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Breaking News of Social Problems: Examining Media Consumption and Student Beliefs about School Shootings

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ABSTRACT AND ARTICLE INFORMATION

School shootings are considered by many to be a social problem in need of a solution. While episodic in nature, they generate fear and concern, particularly as a result of the amount of attention they garner by and through the media. The present study explores the relationship between college students' media consumption and their beliefs that school shootings are a problem in the United States. A survey was administered to 442 university students in fall 2012 and included measures of specific modes through which media is consumed, including television, newspaper, and social media, which then were analyzed to assess such a relationship. The results indicate that social media—Twitter in particular—are significant predictors of students' beliefs about school shootings. These findings also represent an important shift in media production that encourages a more participatory discourse with audience members. Implications for journalistic practices, study limitations, and directions for future research also are discussed.

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School shootings in the late 1990s, culminating with the 1999 shooting at Columbine High School in Littleton, Colorado, have been characterized as a social problem in need of a solution. Additional events, including the shootings at Virginia Tech (2007) and Sandy Hook Elementary School in Newtown, Connecticut (2012), have become what Kellner (2003, 2008a, 2008b) has called a “media spectacle.” Though different events will receive

varying amounts of coverage, the local, national, and even international media cover multiple facets of the story in order to capture audience attention and win the ratings war. Stories permeate television screens, especially on 24-hour news channels, such as Fox News, CNN, and MSNBC. Headlines appear daily across the front pages of newspapers, and the transition of many of them to a digital online format allows for faster, more frequent story generation.

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The view of school shootings as a social problem can be attributed to the abundant media coverage of these events. Stafford and Warr (1985) proposed that in order for a phenomenon to be considered a social problem, people must “(1) condemn it (i.e., view it as wrong or hazardous), (2) perceive it to be frequent or prevalent, and (3) consider it mutable” (p. 307). Despite varied responses to school shootings (particularly as they relate to gun control versus gun ownership), virtually all people condemn them. The around-the-clock media coverage, as well as constant linking of one event to another in the media discourse, leads news consumers to believe that these events are common (Schildkraut & Muschert, 2014). Mutability, or the ability to change the phenomenon (Stafford & Warr, 1985), can be observed through the punitive responses to school shootings that are aimed at preventing future events (Schildkraut & Hernandez, 2014). In addition to proposed gun control and mental health legislation, responses also have included zero-tolerance policies, identification cards, metal detectors, and increased security in schools (Schildkraut & Hernandez, 2014; Schildkraut & Muschert, 2014).

The present study examines students’ beliefs that school shootings are a national problem. A survey was administered at a large southwestern university in fall 2012 and included questions about media consumption over a number of different modes, including television, radio, newspaper (in print and online), and social networking, among others. Specifically, this study was intended to examine the relationship between college students’ media consumption, and their beliefs that school shootings are a problem.

Literature Review

Media and the Cultivation Process

Scholars have long contended that people’s beliefs about the world around them are influenced strongly by the media content they view or hear (Arendt, 2010; Gerbner & Gross, 1976; Gerbner, Gross, Morgan, & Signorelli, 1986; Gerbner, Gross, Signorelli, & Morgan, 1980; Morgan & Shanahan, 2010; Potter, 2011; Shrum, 2001). This has been termed a “cultivation effect” by Gerbner and colleagues (1980, 1986; see also Potter, 2011). This means that the more people consume media, the more likely they are to see the world as it is reflected in the media’s content, particularly when the content is fictional in nature or heavily framed around one specific issue or topic (Arendt, 2010; Morgan & Shanahan, 2010; Romer, Jamieson, & Aday, 2003). The media become people’s main framers of social

reality (Gerbner & Gross, 1976; Gerbner et al., 1980, 1986; Morgan & Shanahan, 2010).

Media exposure may occur either directly or indirectly (Hughes, 1980; Potter, 2011). People may receive media messages themselves, or the messages may be transmitted through conversations and interactions with other news consumers (Hughes, 1980; Potter, 2011; Romer et al., 2003; Sacco, 1982, 1995; Surette, 1992). Thus, exposure to media messages is continually allowing the media to reach broader and more diverse populations through different sources (Couldry, 2008; Gerbner et al., 1986; Potter, 2011). Further, this sharing of information allows people to formulate opinions about a number of issues to which they may not have otherwise been exposed (Callanan, 2012; Couldry, 2008; Gerbner et al., 1986). The impact of media intake, however, has been found to vary by recency and frequency of consumption and may be limited to the short-term (Morgan & Shanahan, 2010; Shrum, 2001).

Heavy consumption of media coupled, with exaggeration about the numbers of people involved in violence, affects consumers’ beliefs about their likelihood of victimization and the true occurrence of such events (Gerbner & Gross, 1976; Gerbner et al., 1980, 1986; Sacco, 1982, 1995). Gerbner and Gross (1976) elaborate by noting that people who see themselves to be at a greater risk of victimization often consume greater quantities of violent media (see also Heath, 1984; Liska, Lawrence, & Sanchirico, 1982; Romer et al., 2003). These same people also believe that crime is occurring more frequently in their communities, even if that is not the case (Dowler, 2003; Dowler, Fleming, & Muzzatti, 2006; Liska et al., 1982).

Prevalence of Violent News

Research on media coverage of crime has found that the information presented by news outlets often is disproportional to its actual occurrence. Studies (e.g., Chermak, 1995; Gilliam & Iyengar, 2000; Graber, 1980; Lawrence & Mueller, 2003; Maguire, Sandage, & Weatherby, 1999; Surette, 1992) have shown that up to 50% of news coverage focuses on violent crime. The large amount of coverage devoted to homicide and serious violent crime is unbalanced with its frequency of occurrence. Additionally, its reported rate is disproportional to the rate of property crime, which is far more common (Chermak, 1994, 1995; Duwe, 2000; Garofalo, 1981; Gilliam & Iyengar, 2000; Graber, 1980; Jewkes, 2004; Maguire et al., 1999; Mayr & Machin, 2012). Stories of property crime, however, rarely contain the sensational characteristics that are needed to hook an audience (Chermak, 1995; Jewkes, 2004; Robinson,

2011; Surette, 1992). Still, not all violent crimes will garner the same coverage (Chermak, 1995, 1998; Duwe, 2000; Pritchard & Hughes, 1997). Due to space and time constraints, the media often highlight the most extreme or serious cases (Lawrence & Mueller, 2003; Maguire, Weatherby, & Mathers, 2002; Robinson, 2011; Stylianou, 2003), especially when news coverage reaches the national level (Duwe, 2000).

School shootings highlight the disproportional reporting by the media. When the Columbine story first broke, CNN aired over six continuous hours of uninterrupted live coverage (Muschert, 2002), and three major news networks (ABC, CBS, and NBC) devoted a minimum of half their nightly news airtime to coverage of the shooting for a month (Robinson, 2011). In the year of the shooting, 319 stories about Columbine were aired on nightly news broadcasts, making it the top story (Robinson, 2011). A separate analysis of coverage of 14 school shootings, each for a one-week period, found that these same three networks aired 53 stories about Columbine, totaling four hours of airtime (Maguire et al., 2002). By comparison, the remaining 13 shootings had just slightly more airtime when their coverage was totaled (Maguire et al., 2002).

Disproportional coverage is not solely limited to television news. Newman (2006) found that over 10,000 articles were published in the nation's top 50 newspapers in the year following Columbine. One paper, *The New York Times*, published 170 articles (Chyi & McCombs, 2004; Muschert & Carr, 2006). Following the 2007 shooting at Virginia Tech, *The Times* published 138 articles, including opinion and editorial articles (Schildkraut, 2012), and a similar number of articles was published in the month following the December 2012 shooting at Sandy Hook Elementary School (Schildkraut & Muschert, 2014). Still, other shootings, such as the 1998 Westside Middle School shooting in Jonesboro, Arkansas or the 2008 Northern Illinois University shooting, and even other mass shooting events, such as those at a Binghamton, New York immigration center in 2009 and a movie theater in Aurora, Colorado in 2012, that have similar fatality counts have failed to garner equal coverage. The result, then, is a distorted picture of the prevalence of school shootings, with the most extreme cases fueling the public's panic.

Purpose of the Study

School shootings, similar to other extremely violent crimes, have the ability to garner high levels of media coverage that lead to a belief that these events are indicative of a larger social problem (Schildkraut & Muschert, 2014). The "disaster

narrative" that accompanies such events represents a broader discourse related to on-going societal value conflicts and provides an opportunity for political agendas to be highlighted and ultimately affect public opinion (Barak, 1994; Gans, 1979; Schildkraut & Muschert, 2014; Tuchman, 1978). This process tends to result from agenda-setting, typically conducted by and through the media (Downs, 1972; McCombs, 1997; McCombs & Shaw, 1972; Weaver, 2007).

Not all events, even those that are extremely violent, will be recognized as a social problem. A recent poll, for example, indicated that readers perceived the 2012 shooting at Sandy Hook Elementary School as a reflection of broader social problems in the U.S. ("Washington Post-ABC News poll," n.d.). The same readers, however, suggested that other mass shooting events, including the 2007 Virginia Tech shooting, the 2011 shooting of congresswoman Gabrielle Giffords in Tucson, Arizona, and the 2012 shooting at an Aurora, Colorado movie theater, were more indicative of isolated, random acts of violence ("Washington Post-ABC News poll," n.d.).

As Cohen (1963) noted, the media "may not be successful much of the time in telling people what to think, but it is stunningly successful in telling people what to think *about*" (p. 13). Therefore, in a broader sense, the present study seeks to understand how a particular phenomenon (school shootings), without regard to specific events, is perceived as a problem in the U.S. Specifically, this study seeks to understand how media consumption affects college students' beliefs about school shootings as a social problem. This study is particularly important as both media production and consumption increasingly are dynamic processes, especially among college students, with the recent shift towards social media for more rapid story construction.

Methodology

Research Question and Hypotheses

The present study focused on the following question: *What is the relationship between college students' media consumption and their beliefs that school shootings are a problem in the United States?* Given the prevalence of media coverage of these episodic violent crimes, it was hypothesized that there is a positive relationship between the amount of media that students consume and their beliefs that school shootings are a social problem. This was expected to hold for all main categories of media (television, print newspaper, online newspaper, and social media).

Participants

A survey was administered during fall, 2012 to students at a large southwestern university. Data collection began at the end of August and was completed at the beginning of December, approximately one week prior to the Sandy Hook Elementary School shooting. A purposive sample of undergraduate courses was selected, and pen-and-paper surveys were administered to students in each course. No students refused to participate, and 442 surveys were completed.

Table 1. Descriptive Statistics for Respondents

Variables	Respondents (N = 442)	
	n	%
Gender		
Male	257	58.1
Female	182	41.2
Race / Ethnicity		
White	215	48.6
Black	40	9.0
Hispanic	159	36.0
Other	13	2.9
Age		
21 and Younger	252	57.0
22 and Older	186	42.1
Political Party Affiliation		
Republican	159	36.0
Democrat	166	37.6
Other	102	23.1
Residence		
On campus	49	11.1
Off campus	380	86.0
Gun Ownership		
Owens	145	32.8
Does Not Own	260	58.8

Note: Variable frequency percentages may not total to 100.0% due to rounding error or missing data.

Table 1 presents the descriptive characteristics of the sample. Males comprised nearly two-thirds of the respondents. Whites were the largest racial/ethnic group, followed by Hispanics. Nearly 60% of respondents were age 21 or younger, representing more traditional students. Political party affiliation was nearly evenly matched between Republicans (36%) and Democrats (37.6%). The majority of respondents lived off campus (86%), and over 30% identified themselves as gun owners.

Dependent Variable

A Likert scale question was used as the dependent variable, to which respondents were asked

to express their agreement with the following statement: "School shootings are a major problem in the U.S." Response options for each question were on a five-point scale, from strongly disagree (1) to strongly agree (5). Responses to this question were nearly evenly distributed, though they were slightly skewed towards the higher end (greater agreement that school shootings are a major problem).

Explanatory Variables

Respondents were asked to report their use of specific media sources for each category (television, print and online newspaper, and social media), focusing on the quantity of media consumed rather than the content (see Gerbner, 1993). For national news television, respondents were asked about their viewership of CNN, Fox News, MSNBC, and Headline News. For national newspapers, both in print and online, respondents were asked about their frequency of readership of the *New York Times*, *Wall Street Journal*, *USA Today*, *Washington Post*, and *Los Angeles Times*. Respondents also were asked about their readership, both in print and online, of local newspapers. These included the *Austin American-Statesman* and the *San Antonio Express*. A category for other local newspapers also was included for both modes of readership. For social media and networking sites, respondents reported their use of Facebook, Twitter, MySpace, Google+, and other sites.

Respondents reported their media use with the response categories of never (coded as 0), sometimes (1), often (2), and daily (3). Additive scales were then constructed to assess overall media consumption of a particular type of media. To assess levels of consumption for cable news networks, a scale was created using the variables CNN, Fox News, MSNBC, and Headline News. Questions regarding consumption of local television news and national evening news programs also were included in the models.

Four scales were computed to assess newspaper readership. For national level newspapers, an additive scale was constructed to assess the frequency of readership of the *New York Times*, *Wall Street Journal*, *USA Today*, *Washington Post*, and *Los Angeles Times* in print. For local newspapers in print, a scale was created to measure consumption of the *Austin American-Statesmen*, the *San Antonio Express*, and other local newspapers. Similar scales also were constructed for the online versions of the national and local newspaper sources. Finally, a scale was constructed assessing the frequency of social media usage, combining responses about Facebook, Twitter, MySpace, Google+, and other social media sites. Table 2 provides the descriptive

Table 2. Descriptive Statistics for Main News Sources and Types of Media Consumed (N=442)

	Never		Sometimes		Often		Daily	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Viewership of News Stations								
Local News	77	18.8	203	49.5	95	23.2	35	8.5
CNN	125	30.5	202	49.3	66	16.1	17	4.1
Fox News	128	31.2	168	40.8	88	21.4	28	6.8
MSNBC	196	47.9	137	33.5	62	15.2	14	3.4
Headline News (HLN)	176	43.1	164	40.2	58	14.2	10	2.5
National Evening News	209	51.2	141	34.6	48	11.8	10	2.5
Reads Print Newspapers								
<i>New York Times</i>	333	75.3	90	20.4	15	3.4	0	0.0
<i>Wall Street Journal</i>	391	88.5	43	9.7	3	0.7	1	0.2
<i>USA Today</i>	326	73.8	97	21.9	15	3.4	0	0.0
<i>Washington Post</i>	387	87.6	40	9.0	7	1.6	0	0.0
<i>L.A. Times</i>	411	93.0	25	5.7	1	0.2	0	0.0
<i>Austin American-Statesman</i>	289	65.4	107	24.2	35	7.9	5	1.1
<i>San Antonio Express</i>	329	74.4	75	17.0	30	6.8	3	0.7
Other Local Newspaper	275	62.2	121	27.4	36	8.1	6	1.4
Reads Online Newspapers								
<i>New York Times</i>	273	61.8	124	28.1	37	8.4	4	0.9
<i>Wall Street Journal</i>	335	75.8	82	18.6	17	3.8	2	0.5
<i>USA Today</i>	254	57.5	137	31.0	37	8.4	9	2.0
<i>Washington Post</i>	339	76.7	66	14.9	28	6.3	3	0.7
<i>L.A. Times</i>	382	86.4	44	10.0	6	1.4	1	0.2
<i>Austin American-Statesman</i>	298	67.4	98	22.2	34	7.7	4	0.9
<i>San Antonio Express</i>	326	73.8	85	19.2	20	4.5	5	1.1
Other Local Newspaper	275	62.2	108	24.4	43	9.7	9	2.0
Uses Social Media Platforms								
Facebook	36	8.1	102	23.1	86	19.5	214	48.4
Twitter	251	55.8	45	10.2	34	7.7	108	24.4
MySpace	423	95.7	9	2.0	0	0.0	1	0.2
Google+	328	74.2	54	12.2	32	7.2	22	5.0
Other Sites	235	53.2	41	9.3	61	13.8	84	19.0

Note: Variable frequency percentages may not total to 100.0% due to rounding error or missing data.

statistics for the respondents’ consumption of the individual media sources.

Table 2 shows that a large percentage of students report never using most types of media. The exception is that large percentages of students report sometimes viewing news stations, especially local news (49.5%), CNN (49.3%), and Fox News (40.8%). Very few students, however, report using any media on a daily basis, with the exception of social media. A large percentage of students reports using Facebook on a daily basis (48.4%). Additionally, a smaller, yet still sizable percentage of

students report using Twitter (24.4%) and other social media sites (19.0%) on a daily basis

Additional variables were created to represent respondent characteristics. Gender was coded 1 for females, with males as the comparison group. Three individual dummy variables – Black, Hispanic, and other were created to measure race and ethnicity, with Whites serving as the reference category. The university surveyed recently was granted status as a Hispanic-Serving Institution, meaning that at least 25% of the student body identifies with this group (Parker, 2011). This and the location of the university support inclusion of this variable. Age

was dichotomized into two categories: 21 and under and 22 and older, with respondents who were 21 and under serving as the reference category.

Several additional variables were included in the analysis: (1) political party affiliation, or more specifically, whether one identifies as a Republican or Democrat (with other affiliations, such as Libertarian, Independent, and Tea Party, serving as the reference category), and (2) ownership of a handgun, rifle, or shotgun. Respondents reporting no ownership of any type of firearm were coded as being a non-gun owner (gun owners were used as the reference category).

Analysis and Findings

Table 3 presents the OLS regression results. In examining the individual categories of media consumption, only one media source has a significant coefficient.

Table 3. OLS Regression Results for School Shootings as a Major Problem by Frequency of News Source Consumption

Variable	School Shootings are a Major Problem in the United States
News Source	
Local News	.074 (.083)
National Evening News Programs	-.092 (.094)
Cable News Networks	.054 (.034)
National Newspapers (Print)	.087 (.050)
National Newspapers (Online)	-.025 (.034)
Local Newspapers (Print)	-.084 (.061)
Local Newspapers (Online)	.077 (.058)
Social Media	.049 (.024)*
Demographics	
Female	.307 (.136)**
Black	-.183 (.255)
Hispanic	-.114 (.150)
Other Race	-.291 (.328)
Over 21	-.108 (.133)
Democrat	.036 (.173)
Republican	-.133 (.171)
Non-Gun Owner	.202 (.153)
(Constant)	2.576 (.222)**
<i>N</i>	330
<i>R</i> ²	.109
Adjusted <i>R</i> ²	.064

* $p < .05$. ** $p < .01$. Results presented are unstandardized coefficients with standard errors in parentheses.

Frequency of social media consumption is positively and significantly related to students' beliefs that school shootings are a major national problem ($b = .049$, $p < .05$). The regression results indicate, however, that no other type of media has a similar relationship. Particularly noteworthy is the lack of significance of cable news network scale in the model, as these networks often are among the first sources to provide coverage of school shootings. Gender is the only other significant variable in the model. Specifically, females, as compared to males, were more likely to believe that school shootings are a major problem ($b = .307$, $p < .01$). Females are more likely than males to fear crime (Brantingham & Brantingham, 1994; Fisher & Sloan, 2003; Fisher, Sloan, & Wilkins, 1995; Kaminski, Koons-Witt, Thompson, & Weiss, 2010; Ortega & Myles, 1987; Roundtree & Land, 1996; Stafford & Galle, 1984; Warr, 1984, 2000; Warr & Stafford, 1983). Therefore, females may be more likely to see crime-related issues as social problems, but future research is needed for further determination.

The non-significant coefficients in Table 3 indicate that there is consensus among most media users and among most groups about the extent to which school shootings are a social problem in the U.S. Further, the low R^2 value suggests that none of the variables account for a sizeable proportion of the variation in students' beliefs about school shootings as a problem.

In order to gain a better understanding of the relationship between social media and whether school shootings are viewed by students to be a national problem, the regression model was rerun with the social media websites disaggregated. Table 4 presents the results of this analysis. The results highlight an important finding. Twitter users differ significantly in their attitudes about school shootings from users of other social media. Specifically, the more students use Twitter, the stronger their belief that school shootings are a social problem ($b = .132$, $p < .05$). As was seen in the previous model, females again were more likely to agree with the statement than males ($b = .412$, $p < .01$).

Discussion

Stylianou (2003) has posited that "the relationship between public perceptions of crime as a social problem and media projections of crime is a central issue in the study of the social construction of crime" (p. 49). The disproportional media coverage of these events, such as Columbine, Virginia Tech, and more recently, Sandy Hook, has led to heightened awareness of school shootings as a social

Table 4. OLS Regression Results for School Shootings as a Major Problem by Frequency of Social Media Platform

Variable	School Shootings are a Major Problem in the United States
News Source	
Facebook	.065 (.060)
Twitter	.132 (.051)*
MySpace	-.346 (.304)
Google+	.047 (.078)
Other Social Networking Sites	.048 (.053)
Demographics	
Female	.412 (.133)**
Black	-.121 (.242)
Hispanic	-.025 (.143)
Other Race	-.264 (.329)
Over 21	.040 (.127)
Democrat	.085 (.164)
Republican	-.030 (.161)
Non-Gun Owner	.285 (.144)
(Constant)	2.540 (.221)**
N	357
R ²	.103
Adjusted R ²	.069

* p < .05. ** p < .01. Results presented are unstandardized coefficients with standard errors in parentheses.

problem. A number of studies (e.g., Altheide, 2009; Chyi & McCombs, 2004; Muschert, 2002, 2007; Muschert & Carr, 2006; Schildkraut, 2012; Schildkraut & Muschert, 2014) have researched how school shootings stories are constructed in the media. Still, none has examined the impact of the media on beliefs about school shootings as a social problem.

The present study sought to examine the impact of media consumption on respondents' beliefs that school shootings are a problem in the U.S. It was hypothesized that there is a positive relationship between the amount of media that students consume and their belief that school shootings are a problem. It was found that the more students use social media, and Twitter in particular, the stronger their beliefs that school shootings are a social problem. Not *all* media use, however, was related to these beliefs in accordance with cultivation theory.

Facebook has been touted as the social media website, with over one billion active users each month (Tam, 2013), and it is clearly the medium of choice among students in the present study. Facebook, however, functions mainly as an online community network that encourages reciprocal

communication among users (Kwak, Lee, Park, & Moon, 2010). Conversely, Twitter, considered a microblogging platform (Hughes & Palen, 2009; Java, Finin, Song, & Tseng, 2007; Kwak et al., 2010; Lerman & Ghosh, 2010; Naveed, Gottron, Kunegis, & Alhadi, 2011), functions less as an interactive community. Instead, Twitter is more synonymous with live streaming news feeds, similar to news tickers and RSS feeds. Users can post short messages (140 characters or less) that mirror news headlines, called "tweets," without a specifically intended audience. The brevity of tweets encourages more rapid and frequent sharing of information by users (Java et al., 2007). In addition to posting updates, users also may share posts from other users, a process known as "retweeting" (Kwak et al., 2010). Research has shown that retweeting allows a single message to reach an average of 1,000 users, regardless of the number of followers (or subscribers) for the original source (Kwak et al., 2010).

Early examinations of Twitter use (e.g., Java et al., 2007) suggested that the application was mainly used to talk about what users were currently doing or about their daily routines (see also Braun & Gillespie, 2011; Hermida, 2010). Some users would share news and weather information, though these were often from automated sources (Java et al., 2007; Lerman & Ghosh, 2010; Naveed et al., 2011). More recently, Twitter has been used to report news and reactions in real time (Braun & Gillespie, 2011; Hermida, 2010). Most national newspapers and television news channels, as well as individual anchors and reporters, stream breaking news via Twitter feeds. Pew Research Center for the People and the Press (2010) reported that among respondents actively using social media, Twitter users are more likely to follow, or subscribe, to the feeds of news organizations and individual journalists than users of other social media sites.

The findings of this study underscore an important shift in journalism practices toward a participatory discourse with audiences (Braun & Gillespie, 2011; Hermida, 2010; Picard, 2009; Skoler, 2009; Stassen, 2010). As Skoler (2009) notes, "Today, people expect to share information, not be fed it" (p. 39). In an effort to get stories onto the air faster, journalists have begun to incorporate more eyewitness accounts through pictures, videos, and other forms of content from various social networking sites (Braun & Gillespie, 2011; Hermida, 2010; Lariscy, Avery, Sweetser, & Howes, 2009). This practice has been called "participatory news" (Deuze, Bruns, & Neuberger, 2007), with the audience members as non-traditional news sources taking on the role of information subsidies (Wigley & Fontenot, 2009; see also Gandy, 1982).

For news media organizations, there are several benefits to using social media. Use of social media platforms, particularly those like Twitter that are limited in message length, allows for more concise and detailed information to be disseminated (Farhi, 2009; Hermida, 2010; Stassen, 2010). It also allows reporters to break stories more quickly from any location (Farhi, 2009; Hermida, 2010; Stassen, 2010), and to do so at a lower cost to news organizations (Braun & Gillespie, 2011; Picard, 2009). Further, the shift towards social media also has allowed the news media to reach consumers that normally were not avid followers, such as most students in the present study (Deuze et al., 2007; Skoler, 2009). One study indicated that Twitter users are up to three times as likely to visit a news website than an average person (Farhi, 2009), thus generating the needed traffic to attract potential advertisers and generate revenue (Picard, 2009; Skoler, 2009).

One issue that is both a benefit and a problem with social media is that these platforms enable millions of people to communicate instantaneously with one another and discuss current news topics (Deuze et al., 2007; Hermida, 2010; Stassen, 2010). While Hermida (2010) notes that the gatekeeping function of the media can be maintained by filtering through tweets prior to publishing them, this does not account for other sources that disseminate information. Even if journalists are selective in the information they share through Twitter and other social media platforms, it does not control for inaccuracies that can occur from general users sharing information with no fact-checking in place (Deuze et al., 2007). Thus, as social media continue to take a more prominent role in the presentation of news, researchers must gain a more critical understanding of the potential effects these technologies have. Additionally, researchers must work with law enforcement and journalism personnel to help to minimize the misinformation that is transmitted by such platforms, particularly as it relates to crime.

The present study is not without several limitations that warrant caution in interpreting its findings. First, this survey was conducted with a purposive sample. The location of the university also is close to the location of another mass shooting at a university. Although that event occurred more than 45 years prior to the current study, students who completed the survey still expressed a greater familiarity with that relatively distant yet local event compared to other, more recent mass shootings. The recency of particular events also should be considered. In order to substantiate the findings of this study, it would be beneficial to replicate this survey at other universities that are not as spatially

proximate to a school shooting site. Further, the media questions included in the survey focused solely on the amount consumed and did not consider the content of what was being viewed. Gerbner (1993), however, found that the consumption of media content can impact perceived likelihood of victimization through a stable set of messages about casting and fate. Future studies could benefit from including such questions to address this issue.

It is possible that these findings may not be generalizable beyond students, as they often are the main users of social media. Still, this is an important consideration about the future of media and social problems. As college students transition into adulthood, the absence of an impact of traditional media sources, such as television and newspapers, on social problems may persist. Instead, these consumers may continue to rely on social media, such as Twitter, as their primary source of news. These sources may endure as the greatest influence in shaping beliefs about social problems, even as individuals enter later stages of their life course. Though it is too early to identify the long-range impact media has in the creation of social problems, future research should examine this issue, particularly as social media and its users continue to evolve.

References

- Altheide, D. L. (2009). The Columbine shooting and the discourse of fear. *American Behavioral Scientist*, 52(10), 1354–1370. doi: 10.1177/0002764209332552
- Arendt, F. (2010). Cultivation effects of a newspaper on reality estimates and explicit and implicit attitudes. *Journal of Media Psychology*, 22(4), 147–159. doi:10.1027/1864-1105/a000020
- Barak, G. (1994). Media, society, and criminology. In G. Barak (Ed.), *Media, process, and the social construction of crime: Studies in newsmaking criminology* (pp. 3–45). New York: Garland Publishing, Inc.
- Brantingham, P. J., & Brantingham, P. L. (1994). Surveying campus crime: What can be done to reduce crime and fear? *Security Journal*, 5, 160–171.
- Braun, J., & Gillespie, T. (2011). Hosting the public discourse, hosting the public: When online news and social media converge. *Journalism Practice*, 5(4), 383–398. doi:10.1080/17512786.2011.557560

- Callanan, V. (2012). Media consumption, perceptions of crime risk and fear of crime: Examining race/ethnic differences. *Sociological Perspectives, 55*(1), 93–115. doi:10.1525/sop.2012.55.1.93
- Chermak, S. M. (1994). Body count news: How crime is presented in the news media. *Justice Quarterly, 11*(4), 561–582. doi:10.1080/07418829400092431
- Chermak, S. M. (1995). *Victims in the news: Crime and the American news media*. Boulder, CO: Westview Press.
- Chermak, S. M. (1998). Predicting story crime salience: The effects of crime, victim, and defendant characteristics. *Journal of Criminal Justice, 26*(1), 61–70. doi:10.1016/S0047-2352(97)00055-X
- Chyi, H. I., & McCombs, M. (2004). Media salience and the process of framing: Coverage of the Columbine school shootings. *Journalism & Mass Communication Quarterly, 81*(1), 22–35. doi:10.1177/107769900408100103
- Cohen, B. C. (1963). *The press and foreign policy*. Princeton, NJ: Princeton University Press.
- Couldry, N. (2008). Mediatization or mediation? Alternative understandings of the emergent space of digital storytelling. *New Media & Society, 10*(3), 373–391. doi:10.1177/1461444808089414
- Deuze, M., Bruns, A., & Neuberger, C. (2007). Preparing for an age of participatory news. *Journalism practice, 1*(3), 322–338. doi:10.1080/17512780701504864
- Dowler, K. (2003). Media consumption and public attitudes toward crime and justice: The relationship between fear of crime, punitive attitudes, and perceived police effectiveness. *Journal of Criminal Justice and Popular Culture, 10*(2), 109–126.
- Dowler, K., Fleming, T., & Muzzatti, S. (2006). Constructing crime: Media, crime, and popular culture. *Canadian Journal of Criminology & Criminal Justice, 48*(6), 837–850. doi:10.3138/cjccj.48.6.837
- Downs, A. (1972). Up and down with ecology: The “issue-attention cycle.” *Public Interest, 28*, 38–50.
- Duwe, G. (2000). Body-count journalism. *Homicide Studies, 4*(4), 364–399.
- Farhi, P. (2009). The Twitter explosion. *American Journalism Review, 31*(3), 26. Retrieved from <http://www.ajr.org/Article.asp?id=4756>
- Fisher, B. S., & Sloan III, J. J. (2003). Unraveling the fear of victimization among college women: Is the ‘shadow of sexual assault hypothesis’ supported? *Justice Quarterly, 20*(3), 633–659.
- Fisher, B. S., Sloan, J. J., & Wilkins, D. L. (1995). Fear of crime and perceived risk of victimization on an urban university campus: A test of multiple models. In B.S. Fisher & J.J. Sloan (Eds.), *Campus crime: Legal, social, and policy perspectives* (pp. 179–209). Springfield, IL: Charles Thomas Publisher.
- Gandy, O. H. (1982). *Beyond agenda setting: Information subsidies and public policy*. Norwood, NJ: Ablex.
- Gans, H. J. (1979). *Deciding what’s news: A study of CBS Evening News, NBC Nightly News, Newsweek, and Time*. New York, NY: Pantheon Books.
- Garofalo, J. (1981). Crime and the mass media: A selective review of the research. *Journal of Research in Crime and Delinquency, 18*(2), 319–350.
- Gerbner, G. (1993). *Women and minorities on television: A study in casting and fate*. Retrieved from the University of Pennsylvania, Annenberg School for Communication website: <http://www.asc.upenn.edu/gerbner/Asset.aspx?asetID=338>
- Gerbner, G., & Gross, L. (1976). Living with television: The violence profile. *Journal of Communication, 26*(2), 173–199. doi:10.1111/j.1460-2466.1976.tb01397.x
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1986). Living with television: The dynamics of the cultivation process. In J. Bryant & D. Zillman (Eds.), *Perspectives on media effects* (pp. 17–40). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gerbner, G., Gross, L., Signorelli, N., & Morgan, M. (1980). Television violence, victimization, and power. *The American Behavioral Scientist, 23*(5), 705–716. doi:10.1177/000276428002300506
- Gilliam, F. D., & Iyengar, S. (2000). Prime suspects: The influence of local television news on the viewing public. *American Journal of Political Science, 44*(3), 560–573. doi:10.2307/2669264

- Graber, D. A. (1980). *Crime news and the public*. Chicago, IL: University of Chicago Press.
- Heath, L. (1984). Impact of newspaper crime reports on fear of crime: Multimethodological investigation. *Journal of Personality and Social Psychology*, 47(2), 263–274. doi:10.1037//0022-3514.47.2.263
- Hermida, A. (2010). Twittering the news: The emergence of ambient journalism. *Journalism Practice*, 4(3), 297–308. doi:10.1080/17512781003640703
- Hughes, M. (1980). The fruits of cultivation analysis: A reexamination of some effects of television watching. *Public Opinion Quarterly*, 44(3), 287–302. doi:10.1086/268597
- Hughes, A. L., & Palen, L. (2009). Twitter adoption and use in mass convergence and emergency events. Paper presented at the Sixth International ISCRAM Conference, Gothenburg, Sweden. Retrieved from http://www.researchgate.net/publication/215500880_Twitter_adoption_and_use_in_mass_convergence_and_emergency_events/file/d912f5112a31de0455.pdf
- Java, A., Finin, T., Song, X., & Tseng, B. (2007). Why we Twitter: Understanding microblogging usage and communities. Paper presented at the Joint 9th WEBKDD and 1st SNA-KDD Workshop, San Jose, CA. Retrieved from <http://aisl.umbc.edu/resources/369.pdf>
- Jewkes, Y. E. (2004). *Media & crime: Key approaches to criminology*. Los Angeles, CA: Sage Publications.
- Kaminski, R. J., Koons-Witt, B. A., Thompson, N. S., & Weiss, D. (2010). The impacts of Virginia Tech and Northern Illinois University shootings on the fear of crime on campus. *Journal of Criminal Justice*, 38(1), 88–98. doi:10.1016/j.jcrimjus.2009.11.011
- Kellner, D. (2003). *Media spectacle*. London: Routledge.
- Kellner, D. (2008a). *Guys and guns amok: Domestic terrorism and school shootings from the Oklahoma City bombing to the Virginia Tech massacre*. Boulder, CO: Paradigm Publishers.
- Kellner, D. (2008b). Media spectacle and the “Massacre at Virginia Tech.” In B. Agger & T.W. Luke (Eds.), *There is a gunman on campus* (pp. 29–54). Lanham, MD: Rowan & Littlefield Publishers, Inc.
- Kwak, H., Lee, C., Park, H., & Moon, S. (2010). What is Twitter, a social network or news media? Paper presented at the International World Wide Web Conference, Raleigh, NC. Retrieved from http://product.ubion.co.kr/upload2012022014222731/ccres00056/db/2250_1/embedded/2010-www-twitter.pdf
- Lariscy, R. W., Avery, E. J., Sweetser, K. D., & Howes, P. (2009). An examination of the role of online social media in journalists’ source mix. *Public Relations Review*, 35(3), 314–316. doi:10.1016/j.pubrev.2009.05.008
- Lawrence, R., & Mueller, D. (2003). School shootings and the man-bites-dog criterion of newsworthiness. *Youth Violence & Juvenile Justice*, 1(4), 330–345. doi:10.1177/1541204003255842
- Lerman, K. & Ghosh, R. (2010). Information contagion: An empirical study of the spread of news on Digg and Twitter social networks. Paper presented at the Fourth International AAAI Conference on Weblogs and Social Media, Washington, D.C. Retrieved from <http://www.aaai.org/ocs/index.php/ICWSM/ICWSM10/paper/viewFile/1509/1839>
- Liska, A., Lawrence, J., & Sanchirico, A. (1982). Fear of crime as a social fact. *Social Forces*, 60(3), 760–770. doi:10.2307/2578391
- Maguire, B., Sandage, D., & Weatherby, G. A. (1999). Crime stories as television news: A content analysis of national big city and small town newscasts. *Journal of Criminal Justice and Popular Culture*, 7(1), 1–14.
- Maguire, B., Weatherby, G. A., & Mathers, R. A. (2002). Network news coverage of school shootings. *The Social Science Journal*, 39(3), 465–470. doi:10.1016/S0362-3319(02)00201-X
- Mayr, A., & Machin, D. (2012). *The language of crime and deviance: An introduction to critical linguistic analysis in media and popular culture*. London: Continuum International Publishing Group.
- McCombs, M. E. (1997). Building consensus: The news media’s agenda-setting roles. *Political Communication*, 14(4), 433–443. doi:10.1080/105846097199236
- McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. *The Public Opinion Quarterly*, 36(2), 176–187. doi:10.1086/267990

- Morgan, M., & Shanahan, J. (2010). The state of cultivation. *Journal of Broadcasting & Electronic Media*, 54(2), 337–355. doi:10.1080/08838151003735018
- Muschert, G. W. (2002). *Media and massacre: The social construction of the Columbine story*. (Unpublished doctoral dissertation). University of Colorado at Boulder, Boulder, CO.
- Muschert, G. W. (2007). Research in school shootings. *Sociology Compass*, 1(1), 60–80. doi:10.1111/j.1751-9020.2007.00008.x
- Muschert, G. W., & Carr, D. (2006). Media salience and frame changing across events: Coverage of nine school shootings, 1997-2001. *Journalism & Mass Communication Quarterly*, 83(4), 747–766. doi:10.1177/107769900608300402
- Naveed, N., Gottron, T., Kunegis, J., & Alhadi, A. C. (2011). Bad news travel fast: A content-based analysis of interestingness on Twitter. *WebSci 2011*. Retrieved from http://www.websci2011.org/fileadmin/websci/Papers/2050_paper.pdf
- Newman, K. (2006). School shootings are a serious problem. In S. Hunnicutt (Ed.), *School shootings* (pp. 10–17). Farmington Hills, MI: Greenhaven Press.
- Ortega, S. T., & Myles, J. L. (1987). Race and gender effects on fear of crime: An interactive model with age. *Criminology*, 25(1), 133–152. doi:10.1111/j.1745-9125.1987.tb00792.x
- Parker, K. (2011, October 5). University aims for emerging research. *The University Star*. Retrieved from <http://star.txstate.edu>
- Pew Research Center for the People & the Press. (2010). Ideological news sources: Who watches and why; Americans spending more time following the news. Retrieved from <http://www.people-press.org/files/legacy-pdf/652.pdf>
- Picard, R. G. (2009). Blogs, tweets, social media, and the news business. *Nieman Reports*, 63(3), 10–12.
- Potter, W. J. (2011). Conceptualizing mass media effect. *Journal of Communication*, 61(5), 896–915. doi:10.1111/j.1460-2466.2011.01586.x
- Pritchard, D. & Hughes, K. (1997). Patterns of deviance in crime news. *Journal of Communication*, 47(3), 49–67. doi:10.1111/j.1460-2466.1997.tb02716.x
- Robinson, M. B. (2011). *Media coverage of crime and criminal justice*. Durham, NC: Carolina Academic Press.
- Romer, D., Jamieson, K., & Aday, S. (2003). Television news and the cultivation of fear of crime. *Journal of Communication*, 53(1), 88–104. doi:10.1093/joc/53.1.88
- Roundtree, P. W., & Land, K. C. (1996). Perceived risk versus fear of crime: Empirical evidence of conceptually distinct reactions in survey data. *Social Forces*, 74(4), 1353–1376. doi:10.2307/2580354
- Sacco, V. F. (1982). The effects of mass media on perceptions of crime: A reanalysis of the issues. *The Pacific Sociological Review*, 25(4), 475–493. doi:10.2307/1388925
- Sacco, V. F. (1995). Media constructions of crime. *Annals of the American Academy of Political and Social Sciences*, 539(1), 141–154. doi:10.1177/0002716295539001011
- Schildkraut, J. (2012). Media and massacre: A comparative analysis of the reporting of the 2007 Virginia Tech shootings. *Fast Capitalism*, 9(1). Retrieved from http://www.uta.edu/huma/agger/fastcapitalism/9_1/schildkraut9_1.html
- Schildkraut, J., & Hernandez, T. C. (2014). Laws that bit the bullet: A review of legislative responses to school shootings. *American Journal of Criminal Justice*, 39, 358–374. doi: 10.1007/s12103-013-9214-6
- Schildkraut, J., & Muschert, G. W. (2014). Media salience and the framing of mass murder in schools: A comparison of the Columbine and Sandy Hook massacres. *Homicide Studies*, 18(1), 23–43. doi:10.1177/1088767913511458
- Shrum, L. J. (2001). Processing strategy moderates the cultivation effect. *Human Communication Research*, 27(1), 94–120. doi:10.1093/hcr/27.1.94
- Skoler, M. (2009). Why the news media became irrelevant – and how social media can help. *Nieman Reports*, 63(3), 38–40. doi:10.1093/hcr/27.1.94
- Stafford, M. C., & Galle, O. R. (1984). Victimization rates, exposure to risk, and fear of crime. *Criminology*, 22(2), 173–185. doi:10.1111/j.1745-9125.1984.tb00295.x

- Stafford, M. C., & Warr, M. (1985). Public perceptions of social problems: Some propositions and a test. *The Journal of Applied Behavioral Science*, 21(3), 307–316. doi:10.1177/002188638502100306
- Stassen, W. (2010). Your news in 140 characters: exploring the role of social media in journalism. *Global Media Journal: African Edition*, 4(1), 1–16. doi:10.5789/4-1-15
- Stylianou, S. (2003). Measuring crime seriousness perceptions: What have we learned and what else do we want to know. *Journal of Criminal Justice*, 31(1), 37–56. doi:10.1016/S0047-2352(02)00198-8
- Surette, R. (1992). *Media, crime, & criminal justice: Images and reality*. Pacific Grove, CA: Brooks/Cole Publishing Company.
- Tam, D. (2013, January 30). Facebook by the numbers: 1.06 billion monthly active users. *CNET News*. Retrieved from http://news.cnet.com/8301-1023_3-57566550-93/facebook-by-the-numbers-1.06-billion-monthly-active-users/
- Washington Post-ABC News poll. (n.d.). *Washington Post Politics*. Retrieved September 4, 2013 from http://www.washingtonpost.com/wp-srv/politics/polls/postabcpoll_20121216.html
- Tuchman, G. (1978). *Making news: A study in the construction of reality*. New York: Free Press.
- Warr, M. (1984). Fear of victimization: Why are women and the elderly more afraid? *Social Science Quarterly*, 65(3), 681–702.
- Warr, M. (2000). Fear of crime in the United States: Avenues for research and policy. In D. Duffee (Ed.), *Criminal justice 2000: Measurement and analysis of crime*, Vol. 4 (pp. 451–489). Washington, DC: US Department of Justice, Office of Justice Programs. Retrieved from http://www.crime-reg.com/police/warr_fear_of_crime.pdf
- Warr, M., & Stafford, M. (1983). Fear of victimization: A look at the proximate causes. *Social Forces*, 61(4), 1033–1043. doi:10.2307/2578277
- Weaver, D. H. (2007). Thoughts on agenda setting, framing, and priming. *Journal of Communication*, 57(1), 142–147. doi:10.1111/j.1460-2466.2006.00333.x
- Wigley, S., & Fontenot, M. (2009). Where media turn during crises: A look at information subsidies and the Virginia Tech shootings. *Electronic News*, 3(2), 94–108. doi:10.1080/19312430902834748

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