

RESEARCH ARTICLE



Perpetuating Perpetrators: News Coverage of Perpetrators and Victims of the Columbine and Parkland Shootings

Ariel Duroskey^a, Elana Newman^a and Avery E. Holton^b

^aDart Center for Journalism and Trauma, The University of Tulsa, Tulsa, Oklahoma, USA; ^bDepartment of Communication, University of Utah, Salt Lake City, Utah, USA

ABSTRACT

Since the Columbine school shootings more than two decades ago, advocates have called for mass shooting coverage at local and national levels to reduce focus on perpetrators and instead increase focus on victims. Given these recommendations, the present study explored the degree to which recent local and national news coverage of the Parkland school shooting is consistent with suggested best practice compared to the precedent-setting Columbine coverage. Newspaper coverage following both shootings was examined, resulting in an analysis of 641 national and local print news articles. Results indicate local Parkland coverage exhibited a greater percentage of articles that referenced the perpetrator by name compared to local Columbine coverage, and references were in more prominent locations, such as the article title and lead paragraph. No other statistical differences were found in perpetrator and victim references between Columbine and Parkland coverage. Findings suggest that despite continued calls to give less focus to perpetrators of mass shootings in local and national news, perpetrators still perpetuate in coverage. Results highlight the need to identify barriers to implementing recommendations for responsible reporting of mass shooting events.

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On April 20, 1999, two high school seniors open fired at Columbine High School in Littleton, Colorado. Twelve students and one teacher were killed and 21 people were injured before the two perpetrators died by suicide. At the time of the event, Columbine was the deadliest school shooting in the US and the third most followed news story of the decade (Pew Research Center 1999). Columbine is often viewed as the first incident of its kind (Schildkraut and Muschert 2014), but unfortunately, it is no longer considered an anomaly. Based on The Washington Post's (2018) analysis, 197 school shooting incidents occurred between April 20, 1999, and March 21, 2018, resulting in at least 130 deaths and 254 injured. Six of those shootings were considered mass school shootings, resulting in four or more deaths, excluding the perpetrators (The Washington Post 2018). Columbine and subsequent mass school shootings garner large amounts of news coverage at the

local and national levels, with coverage consistently emphasizing perpetrators once they have been identified (Schildkraut 2019).

While reporting on school shootings, journalists and editors are tasked with balancing the public's need for information with ethical responsibilities such as minimizing harm (Society of Professional Journalists 2014). This presents a number of challenges. Accurate reporting and satisfying the public's right to know can inadvertently sensationalize mass shootings, provide notoriety to fame-seeking perpetrators, and potentially inspire future perpetrators to carry out similar acts through contagion and copycat effects. As mass shootings continue to occur in the US, researchers, professors, law enforcement personnel, and public campaigns have called for journalists and news outlets to minimize harm by greatly reducing or ending the publication of perpetrators' names and to refrain from publishing photos, manifestos, and general likenesses when reporting on mass violence (Amman et al. 2017; Lankford and Madfis 2018; No Notoriety n.d.).

In place of perpetrator coverage, several researchers and public campaigns have advocated for increased coverage of victims to highlight the importance of victims' lives over perpetrators' actions and to potentially promote community recovery (ALERT Center at Texas State University n.d.; Dahmen 2018; No Notoriety n.d.; Ott and Aoki 2002; RTDNA 2020). Research examining mass shooting coverage at the local and national levels suggests that local news outlets may be more likely to publish articles emphasizing victims and survivors (Holody and Daniel 2017; Holody, Park, and Zhang 2013). Due to their close physical and social proximity to the events, local news outlets and journalists likely have greater access to sources and information compared to national news outlets (Holody and Daniel 2017; Holody, Park, and Zhang 2013). This difference in access to information likely impacts news outlets' ability to increase coverage of victims and survivors; therefore, national and local coverage may differ in the degree to which they have implemented current reporting recommendations. The call for change in perpetrator and victim coverage following mass shooting events continues to be amplified; however, there is little research investigating if reporting practices have changed to reflect these recommendations in national and local coverage.

The present study examines the frequency and prominence of perpetrator and victim references in newspaper coverage, both in local and national newspapers, following two prominent mass school shootings: the 1999 Columbine High School shootings and the 2018 Marjory Stoneman Douglas High School shootings (Parkland). By examining these two similar events 19 years apart, the study investigates the degree to which more recent coverage has implemented the current reporting recommendations when compared to the precedent-setting Columbine coverage. This study builds upon current knowledge of news coverage following mass shooting events by examining the degree to which reporting recommendations were implemented in coverage of a recent mass school shooting. Given that mass shooting coverage has the ability to sensationalize mass violence and potentially perpetuate copycat and contagion effects, understanding the degree to which recommendations are implemented, and exploring potential barriers to implementation are important considerations in the effort to minimize harm.

Reporting Recommendations of Perpetrators and Victims

Specific recommendations from the Radio Television Digital News Association (RTDNA) and public campaigns include that news professionals refrain from naming perpetrators unless essential to the story (ALERT Center at Texas State University [n.d.](#); Amman et al. 2017; No Notoriety [n.d.](#); RTDNA 2020) or entirely forgo naming perpetrators (Lankford and Madfis 2017; Meindl and Ivy 2018; Schildkraut 2019) except in situations in which suspects are still at large. When choosing to publish perpetrator names, the No Notoriety campaign encourages news professionals to be cognizant of prominence by not reporting names in article titles and lead paragraphs (No Notoriety [n.d.](#)). Further, the RTDNA and the FBI suggest news professionals refrain from publishing stories that emphasize details of perpetrators' lives or motives to reduce sensationalizing mass shooting incidents (Amman et al. 2017; RTDNA 2020). RTDNA and public campaigns recommend coverage should emphasize the lives and experiences of victims and survivors (ALERT Center at Texas State University [n.d.](#); No Notoriety [n.d.](#); RTDNA 2020). Regardless of whether the recommendations are proposed by journalism organizations, researchers, law enforcement agencies, or public campaigns, guidelines appear to unanimously agree on at least two points: (1) coverage should reduce the use of perpetrators' names; and (2) coverage should place greater emphasis on victim stories and experiences over that of perpetrators.

These recommendations remove the perpetrator as the focus of agency and prioritize the survivors and the community as the focus of attention. Perhaps also the re-alignment of survivors as protagonists conveys that victims' lives are more important than the actions of perpetrators (No Notoriety [n.d.](#)) and facilitates individual community recovery. One study found that articles focused on individuals affected by mass shootings can alleviate audiences' feelings of guilt often associated with mass tragedies and promote community solidarity (Ott and Aoki 2002). Further, the increase in victim-focused coverage of mass violence may reflect efforts to create meaning for audiences (Hawdon, Agnich, and Ryan 2014), may deepen understanding of the events (Fullerton and Patterson 2006), and may increase sensitivity to those directly affected by the shooting who access the information. The de-emphasis on perpetrators and re-emphasis on victims and survivors represents a new ethical balancing of representing those least represented.

These practices also are aimed to reduce the possibility of motivating perpetrators to seek fame. When compared to other active shooters, mass shooting perpetrators motivated by fame generally kill and injure twice as many people (Lankford 2016). In addition to providing fame and generating competition, perpetrator-focused coverage may inspire future attacks by others, leading to media contagion and copycat effects in mass killings (Kissner 2016; Langman 2017; Towers et al. 2015). Media contagion, as it applies to mass shootings, is defined as the influence of mass shooting coverage on increasing the likelihood that similar incidents or acts of violence will occur in the near future (Lankford and Madfis 2017; Lankford and Tomek 2017). Copycat effects are a more specific form of contagion in that it refers to the imitation of distinct behaviors and actions of previous perpetrators (Langman 2018; Lankford 2016; Lankford and Madfis 2017; Meindl and Ivy 2018). Research on contagion is mixed. Some research suggests that contagion effects are evident for up to two weeks following a single incident (Kissner 2016; Towers et al. 2015). However, a recent study by Fox et al. (2021) found news coverage of mass

shootings has little impact on short-term contagion. The authors suggest clustering of mass shooting events may be better attributed to social and environmental factors (Fox et al. 2021). In contrast to recent disagreement on contagion effects, research shows consistent support for the presence of copycat effects, which may have the potential to span many years (Lankford and Tomek 2017).

Beliefs and Reporting Practices at Local and National Levels

Despite current reporting recommendations for mass shooting coverage regarding perpetrators, news professionals' beliefs and actions may not align with such recommendations. For example, a national survey indicated that the majority of US journalists and editors neither agreed nor disagreed with the statement "there is a connection between news coverage of mass shootings and copycat acts" (Dahmen et al. 2018, 463). Moreover, journalists strongly supported naming the perpetrator and generally agreed with publishing photos, videos, and manifestos of mass shooters. However, when asked how mass shooting coverage could be improved, 72% of journalists' responses aligned with current recommendations to increase stories of survivors.

Based on Dahmen et al. (2018) findings, news professionals' ambivalence about the impact of news coverage on contagion and copycat effects may partially explain why recent studies suggest news coverage continues to emphasize perpetrators over victims following mass shooting incidents. In an analysis of 4,934 front page photos for three days following three separate mass shooting incidents, coverage featured perpetrators more frequently than individual victims at a rate of 16 to 1 when calculated by photo-per-individual (Dahmen 2018). In addition, the size of perpetrator photos was statistically significantly larger than victim photos; however, the prominence of the photos (e.g., lead story, secondary story, teaser, etc.) did not notably differ between perpetrator and victim coverage. While Dahmen (2018) did not distinguish between national and local news coverage, some studies have drawn from both national and local sources to further understand the differences in school shootings coverage based on proximity to the event (Hawdon, Agnich, and Ryan 2014; Holody and Daniel 2017; Holody, Park, and Zhang 2013). Research suggests smaller, more local newspapers typically follow national news outlets in their coverage and reporting trends in relation to national news events (Gans 1979; Harry 2001). However, there is less research in the wake of events that start within the community, such as school shootings. Perpetrator and victim coverage in 40 national and 46 local articles following the Aurora movie theatre shootings revealed differences between national and local coverage (Holody and Daniel 2017). National articles focused on the perpetrator (45%) more frequently than victims and families (17.5%). In contrast, local articles emphasized victims and families (43.5%) more often than the perpetrator (30.4%); however, statistical analyses for significance testing were not conducted. Other studies found similar differences in national and local coverage and suggested local news outlets have greater access to information and publish more community-focused coverage due to their close physical and social proximity (Hawdon, Agnich, and Ryan 2014; Holody, Park, and Zhang 2013).

Studies directly comparing national and local coverage following mass violence provide evidence to suggest local newspaper coverage may differ in content and quantity compared to national newspaper coverage due to journalists' access to information,

community sources, and the interests of the audience (Holody and Daniel 2017; Holody, Park, and Zhang 2013). Specifically, local news outlets may publish more articles and provide greater emphasis on individuals and issues in the community. Thus, journalists' and editors' proximity to the event, assumed role in the community, and opinions about coverage of victims and perpetrators may play a role in accepting or rejecting recommendations to decrease coverage of perpetrators and increase coverage of victims.

Current Study

There is a consistent call to decrease coverage of perpetrators in response to contagion and copycat effects. In addition, public campaigns continue to call for increased victim-focused coverage in an effort to highlight the importance of victims' lives over perpetrator actions. Yet, journalists and editors only support the latter recommendation to increase victim-focused coverage, and generally agree with current practices of publishing perpetrators' names, photos, and other details (Dahmen et al. 2018). Few studies have examined the implementation of these recommendations in recent mass shooting coverage, both in national and local newspapers. To date, many of the studies conducted utilize qualitative research methods and do not use statistical analyses to account for chance findings.

This study utilized Columbine coverage as a point of comparison because it is one of the most studied school shootings and is credited with setting a precedent for subsequent school shooting coverage (Leavy and Maloney 2009; Muschert 2007, 2009; Schildkraut and Muschert 2014). The Columbine shootings share similar characteristics to the Parkland shootings, including the number of casualties, perpetrator demographics, and setting (see Table 1). However, there are two major differences: (1) Parkland was carried out by one perpetrator compared to two Columbine perpetrators, and (2) the Parkland perpetrator was taken into custody approximately one hour following the shootings, whereas the two Columbine perpetrators died by suicide immediately following the shootings. Despite these differences, the Parkland shootings provided an opportunity to examine if coverage of a recent school shooting adhered to reporting recommendations when compared to Columbine coverage. Both national and local articles were utilized to further explore how news coverage of perpetrators and victims may differ based on proximity to the affected community.

Table 1. Comparison of Columbine and Parkland characteristics.

Characteristic	Columbine	Parkland
Location	Littleton, CO	Parkland, FL
Setting	Public high school	Public high school
Date of event	April 20, 1999	February 14, 2018
Day of the week	Tuesday	Wednesday
Time	11:19 AM	2:21 PM
Number of perpetrators	2	1
Perpetrator(s) age	18 and 17	19
Relation of Perpetrator	Both current students	Former student
Fate of perpetrator	Both died by suicide	Taken into custody
Number killed	13	17
Number injured	21	17

Note: Data retrieved from The Washington Post database (The Washington Post 2018).

Given the current mass shooting reporting recommendations for perpetrator and victim coverage, we anticipated that Parkland coverage would minimize references and notoriety given to mass shooting perpetrators, and instead emphasize victim-focused reporting, when compared to Columbine coverage. However, the literature suggests news organizations continue to emphasize perpetrators over victims despite recommendations, and that journalists generally do not believe in copycat effects. Based on this information, the following research questions were asked:

How did Parkland coverage compare to Columbine coverage at the national and local level in the following ways?

RQ₁: the proportion of articles referencing the perpetrator

RQ₂: the prominence of perpetrator references

RQ₃: the proportion of articles referencing at least one victim

RQ₄: the prominence of victim references

Method

A quantitative content analysis was conducted on national and local print newspaper articles published 30 days following the Columbine High School shootings on April 20, 1999, and the Marjory Stoneman Douglas High School shootings on February 14, 2018.

Sample

The New York Times articles were retrieved from the LexisNexis database for Columbine and Parkland coverage to represent national coverage. Consistent with previous mass shooting content analyses, the *New York Times* was selected for national coverage because of its role as a leading national news source and recognition as an agenda-setting source (Chyi and McCombs 2004; Muschert and Carr 2006; Park, Holody, and Zhang 2012; Schildkraut and Muschert 2014). For local coverage, *The Denver Post* and *South Florida Sun-Sentinel* articles were retrieved from the NewsBank database, for Columbine and Parkland respectively. Local newspapers were chosen for their similar proximity and circulation to their corresponding events. *The Denver Post* newsroom headquarters is located approximately 10 miles from Littleton, CO, and has a daily circulation of 196,286 (Gale Group 2020b). Similarly, the *South Florida Sun-Sentinel* is located approximately 11 miles from Parkland, Florida, and has a daily circulation of 135,404 (Gale Group 2020a).

Columbine articles were collected utilizing full-text keyword searches with the terms "Columbine" and/or "Littleton." Searches were limited to articles published 30 days following the event, starting April 21, 1999, up to and including May 20, 1999. Similarly, Parkland article search terms were "Parkland" and/or "Stoneman Douglas." Searches included articles published February 15, 2018, up to and including March 16, 2018. Initial search results were then reviewed based on predetermined inclusion and exclusion criteria. Articles met inclusion criteria if they were news stories or editorials relevant to the event. Consistent with other researchers (e.g., Chyi and McCombs, 2004; Schildkraut and Muschert 2014), editorials were included as they reflect the media agenda and

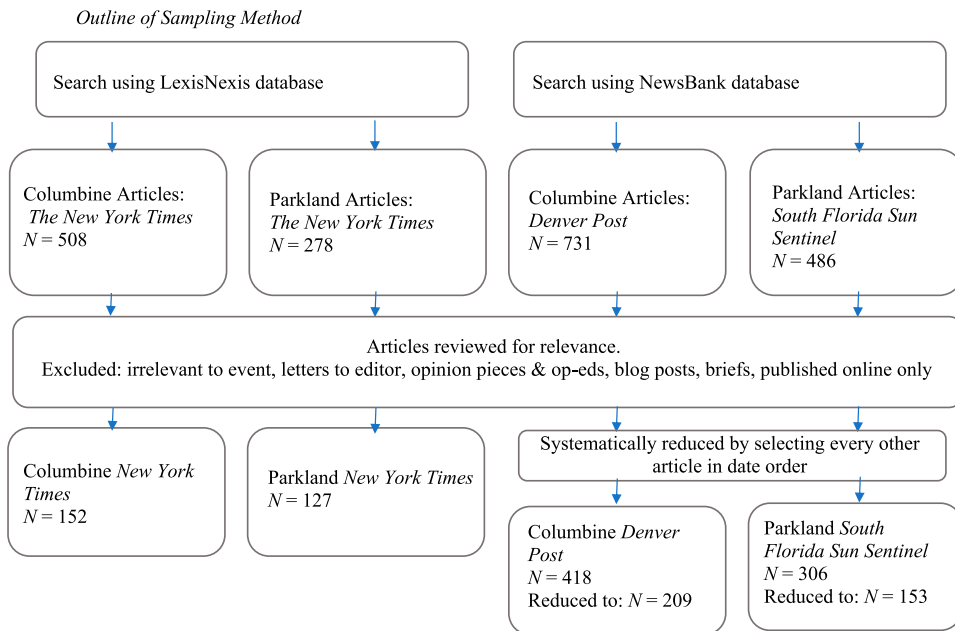


Figure 1. Outline of sampling method.

views of the newspaper. Similarly, letters to the editor, opinion pieces, and op-eds were excluded because they reflect the interaction between the public agenda and the media agenda. In addition, blog entries, briefs, and articles published online only, or were unrelated to the event were excluded. Articles that contained a reference to the event but were otherwise unrelated were also excluded (e.g., a sports article that noted the sports game occurred two weeks after the Columbine shootings with no further reference to the shootings). Due to a large number of local articles, *The Denver Post* and *South Florida Sun-Sentinel* articles were systematically sampled to include every other article in publication date order in the final sample. Figure 1 includes a flowchart illustrating the sampling method.

Procedure

A codebook was developed a priori and variable definitions were refined throughout training sessions based on coding discrepancies and questions that arose. Training sessions focused on articles from *The New York Times* and *Richmond Times-Dispatch* published 30-days after the 2007 Virginia Polytechnic Institute and State University shootings. A total of 38 sample articles were coded over six training sessions. Interrater reliability was calculated for each training session and discrepancies were discussed until a consensus was reached among the three coders. Training sessions were conducted until interrater reliability was achieved, and all variables met Krippendorff's alpha of 0.80 or higher.

National and local articles were evenly distributed and assigned to three coders. The title and body text of articles were coded; picture captions were not coded. To ensure interrater reliability was maintained, a 10% subset of articles was randomly selected

and independently coded by all coders. Discrepancies were discussed until a consensus was reached among coders. Interrater reliability was calculated a total of four times throughout the coding process. Due to the low number of references for each victim, Krippendorff's alpha could not be calculated for 9 of the 13 Columbine victims, and 15 of the 17 Parkland victims. All remaining variables maintained Krippendorff's alpha of 0.80 or higher at each time point prior to resolving any discrepancies.

Variables

The final codebook was developed as part of a larger project. The current study examined five variables: date of publication, perpetrator references, prominence of perpetrator references, victim references, and prominence of victim references.

Date of Publication

The date of publication for each article was coded as the number of days following the event in which the article was published, based on the publication date provided by the database in which the article was retrieved (i.e.: LexisNexis for national articles, NewsBank for local articles).

Perpetrator References

Each article was coded for the number of references to the perpetrators by name. Articles that did not include any references to the perpetrator's name were coded as "0." A single reference by name was defined as the inclusion of the perpetrator's first name, last name, full name, or the use of the perpetrator's name as a possessive noun (e.g., [perpetrator]'s mother). The two perpetrators of Columbine were coded separately; the 18-year-old perpetrator was referred to as "perpetrator 1," and the 17-year-old perpetrator was referred to as "perpetrator 2." Coded references were utilized to produce two outcome variables: the number of articles that referenced the event perpetrator at least once, and the total number of perpetrator references in all articles. Interrater reliability was calculated using Krippendorff's alpha for Columbine perpetrator 1 ($\alpha = 0.89$), Columbine perpetrator 2 ($\alpha = 0.90$), and Parkland perpetrator ($\alpha = 1.0$).

Prominence of Perpetrator References

Each article was coded for the location of the first perpetrator reference, indicating if the initial reference was located in the title, lead paragraph (first paragraph of the article), the first half of the body (first half of the article text following the lead paragraph, based on the number of paragraphs), or last half of body (the last half of the article text; remaining text after lead paragraph and the first half of body). If an article did not include a perpetrator reference, the location of the reference was coded as N/A. Interrater reliability using Krippendorff's alpha calculated for Columbine perpetrator 1 prominence ($\alpha = 0.98$), Columbine perpetrator 2 prominence ($\alpha = 1.0$), and Parkland perpetrator prominence ($\alpha = 1.0$).

Victim References

Articles were coded for the number of references by name for each victim that lost their life in the shootings. Articles that did not include any references to a victim by name were

coded as “0.” Similar to perpetrator references, a single victim reference was defined as the inclusion of a victim’s first name, last name, full name, or use of the name as a possessive noun (e.g., [victim]’s family). Each of the 13 Columbine and 17 Parkland victim names were coded individually. Due to the low number of references for each victim, Krippendorff’s alpha could not be calculated for 9 of the 13 Columbine victims, and 15 of the 17 Parkland victims. Interrater reliability using Krippendorff’s alpha was calculated for Columbine victims Corey DePooter ($\alpha = 0.97$), Isaiah Shoels ($\alpha = 0.93$), Lauren Townsend ($\alpha = 1.0$), William Sanders ($\alpha = 0.95$), and Parkland victims Nicholas Dworet ($\alpha = 1.0$) and Jaime Guttenberg ($\alpha = 1.0$). Victim variables were utilized to calculate three variables: the number of articles that included at least one victim reference, the total number of victim references in all articles, and the average number of references per individual victim.

Prominence of Victim References

Each article was coded for the location of the first victim reference, indicating if the initial reference was located in the title, lead paragraph, the first half of the body, or the last half of the body. If an article did not include a victim reference, the location of the reference was coded as N/A. The location of victim references was not originally included in the initial coding but was added later to be symmetrical to the perpetrator information. As a result, this variable was coded by one researcher.

Analyses

To investigate if Parkland coverage differed from Columbine coverage in national and local newspapers, chi-square analyses were conducted to examine the differences in the percentage of articles including at least one perpetrator reference, prominence of perpetrator references, percentage of articles including at least one victim reference, and prominence of victim references for both national and local coverage. Due to the low number of perpetrator and victim references in article titles, the title and lead paragraph categories were combined for both national and local chi-square analyses.

Table 2. Percentage of national articles containing perpetrator and victim references.

	Columbine National <i>n</i> = 152		Parkland National <i>n</i> = 127		χ^2	<i>p</i>
	<i>n</i>	%	<i>n</i>	%		
Reference at least one perpetrator	48	31.6%	46	36.2%	0.67	0.414
Prominence of perpetrator reference (Columbine perpetrator 1)					7.20	0.066
Title & lead paragraph	12	7.9%	7	5.5%		
First half of body	31	20.4%	28	22.0%		
Second half of body	3	2.0%	11	8.7%		
Prominence of perpetrator reference (Columbine perpetrator 2)					5.61	0.132
Title & lead paragraph	8	5.3%	7	5.5%		
First half of body	30	19.7%	28	22.0%		
Second half of body	4	2.6%	11	8.7%		
Reference at least one victim	16	10.5%	14	11.0%	0.02	0.894
Reference location of first victim reference					1.09	0.779
Title & lead paragraph	2	1.3%	3	2.4%		
First half of body	8	5.3%	8	6.3%		
Second half of body	6	3.9%	3	2.4%		

Table 3. Percentage of local articles containing perpetrator and victim references.

	Columbine local <i>n</i> = 209		Parkland local <i>n</i> = 153		χ^2	<i>p</i>
	<i>n</i>	%	<i>n</i>	%		
Reference at least one perpetrator	68	32.5%	66	43.1%	4.26	0.039
Prominence of perpetrator reference (Columbine perpetrator 1)					13.46	0.004
Title & lead paragraph	13	6.2%	22	14.4%		
First half of body	33	15.8%	36	23.5%		
Second half of body	20	9.5%	7	4.6%		
Prominence of perpetrator reference (Columbine perpetrator 2)					16.87	< 0.001
Title & lead paragraph	8	3.8%	22	14.4%		
First half of body	38	18.2%	36	23.5%		
Second half of body	17	8.1%	7	4.6%		
Reference at least one victim	42	20.1%	37	24.2%	0.87	0.352
Reference location of first victim reference					1.87	0.600
Title & lead paragraph	17	8.1%	15	9.8%		
First half of body	16	7.7%	17	13.4%		
Second half of body	9	4.3%	5	3.8%		

Results

The percentage of articles that included perpetrator references and victim references for national and local coverage is reported in Tables 2 and 3 respectively. The total number of perpetrator and victim references, as well as ratios for the perpetrator-to-victim references in national and local coverage, is reported in Table 4. Since Parkland and Columbine have a large number of victims and only one or two perpetrators, perpetrator and victim references were also calculated to reflect the number of references per individual. For example, the total perpetrator references across all Columbine national articles (397) were divided by two Columbine perpetrators, to determine that each Columbine perpetrator was referenced an average of 198.5 times across all Columbine national articles. Similarly, the total victim references across all Columbine national articles (81) were divided by 13 victims to determine that each Columbine victim was referenced an

Table 4. Number and ratios of perpetrator and victim references.

	Columbine		Parkland	
	National	Local	National	Local
<i>Perpetrator references</i>				
Total perpetrator references	397	566	282	318
Perpetrator references per article	2.61	2.71	2.22	2.08
References per perpetrator ¹	198.5	283	–	–
Perpetrator 1	240	325	282	318
Perpetrator 2	157	241	–	–
<i>Victim references</i>				
Total victim references	81	247	49	225
Victim references per article	0.53	1.18	0.39	1.47
References per victim ²	6.2	19	2.9	13.2
<i>Ratios</i>				
Total perpetrator references to total victim references	5:1	2:1	6:1	1:1
Reference per perpetrator to reference per victim	32:1	15:1	97:1	24:1

Notes: ¹For Columbine, the total number of perpetrator references was divided by 2 perpetrators to calculate the average references per perpetrator. Given that Parkland had 1 perpetrator, the average references per perpetrator is equal to the total perpetrator references. ²Total Columbine victim references was divided by 13 victims; Total Parkland victim references was divided by 17 victims.

average of 6.2 times across all Columbine national articles. When using the average reference-per-individual, this calculation depicts that perpetrator references exceed victim references by a ratio of approximately 32 to 1 when calculated by reference per individual. Similarly, Parkland national coverage referenced the perpetrator more frequently than individual victims by a ratio of approximately 97 to 1. Local Columbine coverage referenced individual perpetrators more often than individual victims by a ratio of approximately 15 to 1. Likewise, local Parkland coverage also referenced the perpetrator more frequently than individual victims by a ratio of approximately 24 to 1.

RQ₁: Perpetrator References

For national coverage, results from chi-square analyses showed the proportion of articles that reference a perpetrator involved in the incident at least once did not significantly differ between Columbine (31.6%) and Parkland (36.2%) national coverage, $\chi^2 (1, N = 279) = 0.667, p = .414$. Therefore, national Parkland coverage did not have a significantly lower percentage of articles that referenced a perpetrator when compared to Columbine. For local coverage, the proportion of articles referencing a perpetrator did significantly differ between events, $\chi^2 (1, N = 362) = 4.258, p = .039$. Local Parkland (43.1%) coverage had a greater percentage of articles that referenced a perpetrator compared to local Columbine (32.5%) coverage.

RQ₂: Prominence of Perpetrator References

Given there were two perpetrators in the Columbine shootings, separate analyses were conducted to compare the location of Columbine perpetrator 1 references and Columbine perpetrator 2 references to the location of Parkland perpetrator references. Despite low observed cell count for perpetrator reference location variables in national coverage, all cells had an observed value greater than one, and an expected value greater than five; therefore, assumptions are met for chi-square analyses. When looking at national coverage, results indicated the proportion of articles across location of perpetrator references did not significantly differ between Parkland and Columbine national coverage, for both Columbine perpetrator 1, $\chi^2 (3, N = 279) = 7.200, p = .066$, and Columbine perpetrator 2, $\chi^2 (3, N = 279) = 5.610, p = .132$. The majority of coverage named the perpetrator in the first half of the article for both Parkland (22.0%) and Columbine (20.4% for perpetrator 1, 19.7% for perpetrator 2) national coverage. For local coverage, the location of perpetrator references significantly differed between Parkland and Columbine local articles when calculated for Columbine perpetrator 1 ($\chi^2 (3, N = 362) = 13.458, p < .005$) and Columbine perpetrator 2 ($\chi^2 (3, N = 362) = 16.871, p < .001$). Post-hoc comparisons of reference location by mass shooting event based on adjusted standardized residuals found no statistically significant differences between groups after Bonferroni corrections when looking at Columbine perpetrator 1. Whereas, post hoc comparisons looking at Columbine perpetrator 2 revealed that Parkland coverage referenced the perpetrator significantly more in the title and lead paragraph when compared to Columbine local coverage of perpetrator 2, after Bonferroni corrections.

RQ₃: Victim References

For national coverage, results from a chi-square analysis indicated the proportion of articles referencing at least one victim did not significantly differ between Parkland (11.0%) and Columbine (10.5%) national coverage, $\chi^2 (1, N = 279) = 0.018, p = .894$. Similarly for local coverage, results from a chi-square analysis indicated the proportion of articles with at least one victim reference that did not significantly differ between Parkland (24.2%) and Columbine (20.1%) local coverage, $\chi^2 (1, N = 362) = 0.865, p = .352$.

RQ₄: Prominence of Victim References

Regarding the prominence of victim references in national coverage, the proportion of articles across different locations of victim references did not significantly differ between Parkland and Columbine national articles ($\chi^2 (3, N = 279) = 1.093, p = .779$). Given that only five articles named the victims in the title or lead paragraph in national coverage, resulting in low cell count, a continuity correction was calculated; however, results remained similar ($\chi^2 (3, N = 279) = 1.105, p = .776$). For local coverage, the proportion of articles across the location of victim references did not significantly differ between Parkland and Columbine local articles ($\chi^2 (3, N = 362) = 1.871, p = .600$).

Discussion

Reporting recommendations in the wake of mass shootings have consistently suggested that journalists and news outlets at local and national levels decrease perpetrator-focused coverage and increase victim-focused coverage. Given these recommendations, and finding relatively few analyses of how such recommendations have been implemented, if at all, at the local and national levels since the Columbine shooting, the present study explored the degree to which Parkland coverage reflected these recommendations when compared to Columbine coverage. This study expands current knowledge about mass school shooting coverage in two ways. First, analyses describe coverage of mass shooting perpetrators and victims in terms of the number of references and prominence of references in print news coverage of two different events 19 years apart. Second, unlike many studies on mass shooting coverage which use qualitative methods to examine coverage, the current study uses quantitative data and statistical analyses to account for chance findings.

Strikingly, local Parkland coverage exhibited a greater proportion of articles that referenced the perpetrator by name compared to Columbine coverage 19 years prior. Additionally, the perpetrator references were in more prominent locations, such as the title and lead paragraph, in local Parkland coverage than in local Columbine coverage. No other statistical differences were found in national coverage between Parkland and Columbine, with respect to the proportion of articles referencing perpetrators and victims, or the prominence of the references.

Findings suggest journalists and news outlets have not implemented recommendations to reduce perpetrator-focused coverage and elevate victim-focused coverage when reporting on the 2018 Parkland shootings. Moreover, local newspapers featured the perpetrators more frequently and more prominently in Parkland coverage than in Columbine coverage. Despite the continued calls to give less focus to perpetrators of

mass shootings, perpetrators still perpetuate in coverage. One explanation for the increase in perpetrator references may be partly due to the survival and arrest of the Parkland perpetrator. Ongoing court proceedings and trial preparations of the perpetrator likely provided additional information in the immediate aftermath for journalists and news outlets to report. This is supported by a recent study by Fox et al. (2020) which found that mass shootings in which the perpetrator was arrested, rather than died, were associated with greater coverage. However, since the Parkland perpetrator was apprehended the day of the incident, news coverage consistent with recommendations should ideally have reflected active choices to withhold reporting of the perpetrator's name and result in fewer perpetrator references. Another potential factor may be a lack of awareness of, or belief in, the strong evidence linking news media practices and copycat effects. While one study found that journalists neither agreed nor disagreed about the presence of a connection between news coverage of mass shootings and copycat effects (Dahmen et al. 2018), it remains unclear the degree to which journalists and news outlets are informed of research pertaining to these issues. More research is needed to better understand factors contributing to journalists' beliefs as well as their ability to keep up with current research and recommendations considering time demands and access to peer-reviewed research and publications. Moreover, news organizations in the U.S. have yet to adopt and implement formal industry-wide guidelines for mass shooting coverage. While the vast majority of recommendations from researchers, law enforcement, journalism organizations, and public campaigns generally agree to decrease emphasis on perpetrator coverage, the specific nuances of perpetrator coverage recommendations vary. Specifically, some call for not naming the perpetrator altogether (Lankford and Madfis 2017; Meindl and Ivy 2018; Schildkraut 2019), while others suggest refraining from publishing details such as photos, videos, and manifestos of perpetrators (Amman et al. 2017; No Notoriety n.d.). These differences in recommendations and lack of formal guidelines may create some confusion when making reporting decisions. Another factor that may contribute to the continued perpetrator-focused coverage is the rise in social media as a news and dissemination source (Shearer 2018). With the sharing of school shooting information on social media, it is possible that social media users looking for entertainment more than news, may perpetuate and reinforce the publication of flashy headlines and perpetrator-focused coverage due to the entertainment value, rather than objective and responsible reporting. However, further investigation into the relationship between print news and social media is needed.

Concerning victim references, the reasoning behind a lack of significant differences in victim coverage in both national and local coverage remains unclear, given that Dahmen et al. (2018) found that 72% of journalists agree with recommendations to increase stories of survivors and those affected by mass shootings. One potential explanation may be how victim references were coded. The present study only included deceased victims of the shootings. Therefore, study results do not accurately account for coverage of survivors, family members, and others who have been affected by the shootings. The coverage of the Parkland teen survivors who organized the Road to Change tour, for example, was not included as victim coverage in this content analysis (Cullen 2019). Despite this limitation, recommendations to increase victim-focused coverage often cite that the intention is to highlight the importance of victims' lives over the actions of perpetrators (ALERT Center at Texas State University n.d.; No Notoriety n.d.; RTDNA 2020).

Therefore, even without considering coverage of survivors, it is expected that more recent coverage would still exhibit an increase in coverage of victims who died in the mass shooting, to emphasize and celebrate their lives. One potential factor contributing to a lack of change in victim references may be due to greater barriers in interviewing victims' families and other survivors following a mass tragedy. In order to provide greater sensitivity and respect for those who were directly impacted by mass tragedies, it is suggested that journalists use extreme caution when contacting victims and survivors immediately following the event, and refrain from using standard practices such as social media techniques (RTDNA 2020). This increased sensitivity may prevent journalists from engaging with surviving families and obtaining information to help celebrate victims' lives. Providing better tools and increasing the availability of training pertaining to sensitive interviewing skills and victim reporting practices may help to encourage journalists to engage more with victims and survivors while being respectful of their needs in the immediate aftermath.

This study examined local and national news coverage separately, as the literature suggests local news outlets are more likely to publish articles emphasizing individuals and community issues directly affected by the event due to their close physical and social proximity (Hawdon, Agnich, and Ryan 2014; Holody and Daniel 2017; Holody, Park, and Zhang 2013). Although statistical analyses were not conducted comparing local coverage to national coverage, coding results suggest similar findings. Specifically, local news coverage referenced victims more for both Columbine (20.1%) and Parkland (24.2%) than national coverage following the shootings (Columbine 10.5%, Parkland 11.0%). Research has found that local news outlets are rapidly decreasing in recent years. Report for America stated that since 2000 the number of local reporters has decreased by 60% and an estimated 1,800 communities no longer have a local news outlet (Kille 2022). The decreased presence of local news outlets likely contributes to barriers to increasing victim-focused coverage, as there are fewer journalists with close physical and social proximity to the event. This not only may have contributed to the lack of increase in victim reporting in local coverage between Columbine and Parkland but suggests that future coverage will continue to have limited access to victims and survivors.

Limitations

The present study had several limitations. In addition to coding only deceased victims, the coding of perpetrator references focused solely on perpetrators' names and failed to account for other references including descriptions of general likeness, quotes, images, and manifestos. Future research should examine victim coverage with the inclusion of victims' families as well as other survivors and affected community members. Second, the study sample was limited to print newspaper coverage. Print news has become increasingly less common as a primary source of news for individuals in the U.S. (Shearer 2018); therefore, the study results may not adequately reflect all news content consumed by the general public. Future research should include additional news media sources such as news websites and social media. Moreover, the print newspaper coverage was limited to one national newspaper and two local newspapers. Future research should consider including multiple national news sources to explore if national news coverage is consistent across different news outlets. Beyond national news

coverage, future research would benefit from including global news sources as well as coverage of global mass violence events.

Despite these limitations, the present study indicates that despite increased calls for less focus on perpetrators and more focus on victims, the national and local coverage of Parkland showed equal or more focus on perpetrators and no changes in victim coverage. The results highlight the need to identify barriers to implementing recommendations for responsible reporting of mass shooting incidents. Journalists and news outlets have the difficult task of balancing the public's right to know and need for information with ethical responsibilities such as minimizing potential harm. Scholars should continue to investigate strategies to provide support to journalists and news outlets in implementing recommendations, in addition to further research tracking the progress of applying recommendations to news coverage.

Implications

Recommendations for reporting on mass shootings are widely addressed by researchers, law enforcement, journalism organizations, and public campaigns alike. However, to date, news organizations in the US have yet to adopt and implement formal industry-wide guidelines for mass shooting coverage. To correct this, The Trace announced its plan to develop guidelines for responsible reporting of mass shooters in partnership with the Donald W. Reynolds Journalism Institute at the Missouri School of Journalism (TCR Staff 2019); however, to our knowledge, the guidelines have not yet been published. Even with the presence of formal guidelines, the issue of disseminating this information still remains. Despite the evidence linking news coverage and copycat effects, most journalists surveyed neither agreed nor disagreed that this connection exists (Dahmen et al. 2018). Greater efforts need to be made to ensure that journalists and news organizations are informed about research findings on copycat effects and reporting recommendations following mass shootings. Moreover, further investigation is needed to explore additional factors that may contribute to the continued focus on perpetrators in coverage and lack of increased victim-focused coverage, including journalists' proximity to the event, assumed role in the community, comfortability with sensitive interviewing skills, and opinions about coverage of perpetrators and victims.

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