Media Salience and Frame Changing in the Coverage of Mass Shootings:
A Comparison of Ideological and Non-Ideological Attacks

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Abstract

Public concern over two distinct forms of episodic violence – mass shootings and terrorism – remains heightened. While historically regarded as distinct phenomenon, recent mass shootings expose a blurring of lines between them. Articles in the New York Times for both ideological (terrorist and extreme far-right) and non-ideological (school and workplace) mass shootings were analyzed to assess media framing and possible shifts in coverage over time. The findings indicate that while sharing many similarities, how these types of mass shootings are framed by the media diverge when the connotation of terrorism is present. In return, this may impact how news consumers come to understand these events.

Keywords: mass shootings; terrorism; ideological violence; non-ideological violence; media framing; agenda-setting; claims maker
Introduction

Mass shootings in the United States continue to be a cause for public concern as, despite their statistically rare occurrence, they are perceived as being commonplace. These perceptions are amplified further with highly lethal events, such as the June 12, 2016, shooting at Pulse Nightclub in Orlando, Florida, which claimed the lives of 49 people and left another 53 injured. While there have been particularly lethal mass shootings in other locations since (e.g., the Route 91 Harvest Festival in Las Vegas, Nevada on October 1, 2017, and the Marjory Stoneman Douglas High School in Parkland, Florida on February 14, 2018), the Pulse shooting differed in one noticeable way: during the rampage, the shooter had called into 9-1-1 dispatch and pledged allegiance to the Islamic State of Iraq and Syria (ISIS) (Mina, 2017). Though an American, the fact that the perpetrator was associated with international (Middle Eastern) extremism when most shooters are believed to be white Americans only further perpetuated the narrative that the Pulse attack was an act of terrorism.

The Pulse shooting may have been shocking in terms of its destructiveness, but media sensationalized mass shootings are not new in the United States (Schildkraut & Elsass, 2016; Schildkraut & Muschert, 2019). Nonetheless, the perpetrator’s connection to a terrorist ideology differentiated the attack from other shootings and from terrorism more broadly. In the past, American terrorism historically has been associated with politically motivated bombings (e.g., the 1995 Oklahoma City bombing) and sophisticated attacks by radical Islamic terrorists (e.g., the September 11th hijackings) as opposed to mass shootings involving more routine motives. Popular discourse about such rare and dramatic acts of violence also usually distinguishes mass shooters harboring personal grievances from ideologically motivated terrorists zealous to instigate broader social and political changes. Even within the scholarly community, mass shootings and terrorist attacks tend to be conceptualized as distinct phenomena, save some notable exceptions (see, for example, Lankford, 2013), despite obvious similarities in their modus operandi, like weapon choice. As a result, a more complete understanding of how to recognize and address the scope or impact of events blurring the line between mass shootings and terrorism is needed.

For crime more generally (Surette, 2015), the media often play an important agenda-setting function in shaping public perceptions of statistically rare events, including mass shootings and terrorist attacks, as well as their corresponding policy responses (Baumgartner & Jones, 2010; Chyi & McCombs, 2004; see also Burns & Crawford, 1999; Chermak, 2002; Schildkraut & Hernandez, 2014; Soraghan, 2000). Thus, the media remain a main source of information on such topics and indicators of their relative salience. Also important, how these stories are told or framed may be especially influential for how the public thinks about episodic crimes like mass shootings and terrorism, given that the majority of people never will be directly impacted by such events. News stories may, for instance, provide descriptive details of an individual offender’s background, focusing on his or her frame of mind and social interactions leading up to and during the shooting. In contrast, other news stories may link a mass shooting to controversial issues like gun control, terrorism, or immigration, effectively changing the focus from the individual to broader social conditions and alternative policy responses.

News stories about mass shootings highlight different aspects of the media event and related social problems, and the nature of coverage often shifts over time. Research has shown that media engage in a dynamic process of “frame changing” over the life span of a story, which allows for continually highlighting different facets of a case and provides fresh content to keep the attention of audiences (Chyi & McCombs, 2004; Muschert & Carr, 2006; Schildkraut & Muschert, 2014). Observing patterns in the ebbs and flows of story narratives allows for deciphering how different types of issues and events are constructed, and in turn, suggests how framing practices may ultimately influence how audiences understand them.

While there has been empirical research examining media coverage of mass shootings (Schildkraut, Elsass, & Meredith, 2018) and domestic terrorism (Chermak & Gruenewald, 2006), the focus of prior studies has generally centered on factors predicting the prevalence of coverage and evaluations of newsworthiness.
rather than on how stories are framed. Others have applied Chyi and McCombs’ (2004) two-dimensional model of frame changing to identity how media framing of school shootings occurs over space (the “where,” but also the “who,” “what,” and “why”) and time (the “when”) (Muschert & Carr, 2006; Schildkraut & Muschert, 2014). These studies have illuminated how news media choose to frame the scope of mass shootings in the United States as a problem and its impact on society.

To date, researchers have yet to examine how attacks obscuring the line between mass shootings and terrorism are framed by news media, and, in particular, how the scope of ideologically motivated and non-ideologically motivated shooting rampages compare. This gap in research has implications for how the public thinks about the causes and consequences of different types of mass shootings, as well as who is responsible for preventing future attacks. Thus, in the current study, we examine similarities and differences in frames across both ideologically (terrorist and extreme far-right) and non-ideologically motivated mass shootings. Based on print news coverage of 18 mass shootings occurring in the United States between 1999 and 2016, we ask, how do the temporal and spatial facets of frames found in print news media coverage of ideological mass shootings compare to those used in non-ideologically motivated mass shootings?

A Review of the Literature

The Issue-Attention Cycle, Agenda-Setting, and Media Framing

An extensive body of research spanning disciplines of mass communication, political science, and sociology has examined the role of media in influencing the salience of social issues. Prior studies can be divided loosely into three key research areas, including studies on the issue-attention cycle, agenda-setting, and media framing. While employing these categories as conceptual tools may be useful in organizing relevant research, they remain interdependent of one another. Below, each of these research streams is discussed briefly while focusing on the purported role of media in presenting complex events and social issues to the public.

The concept of the “issue-attention cycle” first was introduced by Downs (1972) to demonstrate how social problems rapidly appear and disappear from the public’s purview. He argued that most issues were introduced by media, temporarily build salience among the public, and then almost simultaneously fade out of popular discourse, only to be soon replaced by another issue or event that captures the attention of audiences. Downs (1972) introduced a five stage cyclical model for understanding how media can perpetuate concerns over a particular issue, including (1) the pre-problem stage, (2) alarmed discovery and euphoric enthusiasm, (3) realizing the cost of significant progress, (4) gradual decline or loss of intense public interest, and (5) the post-problem stage. This cycle is driven largely by media and, more indirectly, by politicians and pundits who use media as a vehicle for prioritizing certain issues (Baumgartner & Jones, 2010). Despite the abundance of issues competing for salience among the public, rarely does this cycle focus on more than a single issue or a few key concerns at any given time (Baumgartner & Jones, 2010; Downs, 1972; McCombs & Zhu, 1995).

Given the limitations of media for simultaneously focusing on multiple issues, certain problems or stories must be prioritized over others. This process, known as “agenda-setting,” refers to the practices of media, politicians, and other claims makers who select and highlight certain issues and events while deemphasizing or ignoring others (McCombs & Shaw, 1972; see also Entman, 2007; McCombs, 1997; Weaver, 2007). Unable to represent the totality of reality within a society, agenda-setting processes of selection and repudiation allow media workers to define and shape certain issues and events, decidedly prioritizing some over others, and ultimately gaining consensus among the public of their salience (Barak, 1994; Entman, 2007; Gans, 1979; McCombs, 1997). Bombarded with stories on particular topics, audience views of social problems and their relative importance often mirror those that are reflected in the media (Cohen, 1963; Entman, 2007; McCombs, 1997).
Of the select issues highlighted by media, it remains impossible to cover all angles of complex stories before the news cycle once again shifts. Thus, how media decide to frame, or emphasize and deemphasize specific features and angles of a story, also is important to understanding how story narratives are constructed. Ghanem (1997) has described the process of framing as “the construction of an agenda with a restricted number of thematically related attributes in order to create a coherent picture of a particular object” (p. 10). As such, the media use framing as a means to break down complex social issues and repackage them in a way that is both accessible and relatable to audiences (Gans, 1979; Scheufele & Tewksbury, 2007). A media frame also can be conceptualized as “a central organizing idea for news content that supplies context and suggests what the issue is through the use of selected emphasis, exclusion, and elaboration” (Tankard, 2001, pp. 100-101). Frames are used by media and social claims makers “to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described” (Entman, 1993, p. 52). A key concern and justification for conducting an empirical framing analysis is that how media choose to represent or construct an issue or event distorts its “reality” in ways that can ultimately shape public perceptions and policy recommendations.

**Media Representations of Episodic Violence**

As crime has remained an enduring concern to the public and policymakers, such stories historically have dominated the news (Grabber, 1980). Crime stories also are popular among news workers because they are relatively simple and inexpensive to produce (Chermak, 1995; Mayr & Machin, 2012; Tuchman, 1973). Since news space is limited and crime is overabundant, however, most crimes never are covered by the media. Instead, news producers choose to focus on those cases that are the most extreme and, because news is a for-profit business, the most likely to attract the widest audiences (Gans, 1979; Weiss & Chermak, 1998).

While research has found that violence is considered more newsworthy than other forms of crime (Chermak, 1995; Graber, 1980), not all violent crimes receive equal (or possibly any) news attention. Other factors shaping news coverage of serious violence, like homicide, include its statistical rarity and the novelty or extraordinariness of the crime (Johnstone, Hawkins, & Michener, 1994; see also Mayr & Machin, 2012). Such is the case for both mass shootings and terrorist attacks, which are considered statistical outliers due to the number of victims targeted and motivations of offenders. Gladwell (2008) has suggested that often “we learn more from extreme circumstances than anything else … [and] it’s those who lie outside ordinary experience that have the most to teach us” (p. 6). As outliers, both mass shootings and terrorist attacks have the ability to shape public perceptions about crime and corresponding responses to such events. Given the media’s integral role in facilitating such dialogue, understanding how these stories are told by media is critical.

Mass shootings and domestic terrorism share a number of similarities. First, like crime news more generally, not all mass shootings (Schildkraut et al., 2018) and terrorist attacks (Chermak & Gruenewald, 2006; Crelinstein, 1987) receive equal coverage, despite their potential newsworthiness as extraordinary forms of violence. In fact, a majority of domestic terrorism in the United States incidents occurring prior to the 9-11 attacks received little to no national news media coverage (Chermak & Gruenewald, 2006), with only a small minority of terrorist cases ever becoming sensationalized (Nacos, 2003; Picard, 1993).

Second, similar factors have been shown to influence the extent of coverage incidents receive. For both forms of violence, the severity of attacks, typically marked by the number of fatalities, increase the saliency of events and, by extension, the amount of coverage cases receive (Chermak & Gruenewald, 2006; Schildkraut et al., 2018). Coverage of mass shootings, both in terms of likelihood and amount, has also been found to be influenced by whether perpetrators survive their murderous rampages, the types of location (e.g., schools, workplaces, or other venues) targeted, and offenders’ race or ethnicity (Schildkraut et al., 2018). Likewise, both...
target selection and the tactics or weapons used by the offenders can affect the newsworthiness of a terrorism incident (Chermak & Gruenewald, 2006; Weimann & Brosius, 1991).

Finally, as with crime more generally, the public learns about mass shootings and terrorism primarily from media coverage of sensationalized events (Maguire, Weatherby, & Mathers, 2002; Robinson, 2011; Schildkraut & Elsass, 2016; Slone, 2000). Both forms of violence similarly demand responses from stakeholders, including politicians and pundits, who rely on the media to further their agendas and define the causes and consequences of social issues and events. In the past, claims makers have linked coverage of mass shootings to other broader social issues (e.g., gun control or gun rights, mental health), while others tend to be viewed as isolated incidents that fail to meet the threshold of protracted concern (“Washington Post-ABC News Poll,” n.d.). Similarly, in the context of terrorism, research has shown that domestic terrorist attacks are more likely framed as isolated events carried out by deranged individuals, while radical Islamic incidents are depicted as part of an international war against America (Powell, 2011).

While prior research has taken steps to illuminate how and why media choose to cover some forms of serious violence and not others, studies generally have focused on more routine or traditional forms of homicide (Buckler & Travis, 2005; Gruenewald, Chermak, & Pizarro, 2013; Johnstone et al., 1994; Pritchard & Hughes, 1997). Furthermore, past studies of mass shootings and terrorist attacks usually have examined the factors contributing to the newsworthiness of these rare events and have treated these forms of violence as conceptually and operationally distinct. Consequently, less is known about how these extraordinary forms of violence tend to be framed in news stories, and the possible similarities and differences in framing strategies across mass shootings, domestic terrorism, and mass shootings committed as acts of domestic terrorism.

Chyi and McCombs (2004) have suggested that by focusing on the two most important emerging dimensions of any news story, space (where) and time (when), it is possible to empirically trace the framing strategies utilized by news workers to report on one or more issues or events over time. Figure 1 presents Chyi and McCombs’ (2004) analytic framework, which simultaneously accounts for the rise and fall of issues (e.g., agenda-setting) and the scope or evaluation of issues (e.g., framing).
Existing on a continuum, the space dimension ranges from a micro (individual) to a macro (international) level focus with three intermediary categories. The individual level refers specifically to coverage of individual participants, such as shooters, victims, and survivors, whereas the international category considers the story’s impact on a global audience. The community level focuses on a particular group impacted by the shooting, which can encompass the actual community (e.g., city or town) or a surrogate form (e.g., workplace or school). In contrast, the regional dimension considers the potential impact of the coverage on the residents of a larger area, such as a metropolitan region or state. Finally, the societal category concentrates on the national impact of the event being covered.

The time dimension of Chyi and McCombs’ (2004) model allows for consideration of the temporal focus of the media by considering the framing of the story over past, present, and future contexts. The past category underscores the backstory of an event, retracing the time leading up to the attack itself. Next, the present level focuses on coverage of the event as it unfolds and provides for consideration of short-range implications (usually expected to take place within the first 30 days after the attack). Given the tendency of the media to focus on telling the story in the “now,” this category often is the most heavily relied on in the framing of the coverage. Finally, the future dimension frames the discussion about an event and what it means moving forward, such as potential policy changes or strategies aimed at preventing future attacks or the long-range impacts of the phenomenon as a whole. Collectively, this two-dimensional model provides researchers with a framework for sorting and analyzing the use of variable media frames by examining both spatial and temporal changes in the coverage.

In the past, Chi and McCombs’ (2004) model for observing how issues and events are framed over time has been applied to studies of homosexuals’ drug use (Schwartz & Andsager, 2008), political candidate blogs (Bichard, 2006), worker displacement (Brimeyer, Muschert, & Lippman, 2012), and school shootings.

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1 Adapted from Chyi and McCombs (2004).
This growing literature, however, has yet to comparatively examine the similarities and differences in how the scope of ideologically and non-ideologically motivated mass shootings are framed over time.

The Current Study

The purpose of this study is to comparatively examine how the impact of mass shootings is framed by national news media for ideologically (both terrorist and extreme far-right) and non-ideologically motivated events, and how framing strategies may evolve over the lifespan of these events.

Mass Shooting Cases

As noted, the lines between terrorism and mass shootings have become increasingly blurred over the last several decades, highlighted by the Pulse nightclub shooting discussed at the outset of this paper. Ideological and non-ideological crimes share several similarities: they often are violent in nature (Smith, 1994); perpetrators, like other criminals, plan, prepare, and methodologically execute their attacks (Clarke & Newman, 2006); and the events themselves are social constructions (LaFree & Dugan, 2004; Schildkraut, 2016). At the same time, differences exist among these two conceptually divergent crimes. Ideologically motivated attacks are by definition symbolic of broader social and political causes (Nacos, 2003), as compared to non-ideological attacks that involve multiple motives and can appear more random in nature (Capellan, 2015). Consequently, our cross-case application of Chyi and McCombs’ (2004) framework allows not only for coverage between events of various motivations to be compared, but also for specific subsets of each to be further analyzed.

For this study, ideologically motivated mass shootings were disaggregated into two subcategories: extreme far-right and radical Islamic (Freilich et al., 2014). Non-ideological shootings were divided among four additional categories: K-12 schools (those that typically are categorized as school shootings; see also Muschert & Carr, 2006), higher education (college and university attacks), workplace rampages, and other shootings encompassing events that failed to fall into any of the three other categories but have been found in the research to attract comparatively high levels of media attention (see Schildkraut et al., 2018). Three events in each subcategory were drawn from Schildkraut and Elsass’ (2016) comprehensive examination of mass shootings in the United States using Muschert and Carr’s (2006) selection criteria: they qualified as public mass shootings, they were among the most lethal, and they each received national news coverage, albeit at varying

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2 Far-right extremists “are fiercely nationalistic, anti-global, suspicious of federal authority, and reverent of individual liberties, especially their right to own guns and be free of taxes. They believe in conspiracy theories involving imminent threats to national sovereignty or personal liberty and beliefs that their personal or national ‘way of life’ is under attack. Sometimes such beliefs are vague, but for some the threat originates from specific racial or religious groups. They believe that they must be prepared to defend against this attack by participating in paramilitary training or survivalism” (Freilich et al., p. 380).

Jihadists “believe that only acceptance of Islam promotes human dignity. Islamic extremists reject the traditional Muslim respect for ‘People of the Book’ (i.e., Christians and Jews). They believe that ‘Jihad’ (i.e., to struggle in God’s path like the Prophet Muhammad) is a defining belief in Islam and includes the ‘lesser Jihad’ that endorses violence against ‘corrupt’ others. Islamic extremists believe that their faith is oppressed in nominally Muslim Middle-Eastern/ Asian corrupt governments and in nations (e.g., Russia/ Chechnya) that occupy Islamic populations. The U.S. is seen as supporting the humiliation of Islam and exploiting the region’s resources. They believe that America’s hedonistic culture (e.g., gay rights, feminism, etc.) negatively affects Muslim values. Islamic extremists believe that the American people are responsible for their government’s actions and that there is a religious obligation to combat this assault. They believe that Islamic law—Sharia—provides the blueprint for a modern Muslim society and should be forcibly implemented” (Freilich et al., p. 380).
extents (p. 751). Table 1 presents the cases included by location, date, and the amount of coverage (in the form of news stories and total word counts).

Table 1

<table>
<thead>
<tr>
<th>INCIDENT</th>
<th>DATE</th>
<th>ARTICLES</th>
<th>WORDS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideological: Far-Right</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oak Creek, WI</td>
<td>8/5/2012</td>
<td>7</td>
<td>7,265</td>
</tr>
<tr>
<td>Overland Park, KS</td>
<td>4/13/2014</td>
<td>5</td>
<td>5,132</td>
</tr>
<tr>
<td>Charleston, SC</td>
<td>6/17/2015</td>
<td>53</td>
<td>61,576</td>
</tr>
<tr>
<td><strong>Ideological: Radical Islamic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chattanooga, TN</td>
<td>7/16/2015</td>
<td>20</td>
<td>22,002</td>
</tr>
<tr>
<td>San Bernardino, CA</td>
<td>12/2/2015</td>
<td>45</td>
<td>50,865</td>
</tr>
<tr>
<td>Orlando, FL</td>
<td>6/12/2016</td>
<td>96</td>
<td>108,856</td>
</tr>
<tr>
<td><strong>Non-Ideological: K-12 Schools</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Littleton, CO</td>
<td>4/20/1999</td>
<td>115</td>
<td>108,190</td>
</tr>
<tr>
<td>Red Lake, MN</td>
<td>3/21/2005</td>
<td>18</td>
<td>17,479</td>
</tr>
<tr>
<td>Newtown, CT</td>
<td>12/14/2012</td>
<td>130</td>
<td>120,573</td>
</tr>
<tr>
<td><strong>Non-Ideological: Higher Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blacksburg, VA</td>
<td>4/16/2007</td>
<td>50</td>
<td>46,409</td>
</tr>
<tr>
<td>DeKalb, IL</td>
<td>2/14/2008</td>
<td>15</td>
<td>9,290</td>
</tr>
<tr>
<td>Roseburg, OR</td>
<td>10/1/2015</td>
<td>23</td>
<td>25,985</td>
</tr>
<tr>
<td><strong>Non-Ideological: Workplace</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wakefield, MA</td>
<td>12/26/2000</td>
<td>10</td>
<td>7,687</td>
</tr>
<tr>
<td>Huntsville, AL</td>
<td>2/12/2010</td>
<td>12</td>
<td>11,362</td>
</tr>
<tr>
<td>Manchester, CT</td>
<td>8/3/2010</td>
<td>7</td>
<td>7,146</td>
</tr>
<tr>
<td><strong>Non-Ideological: Other</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tucson, AZ</td>
<td>1/8/2011</td>
<td>94</td>
<td>93,688</td>
</tr>
<tr>
<td>Aurora, CO</td>
<td>7/20/2012</td>
<td>34</td>
<td>26,412</td>
</tr>
</tbody>
</table>
Given the limited examination of frame changing applied to mass shootings (Chyi & McCombs, 2004; Muschert & Carr, 2006; Schildkraut & Muschert, 2014), we formulate and structure our research questions consistently with previous works, while also accounting for the nuanced comparisons made in the current study.

**Research Question 1:** How many stories were attributed to the selected events and how was this coverage distributed across the lifespan of each category?

**Research Question 2:** How were the space frames, ranging from narrow to broad, distributed across the lifespan of the coverage? Was frame changing evident over the coverage period?

**Research Question 3:** How were the time frames distributed across the lifespan of the coverage? Was frame changing evident over the coverage period?

**Research Question 4:** What was the relationship between the use of space and time frames?

**Data and Method**

As with the previous studies examining frame changing across mass shootings (Chyi & McCombs, 2004; Muschert & Carr, 2006; Schildkraut & Muschert, 2014), the present study sought to analyze coverage of the selected events in the *New York Times*. Including these previous frame changing studies, the *Times* also has been established by a number of additional researchers (e.g., Altheide 2009a; Chermak & Gruenewald, 2006; Leavy & Maloney, 2009; Muschert, 2002; Schildkraut, 2016; Wigley & Fontenot, 2009) as a leading national agenda-setting news source. In addition to serving as an indicator of issue salience (Weiss & Chermak, 1998), the *Times* also serves as a source of news in its own right with other outlets reprinting its stories (Muschert, 2002). Further, the newspaper format is particularly compatible for analyzing audience effects and frame changing due to its wider variation in views (Altheide, 2009b).

Using the *LexisNexis* database, a leading media archive service (Deacon, 2007), full-text keyword searches were conducted based on the city or institution name rather than the shooters’ names, which have been found to lead to increased false negatives and missing data (Schildkraut et al., 2018). Both Deacon (2007) and Soothill and Grover (1997) caution that false negatives can occur when the search term is so limited that articles are omitted because they do not meet the entered criteria. In order to combat this potential issue, institution names were used when the shooting took place at a school, whereas the name of the city was used for those attacks occurring outside of educational institutions. Results were limited to 30 days of coverage after each attack. While McCombs and Zhu (1995) have found that coverage of public issues averages a lifespan of approximately 18.5 months, Chyi and McCombs (2004) demonstrated that the news cycle for the Columbine shooting lasted just one month and results from other studies (Muschert & Carr, 2006; Schildkraut & Muschert, 2014) also have echoed this finding.

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3 For example, the majority of the coverage of the Virginia Tech shooting consistently references the name of the university rather than Blacksburg, Virginia, where the school is located. Conversely, the July 20, 2012 movie theater shooting in Colorado is most commonly referenced as the Aurora shooting, rather than the shooting at the Century 21 movie theater.
The initial search across all events yielded a total of 1,953 news stories. In order for the dataset to be consistent with the previous studies, the articles then were reviewed and culled to ensure that only news stories and editorials were included. Other pieces, such as letters to the editor or sports articles (e.g., containing the word “shooting” as it pertained to basketball), were excluded from the final dataset. It is important to note that in one pair of shootings – the 2012 attacks in Aurora, CO, and Oak Creek, WI – the latter occurred within 17 days of the former. In order to control for potential conflation of articles published between August 5th (the day of the Oak Creek attack) and August 19th (the 30th day of coverage of the Aurora shooting), the stories were coded discretely based on which event was the primary focus. The final dataset contained 747 articles across 18 separate events, combining for a total of more than 745,000 words in print. Each article then was discretely coded, meaning that it could only be assigned one attribute per category for the article date (number of days after the respective shooting), spatial frame, and time dimension.

Findings

Volume and Pattern of Coverage

The distribution of New York Times articles published across five-day intervals following mass shootings are shown in Table 2. Findings reflect the distribution of coverage across mass shooting types, which is necessary given the apparent temporal disproportionality of coverage across categories. For both the entire dataset and the majority of the categories, approximately half of the articles appeared in print within the first five days, then declining both quickly and variably for the remainder of the month-long period of coverage. A notable exception to this was the category of non-ideological K-12 school shootings, which is the most newsworthy category of mass shootings by making up approximately 35 percent of all articles included in this study. These school shootings had a lower proportion of articles printed in the first five days compared to all other mass shooting categories, and the declines in coverage over the subsequent weeks was more gradual and sustained.
### Table 2

**Distribution of Total Coverage Percent by Days and Shooting Category**

<table>
<thead>
<tr>
<th>Category</th>
<th>Days 1-5</th>
<th>Days 6-10</th>
<th>Days 11-15</th>
<th>Days 16-20</th>
<th>Days 21-25</th>
<th>Days 26-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideological: Far-Right (n = 65)</td>
<td>50.8%</td>
<td>27.7%</td>
<td>9.2%</td>
<td>7.7%</td>
<td>1.5%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Ideological: Radical Islamic (n = 161)</td>
<td>58.4%</td>
<td>24.8%</td>
<td>7.5%</td>
<td>7.5%</td>
<td>1.2%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Non-Ideological: K-12 Schools (n = 263)</td>
<td>35.4%</td>
<td>25.1%</td>
<td>16.0%</td>
<td>8.7%</td>
<td>8.4%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Non-Ideological: Higher Education (n = 88)</td>
<td>64.8%</td>
<td>19.3%</td>
<td>5.7%</td>
<td>6.8%</td>
<td>1.1%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Non-Ideological: Workplace (n = 29)</td>
<td>65.5%</td>
<td>13.8%</td>
<td>17.2%</td>
<td>3.4%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Non-Ideological: Other (n = 141)</td>
<td>44.7%</td>
<td>30.5%</td>
<td>11.3%</td>
<td>7.8%</td>
<td>0.7%</td>
<td>5.0%</td>
</tr>
<tr>
<td><strong>TOTALS (N = 747)</strong></td>
<td><strong>48.1%</strong></td>
<td><strong>25.2%</strong></td>
<td><strong>11.5%</strong></td>
<td><strong>7.8%</strong></td>
<td><strong>3.6%</strong></td>
<td><strong>3.9%</strong></td>
</tr>
</tbody>
</table>

**NOTE:** Frequency percentages may not total to 100.0% due to rounding error.
Space Frames

To assess the second research question, the percentage of articles for all mass shootings reflecting one of five possible space frames (individual, community, regional, societal, and international) are plotted over the period of 30 days following each attack (see Figure 2). Interestingly, the findings in the present study reflect a departure from previous research examining frame changing dynamics across school shootings. Specifically, while prior studies have determined that the societal frame, which situates issues of mass shootings within a national context, was utilized disproportionately more than any other frame, the findings here indicate that not only is this frame used to a lesser extent more generally, it also is employed in mass shootings news articles nearly identically to the individual media frame (38.4% and 38.2%, respectively). Comparatively, in prior studies, between 46% and 52% of articles relied on the societal category to frame school mass shootings, with the individual level frame being employed variably between 18% and 21% of the time (Chyi & McCombs, 2004; Muschert & Carr, 2006; Schildkraut & Muschert, 2014). As shown in Figure 2, the community frame was the third most commonly employed in the present study, representing nearly 14% of stories. The two remaining space frames – regional and international – were employed comparably to prior research on school mass shootings and to a lesser extent than the two dominant categories in the present study.

Beyond the divergences in distribution across levels of space, current study findings also indicate that there is frame changing occurring over the lifespan of the coverage. Specifically, in the first days after the initial attack, mass shootings stories are framed at an individual level, likely focusing on the shooters, victims, and survivors. Over time, however, a shift occurs whereby the societal frame becomes more dominant, allowing the reader to consider the broader impact of these events. This again diverges from the previous studies which have found that at no point did the individual frame get employed more than the societal frame.
regardless of whether the coverage was examined for a single shooting (Chyi & McCombs, 2004) or across multiple events (Muschert & Carr, 2006; Schildkraut & Muschert, 2014).

Figure 3. Distribution of Space Frames by Five-Day Period, Non-Ideological Mass Shootings
Due to the disparity in the distribution of articles by subcategories, further consideration is warranted as to whether the overall patterns are being driven by either ideological or non-ideological cases. The distribution of spatial framing across non-ideological attacks is presented in Figure 3 and ideologically motivated shootings in Figure 4. In comparing these to total frame distributions (see Table 2), it appears that overall coverage framing is being driven largely by the non-ideological shootings as the patterns are virtually identical. Given the overall salience of these events, particularly in consideration of the K-12 school shootings and other attacks, this is not necessarily surprising. Examination of the ideological shootings’ framing (Figure 4), however, diverges substantially from these patterns. Specifically, the majority of the stories in the first 20 days following the attack is focused on the societal impact of the events, shifting only to greater consideration of the individual participants in the last 10 days of coverage.
Figure 5. Distribution of Space Frames by Five-Day Period, Far-Right Mass Shootings
Given the departure of the spatial framing of ideological mass shootings, additional analyses were conducted to determine if this divergence was attributable to either deadly extreme far-right (Figure 5) or radical Islamic terrorist attacks (Figure 6). Comparatively, the stories attributed to the extreme far-right mass shootings have distinguishable central spatial frames as the number of days out from the attack increases, shifting first to consideration about the community, then more broadly to the nation at large, then back down to the region. Conversely, the coverage patterns of the radical Islamic motivated attacks appear to mirror, at least in part, the overall frame changing patterns for the broader category of ideological shootings. Specifically, initial coverage of radical Islamic shootings considers the broad societal impacts of the events, shifting only to the impact of the attack on the community in approximately the third five-day block. Further, while approximately 13% of the total stories for radical Islamic shootings are framed at the international level, this dimension is reflected less in framing of extreme far-right attacks. Instead, extreme far-right shootings are more likely to consider the regional implications of the event than those attributed to radical Islamic motivations (10.8% and 1.2%, respectively).

**Time Frames**

The third research question considers the distribution of the time frames (past, present, and future) focused on in news articles of mass shootings, as well as any potential variation in patterns, across the lifespan of the coverage of the shootings. As illustrated in Figure 7, when considering the full dataset, the findings are largely consistent with previous studies (Chyi & McCombs, 2004; Muschert & Carr, 2006; Schildkraut & Muschert, 2014). Specifically, the use of the present frame is found to be attributed to more than 77% of the stories examined. In further considering the potential for frame changing, the findings also indicate that earlier coverage focuses more on the backstory through the utilization of the past frame, shifting in the last five-day period to greater consideration for the future implications. While this frame changing pattern mirrors that of the
Columbine school shooting coverage examined in the Chyi and McCombs’ (2004) study, as well as later studies of school shootings (Muschert & Carr, 2006, Schildkraut & Muschert, 2014), the shift from past to future frames arrives approximately 10 days later in the current study, suggesting that there may not be as great of an emphasis on the long-range considerations. Still, consistent with previous research, the use of frame changing across time is minimal.

As with the spatial framing, it also is important to consider whether the general framing patterns across time are being influenced by either categories of non-ideologically or ideologically motivated attacks. Figure 8 charts the distribution of space frames for the former, while the framing of the latter is presented in Figure 9. Consistent with earlier findings, the distribution of time frames across non-ideological attacks nearly identically mirrors the overall coverage patterns (Figure 8). Conversely, the framing patterns of the ideological shootings diverge from that of the full sample (Figure 9). While stories about these attacks still are, especially in the first 20 days, framed largely in the immediate context, there is a distinct shift in the remaining 10 days to cover the backstory of the event as the primary focus.
Figure 8. Distribution of Time Frames by Five-Day Period, Non-Ideological Mass Shootings

Figure 9. Distribution of Time Frames by Five-Day Period, Ideological Mass Shootings
To explore this disparity further, the ideological shootings again are considered separately based on subcategory. Respectively, the distribution of time frames for extreme far-right and radical Islamic motivated attacks are presented in Figures 10 and 11. In first examining the extreme far-right shootings, the findings reveal that for the first 20 days of coverage, the framing nearly identically mirrors that of all ideologically motivated shootings. In the period between 21 and 25 days, however, the frame changing is much starker; instead of a gradual changeover, the present frame is exclusively replaced by the past dimension. Further, though the future frame is attributed to ideological shootings in just 2.2% of all cases, this frame never is applied to stories of extreme far-right attacks. Moreover, when examining the coverage patterns of radical Islamic shootings, at no point is the present dimension eclipsed by any other level of the time frame.

Figure 10. Distribution of Time Frames by Five-Day Period, Far-Right Mass Shootings
Framing Across Space and Time

The final research question considered the relationship between the space and time frames, which, when cross-tabulated, are referred to as “core frames” (Chyi & McCombs, 2004, p. 31). The results for the full sample of articles across the 18 shootings is presented in Table 3. When examining the coverage of these events as a collective phenomenon, the findings are largely consistent with the previous studies (Chyi & McCombs, 2004; Muschert & Carr, 2006; Schildkraut & Muschert, 2014). In particular, the “societal-present” relationship dominates the overall coverage. Further, in the present study, the “individual-present” core frame was the second most commonly applied, followed by the “community-present” combination. This mirrors the findings of Schildkraut and Muschert (2014) but departs from Chyi and McCombs’ (2004) determination that the “community-present” and “societal-future” frames were the second and third most commonly employed, respectively.

Figure 11. Distribution of Time Frames by Five-Day Period, Radical Islamic Mass Shootings
Table 3

*Space Frame by Time Frame, All Shootings*

<table>
<thead>
<tr>
<th>Space Frame</th>
<th>Time Frame</th>
<th>Past</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>1.2%</td>
<td>3.1%</td>
<td>0.1%</td>
<td></td>
</tr>
<tr>
<td>Societal</td>
<td>3.1%</td>
<td>32.1%</td>
<td>3.2%</td>
<td></td>
</tr>
<tr>
<td>Regional</td>
<td>0.3%</td>
<td>4.4%</td>
<td>0.4%</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>0.8%</td>
<td>13.1%</td>
<td>0.0%</td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>13.0%</td>
<td>24.9%</td>
<td>0.3%</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Cell entries for all shootings are percent of total (n = 747). \(\chi^2 = 107.20, \text{d.f.} = 8, p < .001.\)

Finally, given the repeated findings of the present study that a disparity in coverage patterns exists between ideologically and non-ideologically motivated shootings, a comparison of core frames between the two is necessary. The breakdown of core frames by type of shooting is presented in Table 4. In line with the analysis of the full dataset, the employment of the “societal-present” core frame is the most common for both ideological and non-ideological shootings, followed by the “individual-present” relationship. Despite such consistency, there are two notable findings that warrant consideration. First, while the “regional-future” core frame is not applied in news articles of ideological attacks, it was used in nearly 6% of the articles for non-ideological shootings. Conversely, ideological shootings are nearly eight times more likely to employ an “international-past” core frame than those events that are non-ideological in nature. Thus, while news articles on non-ideological shootings consider what events mean for a particular region or area moving forward, ideological attacks more often warrant separate examination of backstories as they relate to international stages. These findings and their potential implications are discussed further in the next section.
Table 4

*Space Frame by Time Frame, Comparing Ideological / Non-Ideological Shootings*

<table>
<thead>
<tr>
<th>Space Frame</th>
<th>Time Frame</th>
<th>Past</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>Future</td>
<td>3.1% / 0.4%</td>
<td>5.8% / 4.5%</td>
<td>0.4% / 0.0%</td>
</tr>
<tr>
<td>Societal</td>
<td>Present</td>
<td>2.2% / 3.5%</td>
<td>36.7% / 30.1%</td>
<td>1.8% / 3.8%</td>
</tr>
<tr>
<td>Regional</td>
<td>Past</td>
<td>0.4% / 0.2%</td>
<td>3.5% / 4.8%</td>
<td>0.0% / 5.8%</td>
</tr>
<tr>
<td>Community</td>
<td>Future</td>
<td>0.9% / 0.8%</td>
<td>13.7% / 12.9%</td>
<td>0.0% / 0.0%</td>
</tr>
<tr>
<td>Individual</td>
<td>Future</td>
<td>12.4% / 13.2%</td>
<td>19.0% / 27.4%</td>
<td>0.0% / 0.4%</td>
</tr>
</tbody>
</table>

NOTE: Cell entries for all shootings are percent of total (n = 226 for ideological cases; n = 521 for non-ideological cases).

Non-Ideological: $\chi^2 = 72.75$, d.f. = 8, p < .001.

Ideological: $\chi^2 = 41.32$, d.f. = 8, p < .001.

Discussion

Despite their statistical infrequency in comparison to other forms of violence, mass shootings are considered a complex social problem in need of a solution (Schildkraut & Elsass, 2016). In the past, these attacks have generated fear among the general public (Burns & Crawford, 1999; Schildkraut, Elsass, & Stafford, 2015; Springhall, 1999), influenced legislative responses (Schildkraut & Hernandez, 2014; Soraghan, 2000), and created a platform for a national debate on issues including mental health, guns, and violent media (Schildkraut and Elsass, 2016). Core to their influence is the amount of attention mass shootings are allotted by media. Though usually disproportional to their actual occurrence (Schildkraut et al., 2018), media attention remains a discernable indicator of their salience for the public nonetheless (Chyi & McCombs, 2004).

Volume of media coverage alone, however, is not wholly sufficient to maintain the public’s interest. Instead, how the story evolves over time is equally important. Thus, the process of frame changing becomes even more critical in setting the public’s agenda and maintaining the saliency of these events (Chyi & McCombs, 2004), particularly given the shortened amount of time that the shootings stay in the national discourse.

Further compounding the issue of the saliency of mass shootings is their recent overlap with acts of terrorism. Prior to the 2016 shooting at Pulse nightclub, these two forms of episodic violence largely were considered distinct phenomena, often with unique modus operandi and perceived responses. The line between mass shootings and terrorism, however, was blurred in the aftermath of the 2016 Pulse nightclub attack in Orlando, as well as other terrorist shootings, including the ISIS-inspired San Bernardino, California, event in 2015, leaving the public and the media alike scrambling to make sense of these motivationally ambiguous attacks. Moreover, the academic community has, to date, largely failed to consider the similarities and differences in these types of violence, instead considering their social construction as independent processes. Thus, the present study sought to overcome these gaps, as called for by previous scholars (Muschert & Carr, 2006), by examining how frame changing has been used in the news media coverage of both ideologically and
non-ideologically motivated mass shootings to influence the perceived salience and shared understanding of these events.

As with the coverage of school shootings (Chyi & McCombs, 2004; Muschert & Carr, 2006; Schildkraut & Muschert, 2014), the present study found that when looking at mass shootings more broadly, and ideological and non-ideological attacks in particular, frame changing is routinely employed to help maintain issue salience. This process is considerably more common across the space frames, which are used to situate the narrative around individuals or groups, either at a macro- or micro-level. The findings of the present study indicate that when considering all mass shooting types included in the current study, the pattern of frame changing is dominated by non-ideologically motivated attacks. This finding can be interpreted as a heavy reliance on predetermined media frames by news workers, particularly across the more salient cases (e.g., Columbine, Sandy Hook, Tucson, Virginia Tech, and Aurora), to tell stories of mass shootings.

Notably, however, the coverage and related frame shifting of ideologically motivated mass shootings departs from established frame adoption patterns. In particular, when framing ideological attacks, there is less enduring emphasis on the societal impacts of shootings as the story develops, especially toward the end of the coverage’s lifespan, instead shifting to focus more on the individuals and communities involved. Media stories of radical Islamic shootings are more likely to link deadly attacks to terrorist groups, such as al Qaeda or ISIS, as well as focus on local Muslim-American communities that may be subsequently targeted or otherwise affected. Similarly, extreme far-right mass shootings may be framed around increases in white supremacist, white nationalist, or other forms of so-called patriot groups in the United States.

As suggested by Iyengar (1991), media rely on frames to suggest what parties are responsible for causing (and responding to) social problems. Ideological mass shootings may provide opportunities for media claims makers to blame extremist and terrorist groups and social movements in the wake of attacks, as well as opportunities to suggest social groups who may need protection from future attacks. Since non-ideological shooters are not linked to such groups, there seems to be less of a need to consider the community level impact. Still, the patterns of frame changing between the two sets of ideologically motivated shootings are distinctive. It seems plausible that, much like the general public, media perceive extreme far-right shootings as being more similar to non-ideologically motivated rampages, possibly perpetrated by a deranged individual fostering personal grievances, while making sense of radical Islamic attacks requires news workers to rely on more broadly focused frames.

This idea is highlighted further by examining the distribution of framing in the context of time. While, consistent with previous studies, the collective group of events and non-ideological attacks were framed in the present, highlighting the immediate impact of the shootings, those cases that were ideologically motivated exhibited greater frame changing across time with increased attention to the past. In other words, there was a greater emphasis for ideological shootings to look at the backstory leading up to the attack, presumably to consider the potential radicalization process of the perpetrators. It often takes several weeks for law enforcement to construct a full, cohesive story about the radicalization and precursor behavior of ideologically motivated shooters. Conversely, non-ideological assailants often are perceived to have “snapped;” therefore, less attention is needed to uncover what led them to commit their attack. Coupled with the differentiation of perceptions of extreme far-right and radical Islamic shootings, this idea is supported further by the finding that coverage of ideological attacks is nearly eight times more likely to employ the “international-past” core frame than those that are not ideologically motivated. In sum, as Chyi and McCombs (2004) note, “some frames are arguably more relevant to the nature of the event than others” (p. 30).

While the media generally frame and change frames across mass shooting story cycles similarly, the categorizing of cases as ideological and non-ideological highlights heterogeneity in how mass shootings are covered by media. Specifically, when there is a connotation of terrorism, especially when attacks are fueled by radical Islamic beliefs, stories are framed qualitatively different than far-right and ideological shootings.
Therefore, even when the boundaries of mass shootings and terrorism are blurred, media continue to, in some ways, portray events as distinct phenomena. For instance, framing extreme far-right shootings as more limited in their scope and impact may lead the public to think they are less of a problem than mass shootings by radical Islamic terrorists. This not only has broad implications for how people understand and make sense of mass shootings as terrorist incidents, but also how policymakers frame relevant issue debates and the need for new policy initiatives. Moreover, the distinct framing of radical Islamic ideological attacks may be due, at least in part, to broader social processes at play, such as concerns over immigration, as well as race and ethnicity (see Mingus & Zopf, 2010), whereas white mass shooters are viewed fundamentally different as perpetrators of color (see also Schildkraut et al., 2018). Though such questions could not be explored solely on the approach of the current study, such possibilities should be explored further in future research.

Broadly speaking, the disparity in framing ideological and non-ideological attacks can have additional implications, particularly for news consumers. Given that, as noted at the onset of this paper, most people never will directly experience a mass shooting, the media serve as their primary source of information on such events (Schildkraut et al., 2018). Thus, the manner in which such stories are framed can influence perceptions related to fear of crime or potential risk of victimization (Schildkraut et al., 2015), and perhaps foster disproportional attitudes about mass shootings in the United States (Burns & Crawford, 1999; Springhall, 1999). In turn, this has created demands for changes in safety and security policies, as well as legislative governance (Schildkraut & Muschert, 2019; see also Schildkraut & Hernandez, 2014; Soraghan, 2000).

Though this study adds to the extant body of research on media representations of mass shootings, it is not without its limitations. First, while the New York Times has been established as an agenda-setting source used by scholars to study potential media effects, it remains a single source. In order to validate this study’s findings, future research should consider replication with other agenda-setting media outlets. Similarly, this study assesses the final product of the media – news articles – without accounting for the journalistic decision-making processes that led to their creation. Future researchers may wish to explore how such decisions are made by news producers and what, if any, impact the final products have on media consumers’ perceptions of these events. Further, given the limited number of cases that involve necessary elements of mass shootings and terrorism, future research also should assess whether the findings hold or if this framing pattern is unique to a particular point in time.

**Conclusion**

Mass shootings, both ideological and non-ideological in motivation, continue to capture the interest of news media consumers. Given the influential role that the media play in shaping the public’s perceptions and subsequent calls for response after these high-profile events, it is imperative to understand how the phenomenon and associated issues are being presented to audiences. Chyi and McCombs’ (2004) two-dimensional measurement scheme provides a much needed framework through which to assess some of the most critical facets of a story and how they are framed both at a single point in time and over the lifespan of the event. The changing of frames enables the media and other claims makers not only to keep audiences interested or concerned, but also to construct specific issues as relatively more important than others.

Our study illustrates that when this framework is applied to mass shootings of varying motivations, the media treat these events, which often share many commonalities, as fundamentally different. Moreover, the variation in frame changing between non-ideological and ideological shootings in general, and extreme far-right and radical Islamic attacks more specifically, has potentially broad reaching effects for the public and policymakers alike. As very little progress has been made legislatively to combat these attacks, regardless of motivation, it begs the question as to whether meaningful change is hindered when overarching issues are diluted through media coverage.
References


