Realities and the Congressional Research Service Report from Krouse, J. William & Daniel, J. Richardson. (2015) *Mass Murder with Firearms: Incidents and Victims, 1999–2013.*

[19] Some examples for a Mass Murder using the 2008 FBI definition include the 1984 San Ysidro McDonalds incident in San Diego, California; the 1991 Luby's Restaurant massacre in Killeen, Texas; and the 2007 Virginia Tech murders in Blacksburg, Virginia as given in the FBI Report by Morton, Robert ed. et al. (2008) *Serial Murder: Multi-Disciplinary Perspective for Investigators.*

[20] The terminology as it relates to this paper: Crime → Property + Violent → Homicide Murder → Mass killing/ Mass Murder → Mass shooting → other terms such as active shooting, school shooting, mall shooting, lone wolf shooting, etc.

[21] Department of Homeland Security, Active shooter: How to respond. 2008 pdf

dead, injured, and potential targets[22]. As the FBI definition states "four or more" must be dead in order for it to be considered a mass murder. When applying this base definition to a mass shooting it does not consider injured or all other potential targets present at the time of the attack. The injured persons and other victims present at the attack could have easily been casualties but due to rapid response by first responders, active-shooter training, intervention of some kind, or just pure luck the total number of murdered decreased[23]. An example of an intervention occurring is shooting at 888 Bestgate Road in Annapolis, Maryland on June 28th, 2018. As reported by CNN, CNBC, NBC, and WTOP after the shooting was first called into 911 the first police officers were on scene in less than 60 seconds. Since the response was so quick, as Governor Larry Hogan stated in a WTOP interview "I think that the law enforcement that responded on the scene deserve a lot of credit…They got there within 60 seconds. They prevented further deaths" (Moore, 2018). Hypothetically, if a law enforcement officer just happened to be in the building at the time of the first shot, the death toll potentially could be zero[24]. And thus, this could have been an "attempted" mass shooting and not counted in mass shooting statistics even though the shooter had the motive to kill as many as possible, the ammunition, and with "170 people (in) the building" with the case of the Annapolis shooting (Silverman, DiGiacomo and Simon, 2018). But since this is just theory, the top-notch response by law enforcement personnel was the mitigating factor in reducing the death toll, as the quick response was able to catch the offender off guard.

The death toll criterion is not the only definition difficulty, multiple other areas need to be addressed, such as the location (e.g. indoor, outdoor, confined

[22] Consistent with a research article from Jason R. Silva & Joel A. Capellan (2018) titled the media's coverage of mass public shootings in America: fifty years of newsworthiness. On page 7–8 the methodology defined the issue of including "A death-toll criterion ignores random and systemic factors…that may impact whether or not a perpetrator seeking to become a mass public shooter actually becomes one" as cross referenced from the 2016 Schildkraut & Elsass Book.

[23] An example of an intervention would be of ten cases in Eugene Volokh's Washington Post article from 2015 titled Do citizens (not police officers) with guns ever stop mass shootings? In the article 9 out of 10 cases (one case meets the definition of a mass shooting of four or more killed) of potential death in each mass shooting were reduced or averted altogether due to intervention with a firearm. Note: The article was looking at the issue of if cases existed of citizens stopping a mass shooting with a firearm. Not all the 10 cases would have fully met the definition of a mass shooting as is, but had the ability to evolve into one given the opportunity.

[24] Another example of an issue with the four or more dead criterion is the situation of a shooter shooting down a hallway with 20 people in it. If the shooter misses every person, that would not be a part of the total casualties or noted in statistics even though they had the potential to kill 20, people but did not injure a single person.

space, physical address) which can change during a single mass shooting without qualifying it as a longer-term mass casualty event. There has been a consensus to include some sort of broader "public platform in a 24-hour time period" in the definition to help broaden the scope without adding too much ambiguity. Another issue is a mass shooting must not correlate with terrorism, gang-related activity, or organized crime. This distinction starts to get into the issue of the true motive behind the attack. Including those criminal activities inflates statistics with unrelated criminal activity. This issue was partly analyzed in a study done by Schildkraut and Elsass in 2016, out of 312 identified mass shootings, 46.8% of the shooter(s) were killed leaving 53.2% alive after their rampage. With a little less than half of all shooters dead after the rampage combined with the surviving shooters not always cooperating with the investigation, the nature behind each shooting may be speculated upon but the true reason why every shooting occurred will never be fully understood. Thus, the ideologically driven reason behind each mass shooting is difficult to differentiate and quantify between specific cases.

How do Mass Shootings fit in the public discussion?

Mass Shootings in the United States have become a hot selling, attention grabber of modern media culture and a very hotly debated topic with proponents of possible solutions in many different areas[25]. No matter the reasoning or solution, researchers must push past personal biases to produce the most reliable and trustworthy data to inform the public conversation. As it is becoming difficult to consistently put the data researched into the correct context for discussion[26], the purpose of this section is to inform on the research findings, definitions, data sets, and potential biases of the examined studies/databases.

Mass Shooting Tracker

Mass murder statistics fluctuate on the definition and bias of the author of the study or database as previously described. A prime example of this fluctuation

[25] E.g. education, gun control, preventive measures, mental health, debates on the application of amendments in modern times.

[26] Examples of incorrect usage of data or research include misuse of statistics to defend one's own political opinion or using one statistic in a media article with no background and information of the study. To learn how to use statistics properly see the resources at the end of the article.

is seen with a cursory search of the internet using the search parameters "mass shooting data" the website of Mass Shooting Tracker (MST) appears in the top results. This websites states before the data, reasons, or potential causes of mass shootings that it has been "featured (on) CNN, MSNBC, The New York Times, The Washington Post, The Economist and more" (Mass Shooting Tracker: About the Mass Shooting Tracker, 2013). The MST then states that it uses data from a volunteer group based in the forum centered website Reddit. To start the analysis, the Mass Shooting Tracker defines a mass shooting as,

> "We define a mass shooting to be an incident of gun violence in which 4 or more people are shot in a single shooting spree. This may include the Gunman himself, or police shootings of civilians around the gunman. We do not consider the motive of the shooter…We include the shooters death" (MST, 2013).

This definition is problematic as is pointed out in the 2016 book from Schildkraut and Elsass titled Mass Shootings: Media, Myths, and Realities, which states taking a relatively rare event i.e. mass shooting and combining said event with a vague definition, varied statistics will ensue that cause drastic differences as to the actual rates of mass shootings. This issue is seen in the Mass Shooting Tracker's database as the definition used states it does not differentiate between motive. Without the motive differential, it includes all gang-related, organized crime, and terrorism influenced or related attacks. These other criminal acts are important to study, but they have no influence on mass shootings as they are ideologically different and must be treated as such[27].

Since this data is compiled from nonspecific volunteers from Reddit, the bias of the reporting must be taken into consideration which is noted in the 'About the Mass Shooting Tracker' section. It states that the "primary purpose of the database is to include all deaths and injuries of mass shooting events that would otherwise go unnoticed" (MST, 2013). The study has further, anti-gun leanings as further on they mention "punching a hole in the NRA argument that if mass shootings are televised, more mass shootings will occur via copycats" (MST, 2013). Since the MST openly admits that it opposes all gun related deaths, reasonably one would assume that since the definition is so broad the statistics would be higher compared to other studies.

[27] Grouping all of these criminal activities together is important for overall crime rates to see long/short term trends. But it is counterproductive to group all crime together and search for a solution without understanding why each type of crime occurs.

Now to the actual statistics, from 2013 to the date that the website was accessed for this research article on July 6th, 2018, the MST database has cataloged 2,153 cases of mass murder in the United States totaling 2,770 murders and 8,322 injured. The number of cases, murdered, and injured people in the database are visibly high compared to other studies on mass shootings, which will be compared later in the article. The database includes the shooter's deaths in the murdered statistics which artificially inflate the rate. Although the website does not state if the shooter's injuries are included in the statistics, logically the shooter's injuries would be included in the statistics due to the tone of the website as an anti-gun awareness platform thus increasing the numbers further. The MST, however, does state in the definition that it includes police shootings of civilians around in response to the shootings, but it does not state if the police deaths/injuries related to the shooting are included. With all these unknown extra factors that are thrown in to boost the overall numbers, the boasting of multiple media sources using the website, and the ominous nature of the publishers, the ability to claim a reputable non-bias study that informs the public on mass shootings diminishes with examination.

The Media's disproportionate coverage of Mass Shootings

Studies on Mass Shootings have started to investigate the media coverage of these events to try to inform the public on the skewed media coverage. Since studies have a difficult time conforming to a single definition and as these events still occur the total number of mass shootings will vary with each study. One of the most recent studies, Mass Shootings: Media, Myths, and Realities by Schildkraut and Elsass in 2016, studied the relationships between identified mass shootings, common stereotypes, media coverage associated with the stereotypes and the changing nature of the field of study associated with mass shootings. In the book, a considerable amount of research was dedicated to showing how the definition of mass shooting events have evolved and continue to change[28]. In the book after much contemplation, the definition of a mass shooting is as follows,

> "[a]n incident of targeted violence carried out by one or more shooters at one or more public or populated location(s). Multiple victims (both injuries and fatalities are included) are associated with the attack, and

[28] For more of the history of the definition see Chapter 2 in Media, Myths, and Realities by Schildkraut and Elsass (2016).

> both the victims and location(s) are chosen either at random or for their symbolic value. The event occurs within a single 24-hour period, though most attacks typically last only a few minutes. The motivation of the shooting much not correlate with gang violence or targeted militant or terroristic activity." (Schildkraut & Elsass, 2016).

Using this definition, the first mass shooting in the study occurred in 1880 with 306 mass shooting events identified as of 2014[29]. Some of the stereotypes that were brought up involved the standard of "young white males brandishing assault rifles who commit suicide after their attacks" (Petee et al., 1997, as cited by Schildkraut & Elsass, 2016). The study used the research data to disprove, among other things, the exclusivity of these claims in attempt to demonstrate the bias of the media coverage. In the research, the main goal was not only to disprove each one of the three "standards" but to caution the media and public in both describing a mass shooting as an "outlier" or a so called "usual" case. Both terms cause confusion of the actual mass shootings rates when rapidly interchanged during the public reporting and conversation encompassing mass shootings.

In each case of gun violence, the initial reaction is to either group it into a "textbook incident" which would receive less attention by the general public/media or describe it as an outlier attack which will receive increased public attention. In a 2017 a follow up study by Schildkraut, Elsass, and Meredith the hypothesis examined was to determine which incidents received the most coverage within articles in the New York Times. According to Chermak (1995) as cited by Schildkraut, Elsass, and Meredith (2017),

> "newsworthiness may be assessed based on five criteria – the violent nature of the crime, demographic nature of the victim and offender (such as age, gender, race, and occupation), characteristics of the news agency, the uniqueness of the event, and the event's saliency" (p. 4).

These characteristics defined by Chermak are evident in the research results that identified from 90 mass shootings from 2000–2012 using the 2016 Mass Shooting: Media, Myths and Realities definition[30]. The study collected only

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[29] To see all of the findings of the study, see Chapter 4 in Mass Shootings: Media, Myths, and Realities by Schildkraut and Elsass (2016).

[30] Only 90 mass shooting are identified in this study, due to only analyzing the New York Times database with strict qualifiers. And to determine how high-profile mass shootings, specifically The Columbine High School Shooting, had affects on media coverage. More on Pg. 10 of Schildkraut, Elsass, and Meredith 2017.

stories and editorials for a lifespan of 30 days after each of the 90 incidents (Schildkraut, Elsass, and Meredith, 2017, p. 10). One of the most interesting findings states that the 10 most important cases "account for 70% of the total number of articles printed (in the study), as well as 75% of the total number of words written" (Schildkraut, Elsass, and Meredith, 2017, p. 11). The cases with the top coverage included the Sandy Hook Elementary School Shooting (2012) and the attempted assassination of Gabrielle Giffords (2011) with 130 and 89 articles respectively (Schildkraut, Elsass, and Meredith 2017: p. 12). In the study, the goal was to determine which of the most important factors would include or exclude extensive media coverage of a mass shooting[31]. The research results can be seen below.

Coverage of mass shooting incidents by perpetrator and event characteristics

	Actual incidents	
	N	Percent off incidents
Shooter gender		
Male *	85	94,4
Female	5	5,6
Shooter age		
17 and younger	9	10
18–24	19	21,1
25–35	16	17,8
36–50	32	35,6
51 and older	14	15,6
Shooter race / ethnicity		
White *	52	57,8
Black	18	20
Hispanic	10	11,1
Asian	5	5,6
Other	5	5,6

[31] The sample population of the study was small with only 90 events included in the study from the time period 2000–2012. This study excluded the 1999 Columbine School shooting, in the attempt to show how the public perception and news coverage of these events has changed (Schildkraut, Elsass, and Meredith 2017: p. 7).

Shooter dead		
Yes	50	55,6
No *	40	44,4
Total victims **		
2–5	33	36,7
6–9	33	36,7
10 or more	24	26,7
Median income		
Less than $55,000	10	11,1
$55,000–$59,999	13	14,4
$60,000–$64,999	17	18,9
$65,000–$69,999	16	17,8
$70,000–$74,999	16	17,8
$75,000 and greater	18	20
Location(region)		
Northeast	11	12,2
South *	25	27,8
West	27	30
Midwest	27	30
Location		
School *	26	28,9
Workplace	21	23,3
Restaurant/club/bar	8	8,9
Mall	7	7,8
House	5	5,6
Other	23	25,6

Note: Variable frequency percentages for actual incidents by category may not total to 100% due to rounding error.

* Reference category
** Total victims represents the aggregate of the number of people killed and wounded in the shooting.

(Schildkraut, Elsass, and Meredith, 2017, p. 9)

In 2018, a study from Silva and Capellan expanded on the conclusions of Schildkraut, Elsass, and Meredith in 2017. The study specifically looked at which casualties, locations, and ethnic factors would increase the predictors of coverage by the media. Using a 50-year time period from 1966–2016, 314 mass shootings[32] were identified. Out of all cases, the most used firearm with 54.7% of mass shootings is the handgun alone, the shooter had some sort of relationship with the victims 61% of the time, and the most common location is a business with 36.4% followed by schools at 26.7% (Silva & Capellan, 2018, p. 10). These findings are consistent with other research studies, especially the firearm used and the location of the shooting[33]. Disclosure: the study does include non-state sponsored ideologically driven shootings such as the Orlando, Florida Night Club Shooting and the San Bernardino, California Shooting[34].

The 1999 Columbine High School Shooting was the most covered event with 503 articles and 503,269 words. Columbine had double the articles and total words of the second most covered event, the 2012 Sandy Hook Elementary School Shooting that had 248 articles and 253,036 total words (Silva & Capellan, 2018, p. 11). These two shootings are synonymous with mass shootings due to the unexpected factor in both of them specifically the elaborate, movie-like, nature of the Columbine Shooting and the preparation that Sandy Hook took to prevent a mass shooting event from happening. Both of these events garnered immense media fueled attention and public outrage which helped shape new media procedures and laws in an attempt to prevent more mass shootings.

The media coverage of mass shootings is not only skewed to the top two stories in the study, as the top 15 news generating mass public shootings received 68% of the total articles written and 71% of total words written of the entire 314 cases identified (Silva & Capellan, 2018, p. 11). As Silva and Capellan put it "Less than one-half of a percent of these incidents drive the information and consequently our understanding of these incidents" (p. 11). With such a small percentage of incidents talked about consistently on a public platform, the

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[32] A mass public shooting is defined in this study as "An incident of targeted violence where an offender has killed or attempted to kill four or more victims on a public stage. In line with current research…three more elements were added to this definition: (1) it could involve more than one offender at multiple related locations within a 24-hour time period; (2) the main weapon had to be a firearm; and (3) the shooting was not related to state-sponsored or profit driven criminal activity" (Silva & Capellan 2018: p. 7).

[33] Consistent with (not 100% conclusive) 2016 Schildkraut & Elsass, 2017 Schildkraut & Elsass & Kimberly, 2018 Silva & Capellan, and the 2014 Blair & Schweit studies on mass shootings.

[34] More on why these cases are included can be found on p. 7–8 of Silva & Capellan, The media's coverage of mass public shootings in America: fifty years of newsworthiness.

overall picture and context of these events gets lost. To effectively report on mass shootings in the media, each event must not be thought of as an outlier and reported on as a freak incident (e.g. Columbine and Sandy Hook) that "no one saw coming" or grouped in to the "average incident" and only used in statistics to boost the findings of each report[35]. The top 15 news producing mass shootings are below with the 1966 Texas Tower shooting surprisingly making number 15[36].

Fifteen most news producing mass public shootings

Incident	Year	Total articles	Specific articles	General articles	Total words	Specific words	General words
Columbine High School Shooting	1999	503	127	376	503,269	113,612	389,657
Sandy Hook Elementary School Shooting	2012	248	45	203	253,036	44,985	208,051
Colorado Theater Shooting	2012	212	78	134	210,877	61,391	149,486
Tucson Shooting	2011	207	96	111	209,060	92,696	116,364
San Bernardino Shooting	2015	206	16	190	240,723	22,323	218,400
Virginia Tech Shooting	2007	198	83	115	208,595	62,890	130,069
Orlando Night Club Shooting	2016	175	41	134	192,959	50,681	157,914
Charleston Church Shooting	2015	161	50	111	208,336	52,883	150,453
Fort Hood Shooting	2009	159	73	86	162,288	53,418	108,870

[35] In the 2018 Silvia & Capellan study found that 28% of cases did not receive national coverage and 50% of cases received less than 4 stories (p. 11). In the 2017 Schildkraut & and Elsass found similar results, 23% of cases did not receive coverage and two cases with victim counts over 10 did not receive media coverage at all.

[36] The Texas Tower Shooting is widely regarded as the first wave of increased media attention on mass shooting. Just like The Columbine High School Shooting in 1999 and the Sandy Hook School Shooting in 2012.

Incident	Year	Total articles	Specific articles	General articles	Total words	Specific words	General words
Long Island Rail Road Shooting	1993	106	87	19	98,957	69,380	29,577
Westside Middle School Shooting	1998	77	21	56	83,363	25,566	57,797
CIA Headquarter Shooting	1993	46	20	26	41,576	12,893	28,683
Brooklyn Bridge Shooting	1994	40	33	7	31,741	26,309	5,432
Washington Navy Yard Shooting	2013	35	13	22	41,789	14,842	26,947
Texas Tower Shooting	1966	32	9	23	41,364	83,00	33,064

(Silva & Capellan, 2018, p. 11)

The coverage of mass shootings fluctuates depending on other factors. For example, more than 90 percent of mass shootings were covered if the shooter is Middle Eastern, ideologically motivated, involved a religious location, or had four or more killed in the attack (Silva & Capellan, 2018, p. 12). More than 80 percent of stories are covered if the shooter's age is 20 or less, the shooting is carried out against strangers, the shooter used a combination of weapons, is located in a school or open space, injured victims are more than four, or the attack occurred in the northeast (Silva & Capellan, 2018, p. 12).

In the next two charts, the first demonstrates the percent of incidents based on basic variables of mass shootings and the next chart demonstrates the media coverage of each variable in the parameters of articles and words written. All of the variables that have high coverage rates are hot sellers in news stories. They are very easy to publish as headline articles that have a catchy title in an attempt to draw from a larger pool of consumers.

The dangerous part of putting mass shootings or any news in a quick 10-word summary is the overall context and purpose gets traded for views. This is seen particularly with the variable of a Middle Eastern Shooter among others. If a Middle Eastern Shooter was a variable, 90% of cases were covered even though they only make up 3.4% of all mass shooting cases (Silva & Capellan, 2018, p. 10,12). Not only did Middle Eastern shooters have a high coverage percentage, but the mean total number of articles and words written about each average case was more than double any other variable (Silva & Capellan, 2018, p. 12).

Suggesting that if a Mass Shooting case involves a Middle Eastern shooter the case will receive disproportionate media stories. This can be seen with such shootings as the Orlando, Florida Night Club Shooting in 2016 and the San Bernardino, California Shooting in 2012.

Basic characteristics of mass public shootings, 1966–2016

	N	Percent off incidents
Male	307	96,5%
Age	318	35 (Avg.)
Race		
White*	193	60,6%
Black	67	21,0%
Latino	25	7,8%
Asian	12	3,7%
Middle Eastern	11	3,4%
Confirmed/suggested mental illness	138	43,7%
Relationship		
Strangers	124	38,9%
Relationship with victims	194	61,0%
Ideologically motivated	43	13,5%
Type of weapon(s)		
Handgun	174	54,7%
Shotgun	26	8,1%
Rifle	37	11,6%
Combination	72	22,6%
Location		
Business	116	36,4%
Government	41	12,8%
School	85	26,7%
Religious institution	12	3,7%
Open space	38	7,8%
Conclusion		
Arrested	145	45,9%
Killed	53	16,6%
Suicide	119	37,4%

	N	Percent off incidents
Death toll	318	3.3 (Avg.)
Injured victims	318	4,2 (Avg.)
Location(region)		
Northeast	56	17,6%
South*	35	11,0%
West	129	40,5%
Midwest	98	30,8%

(Silva & Capellan, 2018, p. 10)

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In the end, precautions must be taken to prevent mass shootings, but these precautions must not drastically alter everyday life since these shootings are so rare to begin with. The ability to be vigilant of common place interactions to look for abnormalities cannot be understated for a plethora of reasons including mass shootings. Media coverage of mass shootings must also be consumed with a grain of salt in general, but especially when details are vague or emerging. It is the media's responsibility to report the events to the public, but they may accidentally (or purposefully) sensationalize the coverage. But that should not discourage coverage of mass shootings or possible solutions since as new coverage campaigns such as "names no names" emerge to call ethical journalism principles in to question.

Media coverage by characteristics of mass public shootings

	Percent covered	Mean no. Articles	Mean no. Specific articles	Mean no. General articles	Mean no. Words	Mean no. Specific Words	Mean no. General words
Female	**63.3**	**4.5**	**2.6**	**1.9**	**3613.8**	**2131.4**	**1482.4**
Male	73.2	11.3	5	6.3	11,464.9	4179.9	7284.9
Age							
20 or less	81.8	16.2	5.6	10.6	16,128.5	4168.8	11,509.6
21–40	75.1	15	6.6	8.3	15,831.5	5,805.8	10,025.9
41–59	66.6	3.63	2.48	1.14	3,276.8	1,934.3	1342.5
over 60	57.8	3.4	2.4	1	2380.2	1524.3	855.8
Race							
White	74.3	11.4	4.9	6.5	11,408.5	4116.8	7291.6
Black	73.1	4.8	3.4	1.3	4638.1	2837.7	1800.4
Latino	60	1.9	1.1	0.7	1809.9	854.0	955.9
Asian	75	19.5	9.5	10	19,105.0	7139.9	11,965.1
Middle Eastern	90	70.3	21.9	48.4	75,834.2	20,070.4	55,763.8
No known mental illness	72.8	5.5	2.8	2.8	5716.1	2282.5	3433.5
Mental illness	72.4	18.4	7.8	10.5	18,376.2	6496.5	11,879.6
Stranger	81.1	15.5	7.2	8.3	15,866.4	6324.2	9542.1
Relationship with victims	67.5	8.4	3.5	4.8	8300	2721.3	5578.7
Non-ideologically motivated	70.2	7.9	3.5	4.3	7680.9	2777.3	4903.5

	Percent covered	Mean no. Articles	Mean no. Specific articles	Mean no. General articles	Mean no. Words	Mean no. Specific Words	Mean no. General words
Ideologically-motivated	90.5	34.5	14.8	19.7	36,850.1	13,676.3	18,482.0
Type of weapon(s)							
Handgun	68.9	9.3	4.6	4.6	9197.7	3792.0	5405.7
Shotgun	57.6	2.6	1.6	1	2558.8	1267.1	1291.6
Rifle	72.9	7.1	3.8	3.3	7042.3	2982	4060.4
Combination	89.8	22.3	7.8	14.4	23,088.1	6967.4	16,120.7
Location							
Business	61.7	5.6	2.7	2.8	5481.3	2172.4	3308.8
Government	75.7	16	6.1	9.9	16,594.5	5088.2	11,506.3
School	80	16.1	5.9	10.2	15,795	4713.7	11,081.2
Religious institutions	91.6	20.7	8.08	12.6	24,156.2	7836.8	16,319.4
Open Space	84.2	13.8	8.6	5.2	13,861.8	7581.3	6280.5
Conclusion							
Arrested	69.8	10.5	5.5	4.6	9911.4	4284.7	5626.6
Killed	76.9	12	3.8	8.1	13,740.3	3819.7	9920.57
Suicide	74.7	12.1	4.8	7.2	11,774.9	4052.4	7722.4
Death toll							
3 or less	61.9	3.2	2.2	1	2909.2	1573.4	1335.7
Over 4	95.2	27.3	10.5	16.8	28,319.5	9346.5	18,972.9

Injured victims							
3 or less	65.6	4.6	2.3	2.2	4484.4	1842.4	2642.3
Over 4	84.9	22.8	9.5	13.3	23,256.08	8,174.6	15,081.4
Region							
Midwest	76.7	3.2	2.5	0.76	2664.7	1649.7	1015
Northwest	88.5	16	8.4	7.6	14,885.2	6995.0	7890.2
South	70.5	10.8	4.8	5.9	10,795.7	3979.7	6815.9
West	67.3	15.2	5.4	9.7	15,550	4709.7	10.840.2

(Silva & Capellan, 2018, p. 12)

Final Thoughts

Understandings of mass shootings are shaped by the media coverage and research data that is the backbone of public and political discussion. One of the biggest problems is the ability to place mass shootings into the proper context of the overall crime spectrum. Crime news is often cut up and used against the publishing bodies' desire to push pre-decided political or personal agendas. Mass shooting studies have felt pressure to have a consistent research base as they have started to similarly define a mass shooting. This consistent research base is still a work in progress as divergent thoughts of what to include in the mass shooting definition as well as the plethora of other mass shooting related terminology causes confusion in the public debate. The research results comprised by research studies and federal agencies were included in this paper to show the difference/similarities between researchers, data sets, and common stereotypes associated with mass shootings.

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End Notes

This article was created to demonstrate the differences between mass shooting studies and is not exclusive as only the reports that pertained to the research topic were included. Not every study was referenced. The recent high-profile Las Vegas Mandalay Bay Mass Shooting is only included in the Mass Shooting Trackers Database results as no empirical research is published as of the writing of this article.

The terminology from largest to smallest as it relates to this paper: Crime → Property + Violent → Homicide → Murder Mass killing → Mass Murder → Mass

shooting → other terms such as active shooting, school shooting, mall shooting, lone wolf shooting, etc.

United States crime data can be found in the FBI UCR report published annually. This report is the most accurate source for all modern trends in crime. https://ucr.fbi.gov/

To learn more about how to ethically read statistics one may visit the 2018 report prepared by the Committee on Professional Ethics of the American Statistical Association. http://www.amstat.org/ASA/Your-Career/Ethical-Guidelines-for-Statistical-Practice.aspx