

A CONTENT ANALYSIS OF THE REPORTED INFORMATION IN ONLINE NEWS
REPORTS ON MASS SHOOTERS

by

Jacqueline Eugenia Lenselink-Cedeño

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Approved by:

Dr. Janne Gaub

Dr. Sungil Han

Dr. Michael Turner

ABSTRACT

JACQUELINE EUGENIA LENSELINK-CEDENO. A Qualitative Study of the Reported Information in Online News Reports on Mass Shooters. (Under the direction of DR. JANNE GAUB and DR. SUNGIL HAN)

The rates of mass shootings in the United States have substantially increased in the last couple of decades. Mass media news networks are the first sources to announce reported mass shootings to the general public, but scholars have identified that news articles will commonly discuss information about the perpetrators and not cover as many details related to the outcomes of mass shooting events. Using a content analysis approach, this study investigated the content discussed in online news articles of mass shooting incidents. In addition, this study looked at the distinctions between the information that right-leaning, left-leaning, and centrist news sources report on mass shooting events. The three categories with the most coverage were 1) perpetrator, 2) victims, and 3) context of incident, but the majority of coverage on victims only reported the number of victims killed and wounded. The content that politically biased and unbiased news organizations focused on had varied based on the categories and variables within. Theoretical implications of this study show that the results were consistent with Ruggiero's (2000) uses and gratification theory. Policy implications of this study show consistency with previous literature on the need to address limitations on the extent of categories discussed.

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DEDICATION

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CHAPTER 1: INTRODUCTION

Mass shooting occurrences in the United States have been a cause for concern since the mid-1990s with a continuous slight rise in casualties throughout the years (DiMaggio et al., 2019; Lin et al., 2018). These crimes as a social phenomenon have provoked a lot of discussion and debate among civilians as they have been perceived as happening more commonly. Considering some of the highly notorious mass shooting cases in American history (i.e., Las Vegas Strip, Orlando Pulse nightclub, and the Uvalde school shooting), such events are prime examples of what has been left for their respective communities and American society as a whole. Traumatized victims, American civilians feeling vulnerable, and activist groups coming together to fight for stronger preventative regulation against gun violence. With a steadily increasing rate of mass shootings in the United States, news agencies and the general public pay more attention to the issue than ever before.

In modern society, news reports of mass shootings spread to the general public quickly and efficiently. As concerns about mass shootings grow more prevalent, media outlets, including news sources, feature mass shooting incidents on their cover pages. This practice attracts increased public attention by focusing on stories designed to boost interest (Fox et al., 2021). Another critical concern regarding news reports on mass shooting events is the potential for politically oriented bias. A large volume of studies has highlighted the existence of political bias in the media (Bernhardt et al., 2008; Chapman, 2021; Dreier et al., 2022; Duxbury et al., 2018; Lazaridou & Krestel, 2016; Morris, 2007; Weatherly et al., 2007; Zheng & Scardino, 2021). Scholars have addressed that news outlets contain the power to influence public opinion, and thus, the language used to demonstrate political bias is concerning, especially when news agencies report incidents of mass shootings

(Dreier et al., 2022; Duxbury, Frizzell, & Lindsay, 2018; Schildkraut et al., 2018; Zheng & Scardino, 2021).

Taken together, assessing how mass shooting events are portrayed in the media with respect to perpetrator and political bias is imperative. This study will use content analysis to assess the focus of media reports from familiar news outlets, including an assessment based on political leaning of the outlet. As such, news articles that cover mass shooting events will be the unit of analysis and the sampling approach for the reported incidents and media news agencies will be chosen using purposive sampling. Moreover, a random sampling approach will be used to select the eligible articles for the analysis. The top five occurrences within the last 10 years based on total number of people killed and victims altogether will be selected [e.g., Las Vegas Strip (2017), Orlando Pulse nightclub (2016), Sutherland, Texas Baptist Church (2017), Uvalde, Texas Robb Elementary School (2022), & El Paso, Texas Walmart (2019)]. To do this, 12 mainstream news outlets will be selected based on their reported stance of political bias (e.g., left-leaning, centrist, and right-leaning; Ad Fontes Media, 2024). A total of 174 online news articles (n=174) from five different mass shooting incidents across 12 news platforms will be selected for the analysis. Using this data, the study aims to examine the type of information covered in online news reports of mass shootings and the differences in reported information based on political stance.

CHAPTER 2: LITERATURE REVIEW

2.1 Defining Mass Shootings

Contemporary literature on gun violence has noted that research specifically focusing on mass shootings is complex (Metzl et al., 2021; Porfiri et al., 2019; Reeping et al., 2020). Due to the lack of a universal definition of a mass shooting, researchers in this area have faced difficulty conceptualizing mass shootings (Booty et al., 2019; Dries, 2023; Greene-Colozzi & Silva, 2022; Hunter et al., 2021; Kim et al., 2021; Taylor, 2019). The general public often assumes that mass shootings occur when a large number of individuals become victimized from one or multiple shooters (Kleck, 2009; Lowe & Galea, 2017; Schildkraut & Elsass, 2016). There are also a handful of miscellaneous definitions used by independent scholars and research centers (e.g., Blackman & Baird, 2014; Schildkraut, 2021); however, both the U.S. government and the Gun Violence Archive have developed nuanced definitions that are more consistently used by mass shooting researchers (Capellan & Silva, 2021; Schildkraut, 2021). The Department of Justice, Office for Victims of Crime, Federal Bureau of Investigation, Congress, and the Violence Project Database all use the same working definition of mass shooting, which includes more detail than the Gun Violence Archive's definition in terms of the location(s) and timelines of an active mass shooting event. Their definition indicates that a mass shooting event is:

A multiple homicide incident in which four or more victims are murdered with firearms—not including the offender(s)—within one event, and at least some of the murders occurred in a public location or locations in close geographical proximity (e.g., a workplace, school, restaurant, or other public settings), and the murders are not attributable to any other underlying criminal activity or commonplace circumstance (armed robbery, criminal competition, insurance fraud, argument, or romantic triangle). (Peterson et al., 2022, as cited in Krouse & Richardson, 2015, p. 10)

Alternatively, the Gun Violence Archive—a private database funded by the Department of

Justice—created their own definition for mass shooting events in America:

Mass Shootings are, for the most part, an American phenomenon. While they are generally grouped together as one type of incident they [sic] are several different types including public shootings, bar/club incidents, family annihilations, driveby, workplace and those which defy description but with the established foundation definition being that they have a minimum of four victims shot, either injured or killed, not including any shooter who may also have been killed or injured in the incidents. (Gun Violence Archive, 2024).

There are notable contextual differences between the two definitions. For example, the definition used by the Gun Violence Archive states that any type of gun violence-related incident with a minimum of four individuals killed or injured is to be classified as a mass shooting, regardless of the location; conversely, the definition used by the government requires the incident to occur in a private setting. As a result, the Gun Violence Archive Database includes a higher number of reported cases, and studies using this definition will produce substantially different results than those using the definition from the U.S. government.

Booty and colleagues (2019) delve deeper into these distinctions in their evaluation of the uses of various mass shooting definitions. First, they note that there was a substantial difference when calculating the number of mass shootings in 2017: The government's definition only accounts for 11 mass shootings, whereas the Gun Violence Archive's definition accounted for 346 mass shootings. Given this substantial difference, Booty and colleagues (2019) note that researchers and media platforms can choose which definition they use, which affects the different statistics provided online and in research studies. They also highlight that sources providing different statistically substantial rates of mass shootings show a serious indication of bias due to their statistics only being valid from the Gun Violence Archive's perspective and not the federal government's perspective (Booty

et al., 2019). Given that differences in statistics of mass shooting occurrences are found to result from the definition used, Booty and colleagues (2019) suggest that there needs to be a consistent definition used in order for there to be eventual intervention mechanisms.

The research base on mass shootings also varies in terms of the preferred definition. Some researchers rely on the Gun Violence Archive's definition to promote more inclusivity of mass attacks by firearm (e.g., Callcut et al., 2019; DiMaggio et al., 2019; Gobaud et al., 2023; Vargas et al., 2020). Far more, however, use the government's definition of mass shootings in order to provide reliability on what the government considers to be applicable in mass shooting research (Greene-Colozzi & Silva, 2022; Huff-Corzine & Corzine, 2020; Lankford, 2016; Lankford et al., 2019; Schildkraut, 2014; Schildkraut et al., 2018; Silva, 2022). Researchers of mass shootings have addressed the importance of providing a clear, narrow definition of what casualties can be considered when investigating this subject matter, which various scholars have chosen the U.S. government's definition for such reason (Booty et al., 2019; Greene-Colozzi & Silva, 2022; Huff-Corzine & Corzine, 2020; Lankford, 2016; Lankford et al., 2019; Schildkraut, 2014; Schildkraut et al., 2018; Silva, 2022). In addition, experienced scholars suggest that it is crucial for mass shooting research studies to be consistent with each other on the conceptualization used (Beard et al., 2019; Lankford, 2016; Lopez et al., 2020). As such, this study will use the government's definition when considering events for inclusion in the dataset.

2.2 Media Coverage of Mass Shootings

Scholars have addressed that mass media companies often post reports of mass shooting events that heavily pertain to the suspected perpetrator(s) themselves, including

their identity, background, physical characteristics, type of clothing worn, belongings used at the time of the incident, and their committed actions during the attack (Dahmen, 2018; Lankford & Madfis, 2018). Some studies that address the victims of mass shooting incidents being reported have found that although some national news agencies will post the pictures, names and brief descriptions of victims, they generally take longer to post about the victims than reporting the perpetrator(s) and known facts about the incidents (Dahmen, 2018; Fox et al., 2021; Murray, 2017; Schildkraut, 2019). More specifically, news agencies do not only have more efficient access to information on the perpetrator(s) and facts of the incidents and not as much on the victims, but these studies have discussed that various news outlets are quick to report about the perpetrator(s) and then do not report anything on the victims or the aftermath at all (Dahmen, 2018; Schildkraut, 2019). For instance, in an analysis of media coverage on the Columbine and Parkland shootings by Durosky and colleagues (2023), they found that national-level news articles reporting information on the perpetrator(s) surpassed those focusing on the victims. Moreover, Durosky and colleagues (2023) pointed out that national-level news articles focusing on the Columbine shooters had a total of 397 reports, while the news articles focusing on the victims of Columbine reached 81 total reports. For the Parkland shooting, a total of 282 national-level news articles focused explicitly on the perpetrator, while 49 articles reported information on the victims. Their overall findings discuss that for national-level news coverage on the Columbine shooting, the total perpetrator-to-victim ratio on referenced news articles was 5:1, while the perpetrator-to-victim ratio for the Parkland shooting was 6:1 (Durosky et al., 2023).

Moreover, scholars have argued for drastic changes in how media outlets report the facts of a mass shooting event, because the media's discussion of mass shooters can

inadvertently serve as a catalyst for future high-risk individuals contemplating acts of violence in two ways (Dahmen, 2018; Fox et al., 2021; Murray, 2017; Schildkraut, 2019). First, sensationalized reporting, often focusing on the individual and the details of the event, can inadvertently provide a platform for those seeking notoriety or a sense of power through violence, thereby contributing to the very motives that are considered the root of mass shooting casualties (Lankford, 2016; Dahmen, 2018; Hume & Perreault, 2022; Peterson et al., 2023). By amplifying the actions and identities of mass shooters, media coverage unintentionally fulfills the perpetrators' desire for attention, potentially inspiring others who seek similar recognition. Second, the media inadvertently disseminates information that may be attractive to those with devious intentions by providing extensive coverage of the motives, methods, and outcomes of past incidents (Dahmen, 2018; Hume & Perreault, 2022; Lankford, 2016; Peterson et al., 2023). This dissemination of details can contribute to the formation of a morbid fascination and a distorted sense of magnitude around the perpetrators, potentially inspiring emulation. The risk lies not only in the explicit information shared but also in the psychological impact of continuous exposure, which may create a perverse form of recognition for those seeking notoriety through violent means.

Consequently, there is a critical need for media outlets to approach coverage with a heightened awareness of the potential consequences, carefully considering the fine line between informing the public and unintentionally glorifying perpetrators or providing a blueprint for those who may be inclined towards violent actions. Addressing this issue requires nuanced approaches to reporting that prioritize public safety while minimizing the unintended consequences of both rewarding violent behavior with attention and influencing future high-risk individuals.

2.2.1 Implicating Factors

Research examining the impact of public perception stemming from online news reports on mass shootings underscores the influential role media plays in shaping societal understanding and responses to these tragic events. Smith and colleagues (2018) and Johnson (2020) are scholars that have explored how online news coverage can contribute to the formation of public attitudes, beliefs, and fears surrounding mass shootings. The sensationalization and framing of these incidents in news reports have been shown to influence the public's perception of the prevalence and severity of such events (Williams & Hensley, 2021). Additionally, Thompson and McGee (2019) highlight the potential for media portrayal to impact the emotional feelings and negative attitudes of the public. Moreover, they identify that political bias in news outlets may contribute to prejudicial beliefs among civilians based on the content that is covered (i.e., the perpetrated individual, accessibility to guns, security measures in the setting in which a mass shooting takes place, response mechanisms by first-responders).

2.3 Political Bias in Media Coverage

There is sufficient research that focuses on the general scope of political bias among many news agencies, by which several studies have agreed that bias does exist in news reports (Chiang & Knight, 2011; Coffey, 1975; Eisinger et al., 2007; Eveland & Shaw, 2003; Hackett, 1984; Hamborg et al., 2019; Lazaridou & Krestel, 2016; Rodrigo-Ginés et al., 2023; Spinde et al., 2020). In addition, scholars who have looked into political bias in news reports (e.g., Chiang & Knight, 2011; Coffey, 1975; Eisinger et al., 2007; Eveland & Shaw, 2003; Hackett, 1984; Hamborg et al., 2019; Lazaridou & Krestel, 2016; Rodrigo-Ginés et al., 2023; Spinde et al., 2020) mutually argue that the type of information emphasized in news articles can indicate whether they favor left-leaning or right-leaning

political stance, particularly with articles focusing on politics or current events as their main ideas. One publication that stands out is Rodrigo-Ginés and colleagues' (2023) article discussing how to tell whether there is political bias in the wording used by news agencies. Rodrigo-Ginés and colleagues (2023) share that existing media bias in written content can be detected by using one of several methods, including machine learning techniques, detail on reported speech (i.e., content or narrative analysis), deep learning approaches (i.e., semantic and feature learning), or a mix between machine learning and interpreted analysis. Specifically referring to reported speech data, they identified that content analysis is beneficial for analyzing the context of information provided in order to achieve an in-depth understanding of when biased language is used (Rodrigo-Ginés et al., 2023). Though various studies (e.g., Chiang & Knight, 2011; Coffey, 1975; Eisinger et al., 2007; Eveland & Shaw, 2003; Hackett, 1984; Hamborg et al., 2019; Lazaridou & Krestel, 2016; Rodrigo-Ginés et al., 2023; Spinde et al., 2020) do not explicitly focus on one topic discussed in news articles, they provide a general overview of why and how various news agencies default to biased assumptions in a wide range of events to post about.

Literature on media bias finds that news outlets depict different ideas based on political stance (Bernhardt et al., 2008; Chapman, 2021; Dreier et al., 2022; Duxbury et al., 2018; Lazaridou & Krestel, 2016; Morris, 2007; Weatherly et al., 2007; Zheng & Scardino, 2021). For instance, Lazaridou & Kestrel (2016) analyzed the differences of content published in two major news outlets from the United Kingdom (i.e., The Guardian and The Telegraph) and suggested that political favoritism can be detected through the information provided and whether it discusses one political side's views over the other. Moreover, Weatherly and colleagues (2007) analyzed the information provided in news reports from two major news agencies in the United States, CNN and Fox News. With CNN being

considerably left-leaning and Fox News being right-leaning, they determined that the news article headlines from CNN were generally more biased with left-leaning favoritism, while headlines from Fox News articles were mixed between right-leaning bias and neutrality, depending on the subject matter (Weatherly et al., 2007).

Various research studies have also identified political stance among news agencies in criminological-specific topics, such as stronger gun laws, firearm regulation, assault weapon bans, mental illness among criminals, capital punishment, prison sentencing, and policy initiatives (Alder, 2016; Besley & Case, 2003; Chapman, 2021; Entman, 2007; Haney & Greene, 2004; Haney, 2008; Kerr, 2018; Kerr & Kerr, 2018; Lim et al., 2012; Lim et al., 2015; Schnell, 2001; Steidley & Colen, 2017; Wahl-Jorgensen, 2007). In summary, the level of bias in news reports leads to a downward effect rather than an upward effect. This means that favoritism among the aspects of such topics leads to confusion and disagreement among receivers of news sources. Moreover, Lim and colleagues (2015) specified that agreement on the stances of policy and current events is essential for mitigating the influence of downward bias. For example, Steidley & Colen (2017) investigated the level of bias from the *New York Times* reporting on the National Rifle Association (NRA) and found that the publications had sufficient information for gun reform and firearm regulations, which is consistent with the organization's left-leaning political stance. On the other hand, they address that the NRA prefers to be portrayed from a conservative standpoint when it comes to media reports. Studies have also identified republican politicians being discussed in news reports when they defend gun rights and the NRA, such as Former President Donald Trump's role in such fortification (Amenta, 2022; Chong, 2019; Gilpin, 2020; Klein, 2020). Wahl-Jorgensen's book *Journalists and the public: Newsroom culture, letters to the editor, and democracy* provides a viewpoint that

summarizes political bias in media coverage, which is that modern-day politics have come to mainly be portrayed and communicated through mass media platforms. Thus, Wahl-Jorgensen's (2007) publication gives an overall explanation that news agencies have a lot of influential power in portraying real-world issues and current events for the general public to receive.

The examination of politically-biased news sources in the reporting of mass shootings constitutes a debated aspect within contemporary media discourse. Presently, media outlets frequently demonstrate political inclinations that become particularly discernible when reporting mass shooting incidents (May & McDermott, 2021). This bias manifests in the framing of incidents and the selective presentation of information (Bernhardt et al., 2008; Chapman, 2021; Dreier et al., 2022; Duxbury et al., 2018; Lazaridou & Krestel, 2016; Morris, 2007; Weatherly et al., 2007; Zheng & Scardino, 2021). An imperative consideration for media consumers lies in cultivating an awareness of potential biases and actively seeking diverse news sources to foster a more comprehensive and balanced understanding of distressful events, such as mass shootings. Scholars investigating this area of mass shootings call for a responsible approach to reporting that minimizes risks, while still addressing the public's need for information.

2.3.1 Limited Research

The mass communications literature base has noted several studies that investigate news coverage on mass shooting events (Dahmen, 2018; Fox et al., 2021; Holody & Shaughnessy, 2022; Jetter & Walker, 2018; Jetter & Walker, 2022; Schildkraut, Elsass & Meredith, 2018). While the larger body of mass shooting research is growing, some mass shooting scholars have discussed the relevance of mass communications research and mass

shooting coverage (Dahmen, 2018; Hume & Perreault, 2022; Lankford, 2016; Peterson et al., 2023). These studies have addressed the importance of news outlets needing to practice caution on the type of information being reported. Moreover, these studies have mutually suggested that news outlets focusing on the perpetrator not only contributes to notoriety being given, but that there is the potential for the general public to form prejudice about mass shooting events.

Despite the amount of research available on media reports of mass shootings and politically-biased information in news articles, there is still a major research gap to address. One addition to the role of news reporting that has not been addressed is the focus of left-leaning and right-leaning news agencies that report mass shootings. At this point in time, only a few research studies mention any noticeable relevance of news agencies and their political leaning (Barberá et al., 2015; McClosky & Chong, 1985; Schulze, 2020; Starbird, 2017). These four studies discuss crucial differentiation between news-reporting agencies that produce articles from a left-leaning and right-leaning standpoint (Barberá et al., 2015; McClosky & Chong, 1985; Schulze, 2020; Starbird, 2017), two of which explicitly focus on this relationship with media posts on mass shootings (Barberá et al., 2015 & Starbird, 2017). They sample their data from posts on Twitter (i.e., tweets) that contain mass shooting-related content, as well as expressing opinions based on political preference. When discussing the relevance between Twitter posts and information from news reports on mass shooting occurrences, Barberá and colleagues (2015) and Starbird (2017) address that political preferences among news agencies have relevance to commonly discussed topics, such as mass shootings. Though the studies by Barberá and colleagues (2015) and Starbird (2017) do investigate the type of wording and political affiliation interpreted from

tweets about mass shootings, no specific study on the political affiliation of news agencies and differences among the type of information reported on mass shootings is available.

2.4 Theoretical Framework

This study, while not explicitly testing theory, draws on theoretical arguments from sociology and criminology to examine mass shootings. Theoretical explanations, including choice-based, opportunity-based, learning-based, and strain-based arguments, contribute to understanding mass shootings as a social phenomenon (Fox & Levin, 2017). Anisin (2022) addresses that no single criminological theory applies universally, emphasizing the need for a broad perspective in mass shooting research. Researchers often employ multiple sociological theories due to the rarity of mass shootings and their reliance on a government-defined narrow scope (Anisin, 2022; Booty et al., 2019; Duwe, 2020; Hardin, 2019). When adding the media's influence to a criminological concept, the variety of applicable theories broadens even more (Anisin, 2022; Rocque & Duwe, 2018). Several researchers have attributed theoretical explanations of media effects on criminal behavior, including the potential influences of the media among deviants (Barak, 1988; Ferrell, 1999; Greer, 2010; Karaminaghbi et al., 2022; Kidd-Hewitt, 2002; Phillips, 2017). When research involving media and political bias is added to a relative criminological topic, a few scholars have argued that it is beneficial to include a theoretical communications perspective that helps justify the need for investigation on it (Barak, 2007; Giacomantonio et al., 2022; Kikerpill, 2023). Uses and gratification theory addresses the type of content in mass media and news reporting in current event reports. It has also been previously connected with general topics in criminal justice (Brown et al., 2012; Minnebo, 2000). Thus, Brown and colleagues (2012) and Minnebo (2000) suggest that uses and gratification theory is a plausible

explanation for the type of content being provided in online news articles for crime-related news, such as mass shootings.

2.4.1 Uses and Gratification Theory

Ruggiero's (2000) uses and gratification theory is a type of mass communication explanation that focuses on the content provided by the media and news agencies. Uses and gratification theory suggests that media and news sources provide information that the general audience expects to receive. Moreover, the information provided from media and news sources are perceived as what the general audience wants in order to satisfy their needs for a better understanding of the topic. Dahmen's (2018) qualitative study on media coverage among mass shooting events supports this argument when concluding that news reports focusing on the perpetrator and facts of the event received a substantially higher amount of attention compared to news reports on the victims and action taken afterward. Dahmen (2018) includes discussion on consumers of current events and reported news generally focusing and expecting to receive information on facts about the perpetrator's characteristics and background, as well as the tragedy of the caused event itself.

Further information on Ruggiero's (2000) theoretical arguments shows that uses and gratification is generally applicable to qualitative studies that focus on measuring content provided in media sources and news articles due to the theory's suggestions on information being provided based on what will satisfy the viewers the most. In contemporary news reporting, many articles and produced sources are made available as most people have moved to a digitally-dependent environment over paper-based news acquisition. As digitally-acquired news reports are considered to be more convenient for people, news reporting companies have the ability to track their audience, numbers and subscribers to their reports. When the type of information is considerably new,

groundbreaking, or attention seeking for their viewers, new reporters will be more drawn to provide the information that their audience is looking for.

CHAPTER 3: DATA AND METHODS

3.1 The Current Study

This study focuses on filling one existing gap in mass shooting research. Despite the amount of literature on mass shooting media coverage being expanded, adding political bias into a study has only been addressed in two separate publications (e.g., Barberá et al., 2015; Starbird, 2017). Moreover, including political bias in the analysis helps develop a deeper understanding of possible differences in the content of mass shooting news reports. In this regard, this study aims to evaluate the information posted in a variety of biased and unbiased news articles of mass shooting events to fully assess the research questions. The two research questions are the following:

1. What type of information is in news agency coverage of mass shooting events?
2. How does the coverage vary based on the political leaning of the media outlet?

3.2 Description of Sampling Method and Data

This qualitative study assesses the information provided by news agencies by selecting online articles of mass shooting events. As such, mass shooting incidents will be the unit of analysis and the top five occurrences based on total number of people killed and victims altogether were selected. At the time of data collection, the five deadliest mass shooting incidents with the most individuals victimized (killed or wounded) were the Las Vegas Strip shooting in 2017 (604 victims), the Orlando Pulse nightclub shooting in 2016 (102 victims), the Walmart El Paso shooting in 2019 (48 victims), the Texas Baptist Church shooting in 2017 (46 victims), and the Uvalde school shooting (38 victims; Peterson & Densley, 2019).

To properly measure the first research question, this study sampled reported news articles from various major news outlets that produce online news articles. A simple random sampling approach was used to randomly choose three articles from each news outlet for each incident. To ensure variability of news article representation, articles published within the first 14 days post-incident were initially counted. Then, they were put into an online random number generator to randomly select three numbers that would indicate the articles to sample for the analysis. With the exception that a few news agencies posted less than three articles on the Las Vegas Strip, Orlando Nightclub and Walmart El Paso shootings, the majority of media outlets had three or more online articles on each mass shooting incident within the 14-day time period.

To properly measure the second research question, this study considers the political stance of news outlets for the sample selection because right and left-leaning news outlets typically report current events in distinct ways, such as highlighting different factors of relevance and importance to such current events. Purposive sampling was used to select the news agencies in the analysis. In doing so, the study relies on information from news coverage that are considered to be politically biased or truly centered based on the Interactive Media Bias Chart (Ad Fontes Media, 2024). A total of 12 news agencies were purposively sampled ($n=12$), with five representing the politically left-leaning news outlets ($n=5$), five constituting the politically right-leaning news outlets ($n=5$), and two outlets that are roughly unbiased ($n=2$). For the right-leaning selections, the following news agencies will be used: Fox News Online, The New York Post, The Washington Times, The Wall Street Journal, and The Federalist. For the left-leaning selections, agencies that will be used for investigation include: NBC News, CNN News, The Huffington Post, The New York Times, and The Washington Post. Finally, the two politically-balanced online new

reporting sources will be Reuters and AP News. A total of 174 articles were sampled across 12 online news agencies. Most of the news sources had at least three news articles for each mass shooting incident to sample from, while a few of them had one or two articles on the Las Vegas Strip, Orlando Nightclub, or Walmart El Paso incidents.

Table 1: News Sources (N=174 articles)

Media Outlet	# of Articles
Fox News Online	15
New York Post	15
The Federalist	14
The Washington Times	15
Wall Street Journal	15
CNN News	15
The Huffington Post	15
NBC News	14
The New York Times	15
The Washington Post	15
Reuters	13
AP News	13

3.3 Analytic Strategy

Content analysis is a form of qualitative research that focuses on evaluating text language to better understand a topic. Content analysis provides the unique benefit of obtaining textual language from samples of a study to review and comprehend the meaning

and importance of used wording (Babbie, 1992; Tracy, 2019). While content analysis has three types of approaches for analyzing data—conventional, directed, and summative content analysis (Babbie, 1992)—the conventional approach of content analysis will be used to investigate the research questions in this study. Unlike more interpretive approaches, conventional content analysis focuses on the explicit content of the material, aiming to categorize and describe the surface-level characteristics without imposing preconceived theories or frameworks on the data (Tracy, 2019). In conventional content analysis, researchers start with an open and inductive coding process, allowing patterns and themes to emerge from the data itself rather than being guided by pre-existing categories. The process involves breaking down the content into meaningful units, coding these units, and then categorizing the codes into broader themes. The aim is to provide a detailed and objective description of the content without imposing strong theoretical assumptions. This method is particularly useful in situations where the research questions are more exploratory or when the goal is to understand the content of the data in a comprehensive and contextually rich manner (Tewksbury, 2009; Tracy, 2019). It is often applied in various fields, including communication studies, sociology, psychology, and other social sciences, as Tewksbury (2009) argues when justifying the usefulness of qualitative methods in research. The conventional approach of content analysis will be used to investigate the research questions. As Lankford and Madfis (2018) state, formal investigation of language used in news reports of mass shooting incidents must be achieved in order to potentially help in reducing the rates and trends of mass shootings in the United States.

The following investigation looked at the written content that helps in making up online news articles. For clarification, this study explicitly focused on written articles from

major news outlets and not other types of news reporting, such as podcasts, live TV reporting, social media discussions, or online videos that cover reported facts of the event. By doing this, reviewing reports that 1) take place in real-time which likely have a smaller audience and 2) include the use of personal opinion by the collaborator or audience reactions will be avoided. Moreover, the informative content that elicits higher attention given towards the perpetrator of a mass shooting event will be investigated, such as the reported facts of the event itself, including location, type of setting, target population by specific age, religion, race, ethnicity, public setting, and victimization toll. In addition, other crucial factors relevant to the perpetrator that contribute to notoriety given include their physical characteristics, background of their upbringing, and evidence that shows they were planning to commit a mass shooting.

This study focused on recording the factors each news outlet includes when reporting each mass shooting event. This includes whether they focus on factors relevant to the perpetrator's information and actions done in contribution to the crime, or if news outlets highlight more importance toward the victims of mass shooting events and the outcomes of such occurrences. By recording the type of information and content produced in news articles, this approach assisted in answering the research questions by reviewing what focuses more on the perpetrator and cause of event in leading to notorious attention, and whether there is a notable difference in such approaches between right-leaning and left-leaning news agencies.

It is also important to note the risk of bias involved in qualitative study, critically when designing the coding scheme for the analysis. The risk of bias among the coder of this study is acknowledged, while some measures were taken to mitigate potential issues with bias in the results. First, using simple random sampling to select the articles for

analysis helped to prevent a number of articles based on content choosing and preference from the coder. By randomizing the articles for selection, the risk of bias is reduced because of the varied dates in which articles were posted within the 14-day period. Second, the coder practiced a mix of inductive and deductive coding by creating a coding scheme with expected codes, then doing a beta-test on some articles to see the categories being consistently discussed and adding more variables that would be expected by practicing a beta-test. By doing this initial process before analyzing all articles, bias in the categories and variables assessed was mitigated. Thus, although bias is a normal risk in qualitative research, the randomization for article selection and use of inductive and deductive coding for a beta-test helped to mitigate biased results in this study.

CHAPTER 4: RESULTS

4.1 Overview

The results of reviewing 174 news articles demonstrate a series of topics that are discussed in the online written news articles by major U.S.-based news organizations. The topics were divided into eight categories: 1) weapons, 2) perpetrators, 3) victims, 4) politicians, 5) context of incident, 6) police response, 7) community reaction, and 8) policy issues. The amount of coverage on the categories will help answer the first research question. To answer the second research question, each table by category will include three columns separated by political bias: left-leaning, centered, and right-leaning. Most variables within each category were covered in some news articles, while a few variables were not discussed at all. Tables 3-10 are divided by categories and each table shows the variables, the number of times they were covered in news articles, the percentages that represent the amount of coverage those variables received, and the number of articles that covered each of those variables by political bias.

4.2 Category Coverage in Online Articles

The results divided into the eight categories show that some categories received more attention from the media than others. The top three most discussed categories among the sampled online news articles were 1) perpetrator, 2) victims, and 3) context of incident. The number of articles that discussed the community reactions post-incident were just under half of the total 174 sampled articles. The other four categories that received much less coverage from the sampled articles were 1) weapons, 2) politicians, 3) police response, and 4) policy issues.

Table 2: Category Coverage in Online Articles (N=174 articles)

Category	# of Articles
Weapons	36
Perpetrator	112
Victims	115
Politicians	50
Context of Incident	107
Police Response	51
Community Reaction	73
Policy Issues	31

4.3 Discussion of Weapons

The results of the coverage of weapons (see Table 3) show that they were not always discussed in the news articles. Only 36 articles (20.6%) discussed the weapons possessed by the perpetrators in detail. The articles that did include details on the weapons identified assault rifles as the main type of firearm used by mass shooting perpetrators. Half of them (n=18) reported that the perpetrator used a single assault rifle and roughly 50% of them (n=17) described the use of multiple assault rifles in mass shooting cases. Moreover, right-leaning news agencies tended to identify perpetrators as carrying a single assault rifle, while left-leaning news agencies tended to mention that perpetrators carried more than one assault rifle. Nearly 10% of the articles described perpetrators having a single handgun that was carried in conjunction with an assault rifle. Interestingly, almost one-quarter (22.2%) of articles identified the presence of explosives at the scene of the

incident. Almost 20% of articles discussed the purchasers of the weapons, all of which identified the perpetrators themselves as having bought the weapons legally. Moreover, only 11.1% identified the weapons as having been purchased in a gun store. Just over 15% of articles also included discussion on the magazines and ammunition consumed by the perpetrators- including the exact numbers used by the shooter and the amount found remaining post-incident. Overall, with the exception that right-leaning news agencies discussed perpetrators carrying a single assault rifle more than other weapon-related variables, this category was mainly discussed by left-leaning news agencies.

TABLE 3: Discussion of Weapons (N=36 out of 174 responses)

Variables	N (%)	Left-leaning	Center	Right-leaning
Ammunition: Extended Magazines	6 (16.7%)	4	0	2
How it was obtained: Gun Store	4 (11.1%)	4	0	0
Type of Weapon: Handgun (single)	3 (8.3%)	2	1	0
Type of Weapon: Assault Rifle (single)	18 (50%)	5	1	12
Type of Weapon: Assault Rifle (multiple)	17 (47.2%)	10	1	6
Type of Weapon: Other	8 (22.2%)	4	1	3
Who Purchased it: Perpetrator	7 (19.4%)	6	1	0

4.4 Discussion of Perpetrator

Out of 174 articles, 112 of them (64.4%) focused on the perpetrator and their characteristics (see Table 4). The three most commonly discussed aspects of perpetrators

were the names (n=85, 75%), ages (n=63, 56.3%), and gender identification (i.e., male; n=72, 64.3%). These items were relatively uniformly covered across the political spectrum of outlets. Other demographic characteristics—like marital status (n=10, 8.9%), race/ethnicity (n=10, 8.9%), and physical appearance of the perpetrator (n=13, 11.6%)--were discussed much less frequently, with race/ethnicity and physical appearance predominantly being mentioned by left-leaning outlets. Two other topic areas that received coverage include the hate motivations and vital statuses of each perpetrator. For hate motivations, three separate types were identified across 112 articles: 1) location, 2) race/ethnicity, and 3) gender identity/sexual orientation. Two of them, both from left-leaning news articles, identified the location as the indicating reason for the incident. In addition, 16 articles identified race/ethnicity as the hate reason, and another 16 described gender identity and/or sexual orientation as the motivating factor. The articles that mentioned these hate motivations were primarily discussed by left-leaning news outlets over the right-leaning and centered sources. Moreover, 68 of 112 articles said that the hate motivation was unknown, which is roughly 60% of all perpetrator coverage. Of those 68 articles, 14 of them (20.5%) did add details about speculation of extremism/terrorism-motivated incidents, which were about equally described by left-leaning and right-leaning sources. In terms of each perpetrator's vital status toward the end of each shooting spree, eight articles identified them as still alive post-incident, 11 articles reported that the suspects committed suicide after desistance from shooting, 12 articles said that the suspect was killed by police during the incident, and two articles reported that their vital status was unknown. Both right-leaning and left-leaning news agencies identified their status post-incident.

One of the least discussed areas on the perpetrators was their mental health statuses, as three of 112 responses mentioned suspicions of mental illness, while no articles identified an official diagnosis or family history of mental health concerns. Moreover, the three articles that identified suspicions of mental illness came from left-leaning news agencies. In addition, nine of 112 perpetrator responses briefly mentioned mental health struggles without any additional context to infer from. Only one article of 112 that focused on the perpetrator identified a history of bullying victimization, which was reported by a right-leaning news agency. Some articles also mentioned known factors of the perpetrators' backgrounds, including their educational and occupational histories, in addition to some personal interests. A total of nine articles identified their educational histories, while 17 other articles discussed their occupational histories. In addition, left-leaning news sources generally reported this information more often than right-leaning or centered agencies. Thirteen articles discussed perpetrators' hobbies. The representation of discussion on their personal interests was approximately equal between left-leaning and right-leaning sources, while only one article from a centered news outlet discussed the perpetrator's interests.

Table 4: Discussion of Perpetrator (N=112 out of 174 responses)

Variables	N (%)	Left-leaning	Center	Right-leaning
Name	85 (75.9%)	30	6	49
Gender: Male	72 (64.3%)	31	8	33
Age	63 (56.3%)	39	6	18
Race/Ethnicity	10 (8.9%)	8	0	2
Marital Status	10 (8.9%)	10	0	0
Friends/Family	31 (27.7%)	22	5	4

Physical Appearance at Time of Incident	13 (11.6%)	10	2	1
Mental Illness: Suspicion/Undiagnosed	3 (2.7%)	3	0	0
Mental Illness: No context	9 (8%)	4	0	5
History of Bully Victimization	1 (0.9%)	0	0	1
Educational History	9 (8%)	6	2	1
Occupational History	17 (15.2%)	10	2	5
Personal Interests	13 (11.6%)	7	1	6
Hate Motivation: Location	2 (1.8%)	2	0	0
Hate Motivation: Race/Ethnicity	16 (14.3%)	12	0	4
Hate Motivation: Gender Identity/Sexual Orientation	16 (14.3%)	13	2	1
Hate Motivation: Unknown	68 (60.7%)	27	3	38
Extremism/Terrorism	14 (12.5%)	6	0	8
Vital Status: Alive Post-Incident/In Custody	8 (7.1%)	4	1	3
Vital Status: Committed Suicide	11 (9.8%)	6	1	4
Vital Status: Killed by Police	12 (10.7%)	4	1	7
Vital Status: Unknown	2 (1.8%)	1	1	0

4.5 Discussion of Victims

Out of 174 total articles analyzed, 115 (66.1%) included coverage on the victims of each mass shooting occurrence (see Table 5). Of all variables, the number of victims killed and wounded were discussed the most out of 115 responses. Exactly 100 articles

(87% of 115 total) discussed the number of deaths that resulted from each incident, with left-leaning news sources reporting a slightly higher number of articles than right-leaning agencies. Regarding centered news agencies, 12 articles identified the death toll of the mass shooting incidents. Moreover, just over half of the victim-focused articles (n=59) identified the number of victims left wounded, which is roughly half of all articles that included discussion on the victims. Similar to the coverage on the death tolls, left-leaning outlets reported a slightly higher number of articles than right-leaning news agencies, in addition to six articles from centered sources discussing the wounded victims. The next most discussed variable regards the difficulties and struggles that victims or families of victims were going through as a result of the mass shootings. Approximately 25% of articles discussed the struggles victims and relatives went through, with 19 being reported by left-leaning news outlets, eight being reported by right-leaning agencies, and two being discussed in centered news articles. Despite these two variables having the most coverage, only three articles reported a total number of victims for the incidents, two of which were reported by centered news outlets and one left-leaning news agency as well.

Some articles identified the characteristics of mass shooting victims, including their names, age ranges, race/ethnicity, gender identity/sexual orientations, professions, and personal interests. The names of mass shooting victims were identified in 21 articles (18.3%), with 12 coming from left-leaning outlets, two being discussed by centered sources, and seven being covered by right-leaning sources. The age ranges were also covered in 21 news reports, with 17 being covered by left-leaning outlets, one article from a centered news agency, and three articles from right-leaning news outlets. The races and/or ethnicities of mass shooting victims did not receive as much coverage; nine articles (7%) reporting racial and ethnic demographics of victims. Left-leaning news agencies produced

six articles that covered the races and ethnicities of mass shooting victims, while one article from a centered news agency discussed race/ethnicity of victims and two right-leaning sources did as well. In terms of gender identity and sexual orientation of victims, only five of 115 reported on it. No centered news agencies reported on gender identity or sexual orientation of victims, but four left-leaning articles did and one right-leaning news agency produced an article on it. Some articles focused on the professions or personal interests of victims; nine of 115 responses reported the professions of some victims, and ten articles discussed personal interests that victims had. Moreover, left-leaning news outlets produced more reports on professions and personal interests than centered and right-leaning news sources did, with seven discussing the professions of victims and eight articles reporting personal interests of victims. Only two right-leaning news articles discussed professions that victims had, and one article from a right-leaning news outlet discussed personal interests. Lastly, no centered news agencies discussed the professions of victims, and one article from a centered source discussed personal interests of mass shooting victims.

Table 5: Discussion of Victims (N=115 out of 174 responses)

Variables	N (%)	Left-leaning	Center	Right-leaning
Names(s)	21 (18.3%)	12	2	7
Age Ranges	21 (21.3%)	17	1	3
Race/Ethnicity	9 (7.8%)	6	1	2
Number: Killed	100 (87%)	47	12	41
Number: Wounded	59 (51.3%)	31	6	22
Number: Total Victimized	3 (2.6%)	1	2	0
Gender Identity/Sexual Orientation	5 (4.3%)	4	0	1

Professions	9 (7.8%)	7	0	2
Personal Interests	10 (8.7%)	8	1	1
Difficulties/Struggles Post-Incident	29 (25.2%)	19	2	8

4.6 Discussion of Politicians

The coverage of politicians in mass shooting news reports was represented in 50 of 174 articles (see Table 6). Notably, the centrist outlets were virtually silent on the responses from politicians. Considering the coverage of local politicians, nine other articles also covered similar aspects; with five left-leaning sources reporting the responses of local politicians and four right-leaning news outlets discussing the responses of local politicians. In addition, former politicians were only talked about in four of the 50 articles, with three left-leaning articles discussing the responses from former politicians and one right-leaning news source producing coverage on a former politician's response to a mass shooting incident.

The type of politician most discussed was the United States President at the time of the incident (34 articles). Right-leaning outlets reported more articles on the President's responses to mass shooting occurrences compared to left-leaning agencies. Right-leaning media agencies produced 24 articles that discussed the President's responses to mass shootings, while 10 other articles were from left-leaning news organizations. The United States Vice President at the time of each mass shooting incident did not receive as much news attention as the President did, as only five articles reported the responses from the Vice President. Only one article from a left-leaning source discussed the Vice President's

response, while the right-leaning news organization included the Vice President's response in four articles.

State-level politicians, such as senators and state representatives were also discussed in several articles. Home state and/or district officials were discussed in 19 out of 50 articles, with 11 being represented by left-leaning news organizations and eight being discussed in right-leaning news articles. Coverage on senators and representatives from another state and/or district was found in 7 out of 50 news articles, with three of them being discussed in left-leaning news articles and four of them being talked about in right-leaning news articles.

Table 6: Discussion of Politicians (N=50 out of 174 responses)

Variables	N (%)	Left-leaning	Center	Right-leaning
President	34 (68%)	10	0	24
Vice-President	5 (10%)	1	0	4
Senators/Representatives: Home State/District	19 (38%)	11	0	8
Senators/Representatives: Other State/District	7 (14%)	3	0	4
Local Politicians	10 (20%)	5	1	4
Former Politicians	4 (8%)	3	0	1

4.7 Discussion of Context of Incident

Many news articles discussed the context of mass shooting incidents in detail. Out of 174 responses, 107 of them produced coverage on the context of the events (see Table 7). The most discussed variables among the sampled news articles was the setting

of each mass shooting incident. Left-leaning news sources represented 47 out of 101 articles on the setting, while 45 right-leaning news sources discussed the setting of mass shooting incidents. The remaining nine articles on event setting came from centered news sources. Two other variables that more than one-third of the 107 articles covered were the timeline of the event and the perpetrator's actions during the incident. The timeline of mass shooting events was described in 40 articles, with 21 being represented by left-leaning news outlets and 17 being reported by right-leaning sources. Two articles from non-biased media outlets also focused on the timeline of mass shooting instances. For the perpetrator actions during each incident, 45 articles reported applicable information. Left-leaning news sources produced 29 articles with description of perpetrator actions, right-leaning news organizations published 14 articles with the same context, and another two articles came from centered news sources.

Another variable that online news articles discussed was the perpetrator's status after each mass shooting casualty, which 35 articles covered. Left-leaning news sources produced 15 articles with discussion on this variable, while right-leaning media outlets reported the perpetrator status in 16 articles. Non-biased media sources also produced four articles that reported the perpetrator's status after their respective committed shootings. The evidence found in the aftermath of each mass shooting was also related to the context of the incidents, by which 25 online articles out of 107 reported relevant evidence to the perpetrator's plans. Of those 25, the majority were reported by left-leaning news sources, which was 15 articles. Right-leaning news organizations discussed relevant evidence in eight articles, while centered news sources discussed the evidence found in two articles.

The three variables least discussed among the context of each incident were the responses from the targeted populations, verbal expressions from the perpetrator and the definition of mass shootings. The discussion of responses from the targeted populations during each incident was apparent in 13 articles out of 107, by which the majority were reported by left-leaning news sources. On the other hand, only one article from a right-leaning news source reported the responses that targeted individuals expressed during the respective incident, and two articles from centered news sources reported the same. The context of each incident also constitutes verbal expressions that were reportedly said by the perpetrator during each shooting, by which only two articles of 107 discussed assertions made. Both articles came from left-leaning news sources. Lastly, the definition of mass shootings was only covered in one article, which was described by a centered news source. No left or right-leaning news organization included discussion on the definition of mass shootings.

Table 7: Discussion of Context of Incident (N=107 out of 174 responses)

Variables	N (%)	Left-leaning	Center	Right-leaning
Definition of Mass Shootings	1 (0.9%)	0	1	0
Timeline of Event	40 (37.4%)	21	2	17
Setting of Incident	101 (94.4%)	47	9	45
Perpetrator Actions During Incident	45 (42.1%)	29	2	14
Verbal Expressions from Perpetrator	2 (1.9%)	2	0	0
Responses from Targeted Population	13 (12.1%)	10	2	1

Perpetrator Status After Desistance from Shooting	35 (32.7%)	15	4	16
Evidence Found in Aftermath of Shooting	25 (23.3%)	15	2	8

4.8 Discussion of Police Response

Roughly 30% of 174 responses (51 articles) focused on the police responses for each mass shooting incident (see Table 8). Right and left-leaning news organizations generally discussed the responses from local municipal police and federal law enforcement more than other types of police. Centrist news outlets generally did not cover police response as much as right and left-leaning news sources did, as the only two variables they provided coverage on were municipal local police and general law enforcement (no detail to specific type given). Left and right-leaning news articles showed less coverage on local sheriff officers, School Resource Officers (SROs), and state-level police.

Table 8: Discussion of Police Response (N=51 out of 174 responses)

Variables	N (%)	Left-leaning	Center	Right-leaning
Local Police: Municipal	21 (41.2%)	11	1	9
Local Police: Sheriff	11 (21.6%)	4	0	7
School Resource Officer (SRO)	5 (9.8%)	3	0	2
State Police	10 (19.6%)	4	0	6
Federal Agency	23 (45.1%)	10	0	13
Law Enforcement Officials - Unspecified	17 (33.3%)	8	3	6

4.9 Discussion of Community Reaction

About 42% of the sampled articles included discussion on the community reactions of mass shooting incidents, which was 72 total (see Table 9). Across all variables included, left-leaning news organizations discussed different aspects of community interest the most. Of the 73 reports, more articles generally described organized vigils and memorials for the victims to raise awareness of those deceased. Some articles also discussed the perception that society has developed as a result of mass shooting incidents; by which the way hate motivations of mass shootings are perceived were discussed the most out of all types of discerned aspects. Right-leaning news organizations discussed the reactions from communities much less compared to left-leaning sources. Centrist news outlets rarely spoke on community reaction; only a few articles reported on vigils, memorials, and a community march post-incident.

Table 9: Discussion of Community Reaction (N=73 out of 174 responses)

Variables	N (%)	Left-leaning	Center	Right-leaning
Vigil	15 (20.5%)	9	4	2
Memorial	16 (21.9%)	11	2	3
City Council Meeting	6 (8.2%)	3	0	3
Compensation to Families of Victims	1 (1.4%)	1	0	0
Community March/Demonstration	7 (9.6%)	6	1	0
Fundraiser	6 (8.2%)	2	0	4
Funeral for Killed Victims	4 (5.5%)	3	0	1
Perception of Mass Shootings: Perpetrator	1 (1.4%)	1	0	0

Perception of Mass Shootings: Hate Motivation	17 (23.3%)	13	0	4
Perception of Mass Shootings: Rates of Mass Shootings	9 (12.3%)	7	0	2
Perception of Mass Shootings: Policy Change	12 (16.4%)	7	0	5
Perception of Mass Shootings: Prevention	3 (4.1%)	3	0	0
Perception of Mass Shootings: Police Legitimacy	8 (11%)	6	0	2

4.10 Discussion of Policy Issues

Not many articles discussed policy issues related to each mass shooting event. Out of 174 total responses, 31 articles discussed one of five policy areas that are claimed as needing improvement, with none of the centered news agencies discussing policy issues (see Table 10). Gun control was the most discussed issue, with 27 out 31 articles focusing on the impact it's made on American mass shootings. Policy discussion on gun control was identified more from right-leaning news outlets, as 17 of those 27 talked about it, while 10 left-leaning news agencies discussed gun control in relation to the mass shooting incidents. Policy surrounding accessibility to mental health treatment and resources was addressed in seven of the articles, by which all seven were discussed by right-leaning news outlets. Similarly, policy on awareness of mental illness (i.e., symptoms, treatment, and resources) was covered in 10 articles, by which eight of those 10 were addressed by right-leaning news agencies and two articles from left-leaning news sources discussed the awareness aspect of mental health. Two other policy areas that were identified, but minimally covered, were limitations on violent media and

immigration. Only one article discussed issues surrounding violent media for the general public, with specific attention to violence in video games. The article on limitations to violent media was produced by a right-leaning news agency. Moreover, policy on immigration was covered in two articles, both of which were produced by right-leaning news agencies.

Table 10: Discussion of Policy Issues (N=31 out of 174 responses)

Variables	N (%)	Left-Leaning	Center	Right-Leaning
Gun Control	27 (87.1%)	10	0	17
Accessibility to Mental Health Treatment and Resources	7 (22.6%)	0	0	7
Awareness of Mental Illness/Symptoms/Treatment/Resources	10 (32.3%)	2	0	8
Limitations on Violent Media	1 (3.2%)	0	0	1
Immigration	2 (6.5%)	0	0	2

CHAPTER 5: DISCUSSION AND CONCLUSION

5.1 Overview

The results demonstrated a variety of findings and information that were crucial to help fill in the research gap of political bias in the media of mass shooting news coverage. Considering that nothing has been done on using political bias as a control variable among mass shooting news coverage, the findings helped determine the differences in the levels of coverage from a general standpoint and also based on the outlet's political slant. The research questions that were assessed are as follows:

1. What type of information is in news agency coverage of mass shooting events?
2. How does the coverage vary based on the political leaning of the media outlet?

A random number generator was used to randomly select eligible articles on all five mass shooting events across 12 different news agencies, by which a total of 174 news articles were sampled. The content of the sampled news articles varied across eight different categories: 1) weapons, 2) perpetrators, 3) victims, 4) politicians, 5) context of incident, 6) police response, 7) community reaction, and 8) policy issues. Moreover, the attention given to the variables within each category demonstrate the level of attention given to each one from an overall standpoint of mass shooting coverage and from the standpoint of politically biased news agencies.

5.2 Research Question 1: Coverage of Mass Shootings in News Articles

In answering Research Question 1, it was found that the categories with the most coverage were perpetrators (n=112, 64.5%), victims (n=115, 66.1%), and the context of the incident (n=107, 61.5%). Many sampled news articles reported information on the perpetrator, including their name, age, and known background information. Roughly

two-thirds of all analyzed news articles included information on the victims, with emphasis on the number of individuals killed and injured, and about half discussed the community reaction (n=73, 41.6%). The categories receiving the least coverage include the discussion of politicians (n=50, 28.7%), the discussion of police response (n=51, 29.3%), weapons (n=36, 20.7%) and policy issues (n=31, 17.8%). Within the context of weapons, articles generally did not discuss the types of weapons used by mass shooting perpetrators. Those that did identified the use of assault rifles (i.e., AR-15 or AR-556) as the predominant weapon compared to other types. Very few articles described the use of a handgun in mass shooting incidents. Other types of weapons that news reports identified varied between explosives, unidentified types of firearms, and unidentified forms of melee. A few articles (n=4, 11.1%) mentioned how the perpetrators acquired their weapons, which were legally purchased at gun stores. Most articles discussed the perpetrator. The most common characteristics were the perpetrator's name, age, gender, and motivation (identified or unidentified). News articles also dedicated some attention to the friends and family members of the perpetrators and just over 30% of articles from this category identified the perpetrator's vital status post-incident (i.e., committed suicide, killed by police, alive and in custody, or unknown). Other variables that received much less attention include the perpetrator's physical appearance at the time of incident, context of mental health status, history of bully victimization, occupational history, educational history, and personal interests.

Regarding victims, the majority of sampled articles that mentioned the victims of mass shooting incidents focused on reporting the numbers of individuals killed and wounded. Exactly 100 responses covered the number of victims killed, while 59 responses mentioned the number of victims wounded, and the rest of victim-related variables were

discussed much less often across all articles. Just over one-quarter of the victim-focused news articles described the difficulties that wounded victims and families of victims were going through post-incident. Moreover, just under 20% of articles from this category reported the names and age ranges of victims from mass shooting incidents. Other victim-focused variables that were infrequently discussed include identification of race/ethnicity, gender identity/sexual orientation, professions, and personal interests.

Coverage on various U.S. politicians were included in some of the sampled articles, which mainly discussed the reactions, speeches and online posts that were made by politicians. The type of information that was said by politicians usually surrounded thoughts and prayers for victims, visitation days to city and location of incident, policies that are not to blame for mass shooting instances, and discussion on presumed issues that led to mass shootings, such as needs for policy change. The majority articles from this category included content from the president at the time the incidents occurred (i.e., former President Obama, former President Trump, and President Biden). Just over half of the articles from this category included the reactions and comments made by senators and representatives from the home state of the incident or from other states. Other types of politicians received less attention, including the vice president at the time of the mass shooting occurrence and local politicians within each city of the incidents.

Contextually speaking on the mass shooting incidents, articles focused primarily on the setting of the incident (i.e., the type of location, such as a school), the perpetrator's actions during the shooting (i.e., cornering groups of people from the target population, perpetrator barricading themselves somewhere within the setting, perpetrator shooting from hotel room onto crowd of people), and the timeline of the event from the beginning of the suspect's known whereabouts actions until the end of the shooting spree. The

perpetrator's status at the end of the shooting (i.e., alive or dead), evidence, definitions of mass shootings, and verbal expressions or responses from the victims or shooters during the incident were least often discussed.

The coverage of police response shows that the attention given to mass shooting events was quite varied, but no substantial differences between coverage of news agencies were found. Federal agencies (i.e., Federal Bureau of Investigation, Customs and Border Security, and Department of Homeland Security) were the most commonly discussed because of their participation and involvement with responding to mass shooting reports. Local agency responses received the next highest amount of coverage in terms of their effectiveness in responding to mass shooting emergency reports. Interestingly, some news agencies were also not able to specify the type of law enforcement team responding, which accounted for three of the four centrist news sources. The rest of the results showed a similar amount of coverage without any substantial differences.

Discussion on the community reactions showed different forms of community members coming together after a tragic mass shooting event, by which they were reported across 73 news articles. The most discussed variable was the perception that community members developed after mass shooting incidents, specifically on the hate motivation behind the perpetrator's actions. Other types of perceptions on mass shootings discussed involved rates of mass shootings, policy change, perpetrator, police legitimacy, and prevention. Other types of community involvement were related to honoring the memory of victims and reacting to the mass shooting tragedies. Roughly 20% of articles from the category described the details of vigils and memorials that were organized to honor those who were victimized. Other variables that were not covered as much across news articles included the organization of a city council meeting, community march/demonstration,

compensation to families of victims, fundraisers to support victims, and organized funerals for victims.

Finally, five types of policy issues were discussed across 31 articles. The most discussed policy area was gun control (see table 10); as nearly 90% of the sampled articles included discussion on gun control policy, whether it described why there needs to be stronger regulations or why gun control is not a problematic indicator of mass shooting rates. Other types of policy issues discussed included the accessibility to mental health resources and awareness of symptoms, treatment and resources. Articles that discussed policy surrounding mental health were related to claims that politicians made of mental health being the issue and that individuals with serious mental illnesses need to be properly evaluated and maintain restrictions. The two least discussed policy issues surrounded immigration and limitations on violent media (i.e., violent video games).

5.2.1 Comparison of Coverage

Findings on the level of coverage for some variables compared to others were notable, including the varied discussion of characteristics of perpetrators identified versus those of victims, the context of each incident based on the perpetrator's actions versus the effect on victims, and the most discussed policy in news coverage being gun control. Some variables received a high amount of coverage as expected, given that other scholars have argued that the media tends to report information related to the perpetrator and incident itself more often than report the effects left on the victims (Dahmen, 2018; Fox et al., 2021; Murray, 2017; Schildkraut, 2019). Thus, the results on the media coverage are consistent with existing literature on this subject matter. Additionally, some did not have as much news coverage, while some variables were expected to have more coverage than what was found. The most imperative comparisons were: identified characteristics-

perpetrators versus victims, context of incident- perpetrator actions versus effects on victims, community reaction- perception of mass shootings versus honorification of victims, and policy issues- gun control versus other considerable factors.

First, the discussed characteristics between perpetrators and victims will be interpreted. Both perpetrators and victims were emphasized by roughly two-thirds of articles. However, more aspects of perpetrators were covered in comparison to those of the victims. For instance, 115 articles mentioned the victims to some extent, but 100 of them focused on reporting the number of killed victims, while 59 of them also mentioned the number of wounded victims. Other variables relative to the victims, including their names, ages, races/ethnicities, gender identities, professions, personal interests, and difficulties encountered post-incident, were covered much less across the articles. On the other hand, various characteristics were described much more frequently about the perpetrators, such as their name, gender, age, race/ethnicity, occupational history, and close friends or family. Thus, although the findings show that a few more articles reported at least one variable on the victims, the amount of coverage produced on the perpetrator and their characteristics was substantial in comparison to the variety of aspects covered among the victims. Preference is given to the perpetrators and their characteristics relative to the victims, even accounting for a 14-day lag time.

Second, assessing the context of mass shooting events between perpetrator actions versus effects on victims should be acknowledged. The actions relative to the perpetrator throughout the incident's timeline received a substantially higher amount of coverage than other aspects that did not highlight the perpetrator's actions. For instance, many of the articles discussing the context of the event paid attention to the perpetrator's whereabouts and actions in relation to the shooting spree. In addition, the articles that

provided detail on the timelines of the incidents focused on the perpetrator's actions leading up to the shooting sprees, their actions during the shootings, and their vital status after they desisted from shooting (i.e., committed suicide, killed by police, alive and in custody, or unknown). In comparison, context-related factors on the victims of the mass shooting casualties were only highlighted in 13 out of 107 articles from this category. Those 13 articles discussed the responses that targeted individuals had in the moment of the shooting sprees, such as whispering to one another, yelling at the perpetrator, playing dead and using deceased victims' blood to not be targeted by the perpetrator, family members shielding one another and having their lives taken to save their loved ones, individuals taking photos and videos of the incident, and helping one another to hide or escape the location of the incident. Moreover, the details given about victim responses during the shooting spree were each highlighted in one or in just a couple of articles. Considering that the majority of articles discussing the context of incidents highlighted perpetrator-related information, many articles had repeated the same content on the shooter's whereabouts and actions. Many articles reported the same stories of their arrivals to the locations, where they had been seen before and during the incident, their targets during attack, and their statuses post-shooting (i.e., alive and went into custody or dead and had committed suicide or was killed by police). Overall, given the substantially lesser amount of articles reporting on the victims and the context of the incidents, news organizations generally did not pay as much attention to the responses from victims as opposed to the perpetrator-focused variables. Thus, the context of incidents paid a preferable amount of attention to the perpetrators over the victims.

The coverage on the community reactions of mass shooting events demonstrates that 75% of the coverage of community reaction and involvement post-incident was related to the societal level perceptions of mass shootings and organized meetings in reaction to the incidents. By comparison, there was not as much news coverage on the approaches that community members took to honor the victims of mass shootings. Just over half of the articles from the community reaction category described the support given to victims and families of victims from mass shooting incidents (i.e., vigil, memorial, compensation for families, fundraiser, and funerals for victims). Although not overly substantial, general news coverage on the community responses to mass shooting incidents gave more attention to the perception from the public and organized meetings (i.e., city council meetings and community marches) over the honorification of victims. Finally, differences between policy issues discussed in the media should be addressed. The results showed that policy discussion related to gun control received a substantial amount of attention compared to other policy-related areas. Nearly 90% of articles that discussed policy issues within the mass shooting realm focused on gun control, whether it be that gun laws need to be made stronger or providing an argument on why gun laws are not the problem leading to mass shooting instances. Some articles discussed more than one policy area, such as accessibility to mental health resources, awareness of mental illness symptoms, treatment and resources, limitations on violent media, and immigration. Just over 50% of articles also discussed mental illness being claimed as the problem and the need for improved policy on mental health. Only two articles discussed immigration policy, while one article discussed a need for limitations on violent media and focused specifically on the effects of violent video games, by which Former President Donald Trump claimed that violent video games have negative effects on people. Although one article highlighted the argument of violent media

impacting gun violence, this claim goes strongly against research studies that have tested the relationship between violent video games and deviant behavior (Coyne, 2018; Przybylski & Weinstein, 2019).

5.3 Research Question 2: Coverage Based on Political Bias of News Outlets

The results showed that the coverage of different characteristics varied based on the political slant of the media outlet. While most characteristics were favored by one side or the other, there were also some variables that unbiased news outlets did not cover at all. The following will assess the level of news coverage of the categories and variables within by political bias.

For the discussion of weapons, the coverage that left and right-leaning sources gave on weapons of mass shooting instances had varied. Left-leaning news sources covered all of the variables from this category, while right-leaning sites did not discuss the use of a handgun, the place in which the weapons were purchased (i.e., gun store), or who had purchased the weapons. Interestingly, right-leaning news sources usually identified the perpetrators having a single assault weapon on hand, while left-leaning news sources normally claimed that perpetrators had two or more assault rifles on hand. The coverage from both sides on the ammunition did not appear to be substantial, since only six articles talked about the extended magazines they acquired.

Considering the findings on media coverage of mass shooting perpetrators (see table 4), many variables were predominantly identified and discussed in left-leaning news articles, such as age, friends/family, marital status, race/ethnicity, mental illness suspicion, physical appearance at time of incident, educational history, occupational history, hate motivation (location, race/ethnicity, gender identity/sexual orientation). Right-leaning

sources also discussed most of those variables, but not as often or as extensively compared to left-leaning sources. On the contrary, right-leaning news coverage did overtake the discussion of two perpetrator-related variables; name and hate motivation (unknown). Other variables received an approximately balanced amount of coverage between left and right politically biased news organizations. Centrist news sources only produced one or two articles for most perpetrator-related variables, with the exception of covering age and friends/family more often in their articles.

The coverage on mass shooting casualties with victims as the main focus was generally highlighted by left-leaning news articles, while right-leaning did not discuss the effects in detail as much as left-leaning sources did. All variables from table 5 on the discussion of victims (i.e., name(s), age ranges, race/ethnicity, number of victims killed, number of victims wounded, gender identity/sexual orientation, professions, personal interests, and difficulties/struggles post-incident) were predominantly covered by left-leaning news organizations, with the exception of number of total victims being overtaken by centrist news articles. Given the differences in the amount of coverage, the results show that left-leaning news organizations produced more attention to the victims of mass shootings over right-leaning news outlets. Right-leaning news articles produced many more articles of the numbers of victims killed and wounded, but rarely discussed other variables. Centrist sources also provided more attention to the numbers of victims that were killed and wounded, with the addition that two articles identified the general number of victimized people. Interestingly, three articles identified the total number of victimized individuals, as one left-leaning news article focused on the general amount of affected individuals.

The coverage on politicians and their comments post-incident were also quite addressed in recent journal articles. The majority of articles in this category discussed the U.S. President at the time of the incident, and in addition, most articles that addressed a presidential response or speech on the mass shooting events were reported by right-leaning news organizations. In addition, five articles from this category included discussion on the U.S. Vice President at the time of the incident, by which four of those articles came from right-leaning news sourced and only one left-leaning source produced an article that focused on the Vice President's visit to the affected city post-shooting. Other variables, including senators/representatives (home or other state/district), local politicians and former politicians generally received a balanced amount of coverage from left and right-leaning news organizations. Interestingly, centrist news outlets only provided one article that focused on any type of politician, by which they discussed the mayor of one impacted city and their response to the mass shooting incident.

Next, it is useful to consider the politically-biased news coverage in the contexts of individual mass shooting incidents. Some variables were predominantly covered by left-leaning sources, while other variables showed that they were similarly reported by left and right-leaning news organizations. Left-leaning news sources did provide more coverage on timeline of event, perpetrator actions during incident, verbal expressions from incident, responses from targeted population, and evidence found in aftermath of shooting. Variables that received an approximate balanced amount of coverage from left and right-leaning sources were setting of incident and perpetrator status after desistance from shooting. Thus, the results on the discussion of context of incident demonstrate that right-leaning news organizations did not provide as many articles on the relevant variables as left-leaning news organizations did. Moreover, one variable in relation to context of incidents is the definition

of mass shootings, by which only one centrist news article discussed how mass shootings are conceptualized to begin with. Other variables were covered in 2-4 centrist articles, with the exception of the settings of the incidents that were identified in nine centrist news articles.

The sixth category assesses the form of police response from law enforcement on the mass shooting incidents. Based on political bias of news organizations, all variables from this category received a balanced amount of news coverage [i.e., local police (municipal and sheriff, school resource officer (SRO), state police, federal agency, and law enforcement officials (unspecified)]. Left and right-leaning news organizations did not provide a substantially higher or lower amount of coverage for the variables on police responses to mass shooting incidents. However, centrist news sources only identified one type of law enforcement response, which was the municipal local police. In three articles, centrist news sources described police response without identifying the specific type.

Penultimately, the community reactions on the mass shooting incidents showed some bias from politically biased sources. Left-leaning news organizations showed more discussion on all variables of the community reactions and involvement post-incidents compared to right-leaning sources, with the exception of fundraiser and perception of mass shooting: policy change. More right-leaning sources identified fundraisers that communities in the affected cities hosted to support the victims of mass shooting events, while the coverage of the perceptions of policy change were just about balanced. Thus, left-leaning news sources demonstrate that they included more discussion on the community reactions and types of involvement as opposed to rightleaning sources. Considering the results for centrist news outlets, only three variables from the category were identified: vigil, memorial, and community march/demonstration. Thus, centrist news

organizations discussed vigils and memorials to honor the victims, and they provided one article that was relative to a reaction from the public on addressing gun violence-related issues. Lastly, policy issues surrounding mass shooting rates were heavily discussed by politically-biased news agencies. No centrist news outlets produced articles that discussed policy issues surrounding mass shootings. Right-leaning news organizations produced more articles on the five identified policy issues (i.e., gun control, accessibility to mental health treatment and resources, awareness of mental illness, symptoms, treatment and resources, limitations on violent media, and immigration) as opposed to left-leaning news agencies. In addition, three of the variables (i.e., accessibility to mental health treatment and resources, limitations on violent media, and immigration) were not discussed by left-leaning news agencies at all. Thus, right-leaning news coverage tended to discuss policy issues and claim more problem areas compared to other sources. Interestingly, one finding from the results reflects on the discussion of immigration policy from right-leaning news outlets. Only two articles discussed immigration policy being a relative reason for two of the five mass shooting events due to their close proximity to the U.S. border with Mexico [i.e., Walmart El Paso (2019) and Uvalde (2022)]. However, only one of the perpetrators from both instances was of Hispanic origin, while the other was Caucasian and found to have committed the mass shooting due to a hate motivation against immigrants coming into the United States. Thus, although two articles discussed immigration policy in relation to mass shooting casualties, one of them focused on the targeted population and made the connection with needing policy change on immigration. The contributing reports from the right-leaning news organization used careful wording to address immigration issues without appearing as victim-blaming.

5.4 Implications

The findings of this study are not only informative in the area of mass shooting research, but also for mass communication and political science academics. The supporting literature of this study highlighted uses and gratification theory by Ruggiero (2000), which comes from the mass communication area. In addition, the supporting literature discussed the importance of assessing the content that mass shooting news articles cover and the political biases involved in the content. Given these two areas, the results of this study led to consider implicating factors for the mass communication and policy issue aspects.

5.4.1 Theoretical Implications

Ruggiero's (2000) uses and gratification theory makes the argument that mass media platforms, such as news organizations, will focus on discussing the type of information that the audience expects to see. In the context of tragic events, such as mass shootings, literature has also discussed that some components of media coverage on mass shootings are 1) focused on by the media outlets and 2) in the interest of the general public. Those components were generally relative to the perpetrator and information on the incident itself. Although this study was not an explicit test of theory, the results from this study demonstrate a consistency with Ruggiero's mass communication theory and findings of previous studies on the content of mass shooting news articles (see Dahmen, 2018; Fox et al., 2021; Murray, 2017; Schildkraut, 2019) due to the increased number of times in which perpetrators, victim count, and the context of the incidents were covered. Moreover, the results show that news agencies will focus on the type of content that their unique audience expects to see, which can vary based on the political bias of media outlets and the political affiliation of their readers. Right-leaning news agencies will

focus on content that conservatives will expect to see, left-leaning news outlets will aim to produce information that liberals want to read about, and centrist news sources will generally focus on reporting facts of incidents without implying any politically-related topics or individuals (e.g., politicians).

Considering that various theoretical areas have been applied in mass shooting research, there is potential for theory building with a specific focus on media coverage of mass shootings. Ruggiero's (2000) argument and the findings show that news organizations generally focus on reporting specific aspects of perpetrators of the context of the shootings they commit, and in addition, the number of killed and wounded victims are identified in many articles. Other categories, such as weapons used, responses from U.S. politicians, police response, community reaction and policy issues were not discussed as much as perpetrator, incident, and victim-related variables were. Thus, the findings of this study may be used along with related research to build on theory of mass communication, while contributing to the mass shooting literature and supportive theory. Future researchers may consider developing a theoretical argument that further Ruggiero's (2000) uses and gratification theory.

5.4.2 Policy Implications

The findings of this study, in conjunction with the supporting literature, show that coverage on mass shooting events and information discussed can vary based on the political stance of news agencies. Moreover, the variability of category coverage can differ based on the news agency's focus of the article- whether it reports information on the perpetrator or the victims. These findings suggest that news organizations producing written online articles should practice caution when reporting mass shooting events. More specifically, media outlets should become aware of the extent in which specific

focuses on mass shooting casualties are highlighted and discussed in news articles. Moreover, categories with substantially higher coverage and variables with increased attention should be monitored for news organizations to avoid too much emphasis on them. A critical example that was shown in the findings and discussion was the level of perpetrator-related and context of incident-related variables being considered in news coverage, while victim-related variables received much less attention from media agencies. Coverage on the context of mass shooting events mainly highlighted the perpetrators' actions that contributed to the incidents, while a small amount of articles from this category brought attention to the responses targeted individuals had during the shooting. Given these findings, potential policy development on the extent of mass shooting news coverage should be considered. As previously mentioned, the findings showed to be consistent with previous literature on mass media coverage of mass shootings and that perpetrators, in addition to their actions, are covered the most in news reports of mass shooting instances. Moreover, some major differences of news coverage were found between left and right-leaning news agencies. Policy makers may consider using the results and findings of this study to develop policy on the type of content and extent to why specific aspects are discussed in media coverage. For instance, many variables on the perpetrators and their actions received coverage, but the most predominant information on victims was the reported numbers of people wounded and killed. To that point, other variables on the victims, such as their names, ages, interests, professions, and difficulties post-incident should be covered at a higher extent as opposed to perpetrator-specific information. Policy makers should use supporting literature and the findings of this study to consider plausible policy development on the type of coverage mass media sources can provide with respect to mass shooting instances.

Moreover, policy should be considered for the extent in which relevant categories are discussed and whether it should be minimized or increased.

5.5 Study Limitations and Recommendations for Future Research

5.5.1 Limitations of Study

There are several recognized limitations in this study to address. First, this study focused exclusively on analyzing online-accessible news articles from established news organizations. This study did not include an analysis of other forms of news reporting, such as photos, live TV broadcasts, podcasts, and short-form videos (e.g., Instagram Reels and TikTok videos). Second, this study's sample was limited to U.S.-based media outlets, at least in part because Ad Fontes Media virtually excludes non-U.S. outlets. Third, this study did not account for mass shooting coverage from news organizations that the Interactive Media Bias Chart from Ad Fontes Media (2024) consider to produce inaccurate, misleading, or fabricated information/propaganda and are extreme or hyper-partisan left or right-leaning. This study only used news organizations that are well-known by the general American public that Ad Fontes Media (2024) considers to produce factual information. Lastly, acknowledging that this study used qualitative analysis, there is a risk of implied bias from the coding process. The use of multiple coders producing the analysis was not possible for this study; as such, only one coder worked on the categories and variables in shown in the results.

5.5.2 Considerations for Future Research

This study suggests various ideas for future research to consider when choosing to investigate this topic area. First, future research could extend the findings of this study by using these other forms of data, such as videos on social media platforms, photos in news articles, podcasts, and live TV broadcasts. Second, future research should include

news outlets from outside the United States to investigate this topic and describe any possible differences between those news organizations and outlets in the U.S. This should include outlets from non-English speaking countries to account for cultural differences in views about firearms. Inclusively, using news articles from non-Western organizations would be considerable to assess how non-Western societies portray mass shootings in the United States. Moreover, designing a study that includes non U.S.-based news organizations will potentially inform additional theoretical implications relative to Uses and Gratification Theory (Ruggiero, 2000).

Thirdly, the findings of this research can be extended by developing a similar study, but with the inclusion of lesser-known, extremist and/or misleading news sources and use the findings of this study to make comparative conclusions. In addition, a study that evaluates mass shooting media coverage from such news agencies should consider using narrative analysis to assess any underlying ideologies that exist within fabricated news reports. Fourth, this study does not account for the specific dates in which each article was published after the mass shooting incident took place. Although all sampled articles had been published within the first 14 days post-incident, some randomly selected articles may have been published within the first few hours post-incident, while others were posted days afterward when more information about the incident was clear. Future research may consider looking at the average time in which news agencies had published news reports on mass shooting events. Fifth, because this study sampled articles that were posted within a 14-day period after each mass shooting incident, there is potential that more information and findings on each attack had evolved after the 14-day cutoff point. Future research should consider looking at the content of mass shooting coverage with a longer time frame,

such as extending it to 30 days or longer, so that the possibility of new categories and applicable variables within can be assessed.

It is also important to acknowledge the emotional effects of devoting time to reading about tragic experiences, which is known as vicarious trauma (Cowan et al., 2020). Reading multiple news articles on mass shooting instances during the analysis process may lead to triggering effects of emotional sensibility, given the type of content that is discussed in the articles. Moreover, vicarious trauma is relative to traumatic feelings and effects after experiencing exposure to the stories and experiences of others (Branson, 2019). During the analysis of news articles, breaks had to be taken into account for the analysis time frame to process and acknowledge the type of information reported, given that mass shootings as a social phenomenon are rare incidents that affect many vulnerable, innocent lives. Critical information that was analyzed included graphic, detailed information on the killings and injuries of victims, the effects on the victims during and after the incidents, the difficulties encountered by victims, and the honorification of victims through organized vigils, memorials, and funerals. Thus, researchers looking to analyze reported content of mass shooting events in the media should take into account that there is potential for emotional triggering and sensitivity to arise when reading detailed information on the outcomes of mass shootings. Setting time aside to take breaks and process the emotionally-sensitive details in mass shooting news coverage is highly encouraged.

5.6 Conclusion

In conclusion, this study focused on assessing the content that is discussed in online news articles of mass shooting instances and the varied coverage based on the political stances of news organizations. Five of the deadliest mass shootings in U.S. history were

selected to review the type of information discussed, while 12 news organizations (five left-leaning, five right-leaning, and two centrist) were selected to evaluate the content they usually focused on. A total of 174 articles were randomly selected to assess the content discussed by politically biased and unbiased news organizations.

The results showed that eight different categories were majorly discussed by left-leaning, right-leaning and centrist news sources, while the variables within each category varied in terms of how often they were discussed and how many articles each politically biased group produced. The categories and variables identified helped to answer the first research question by identifying the content that is generally discussed in online reports of mass shootings. Each category and variable demonstrated the number of articles that replicated the discussion to help understand the extent of its coverage out of 174 articles. The results showed that three major categories were covered the most: *discussion of perpetrators, victims* and *context of incident*. The division of articles covered by left-leaning, right-leaning, and centrist news organizations helped answer the second research question after reviewing and discussing the differences of coverage for each variable by group of political bias. The results showed that the majority of categories received more coverage from left-leaning news sources over the right-leaning and centrist news organizations, with the exception of two categories: discussion of *weapons* and *policy issues*. From the politically-biased standpoint, left and right-leaning news sources did not show a substantial difference on the coverage of weapons used in mass shooting incidents. In addition, the coverage on policy issues showed that right-leaning news organizations identified more policy areas related to mass shootings and discussed them more often than left-leaning news

articles.

Overall, this study concluded that mass shooting news coverage tended to discuss the weapons, perpetrators, victims, politicians, context of incident, police responses, community reactions, and policy issues related to each incident. From a general standpoint, some variables within each category received more coverage than others. Considering the politically biased and unbiased news sources, there was a lot more variability on the content covered by left-leaning news organizations as opposed to right-leaning and centrist sources. Left-leaning articles predominantly discussed more variables across six of the eight categories (i.e., perpetrators, victims, politicians, context of incident, police response, and community reactions). Some limitations related to the study's methodology and approach were addressed for future researchers to consider. Research on this subject area should consider using non U.S.-based news organizations that cover mass shooting events in the United States to assess any other plausible differences of mass shooting news coverage. Moreover, future researchers may consider using more articles for each mass shooting event from various selected news organizations. Lastly, all researchers in this area should be aware of the vicarious trauma that can be induced from reading news articles on mass shooting events.

REFERENCES

- Alder, J. (2016). Media portrayal of mentally disordered offenders: A case study. *Mental Health Practice*, 19(7).
- Amenta, E. (2022). Why US Conservative Movements Are Winning: It's Not Trump—It's The Institutions. *Mobilization*, 27(1), 27-45.
- Anisin, A. (2022). Theorizing Mass Shootings. *Mass Shootings in Central and Eastern Europe*, 65-84.
- Barak, G. (1988). Newsmaking criminology: Reflections of the media, intellectuals, and crime. *Justice Quarterly*, 5(4), 565-587.
- Barak, G. (2007). Doing newsmaking criminology from within the academy. *Theoretical Criminology*, 11(2), 191-207.
- Barberá, P., Jost, J. T., Nagler, J., Tucker, J. A., & Bonneau, R. (2015). Tweeting from left to right: Is online political communication more than an echo chamber?. *Psychological Science*, 26(10), 1531-1542.
- Beard, J. H., Jacoby, S. F., James, R., Dong, B., Seamon, M. J., Maher, Z., ... & Morrison, C. N. (2019). Examining mass shootings from a neighborhood perspective: an analysis of multiple-casualty events and media reporting in Philadelphia, United States. *Preventive medicine*, 129, 105856.
- Benski, T., Langman, L., Perugorria, I., & Tejerina, B. (2013). From the streets and squares to social movement studies: What have we learned?. *Current sociology*, 61(4), 541-561.
- Bernhardt, D., Krasa, S., & Polborn, M. (2008). Political polarization and the electoral effects of media bias. *Journal of Public Economics*, 92(5-6), 1092-1104.

- Besley, T., & Case, A. (2003). Political institutions and policy choices: evidence from the United States. *Journal of Economic Literature*, 41(1), 7-73.
- Blackman, J., & Baird, S. (2013). The shooting cycle. *Conn. L. Rev.*, 46, 1513.
- Blinder, A., Harmon, A., & Oppel, R. A. (2019). "I Will Not Say His Name": Police Try to End Notoriety of Gunmen in Mass Shootings. *New York Times (Online)*.
- Booty, M., O'Dwyer, J., Webster, D., McCourt, A., & Crifasi, C. (2019). Describing a "mass shooting": the role of databases in understanding burden. *Injury epidemiology*, 6, 1-8.
- Branson, D. C. (2019). Vicarious trauma, themes in research, and terminology: A review of literature. *Traumatology*, 25(1), 2.
- Brown, D., Lauricella, S., Douai, A., & Zaidi, A. (2012). Consuming television crime drama: A uses and gratifications approach. *American Communication Journal*, 14(1), 47-60.
- Calcutt, R. A., Robles, A. M., Kornblith, L. Z., Plevin, R. E., & Mell, M. W. (2019). Effect of mass shootings on gun sales—A 20-year perspective. *The journal of trauma and acute care surgery*, 87(3), 531.
- Capellan, J. A., & Silva, J. R. (2021). An investigation of mass public shooting attacks against government targets in the United States. *Studies in Conflict & Terrorism*, 44(5), 387-409.
- Chapman, K. (2021). A Quantitative Content Analysis of Political Bias Impacting Mass Shooting Coverage: Comparing a Liberal News Outlet with Gun Archive Data for the Time Period 2014–2019. Arkansas State University.
- Chiang, C. F., & Knight, B. (2011). Media bias and influence: Evidence from newspaper endorsements. *The Review of economic studies*, 78(3), 795-820.

- Chong, M. (2019). Discovering fake news embedded in the opposing hashtag activism networks on Twitter: #Gunreformnow vs. #NRA. *Open Information Science*, 3(1), 137-153.
- Coffey, P. J. (1975). A quantitative measure of bias in reporting of political news. *Journalism Quarterly*, 52(3), 551-553.
- Corbelli, J. (1982). Fame and Notoriety in Defamation Litigation. *Hastings LJ*, 34, 809.
- Cowan, R. G., Blum, C., Szirony, G., & Cicchetti, R. J. (2020). Supporting survivors of public mass shootings. *Journal of Social, Behavioral, and Health Sciences*, 14(1), 12.
- Coyne, S. M., Warburton, W. A., Essig, L. W., & Stockdale, L. A. (2018). Violent video games, externalizing behavior, and prosocial behavior: A five-year longitudinal study during adolescence. *Developmental Psychology*, 54(10), 1868.
- Dreier, S. K., Gade, E. K., Card, D., & Smith, N. A. (2022). Patterns of bias: How mainstream media operationalize links between mass shootings and terrorism. *Political Communication*, 39(6), 755-778.
- DiMaggio, C., Avraham, J., Berry, C., Bukur, M., Feldman, J., Klein, M., ... & Frangos, S. (2019). Changes in US mass shooting deaths associated with the 1994–2004 federal assault weapons ban: Analysis of open-source data. *Journal of trauma and acute care surgery*, 86(1), 11-19.
- Dries, D. J. (2023). Mass Shooting. *Air Medical Journal*, 42(3), 129-134.
- Durosky, A., Newman, E., & Holton, A. E. (2023). Perpetuating Perpetrators: News Coverage of Perpetrators and Victims of the Columbine and Parkland Shootings. *Journalism Studies*, 24(4), 515-531.

- Duwe, G. (2020). Patterns and prevalence of lethal mass violence. *Criminology & Public Policy*, 19(1), 17-35.
- Duxbury, S. W., Frizzell, L. C., & Lindsay, S. L. (2018). Mental illness, the media, and the moral politics of mass violence: The role of race in mass shootings coverage. *Journal of research in crime and delinquency*, 55(6), 766-797.
- Eisinger, R. M., Veenstra, L. R., & Koehn, J. P. (2007). What media bias? Conservative and liberal labeling in major US newspapers. *Harvard International Journal of Press/Politics*, 12(1), 17-36.
- Entman, R. M. (2007). Framing bias: Media in the distribution of power. *Journal of Communication*, 57(1), 163-173.
- Eveland Jr, W. P., & Shah, D. V. (2003). The impact of individual and interpersonal factors on perceived news media bias. *Political psychology*, 24(1), 101-117.
- Ferrell, J. (1999). Cultural criminology. *Annual review of sociology*, 25(1), 395-418.
- Fox, J. A., & DeLateur, M. J. (2014). Mass shootings in America: Moving beyond Newtown. *Homicide Studies*, 18(1), 125-145.
- Fox, J. A., & Levin, J. (2016). Explaining mass shootings: Types, patterns, and theories. The Wiley handbook of the psychology of mass shootings, 36-55.
- Fox, J. A., Gerdes, M., Duwe, G., & Rocque, M. (2021). The newsworthiness of mass public shootings: What factors impact the extent of coverage?. *Homicide studies*, 25(3), 239-255.

- Fox, J. A., Sanders, N. E., Fridel, E. E., Duwe, G., & Rocque, M. (2021). The contagion of mass shootings: The interdependence of large-scale massacres and mass media coverage. *Statistics and Public Policy*, 8(1), 53-66.
- Franquez, J. J., Hagala, J., Lim, S., & Bichler, G. (2013). We be drinkin': A study of place management and premise notoriety among risky bars and nightclubs. *Criminology Rev.*, 14, 34.
- Giacomantonio, C., Litmanovitz, Y., Bennell, C., & Jones, D. J. (2022). Expressing uncertainty in criminology: Applying insights from scientific communication to evidence-based policing. *Criminology & Criminal Justice*, 17488958221107325.
- Gilpin, D. R. (2020). The Second Amendment vs. the First: The NRA's Constitutional Bias Perspective on Fake News.
- Gobaud, A. N., Mehranbod, C. A., Kaufman, E., Jay, J., Beard, J. H., Jacoby, S. F., ... & Morrison, C. N. (2023). Assessing the gun violence archive as an epidemiologic data source for community firearm violence in 4 US cities. *JAMA network open*, 6(6), e2316545-e2316545.
- Greene-Colozzi, E. A., & Silva, J. R. (2022). Mass outcome or mass intent? A proposal for an intent focused, no-minimum casualty count definition of public mass shooting incidents. *Journal of mass violence research*, 1(2), 27-41.
- Greer, C. (2010). News media criminology. *The SAGE handbook of criminological theory*, 490-513.
- Hackett, R. A. (1984). Decline of a paradigm? Bias and objectivity in news media studies. *Critical Studies in Media Communication*, 1(3), 229-259.

- Hamborg, F., Donnay, K., & Gipp, B. (2019). Automated identification of media bias in news articles: an interdisciplinary literature review. *International Journal on Digital Libraries*, 20(4), 391-415.
- Haney, C., & Greene, S. (2004). Capital constructions: Newspaper reporting in death penalty cases. *Analyses of Social Issues and Public Policy*, 4(1), 129-150.
- Haney, C. (2008). Media criminology and the death penalty. *DePaul L. Rev.*, 58, 689.
- Hardin, K. C. (2019). Active and Mass Shootings: An Introduction and Overview. *Assessing and Averting the Prevalence of Mass Violence*, 1-17.
- Holody, K. J., & Shaughnessy, B. (2022). # NEVERAGAIN: framing in community and national news coverage of the Parkland mass shootings. *Journalism practice*, 16(4), 637-659.
- Huff-Corzine, L., & Corzine, J. (2020). The devil's in the details: Measuring mass violence. *Criminology & Public Policy*, 19(1), 317-333.
- Hume, H., & Perreault, G. (2022). Media and mass shootings: Field theory in CNN news coverage of the Columbine high school and Parkland high school mass shootings. *Electronic News*, 16(3), 147-163.
- Hunter, L. Y., Ginn, M. H., Storyllewellyn, S., & Rutland, J. (2021). Are mass shootings acts of terror? Applying key criteria in definitions of terrorism to mass shootings in the United States from 1982 to 2018. *Behavioral sciences of terrorism and political aggression*, 13(4), 265-294.
- Interactive Media Bias Chart*. Ad Fontes Media. (2024, January 17).

<https://adfontesmedia.com/interactive-media-bias-chart/>

- Kambam, P. R., Pozios, V. K., Bond, K. L., & Ostermeyer, B. K. (2020). The influence of media related to mass shootings. *Psychiatric annals*, 50(9), 393-398.
- Karaminaghibi, H., Razavifard, B., & Moazenzadegan, H. (2022). The effectiveness of the media in committing and preventing crime in the light of cultural criminology. *Journal of Comparative Law*, 6(2), 53-75.
- Kellermann, A. L., Rivara, F. P., Rushforth, N. B., Banton, J. G., Reay, D. T., Francisco, J. T., & Somes, G. (1993). Gun ownership as a risk factor for homicide in the home. *New England Journal of Medicine*, 329(15), 1084-1091.
- Kerr, S. E. (2018). *Gun Violence Prevention?: The Politics Behind Policy Responses to School Shootings in the United States*. Springer.
- Kerr, S., & Kerr, S. (2018). A Partisan Issue? Policy-Making and Guns in the United States. *Gun Violence Prevention? The Politics Behind Policy Responses to School Shootings in the United States*, 31-55.
- Kidd-Hewitt, D. (2002). Crime and the media: a criminological perspective. *Criminology: A Reader*. London, UK: Sage, 116-29.
- Kikerpill, K. (2023). The crime-as-communication approach: Challenging the idea of online routine activities by taking communication seriously. *Journal of Economic Criminology*, 2, 100035.
- Kim, C., Capellan, J. A., & Adler, A. (2021). Exploring the empirical literature on mass shooting: A mixed-method systematic review of peer-reviewed journal articles. *Aggression and violent behavior*, 58, 101584.
- Kleck, G. (2009). Mass shootings in schools: The worst possible case for gun control. *American*

Behavioral Scientist, 52(10), 1447-1464.

Klein, A. G. (2020). Loaded Words: NRATV and the Making of Liberal America as a Public Enemy. *Journal of Contemporary Rhetoric*, 10.

Lankford, A. (2016). Fame-seeking rampage shooters: Initial findings and empirical predictions. *Aggression and Violent Behavior*, 27, 122-129.

Lankford, A. (2016). Are America's public mass shooters unique? A comparative analysis of offenders in the United States and other countries. *International Journal of Comparative and Applied Criminal Justice*, 40(2), 171-183.

Lankford, A., & Madfis, E. (2018). Don't name them, don't show them, but report everything else: A pragmatic proposal for denying mass killers the attention they seek and deterring future offenders. *American Behavioral Scientist*, 62(2), 260-279.

Lankford, A., Adkins, K. G., & Madfis, E. (2019). Are the deadliest mass shootings preventable? An assessment of leakage, information reported to law enforcement, and firearms acquisition prior to attacks in the United States. *Journal of Contemporary Criminal Justice*, 35(3), 315-341.

Lankford, A., & Silver, J. (2020). Why have public mass shootings become more deadly? Assessing how perpetrators' motives and methods have changed over time. *Criminology & Public Policy*, 19(1), 37-60.

Lazaridou, K., & Krestel, R. (2016). Identifying political bias in news articles. *Bulletin of the IEEE TCDL*, 12(2), 1-12.

- Levin, J., & Wiest, J. B. (2018). Covering mass murder: An experimental examination of the effect of news focus—killer, victim, or hero—on reader interest. *American behavioral scientist*, 62(2), 181-194.
- Lim, C. S., Snyder Jr, J. M., & Strömberg, D. (2012). The Judge, the Politician and the Press: Newspaper Coverage and Criminal Sentencing Across Electoral Systems. *Cornell University Typescript*.
- Lim, C. S., Snyder Jr, J. M., & Strömberg, D. (2015). The judge, the politician, and the press: newspaper coverage and criminal sentencing across electoral systems. *American Economic Journal: Applied Economics*, 7(4), 103-135.
- Lin, P. I., Fei, L., Barzman, D., & Hossain, M. (2018). What have we learned from the time trend of mass shootings in the US?. *PloS one*, 13(10), e0204722.
- Lopez, B. E., Crimmins, D. M., & Haskins, P. A. (2020). Advancing mass shootings research to inform practice. *National Institute of Justice Journal*, 282, 1-9.
- Lowe, S. R., & Galea, S. (2017). The mental health consequences of mass shootings. *Trauma, Violence, & Abuse*, 18(1), 62-82.
- Marshall, P. D. (2014). Celebrity and power: Fame in contemporary culture. U of Minnesota Press.
- May, A. R., & McDermott, V. (2021). “Every Day When I Go to Work, I Wonder If it Will Be the Day I Die”: Sensemaking Mass Media and School Shootings. *In Theorizing Criminality and Policing in the Digital Media Age* (pp. 131-150). Emerald Publishing Limited.
- McClosky, H., & Chong, D. (1985). Similarities and differences between left-wing and right-wing radicals. *British Journal of Political Science*, 15(3), 329-363.

- McCurdy, P. (2012). Social movements, protest and mainstream media. *Sociology Compass*, 6(3), 244-255.
- Metzl, J. M., Piemonte, J., & McKay, T. (2021). Mental illness, mass shootings, and the future of psychiatric research into American gun violence. *Harvard review of psychiatry*, 29(1), 81.
- Minnebo, J. (2000). Fear of crime and television use: A uses and gratifications approach. *Communications*, 25(2).
- Morris, J. S. (2007). Slanted objectivity? Perceived media bias, cable news exposure, and political attitudes. *Social science quarterly*, 88(3), 707-728.
- Murray, J. L. (2017). Mass media reporting and enabling of mass shootings. *Cultural Studies↔ Critical Methodologies*, 17(2), 114-124.
- Muschert, G. W. (2009). Frame-changing in the media coverage of a school shooting: The rise of Columbine as a national concern. *The Social Science Journal*, 46(1), 164-170.
- Peterson, J., & Densley, J. (2021). The violence project: How to stop a mass shooting epidemic. Abrams.
- Peterson, J. K., Densley, J. A., Knapp, K., Higgins, S., & Jensen, A. (2022). Psychosis and mass shootings: A systematic examination using publicly available data. *Psychology, Public Policy, and Law*, 28(2), 280.
- Peterson, J., Densley, J., Spaulding, J., & Higgins, S. (2023). How Mass Public Shooters Use Social Media: Exploring Themes and Future Directions. *Social Media+ Society*, 9(1), 20563051231155101.

- Phillips, N. D. (2017). Violence, media effects, and criminology. *In Oxford research encyclopedia of criminology and criminal justice*.
- Porfiri, M., Sattanapalle, R. R., Nakayama, S., Macinko, J., & Sipahi, R. (2019). Media coverage and firearm acquisition in the aftermath of a mass shooting. *Nature human behaviour*, 3(9), 913-921.
- Przybylski, A. K., & Weinstein, N. (2019). Violent video game engagement is not associated with adolescents' aggressive behaviour: evidence from a registered report. *Royal Society Open Science*, 6(2), 171474.
- Reeping, P. M., Jacoby, S., Rajan, S., & Branas, C. C. (2020). Rapid response to mass shootings: A review and recommendations. *Criminology & Public Policy*, 19(1), 295-315.
- Rocque, M., & Duwe, G. (2018). Rampage shootings: an historical, empirical, and theoretical overview. *Current opinion in psychology*, 19, 28-33.
- Rodrigo-Ginés, F. J., Carrillo-de-Albornoz, J., & Plaza, L. (2023). A systematic review on media bias detection: What is media bias, how it is expressed, and how to detect it. *Expert Systems with Applications*, 121641.
- Schildkraut, J. (2014). Mass murder and the mass media: An examination of the media discourse on US rampage shootings, 2000-2012.
- Schildkraut, J., & Elsass, H. J. (2016). Mass shootings: Media, myths, and realities. *Bloomsbury Publishing USA*.
- Schildkraut, J., Elsass, H. J., & Meredith, K. (2018). Mass shootings and the media: Why all events are not created equal. *Journal of Crime and Justice*, 41(3), 223-243.

- Schildkraut, J. (2019). A call to the media to change reporting practices for the coverage of mass shootings. *Wash. UJL & Pol'y*, 60, 273.
- Schildkraut, J.(2021). Can Mass Shootings be Stopped?. *Rockefeller Institute of Government*.
- Schnell, K. C. F. (2001). Assessing the democratic debate: How the news media frame elite policy discourse. *Political Communication*, 18(2), 183-213.
- Schulze, H. (2020). Who uses right-wing alternative online media? An exploration of audience characteristics. *Politics and Governance*, 8(3), 6-18.
- Schweikert, K., Huth, M., & Gius, M. (2021). Detecting a copycat effect in school shootings using spatio-temporal panel count models. *Contemporary Economic Policy*, 39(4), 719–736.
<https://doi.org/10.1111/coep.12532>
- Serazio, M. (2010). Shooting for fame: Spectacular youth, web 2.0 dystopia, and the celebrity anarchy of generation mash-up. *Communication, Culture & Critique*, 3(3), 416-434.
- Silva, J. R. (2019). Mass shooting films: Myths, academic knowledge, and popular criminology. *Victims & Offenders*, 14(2), 239-264.
- Silva, J. R. (2022). Mass shooting outcomes: A comparison of completed, attempted, failed, and foiled incidents in America. *Deviant Behavior*, 43(12), 1487-1506.
- Spinde, T., Hamborg, F., Donnay, K., Becerra, A., & Gipp, B. (2020). Enabling news consumers to view and understand biased news coverage: a study on the perception and visualization of media bias. In *Proceedings of the ACM/IEEE joint conference on digital libraries in 2020* (pp. 389-392).
- Starbird, K. (2017). Examining the alternative media ecosystem through the production of alternative narratives of mass shooting events on Twitter. In *Proceedings of the International AAAI Conference on Web and Social Media* 11(1), 230-239.

- Steidley, T., & Colen, C. G. (2017). Framing the gun control debate: Press releases and framing strategies of the National Rifle Association and the Brady Campaign. *Social Science Quarterly*, 98(2), 608-627.
- Taylor, H. (2019). Domestic terrorism and hate crimes: legal definitions and media framing of mass shootings in the United States. *Journal of policing, intelligence and counter terrorism*, 14(3), 227-244.
- Tewksbury, R. (2009). Qualitative versus quantitative methods: Understanding why qualitative methods are superior for criminology and criminal justice. *Journal of Theoretical and Philosophical Criminology*, (1), 38-58
- Tracy, S. J. (2019). Qualitative research methods: Collecting evidence, crafting analysis, communicating impact. *John Wiley & Sons*.
- Vargas, T., Schiffman, J., Lam, P. H., Kim, A., & Mittal, V. A. (2020). Using search engine data to gauge public interest in mental health, politics and violence in the context of mass shootings. *PLoS one*, 15(8), e0236157.
- Wahl-Jorgensen, K. (2007). *Journalists and the public: Newsroom culture, letters to the editor, and democracy* (p. 45). Cresskill, NJ: Hampton Press.
- Watson, S. (2022). Mass shootings, fatality thresholds and defining by numbers: Political and social consequences. *Criminology & Criminal Justice*, 17488958221110812.
- Weatherly, J. N., Petros, T. V., Christopherson, K. M., & Haugen, E. N. (2007). Perceptions of political bias in the headlines of two major news organizations. *Harvard International Journal of Press/Politics*, 12(2), 91-104.

Zheng, J., & Scardino, F. (2021). News Media Coverage of Mass Shootings: How the Political Stance of News Media Influences the Coverage of Mass Shooters. *Journal of Student Research*, 10(1).

APPENDIX: Online News Articles of Mass Shootings

Las Vegas Strip (2017)

Right-leaning News Sources

Fox News Online

[“Las Vegas shooting: Lawmakers condemn 'senseless' attack, thank police”](#)

[“Las Vegas gunman targeted aviation fuel tanks during shooting spree, report says”](#)

[“Trump heads to Las Vegas to comfort a grieving city, expected to avoid gun politics”](#)

New York Post

[“Las Vegas shooter killed himself after massacre”](#)

[“FBI: Las Vegas shooter had no connection to ISIS”](#)

[“Las Vegas shooter was a multi-millionaire real estate investor: brother”](#)

The Federalist

[“Las Vegas Shooter Kills At Least 50, Wounds More Than 200 At Music Festival”](#)

[“Democrats Have No Idea How To Prevent Mass Shootings”](#)

[“When You Politicize Shootings You Make It Harder To Find Solutions”](#)

The Washington Times

[“Stephen Paddock, 64, identified as Las Vegas shooting suspect”](#)

[“Las Vegas shooting strains hospitals”](#)

[“Las Vegas massacre raises many questions”](#)

Wall Street Journal

[“Las Vegas shooting leaves several people injured”](#)

[“Las Vegas Mass Shooting renews debate over gun silencer bill”](#)

[“Las Vegas shooting victims remembered by friends and family”](#)

Left-leaning News Sources

CNN News

[“Las Vegas shooting: What we know”](#)

[“Las Vegas shooting: Rapid-fire shots”](#)

[“Las Vegas shooting: Bodycam footage shows first response”](#)

The Huffington Post

[“Over 50 Dead, Hundreds Wounded In Shooting At Las Vegas Country Music Festival”](#)

[“What We Know About The Las Vegas Shooting Victims”](#)

[“Calling Las Vegas Massacre ‘Deadliest Shooting In U.S. History’ Erases Our Violent Past”](#)

NBC News

[“Las Vegas Shooting: 59 Killed and More Than 500 Hurt Near Mandalay Bay”](#)

[“Eyewitness to Las Vegas Shooting Describes Event”](#)

The New York Times

[“Marilou Danley, Gunman’s Girlfriend, Says She Was Unaware of His Plans”](#)

[“Las Vegas Gunman’s Criminal Father Vanished From Sons’ Lives”](#)

[“Gunman’s Vantage Point and Preparations Opened the Way for Mass Slaughter”](#)

The Washington Post

[“At least 59 killed in Las Vegas shooting rampage, more than 500 others injured”](#)

[“Las Vegas gunman shot security guard minutes before massacre, police say”](#)

[“How the Las Vegas Strip shooting unfolded”](#)

Centered News Sources

Reuters

[“Two hours of horror, disbelief, as gunman opens fire in Las Vegas”](#)

[“Las Vegas gunman's girlfriend says no advance knowledge of massacre”](#)

[“New timeline in Vegas shooting raises questions on police response”](#)

AP News

[“‘I’m going to die’: fear grips Vegas strip; gunman kills 59”](#)

[“The Latest: Guest next to Vegas gunman’s room ‘shaken’”](#)

[“Acts of heroism emerge in chaos of Las Vegas shooting”](#)

Orlando Pulse Nightclub (2016)

Right-leaning News Sources

Fox News Online

[“Orlando shooting: A week later, victims' families and survivors worry about future”](#)

[“What We Know: Gay nightclub shooting deadliest on US soil”](#)

[“OneOrlando fund to give money directly to survivors and families of Pulse nightclub massacre”](#) *New York Post*

[“Gunman pledged allegiance to ISIS before Florida gay club massacre”](#)

[“Gay men barred from giving blood to victims of gay club massacre”](#)

[“Obama says Florida gay nightclub massacre an ‘act of terror and hate’”](#)

The Federalist

[“Anderson Cooper’s Orlando Ranting Is Bad For America”](#)

[“Why It’s Idiotic To Blame Christians For The Orlando Attack”](#)

The Washington Times

[“Victim vignettes: All described as kind, loving, full of joy”](#)

[“Omar Mateen identified as Pulse nightclub gunman”](#)

[“Omar Mateen, Orlando shooter, had strong indications of radicalization”: FBI”](#)

Wall Street Journal

[“Orlando Shooting Ranks Among Deadliest Attacks in U.S.”](#)

[“Orlando Forges Unity in the Wake of Attack”](#)

[“In College, Orlando Shooter Was Known for Antigay Views”](#)

Left-leaning News Sources

CNN News

[“Orlando shooting: 49 killed, shooter pledged ISIS allegiance”](#)

[“Timeline of Orlando nightclub shooting”](#)

[“Witness: 'Blood everywhere' after Orlando club shooting”](#)

The Huffington Post

[“How understanding HIV helped me cope with the Orlando shooting”](#)

[“Your Queer Loved Ones Just Lost 49 Family Members. Be Patient With Them.”](#)

[“Vigils For Orlando Shooting Victims Unite Thousands To Fight Hate”](#)

NBC News

[“Orlando Nightclub Massacre Live Blog: Latest Updates on Pulse Shooting”](#)

[“Who Is Orlando Nightclub Shooting Suspect Omar Mateen?”](#)

[“Witness Records Gunfire at Scene of Orlando Nightclub Shooting”](#)

The New York Times

[“Orlando Shooting: How the World Is Paying Tribute to the Victims”](#)

[“Names of the Dead”](#)

[“Omar Mateen, Twice Scrutinized by F.B.I., Shows Threat of Lone Terrorists”](#)

The Washington Post

[“‘He was not a stable person’: Orlando shooter showed signs of emotional trouble”](#) [“The target was a gay nightclub. The target was also all of us”](#)

[“Orlando shooter’s father: ‘If I did know, I would have stopped him’”](#)

Centered News Sources

Reuters

[“Islamic State claims responsibility for Orlando nightclub shooting”](#)

[“Orlando killer expressed support for multiple Islamist groups”](#)

[“Fifty people killed in massacre at Florida gay nightclub - police”](#)

AP News

[“Correction: Nightclub Shooting-Florida-The Latest story”](#)

Sutherland Springs, Texas - First Baptist Church (2017)

Right-leaning News Sources

Fox News Online

[“Texas church shooting: Trump, politicians react”](#)

[“Couples, families among the dead in Texas church shooting”](#)

[“Pence to visit Texas church shooting scene this week”](#)

New York Post

[“At least 26 dead, dozens injured in Texas church massacre”](#)

[“Pastor’s 14-year-old daughter killed in Texas church shooting”](#)

[“A look inside the church of Texas’ deadliest mass shooting”](#)

The Federalist[“When The Saints Of First Baptist Church Were Murdered, God Was Answering Their Prayers”](#)[“15 Of The Most Unhinged Responses To The Texas Church Massacre Yet”](#)[“Hero Who Stopped Texas Gunman: I Couldn’t Have Stopped Him Without My AR-15”](#)*The Washington Times*[“Texas church attack the latest US mass shooting”](#)[“Devin Kelley identified as Sutherland Springs, Texas church shooter”](#)[“Suspect in Texas church massacre wore black mask with a skull face”](#)*Wall Street Journal*[“Texas church victims included pastor’s daughter”](#)[“Massacre in Texas leaves families with unspeakable losses”](#)[“Two dozen funerals in one Texas town”](#)Left-leaning News Sources*CNN News*[“At least 26 people killed in shooting at Texas church”](#)[“The victims of the Texas church shooting”](#)[“Trump offers his support after church shooting”](#)*The Huffington Post*[“At Least 26 Dead In Shooting At Texas Baptist Church”](#)[“People Fed Up With ‘Thoughts And Prayers’ Demand Action After Texas Church Massacre”](#)[“Texas Church Is Transformed Into Poignant Memorial For Mass Shooting Victims”](#)*NBC News*

[“Texas Church Shooter Had 'a Purpose and a Mission' in Family Feud, Investigator Says”](#)

[“In Memoriam: The Sutherland Springs Shooting Victims”](#)

[“Texas Church Shooting: More Than Two Dozen Parishioners Killed”](#)

The New York Times

[“What Happened at the Texas Church Shooting”](#)

[“‘You’re goona die’ survivors of the texas shooting recall terrifying scene”](#)

[“Texas Gunman Once Escaped From Mental Health Facility”](#)

The Washington Post

[“Texas church becomes a solemn memoiral a week after shooting massacre”](#)

[“At least 26 dead in South Texas church shooting, officials say”](#)

[“Texas church gunman escaped mental health facility in 2012 after threatening military superiors”](#)

Centered News Sources

Reuters

[“Church shooter killed himself after vehicle chase, sheriff tells CBS”](#)

[“Mother killed shielding her four children in texas church shooting”](#)

[“A Texas school is devastated by church shooting”](#)

AP News

[“The Latest: Trump calls Texas church shooter “deranged.””](#)

[“Texas church gunman sent hostile text messages before attack”](#)

[“Violence followed Texas church gunman after high school”](#)

Uvalde, Texas - Robb Elementary School (2022)

Right-leaning News Sources

Fox News Online

[“Police face questions over timeline of events surrounding Uvalde school shooting”](#)

[“Uvalde, Texas police cooperating with state in school shooting probe, district PD chief not responding”](#)

[“Texas school shooting suspect said 'goodnight,' played 'sad' music before firing, 11-year-old says”](#) *New York Post*

[“9 students, 2 teachers dead in Robb Elementary School shooting in Texas”](#)

[“What we know so far about Salvador Ramos, the suspected Texas school shooter”](#)

[“Texas school shooting: What we know about the victims”](#)

The Federalist

[“Uvalde Had A Security System For School Shootings. The Failure To Implement It Doesn’t Mean](#)

[Democrats Are Right”](#)

[“Here Are Eight Lies Texas Officials Told About Uvalde That Should Get Them Fired”](#)

[“School Shootings Aren’t Caused By Faulty Gun Laws But By The Collapse Of The Family”](#)

The Washington Times

[“Uvalde, Texas school shooting: What do we know so far?”](#)

[“Uvalde, Texas, school shooting response defined by police”](#)

[“Uvalde, Texas, school shooting: 19 students, teacher dead”](#)

Wall Street Journal

[“The lives lost in Texas, Uvalde: families share the victims’ stories”](#)

[“Texas parents angered over police response to shooting”](#)

[“Uvalde school security chief silent as post-shooting questions swirl”](#)

Left-leaning News Sources

CNN News

[“Deadly shooting at Texas elementary school”](#)

[“Ted Cruz calls school shooting "unspeakable crime"”](#)

[“What we know and don’t know in the Texas massacre”](#)

The Huffington Post

[“Uvalde Student: 'I Played Dead So He Wouldn't Shoot Me'”](#)

[“Gunman's Last 90 Minutes Fuel Questions About Police Response At Uvalde School”](#)

[“Texas Fourth Grader Recalls 'Hiding Hard' Under Table As Gunman Shot Classmates”](#)

NBC News

[“At least 21 dead after mass shooting at Texas elementary school, state senator says”](#)

[“Two dead, multiple children injured in Texas elementary school shooting”](#)

[“9 children, 2 teachers killed in Texas elementary school shooting”](#)

The New York Times

[“‘Why the Kids?’ In Close-Knit Uvalde, It’s Everyone’s Loss.”](#)

[“Parents Express Anger at Police Response to Uvalde School Massacre”](#)

[“Texas Massacre is the Second-Deadliest School Shooting on Record”](#)

The Washington Post

[“Police hold news conference on law enforcement response to Uvalde shooting”](#)

[“Gunman bought two rifles, hundreds of rounds in days before massacre”](#)

[“These are the victims of the Uvalde school shooting in Texas”](#)

Centered News Sources

Reuters

[“Gunman kills 19 children, 2 teachers at Texas elementary school”](#)

[“Investigators question police response in Texas shooting”](#)

[“Texas massacre shocks, but gunfire at U.S. schools at record high”](#)

AP News

[“Gunman kills 19 children, 2 adults in Texas school rampage”](#)

[“Onlookers urged police to charge into Texas school”](#)

[“Texas elementary school shooting: What do we know so far?”](#)

Walmart El Paso, Texas (2019)

Right-leaning News Sources

Fox News Online

[“El Paso shooting Walmart employee helped up to 100 escape, says he was 'trained the customers come](#)

[first”](#)

[“El Paso shooting fatalities now at 22 after victim dies at hospital Monday morning, police say”](#)

[“Beto O'Rourke says Trump's rhetoric in part to blame for El Paso mass shooting”](#)

New York Post

[“At least 20 dead in Texas Walmart massacre, 21-year-old in custody”](#)

[“Suspect in El Paso Walmart shooting identified as Patrick Crusius”](#)

[“El Paso, Dayton mass shootings prompt renewed gun-control debate”](#)

The Federalist

[“Why Going After Guns And Everything Labeled White Supremacy Won't Solve Shootings”](#)

[“Julián Castro Blames Trump For El Paso Shooting”](#)

[“Why It’s Wrong To Blame Trump For The Mass Shootings”](#)

The Washington Times

[“El Paso Walmart Shooting suspect admits target Mexicans in massacre, affidavit says”](#)

[“Mexico to take ‘forceful legal actions’ after El Paso shooting”](#)

[“Walmart orders violent video game displays removed”](#)

Wall Street Journal

[“Trump to Visit El Paso and Dayton, Testing His Ability to Heal”](#)

[“El Paso shooter’s family says he was influenced and informed by people we do not know”](#)

[“El Paso shooting suspect targeted Mexicans, officials say”](#)

Left-leaning News Sources

CNN News

[“20 people killed in El Paso shooting, Texas governor says”](#)

[“Police believe the El Paso shooter targeted Latinos. These are the victims’ stories”](#)

[“El Paso community reflects on horrors of mass shooting”](#)

The Huffington Post

[“El Paso Shooting Suspect Says He Targeted Mexicans: Police”](#)

[“Death Toll Rises In El Paso Shooting”](#)

[“Kamala Harris: Trump Was 'Tweeting Out The Ammunition' For El Paso Shooter”](#)

NBC News

[“El Paso shooting: 20 people dead, 26 injured, suspect in custody, police say”](#)

[“Multiple people killed in mass shooting at El Paso shopping center”](#)

[“Horror in El Paso another in a long list of mass killings plaguing the nation”](#)

The New York Times

[“How the El Paso Shooting Exposes the Rifts in Texas Politics”](#)

[“El Paso Shooting Victims: Here Are Some of Their Stories”](#)

["El Paso Shooting Suspect's Manifesto Echoes Trump's Language"](#)

The Washington Post

[“At least 20 dead in El Paso shopping center shooting as authorities investigate Texas man and manifesto”](#)

[“The scene at the El Paso shooting that left several wounded, dead”](#)

[“As his environment changed, suspect in El Paso shooting learned to hate”](#)

Centered News Sources

Reuters

[“Gunman kills 20, wounds 26 at Walmart store in El Paso, Texas”](#)

AP News

[“Police: El Paso shooting suspect said he targeted Mexicans”](#)

[“20 killed, 26 wounded when gunman attacks Texas shoppers”](#)

[“The Latest: Groups wanting tougher laws on guns march”](#)