Article

The Newsworthiness of Mass Public Shootings: What Factors Impact the Extent of Coverage?

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Abstract

This study examined the characteristics of mass public shootings from 2000 through 2019 that impacted the extent of news coverage. A negative binomial regression predicting AP story counts indicated substantially greater coverage of shootings with a high number of casualties; that target government facilities, schools, or houses of worship; that are perpetrated by younger assailants, particularly with indications of mental illness; that involve terrorism or hate-motivation; that end in the assailant's arrest rather than death; and, to a lesser extent, that include larger shares of victims who are White, women, children, and strangers. Overall, the disproportionate coverage contributes to distorted perceptions of risk and reinforces inaccurate stereotypes about these crimes.

Keywords

mass public shootings, news media coverage, public perceptions, negative binomial regression, offense characteristics

Introduction

Beliefs and attitudes concerning the nature of crime and functioning of the justice system are influenced by a variety of sources, including family members, peers, teachers, and the media. However, since most people have little or no firsthand experience

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as perpetrator or victim of a serious crime, news reports in print, online, and on-air significantly shape public opinion and perception with regard to crime and punishment (Graber, 1980; Kubrin & Grosholz, 2007; Kupchik & Bracy, 2009; Surette, 2007; Warr, 2000). Although social media have expanded their role in the public consumption of news, both factual and fictitious, they very often serve as a secondary means of transmission for stories originating in traditional outlets.

Unfortunately, the information contained in news coverage of crime and criminal justice issues does not always provide an accurate portrayal of prevalence and patterns. Because the news business is indeed a business and must be at least somewhat responsive to profitability concerns, decisions on which stories to cover, and to what extent, have dual objectives: to inform and to entertain the audience (Graber, 1980; Kubrin & Grosholz, 2007; Robinson, 2014; Surette, 2007; Warr, 2000). Sensational, graphic, and violent stories are particularly captivating, and such events therefore are highlighted and remain longer in the news to attract and hold public attention (Kubrin & Grosholz, 2007; Lawrence & Mueller, 2003). However, the extent to which such crimes are covered can impact public perceptions of risk and opinions concerning the appropriate criminal justice response. It is important, therefore, to explore the offense correlates of newsworthiness. In this study, we examine coverage of one particularly high-profile crime type—mass public shootings with at least four victim fatalities.

Newsworthiness of Homicide

Since it would be impossible for media outlets to report on every crime-related story, editors and news directors must make judgments concerning their relative newsworthiness (Chermak, 1995; Surette, 2007). A crime's newsworthiness and its rarity tend to go hand-in-hand: the more unusual and extreme, the more compelling it is as a news story (Chermak, 1995). However, covering stories based on audience interest, rather than actual occurrence, paints a distorted picture of crime patterns. For example, because of its severity and the fear associated with it, homicide is more newsworthy than property crime, despite being far less common (Baranauskas & Drakulich, 2018; Chermak, 1995; Robinson, 2014). Further, many homicides receive little, if any, news coverage, depending on characteristics of the incident and those involved (Chermak & Chapman, 2007).

Certain offender, victim and incident characteristics have been found to increase the newsworthiness of homicides, regardless of their representativeness. For example, homicides committed by juveniles or offenders over the age of 35 are more newsworthy than those committed by offenders between the ages of 18-35 (Chermak, 1998), even though nearly two-thirds of homicide offenders are in this age range (Fox & Fridel, 2019). Furthermore, while most homicide offenders are male, female offenders receive a disproportionate amount of media coverage (Chermak, 1998). Whereas nine out of ten homicides are committed by a single perpetrator, incidents with multiple offenders have been deemed more newsworthy (Lundman, 2003; Paulsen, 2003). Additionally, although fatal encounters in which the victim is killed by a stranger represent only about one-quarter of all homicides, they are considerably more

newsworthy than incidents involving family members or acquaintances (Duwe, 2000). Finally, gun homicides, specifically those involving the use of assault weapons, receive more coverage than murders involving other weapons (Duwe, 2000; Gruenewald et al., 2009). This disproportionate coverage of certain crimes over others fosters distorted perceptions of homicide patterns.

Mass Shootings

Mass shootings, defined here as any incident in which four or more people are fatally shot within 24 hours, are rare events. Despite their relative infrequency, homicides that claim large numbers of victims tend to receive an inordinate amount of news coverage (Chermak, 1998; Duwe, 2000, 2004). The role the media play in the social construction of crime is especially influential for mass shootings and other extreme forms of homicide, as few people have a personal connection to these rare events (Duwe, 2000; Schildkraut & Elsass, 2016). Media coverage of mass shootings includes not only daily news and special reports, but also a host of documentaries about infamous murders. Furthermore, when these events happen, television ratings and newspaper readership surge. For example, 68% of adults surveyed by the Pew Research Center for the People and the Press (1999) indicated that they paid close attention to coverage of the Columbine shootings as it unfolded. In addition, a Gallup survey following the mass shooting at the Sandy Hook Elementary School found that 50% of adults watched the coverage of the event "very closely" and 90% at least "somewhat closely" (Saad, 2012).

Continuous coverage of mass public shootings leaves Americans with a distorted view of the phenomenon, leading them to believe that the events are far more frequent than they are in reality (Elsass et al., 2014; Schildkraut et al., 2015). In a recent Gallup poll, for example, nearly 50% of respondents indicated that they were afraid of being the victim of a mass shooting (Brenan, 2019). Another survey found that almost one-third avoid public spaces and events to reduce their risk of victimization (American Psychological Association [APA], 2019).

News coverage can influence not only what people think about, but how we think about it. To the degree that mass shootings involving certain types of locations, circumstances, or offenders are publicized more extensively than others, the audience may harbor an inaccurate idea of the nature of these events and perhaps the most appropriate strategies for prevention and response. Many Americans, for example, consider the stereotypical mass shooter to be a white male struggling with serious mental health issues and that identification and treatment rather than gun control would be the most effective strategy for limiting the carnage (Metzl & MacLeish, 2015). The validity of this perspective turns on its alignment with cases not coverage.

While mass killings are newsworthy in a general sense, certain characteristics impact the extent of coverage. In his study of nearly 500 mass murders between 1976 and 1996, Duwe (2000) found that indiscriminate shootings of large numbers of victims in public settings, particularly if an assault weapon is used, receive substantially

more news coverage than family annihilations or felony-related massacres regardless of body count (Duwe, 2000).

Given the intense public interest and concern surrounding shooting rampages in schools, houses of worship, and other public venues, there have been three recent attempts to understand the characteristics of a mass public shooting that increases its newsworthiness. Studies by Schildkraut et al. (2018) and by Silva and Capellen (2019a, 2019b) found victim count to be the most significant factor driving the amount of news coverage. Additionally, Silva and Capellan (2019b) observed that, among the perpetrators of such events, school shooters and lone wolf terrorists are routinely featured in news coverage.

Unfortunately, these three studies suffer from certain methodological issues related to both case-defining criteria and data source that compromise the accuracy of their results. For example, Silva and Capellan (2019a, 2019b) argue that in defining an event, an assailant's intent is more important than the outcome. Therefore, they consider a mass shooting as one in which the assailant attempts to kill large numbers of victims, whether successful or not. Although incidents in which offenders are stopped by police or bystander intervention or in which most victims survive their injuries may be important for understanding motivation, the media focus on what happened rather than what the assailant had hoped would happen. Defining mass shootings to encompass incidents with minimal death tolls directly impacts the ability to identify cases through open source news archives. Data sets that include mass shootings with few or no fatalities would tend to be seriously biased by the capacity to locate cases and associated details on low level shootings, particularly those occurring in distant past.

The bias associated with attempting to locate older cases with few fatalities can be illustrated by the missing data problems associated with the FBI's active shooter research launched in 2014, which, like Silva and Capellan (2019a, 2019b) defines an incident based on a gunman's intent. Many active shooters fall far short of their goal, including some who fail to kill anyone. FBI reports have pointed to a three-fold increase since 2000 in the number of active shooter events (Blair & Schwieit, 2014), a finding frequently mischaracterized by the press as a rising tide of mass shootings (see, for example, Schmidt, 2014). As evidence of bias, the FBI's dataset reveals a marked rise in the percentage of cases resulting in no fatalities. For the years 2000 to 2003, where cases were gathered retrospectively, 9% of active shooter incidents resulted in no fatalities. In contrast, for the years 2016 to 2019, where cases were added to the database contemporaneously, 27% of active shooter incidents resulted in no fatalities. Thus, either active shooters of recent vintage are not quite as deadly as those of earlier years, or, more likely, such cases were simply harder to find after so many years.[1]

A temporal bias may also exist in Silva and Capellan's (2019a, 2019b) dataset of cases over a 50-year time span given that news coverage of incidents was not limited based on elapsed time since event occurrence. Thus, cases in more recent years could have their coverage counts censored as compared to shootings from decades ago.

A more critical limitation involves the measurement of news coverage. All three studies utilized *The New York Times* as the basis for measuring the number and lengths of news stories. Although often considered the nation's "newspaper of record," this

newspaper, like most major dailies, includes both national news as well as coverage of regional and local events, which would tend to produce a bias in favor of cases in New York and surrounding states. It is not surprising, therefore, that Silva and Capellan (2019b, Table 4) found significantly less coverage of cases in regions of the U.S. outside of the Northeast, as did Schildkraut et al. (2018, Table 5).[2]

The Present Study

As indicated, mass shootings that occur in public settings typically receive an inordinate amount of news coverage and dominate public and legislative debates surrounding gun control, school safety, and mental health services (Duwe, 2000). After all, such shootings can occur at any time and any place and to anyone. It is not surprising that, despite their rarity, these seemingly senseless massacres disproportionately stoke public fear and shape public policy.

Our objective is to examine the particular incident, offender, and victim characteristics that make mass public shootings especially newsworthy, besides the size of the body count. In doing so, we limit the analysis to those incidents with large numbers killed (specifically, at least four) to ensure complete case coverage and limit any biases related to data availability. We also utilize a source of news coverage that does not introduce an inherent bias based on region or any other characteristic that may differ by region. By exploring the factors making certain incidents especially newsworthy, we hope to shed light on the messages that inform (and perhaps misinform) the public's thinking about the nature and prevention of mass shootings.

Data Sources and Variables

There is not only much confusion surrounding the definition of the term mass shooting, but also debate over its prevalence and trends (Fox & Levin, 2015). There is also disagreement concerning the appropriate victim count threshold, whether that threshold should be based on fatalities alone or rather all victims deceased and surviving, and whether cases should be excluded based on victim-offender relationship, motive or location. For the purpose of examining the newsworthiness of mass shootings, it is reasonable to limit the analysis to those cases that indeed receive the most publicity: mass shootings with large numbers of fatalities that occur in public locations.

We define a mass public shooting as an incident in which four or more victims are fatally shot in a public location within a 24-hour period, absent of underlying criminal activity, such as robberies, drug deals, and gang conflict. The specific inclusion rules are as follows: (1) at least four of all victims were killed by gunfire; (2) at least four of the victims were killed in a public place (e.g., school, restaurant/bar, theater/concert venue, business, government facility, and house of worship) or else at least half of all victim fatalities occurred in a public place; and (3) the shooting did not occur in a private residence, although those that occurred in a non-private residence (e.g., group home or motel) are included. Starting with a database of mass shootings

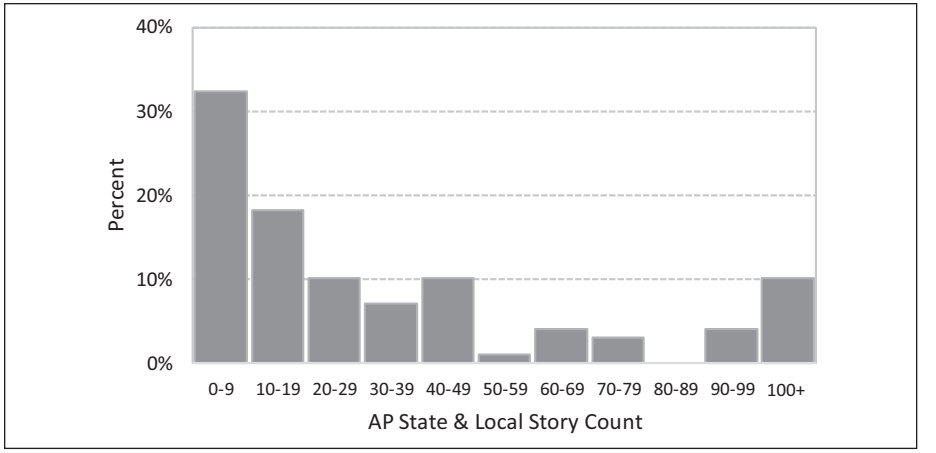

Figure 1. Distribution of AP state & local wire story counts ($N = 100$).

continually maintained by Duwe (2020), we scanned other available databases[3] to ensure complete coverage of events. We then evaluated each incident to determine if it qualified as a mass public shooting by the criteria indicated above.[4] As a result of this case-by-case assessment, we identified a final list of 97 mass public shootings from 2000 through 2019 that, in total, involved 199 assailants (2 incidents were committed by male/female pairs), 763 victims fatally shot (the maximum of 58 associated with the 2017 Las Vegas concert shooting) and another 996 victims injured by gunfire (nearly half also associated with the Las Vegas massacre).[5]

To provide a measure of the extent of publicity given each incident, we obtained through *Nexis Uni*® the number of stories in the Associated Press State & Local Wire (AP_SL) that referenced the assailant's name during the 15 days following the massacre, including the day of the incident. This source of coverage minimizes, if not eliminates, any regional bias that would exist with major national newspapers, such as *The New York Times*, or with the Associated Press national wire. Also, by limiting the coverage window to a fixed 15-day period, we avoid any censoring bias from the varying time spans from incident date to news wire search date.

The AP_SL story counts range from 0 to 217 with a median of 18, a mean of 38.74 and a standard deviation of 50.50.[6] The distribution is heavily skewed, as reflected in the percentage distribution shown in Figure 1. Whereas 32 of the 99 assailants were the subject of fewer than ten AP wire stories, 10 high-profile offenders were included in at least 100 stories in the wake of their shooting sprees.[7]

Although nearly all of the mass public shootings were covered in wire stories, there was clearly wide variation in the extent to which the cases and the perpetrators' names were publicized. In an attempt to account for this variation, we considered several predictor variables related to the incident, offender, and victims.

Table 1 shows the mean and standard deviation of AP_SL story counts broken down by the categories of several characteristics.[8] The differences among regions

Table 1. Comparison of AP Story Counts by Incident, Offender, and Victim Factors.

			AP state & local wire stories			
Variable	Category	Number	Mean	Std. Dev.	*F* ratio	*p*-value
All cases		97	38.7	50.5		
Region	East	13	43.2	56.3	0.246	.864
	Midwest	20	31.0	27.6		
	South	35	39.8	54.3		
	West	29	40.8	56.8		
Location	Government	7	81.0	66.2	3.271	.025
	School	13	70.3	61.0		
	Worship	8	61.6	52.5		
	Other	69	29.0	46.2		
Offender age	Under 25	23	66.5	75.7	5.942	.004
	25–39	38	37.3	42.2		
	40 and over	36	22.5	27.1		
Offender race	White	56	49.1	58.5	6.590	.012
	Nonwhite	41	24.7	32.7		
Contributor	Terrorism	7	81.0	66.2	3.749	.007
	Hate	8	49.1	53.0		
	Grievance	44	21.8	29.2		
	Mental illness	16	60.1	79.3		
	Other	22	40.0	40.5		
Outcome	Arrested	36	42.6	56.6	0.237	.627
	Killed	61	36.5	46.9		
Interracial	Yes	34	41.7	50.4	0.065	.799
	No	63	37.1	50.9		

(defined by the usual Census Bureau designations) were not appreciable, as anticipated by using the state and local wire rather than the national news feed. There were substantial differences, reflected by large *F* ratios, based on location type, offender age and race, and situation. Not surprisingly, more coverage was given to shootings that targeted sensitive locations—schools, houses of worship and government facilities including military bases ($F = 3.271$, $p < .05$). Differences among offender age categories were substantial ($F = 5.942$, $p < .01$).[9] Offenders under 25 years of age, who constituted only about one-quarter of the assailants, received more than twice the level of news reporting than 25 and over, in large part because many were associated with school shootings. White offenders were covered far more extensively than nonwhite assailants ($F = 6.590$, $p < .05$); although not shown, the means for Black and Hispanic offenders were virtually identical. There are sharp differences among the various contributors ($F = 3.749$, $p < .01$). Cases that involved terrorism or were perpetrated by an offender with signs of mental illness received far greater news coverage, as did hate-motivated shootings but to a lesser degree. Finally, although comparisons based on outcome (offender arrested vs. deceased) and interracial pattern (race dissimilarity

Table 2. Correlation of AP Story Counts with Incident, Offender, and Victim Variables.

					Association with AP state and local Counts	
Variable	Minimum	Maximum	Mean	Std. Dev.	Pearson's *r*	*p*-value
Victims killed	4	58	7.9	8.3	0.623	.000
Victims killed (root)	2	8	2.6	1.0	0.665	.000
Victims injured	0	413	10.3	42.7	0.340	.001
Victims injured (root)	0	20	2.0	2.5	0.527	.000
%Victims strangers	0%	100%	56%	45.7%	0.386	.000
%Victims female	0%	100%	40.3%	28.3%	0.114	.265
%Victims < 18 years old	0%	100%	8.6%	21.8%	0.178	.081
%Victims white	0%	100%	62.6%	40.3%	0.119	.247

Note. $N = 97$; Victim characteristics are based on fatalities only.

between offender and the majority of victims killed) revealed only modest differences, the effects were in the anticipated direction. Offenders who survived their attack received about 17% more coverage than those who committed suicide or were killed at the scene, and a somewhat similar difference existed for assailants whose killings tended to cross racial lines compared to those who were of the same race as most of their victims.

Table 2 presents the means and standard deviations for the number of gunshot victims killed, the number of gunshot victims injured, and several percentage measures pertaining to slain victim characteristics, as well as their correlations with the AP State & Local Wire story counts. Because of the substantial skewness in the casualty figures, victim counts were square-rooted for later analysis. Unsurprisingly, the strongest association involves the number of people fatally shot by the assailant ($r = .623$, $p < .001$). Also correlated with coverage were the number of injured victims ($r = .340$, $p < .001$) and the extent of victimization of strangers, as opposed to co-workers, classmates, etc. ($r = .386$, $p < .001$). The correlations of coverage with the percentage of female victims, of younger victims, and of White victims were all in the expected direction, although not especially strong.

Regression Results

Because of the substantial overdispersion in the AP_SL counts, we used negative binomial regression to assess the extent to which news coverage can be predicted by all of the case characteristics in combination. Table 3 presents several specifications of the model with severity (i.e., number of victims killed and injured), location, offender, and victim characteristics entered as regressors in stages. As indicated by the Likelihood Ratio Chi-Square statistics, all with $p < .001$, the model improves substantially with

Table 3. Negative Binomial Regression of AP Stories Based on Mass Public Shootings Incident, Offender, and Victim Characteristics.

		Severity only				Severity/Loc				Severity/Loc/Off				Severity/Loc/Off/Vic			
Regressor		*b*	SE (*b*)	*p*	IRR	*b*	SE (*b*)	*p*	IRR	*b*	SE (*b*)	*p*	IRR	*b*	SE (*b*)	*p*	IRR
Intercept		1.718	0.383	.000		1.692	0.375	.000		0.858	0.443	.053		−0.018	0.488	.971	
Victims killed (root)		0.496	0.151	.001	1.642	0.429	0.154	.005	1.536	0.424	0.147	.004	1.528	0.396	0.142	.005	1.486
Victims injured (root)		0.189	0.075	.012	1.208	0.198	0.076	.009	1.219	0.103	0.074	.161	1.109	0.101	0.070	.149	1.106
Region	East					0.114	0.352	.745	1.121	0.206	0.337	.541	1.228	0.204	0.322	.527	1.226
	Midwest					0.098	0.296	.740	1.103	0.474	0.289	.101	1.606	0.538	0.302	.074	1.713
	South					−0.450	0.278	.106	0.638	−0.397	0.272	.145	0.673	−0.169	0.281	.547	0.844
	West*																
Location	Government					0.898	0.419	.032	2.454	0.997	0.442	.024	2.710	0.788	0.418	.059	2.199
	School					0.621	0.318	.051	1.860	0.794	0.313	.011	2.211	0.641	0.332	.053	1.899
	Worship					1.046	0.384	.006	2.846	0.761	0.374	.042	2.140	0.737	0.365	.044	2.089
	Other*																
Off. Age	Under 24									0.558	0.299	.062	1.748	0.588	0.281	.036	1.800
	25–39									0.431	0.240	.072	1.539	0.422	0.230	.067	1.524
	40 and up*																
Off. Race	White									0.239	0.233	.304	1.270	0.046	0.249	.853	1.047
	Nonwhite*																

(continued)

Table 3. (continued)

		Severity only				Severity/Loc				Severity/Loc/Off				Severity/Loc/Off/Vic			
Regressor		*b*	SE (*b*)	*p*	IRR	*b*	SE (*b*)	*p*	IRR	*b*	SE (*b*)	*p*	IRR	*b*	SE (*b*)	*p*	IRR
Contributor	Terrorism									0.731	0.404	.071	2.077	0.971	0.418	.020	2.640
	Hate									0.541	0.453	.233	1.717	0.621	0.469	.185	1.860
	Grievance									0.070	0.293	.811	1.072	0.105	0.292	.718	1.111
	Mental illness									0.499	0.329	.130	1.647	0.434	0.322	.178	1.543
	Other*																
Outcome	Arrested									0.480	0.215	.025	1.616	0.448	0.207	.030	1.566
	Killed*																
%Victims strangers														0.003	0.002	.215	1.003
%Victims female														0.007	0.004	.102	1.007
%Victims < 18 years old														0.000	0.006	.951	1.000
%Victims white														0.007	0.003	.008	1.007
Interracial	Yes													0.103	0.248	.676	1.109
	No*																
Dispersion parameter		1.118	0.158			0.974	0.142			0.788	0.121			0.681	0.108		
Log likelihood			–437.839				–430.781				–420.914				–414.466		
Likelihood ratio χ^2			38.4, df = 2, $p = .000$				52.8, df = 8, $p = .000$				72.2, df = 16, $p = .000$				85.1, df = 21, $p = .000$		

Note. *Reference category, $N = 97$.

each additional set of predictors.[10] Additionally, the fact that the dispersion parameter remains closer to one than zero confirms the appropriateness of using a negative binomial distribution, rather than one based on the Poisson distribution.[11]

The regression coefficients displayed in Table 3 are all in the expected direction, consistent with the univariate results of Tables 1 and 2. The significance of the regressors generally corroborate the univariate tests, with a few exceptions. The number of victims remains the strongest predictor of the extent of news coverage throughout all specifications. Moreover, the associated Incident Rate Ratio for the victim tally in the final model (IRR = 1.486) indicates that, with all other variables constant and converting values to square roots, a mass shooting with 15 victims would tend to receive 91% more coverage than one with 5 victims.[12] Government facilities, schools, and houses of worship as locations all tend to increase news coverage, more or less doubling the story counts over the reference pool of other shooting sites (IRR values of 2.199, 1.899, and 2.089, respectively). Evidence of terrorism tends to increase coverage by more than two and one-half times, while shootings inspired by racism or other forms of hate and those committed by an assailant with indications of mental illness also receive considerably increased coverage.

Shootings perpetrated by younger offenders, especially those under age 25, are covered much more extensively. Offender race, although initially a strong predictor, is supplanted in the final stage of the regression by the percentage of White victims (IRR = 1.007, a small multiplier but one that compounds for each percentage point). Finally, emerging as a strong predictor after taking into account all other variables in the model, the offender being arrested as opposed to dying at the scene increases the story count by more than 50% (IRR = 1.566). It appears that the press has a wider range of news angles for an offender who faces criminal prosecution rather than an early grave.

The general topic of mass shootings has received substantially more news coverage in recent years, which raises the possibility of a corresponding increase in case-specific coverage as well. However, the correlation between AP_SL count and a year variable is low ($r = .109$, $p = .288$). Moreover, the rather modest increasing trend in per-case coverage suggested by this correlation is a direct result of the fact that most of the shootings with especially large body counts have taken place since 2012. Specifically, 13 of the 16 incidents with double-digit death tolls and 5 of the 6 with more than 20 victims occurred since then. After controlling for the number of victims killed in each incident, the correlation of AP_SL counts and year weakens further (partial $r = -.082$, $p = .427$). Moreover, including year as a variable in the regression analysis creates very little change in the results (not shown) with the Likelihood Ratio Chi-Square improving by only half a percent. Thus, there is no empirical or theoretical justification for including a trend variable in the model.

Finally, skewness in the victim and publicity counts raises the potential for distortion as a result of outliers. As a sensitivity check, we successively eliminated cases based on extreme values of victim counts and then on the AP story counts. We also truncated the injured victim count in the Las Vegas shooting from 413 to 100. Although the exact values of the regression coefficients changed slightly, their relative strengths were generally unaffected.

Discussion

As compared to more mundane events, tragedies and catastrophes typically receive an inordinate amount of attention from the news media, both electronic and print. Among the array of disasters that dominate a news cycle, be they of natural or human origin, mass shootings in public places are particularly prominent. In 2012, for example, the annual survey of Associated Press editors listed the mass shooting at the Sandy Hook Elementary School in Newtown, CT as the top story of the year, eclipsing both a hotly contested presidential race and a superstorm also bearing the name Sandy (Crary, 2012). In 2018, another school massacre—at the Marjory Stoneman Douglas High School in Parkland, FL—was selected as the top news story of the year (Crary, 2018). In addition, the editors ranked mass shootings in general as fourth on the 2018 list, citing several cases including massacres with double-digit death tolls at a bar in Thousand Oaks, CA and a synagogue in Pittsburgh, PA. Then, in 2019, a year during which the number of cases peaked (Pane, 2019), mass shootings again ranked number four on the AP list largely because of the massacres in El Paso, TX and Dayton, OH that shocked the nation on consecutive days in August (Crary, 2019).

Since media reports about mass shootings impact public perceptions of risk as well as opinions on various policies such as gun control (Duwe, 2020), it is important to understand which types of incidents gain the most coverage. As reported here, there is wide variation in the extent to which even mass public shootings are featured in the news. The higher the body count, the more newsworthy—a finding that meshes with previous work on mass shootings regardless of location or type (Duwe, 2000). Furthermore, mass public shootings that target such places as government facilities, schools and houses of worship; that involve terrorism or bias in some form; that are perpetrated by younger assailants with substantial signs of mental illness; that involve White Americans particularly in terms of the racial makeup of those killed; or that claim the lives of innocent strangers are especially frequent subjects of news stories. This encourages stereotypical and distorted perceptions—for example, that mass shootings are usually carried out by young deranged gunmen or those with ideological ties to terror or hate groups—when the typical patterns are, in fact, far less sensational, involving personal grievances not driven by psychotic thinking (see Fridel, 2017). However, the atypical is what tends to be the most newsworthy and impactful.

The tendency for these horrific crimes and their perpetrators to attract significant media attention has been criticized in multiple respects. Some suggest that the seemingly constant stream of disturbing news reports about armed assailants running amok has a desensitizing effect on the audience and may promote a decidedly negative view of social relations (see Scharrer, 2008). Focusing more on coverage of the offender than the offense, several prominent members of the media (including CNN's Anderson Cooper) and a growing number of academics (see Lankford & Madfis, 2017) have promoted the "No Notoriety" campaign. They urge the news media to avoid frequently repeating the names of mass killers or showing their images. Although identifying mass shooters more than necessary does add insult to injury as far as the victims and their families are concerned, there is not much evidence beyond simple anecdotes that

this encourages copycats. Indeed, it is the act, not the actor, that like-minded individuals applaud and find inspirational. Some white nationalists, for example, hailed the August 2018 massacre of Hispanics in El Paso, without necessarily referencing the gunman's name (see Hayden, 2019).

The idea that the identities of people who commit unspeakable acts should themselves remain unspoken is understandable. However, it is hardly reasonable, practical or even possible for the names and images of mass killers to remain sealed from public awareness. The name, image, as well as basic demographic information about an assailant is newsworthy, just as much as are descriptions of those who were killed. Moreover, what would be the logic for withholding the names of mass shooters but not serial killers and mobsters who become the focus of biopics and documentaries, or sex offenders whose identities and photographs are published online in government-maintained registries? And how many victims must an assailant shoot for it to become inadvisable to publish their identity?

Despite our skepticism regarding the "No Notoriety" campaign, journalists sometimes do cross the ethical line from stating the basic facts about an offender to reporting on superfluous details concerning that person's life and lifestyle. For example, in the extensive coverage of Las Vegas mass murderer Stephen Paddock, we learned about his enjoyment of karaoke, his favorite casino games, his shoe size, and even what he ordered from room service at the Mandalay Bay Hotel just prior to the shooting. His relatives and acquaintances were frequently interviewed by the press. *The New York Times* methodically traced through visual recordings of his every movement in the days leading up to the massacre. The relentless digging into the gunman's recent and distant past did not uncover the truth about his motive, but in the process of seeking answers the news media inadvertently humanized a most undeserving individual.

Although we do not subscribe to a total blackout on news coverage identifying mass shooters or showing their images, the press should limit coverage of the assailant to the essential facts (e.g., demographic characteristics, details on the weapons used and their acquisition, motive, and criminal justice processing), and avoid gratuitous details about the offender's background and planning process that add little or nothing to our understanding of events. Coverage of mass shooting incidents has become a staple for the media, particularly cable news channels with many hours of airtime to fill. And, of course, the public seems to have an insatiable appetite for following these events as they unfold. These incidents, as breaking news, should be covered, but the style of reporting can certainly be elevated without infringing on the freedom of the press.

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Notes

1. Although improvements in the law enforcement response to active shooter events may have contributed to less lethal outcomes, the FBI database is missing several cases primarily in the earlier years, including the April 2000 shooting spree in Pittsburgh that resulted in five fatalities and the October 2002 shooting at the University of Arizona in which three faculty members were killed (see also Lott, 2015).
2. We compared story counts from *The New York Times* to those from the AP State and Local wire, the measure used in the analysis reported on here. The *Times* typically had far fewer stories than the AP wire. Of the 62 cases for which both sources had at least two stories, the *Times* had fewer stories for 57 cases, the same number for 2 cases, and more stories for 3 cases. All 3 with more stories in the *Times* involved offenders from the Northeast. Thus, not only does the AP wire provide a greater volume of stories, which is advantageous for analytical purposes, but it minimizes, if not eliminates, the potential for regional bias.
3. The additional data sources used to cull the pool of potential cases came from the Associated Press/USA Today/Northeastern University Mass Killing Database, the FBI's Active Shooter Events, the FBI's Supplementary Homicide Reports, the Washington Post, Mother Jones, Everytown for Gun Safety, the Stanford University Geospatial Center, Jillian Turanovic and Travis Pratt of Florida State University, Jillian Peterson and James Densley of Hamline University, and Louis Klarevas of Columbia University.
4. For each mass shooting in the pool of possible inclusions, three individuals independently judged whether the case satisfied all of the criteria for classifying it as a mass public shooting. There was agreement among the three raters in 93.1% of the cases. This rate of concurrence increased to 94.7% when counting cases for which two of the three agreed while the third rater was unable to decide.
5. In the analysis to follow, we use 58 and 413, respectively, for the number of victims killed and the number of victims injured by gunfire in the 2017 Las Vegas mass shooting. In 2020, two additional victims died as a result of injuries suffered in the shooting. However, because our focus in on the extent of publicity in the weeks following the shooting, we used the victim count known at that time.
6. For all statistical results, the cases were weighted so that the 2 multiple-offender incidents were treated as one observation.
7. The offenders with at least 100 stories were (in descending order of coverage): Adam Lanza (Newton, CT), Jared Loughner (Tucson, AZ), James Holmes (Aurora, CO), Omar Mateen (Orlando, FL), Dylann Roof (Charleston, SC), Seung-Hui Cho (Blacksburg, VA), Stephen Paddock (Las Vegas, NV), Nikolas Cruz (Parkland, FL), and both Syed Farook and Tashfeen Malik (San Bernardino, CA).
8. *F* ratios were used throughout the table, even for two-group comparisons, simply for consistency sake. Of course, in cases of dichotomies, analysis of variance is equivalent to a t test.

9. Because of the non-linear relationship between offender age and news coverage, the former was trichotomized for its eventual role as a regressor in predicting coverage. The particular cut-points used here were determined based the pattern observed in the relationship with coverage as well as customary age groupings.
10. Because these data constitute a population of cases rather than a random sample, *p*-values are not meaningful in the strict sense of hypothesis testing for non-zero values. Instead, they are used here as a gauge of the relative strength of the regressors. Thus, variables were not eliminated based on any particular threshold for *p*-values.
11. The superiority of the negative binomial over the Poisson is also indicated by comparing the respective Likelihood Ratio statistics (not shown).
12. Of course, shootings with higher victim counts do not tend to occur with all other factors equal. Based on the severity model consisting only of casualty counts, an increase in victims killed from 5 to 15 would be expected to produce 125% more news coverage.

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