

Who Watches an ISIS Beheading—and Why

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In the wake of collective traumas and acts of terrorism, media bring real graphic images and videos to TV, computer, and smartphone screens. Many people consume this coverage, but who they are and why they do so is poorly understood. Using a mixed-methods design, we examined predictors of and motivations for viewing graphic media among individuals who watched a beheading video created by the terrorist group Islamic State of Iraq and Syria (ISIS). A representative national sample of U.S. residents ($N = 3,294$) reported whether they viewed a video and why (or why not) via an anonymous survey administered during a 3-year longitudinal study. Accounting for population weights, about 20% of the sample reported watching at least part of a beheading video, and about 5% reported watching an entire video. Increased likelihood of watching a video was associated with demographics (male, unemployed, and Christian), frequency of typical TV watching, and both prior lifetime exposure to violence and fear of future terrorism. Watching at least part of a beheading video was prospectively associated with fear of future negative events and global distress approximately 2 years after the beheading videos went viral. The most common reasons respondents reported for watching a beheading video were information seeking and curiosity. Results suggest attentional vigilance: Preexisting fear and history of violent victimization appear to draw individuals to graphic coverage of violence. However, viewing this coverage may contribute to subsequent fear and distress over time, likely assisting terrorists in achieving their goals.

Keywords: graphic media, terrorism, motivations, distress, mixed methods

Supplemental materials: <http://dx.doi.org/10.1037/amp0000438.supp>

The proliferation and availability of real graphic imagery across media platforms exposes viewers to disturbing visuals of blood and human carnage when acts of terror unfold. In some cases, this exposure is passive as people engage in regular daily media use. For example, the death of Philando Castile that was livestreamed on Facebook passively exposed millions to a horrific scene, especially after it went viral across social media platforms. In other cases, however, people actively chose to watch this content. Despite increasing access to real graphic imagery of tragedies, much of what is known about why people view graphic imagery comes from research on fictional media violence.

A meta-analysis of studies exploring enjoyment of fright and violence in fictional media (e.g., horror) found several constructs related to enjoyment, including high sensation seeking and aggressiveness, low empathy, and being male (Hoffner & Levine, 2005). Other work examining the “appeal” of this content also found that sensation seeking is an important individual-level characteristic associated with this preference (Sparks & Sparks, 2000; Tamborini, 1991; and see Oliver & Sanders, 2004, for a discussion of how sensation seeking and other characteristics and social processes are related to enjoyment of this content). However, this literature excludes predictors of viewing nonfictional (real)

This article was published Online First February 25, 2019.

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Data collection was supported by U.S. National Science Foundation Grants BCS-1342637, BCS-1451812, and BCS-1650792 to Roxane Cohen Silver and E. Alison Holman. We thank GfK’s Government & Academic

Research team of Debra Vanni, Wendy Mansfield, Mansour Fahimi, and Ying Wang for providing GfK KnowledgePanel data, preparing web-based survey and data files, and providing methodological and statistical guidance. We thank Dana Rose Garfin for contributions to the larger study and statistical advice, Josiah Sweeting and Giancarlo Pasquini for open-ended data coding, Danielle Guest for helping create the qualitative codebook, and Elizabeth Martin for comments on a draft of the article.

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graphic media, because such content is believed to differ from fictional, made-for-entertainment media (Hoffner & Levine, 2005). For instance, when viewing graphic fictional violence, individuals can focus on film production elements to create emotional distance if they need to regulate their emotional responses (Goldstein, 1999), which is a regulatory strategy not available when viewing nonfictional graphic images. Indeed, research has suggested individuals shown identical graphic images respond differentially based on whether they are told the images are real or fictional, such that people respond more negatively when told the images are real (Kobach & Weaver, 2012). Moreover, what if real graphic media draws an even broader audience of individuals who are not attracted to these images for violence sake, but despite it? Research has suggested that the presence of gore in movies deters their appeal but not when meaningfulness is high (Bartsch & Mares, 2014). This may be the case for highly graphic images of large-scale tragedies that carry great significance to a nation's citizens and beyond.

A few studies have explored viewers' motivations for watching real graphic coverage following the September 11 terrorist attacks (9/11). However, methodological limitations (e.g., using undergraduate samples, asking respondents about only researcher-generated motives; Haridakis & Rubin, 2005; Hoffner, Fujioka, Ye, & Ibrahim, 2009) limit the insights that can be gleaned from the extant literature. Recently, researchers from the United Kingdom surveyed a nonrepresentative sample of university students and other young adults and showed them a clip of Syrian captives before their execution by the terrorist group Islamic State of Iraq and Syria (ISIS; Cottee & Cunliffe, 2018). They found that 41% of men and 16% of women who participated reported a desire to watch the execution in its entirety. Nonetheless, it is not clear how many individuals were exposed to this survey but chose not to participate, no attempt was made to identify the motivations of those who participated, and it is unclear how many would have actually followed through to watch the execution in full if offered the opportunity (Cottee & Cunliffe, 2018). Thus, it is still unclear what motivates individuals to watch real, graphic violent content and what the consequences of doing so are.

Perhaps individuals living with mental health conditions are drawn to real graphic media coverage, and the symptoms observed following exposure to graphic coverage reflect viewers' preexisting psychopathology. Individuals with mental health conditions such as clinical depression (Dittmar, 1994) or panic disorder, dysthymia, or agoraphobia (de Wit, van Straten, Lamers, Cuijpers, & Penninx, 2011) do watch significantly more TV in general than do individuals without mental health conditions, but prior research has found no association between mental health history and graphic news consumption (Jones, Garfin, Hol-

man, & Silver, 2016). Moreover, viewing graphic news coverage in the wake of disasters appears to be quite common in the general population. For example, the day following 9/11, a nationally representative sample of Americans reported watching an average of 8.1 hr of event-related news coverage (Schuster et al., 2001), and 44% of individuals in a representative national sample reported viewing 4 hr or more of 9/11-related news coverage daily in the subsequent week (Silver et al., 2013). However, the proportion of individuals over 18 who annually report an anxiety disorder (18.1%; Anxiety and Depression Association of America, 2016) and a depressive disorder (6.7%; National Institute of Mental Health, 2017) is substantially smaller than the large percentage of those who reported viewing 9/11-related media coverage, suggesting individuals with mental health conditions are not the only ones engaging graphic news coverage of collective traumas.

Alternatively, preexisting fear may lead individuals to watch real graphic media. The literature on attentional bias offers insight into what might drive individuals to do so. Research has suggested that individuals show greater visual attention to stimuli they find frightening. For example, eye-tracking studies have indicated that individuals who are shown a stimulus they fear (e.g., spiders) demonstrate increased attention toward the stimulus while it is displayed on a screen and even after the image is removed (Mogg & Bradley, 2006). Similarly, individuals with a heightened fear of pain show an attentional bias toward the presentation of pain-related words on a screen, compared to those with a low or medium fear of pain (Keogh, Ellery, Hunt, & Hannent, 2001). It is important to note that fear of a given stimulus can be primed and is not specific to individuals with diagnosable phobias. For example, children show increased attentional bias toward an unfamiliar animal after being primed to fear it (Field, 2006). That is, information about an unknown, disturbing stimulus can increase one's attention to it by instilling fear. Once individuals focus on disturbing content, the anxiety-provoking nature of this content may sustain their gaze because individuals high in state anxiety are slower at disengaging from threatening stimuli (Fox, Russo, Bowles, & Dutton, 2001). Together, these findings suggest that when a video with graphic imagery enters the visual field, it may be difficult for some individuals who feel anxious about it to turn away.

However, the constant supply of real graphic media imagery has led researchers to speculate that individuals who view these images may be at risk for the same psychological and physical symptoms traditionally seen in those directly exposed to collective traumas. For example, individuals who saw more images of 9/11 on TV had increased risk for probable posttraumatic stress disorder, even after controlling for direct exposure to the attacks (Ahern, Galea, Resnick, & Vlahov, 2004). Moreover, watching 4 hr or more daily of TV coverage in the aftermath of 9/11 was

associated with greater mental and physical health problems 2–3 years later (Silver et al., 2013). This body of research suggests that exposure to real graphic media coverage carries real psychological risks for viewers.

Attending to real graphic media coverage may serve to exacerbate fear, especially when it depicts random and senseless killings. For example, research conducted in the wake of the 9/11 attacks found that being exposed to terrorism-related stories (Rubin et al., 2003) and watching 3 hr or more of 9/11 coverage daily (Holman & Silver, 2005) was associated with increased fear of being victimized by terrorists. Ultimately, terrorists seek to instill widespread fear and anxiety (Silver & Matthew, 2008) and show that their actions are justified (Winkler, El Damanhoury, Dicker, & Lemieux, 2018) against those with whom they are fighting (O'Neil & Gray, 2011). Terrorists also believe that the media can aid in disseminating this fear (Weimann, 2005), targeting venues likely to generate a great deal of media coverage (Galily, Yarchi, Tamir, & Samuel-Azran, 2016). Understanding the psychological impact of exposure to real videos of graphic violence (e.g., killings) released by terrorists is critical, because watching this content may fulfill terrorists' goals.

The Present Study

One particular act of terrorism that received extensive attention in the United States occurred in August 2014, when ISIS recorded the beheading of American journalist James Foley in a remote desert location. The 5-min video was posted to the Internet and went viral, appearing on websites such as LiveLeak.com and social media sites like YouTube, Facebook, and Twitter (Selter, 2014). News organizations made the decision to shield viewers from the gruesomeness of the video by sharing only screen grabs, which may have paradoxically increased interest in the video (Bushman, 2006), because interested individuals had to actively seek out the video in its entirety on their own. A few weeks later, ISIS released a 3-min video depicting the beheading of journalist Steven Sotloff (Bradley, 2014). In the days after Sotloff's beheading, 94% of U.S. respondents in an NBC/Wall Street Journal poll reported exposure to coverage of journalists' beheadings, which marked unparalleled exposure to such an event ("ISIS threat: Fear of terror," 2014). Although a number of other ISIS beheading videos were also released, the search term *beheading* on Google reached peak interest from August 17 to August 23, 2014, coinciding with Foley's beheading, and 61% of peak interest from August 31 to September 16, 2014, coinciding with Sotloff's beheading; no other video seemed to reach this level of interest between July 2014 and April 2015 (Google Trends, 2018).¹

When these videos went viral, data were already being collected from a representative national sample of U.S.

adults as part of an ongoing multiwave longitudinal study that began shortly after the Boston Marathon bombings (BMB; Garfin, Holman, & Silver, 2015; Holman, Garfin, & Silver, 2014). This provided a unique opportunity to conduct a mixed-methods study to quantitatively explore correlates of watching real, highly graphic media coverage and qualitatively explore participants' motivations for watching (or not watching). The ISIS beheading videos were ideal for exploring these questions because individuals could likely recall whether they had viewed one due to its graphic nature and the effort required to seek one out. Moreover, access to a large, representative sample enabled us to explore predictors and correlates of viewing a video using a diverse sample, while avoiding ethical concerns about assigning participants to watch real, gruesome murders at the hands of terrorists (although see Grizzard et al., 2017).

The present study capitalized on having access to a large representative national sample of U.S. residents for whom data about their mental health, negative life experiences, psychological symptoms, and fear of terrorism prior to the release of the ISIS beheading videos had already been collected. This enabled an exploration of whether individual differences predicted viewing a beheading video. The longitudinal nature of this study allowed negative psychological correlates of viewing to be explored 1 year later, while controlling for other variables that may contribute to subsequent negative psychological symptoms. Furthermore, surveys were completed anonymously, which enabled assessment of participants' motivations for watching (or not watching) this highly graphic content to examine whether their self-reported motivations for viewing corroborated the predictors of viewing identified by quantitative analysis.

Method

Overview

This longitudinal study began in 2013 to assess responses to the BMB and followed a national sample for over 3 years. Thus, data were available on participants' demographics, prior

¹ Although the beheading videos of Westerners by the Islamic State of Iraq and Syria (ISIS) group gained the most attention, they are not as graphic as other beheading videos that feature the murder itself (Friis, 2015; Hawkins, 2014). The beheading videos of Foley and Sotloff begin with victim speeches, depict the start of the beheading but omit the full act, and last depict the head detached from the body (Jalabi, 2014). Although the killing itself was omitted, the final outcome was made clear by the final scene and abundant news coverage discussing the event. Certain death images in which a fatal outcome is clear from the image and text have been used in ISIS's magazine to demonstrate the veracity of their threats (Winkler, El Damanhoury, Dicker, & Lemieux, 2016). Moreover, although images of killings in which the death is confirmed require less imagination than do more ambiguous images that lack this confirmation (Winkler et al., 2016), the omission of the beheading likely created some ambiguity about the act. Thus, the videos depicting ISIS beheading the American journalists appear carefully designed to attract the United States' attention and imprint an image in individuals' minds.

mental health diagnoses, television watching habits, direct BMB exposure, and lifetime exposure to violence, all of which had been collected prior to the release of the ISIS beheading videos. This allowed an examination of whether prior fear of terrorism predicted viewing a beheading video, in addition to other variables that might distinguish individuals who chose to watch the videos from those who chose not to. Further, participants were then followed for another year, enabling a prospective examination of whether those who watched a beheading video subsequently exhibited greater global distress, functional impairment, and fear of future negative events, including terrorism. Table 1 includes a list of the variables used in the analyses, the time points they were collected, and the number of participants in the longitudinal sample who completed each survey. Figure 1 depicts the temporal relationship between the four waves of data collection and the BMB; the release of the beheading videos; and the Pulse Nightclub shooting in Orlando, Florida.²

Sample

Participants were drawn from the GfK KnowledgePanel, a representative national sample of U.S. residents recruited to a research panel using address-based sampling. GfK provides Internet access or other compensation in return for web-based survey completion and uses traditional survey methods to maintain the sample. A representative national sample of U.S. residents ($n = 2,888$) and oversamples from Boston ($n = 846$) and New York ($n = 941$) metropolitan areas were surveyed anonymously at Wave 1 (Garfin et al., 2015; Holman et al., 2014); respondents completed anonymous online surveys three additional times. (Communities were purposefully oversampled because individuals in these areas were more likely to be directly exposed to the BMB and other collective traumas such as 9/11.) At Wave 3, participants ($n = 3,294$) reported whether they watched all, part, or none of a beheading video. Of those individuals, most ($n = 2,972$) provided open-ended responses about their motivations for doing so.

Procedures

Panelists active on the GfK panel at the time of data collection were sent an e-mail with an introduction inviting them to complete a web-based survey designed by the research team and an embedded link to the survey. Those participants who were withdrawn from the GfK panel at the time of data collection but agreed to be contacted for longitudinal assessments were surveyed either online or by returning a hard copy by mail. E-mail reminders, postcards, and phone calls were used to encourage participation among those who did not respond to the initial invitation.

To maintain a panel that is nationally representative, GfK computes design weights that take into account that individuals from certain demographic groups may be more

likely to be part of the panel. Study design weights and poststratification weights specific to the sample were created that account for differences in the likelihood of individuals' participating and for attrition (see Holman et al., 2014). The weighted composition of the sample closely matched that of the target population as defined by the benchmarks from the American Community Survey (U.S. Department of Commerce, U.S. Census Bureau, 2015). Thus, although there was some attrition across the waves, weighting the sample helped correct for this and allowed population-based inferences about the findings. All procedures were approved by the Institutional Review Board at the University of California, Irvine.

Measures

Pre-Wave 1: Covariates Collected by GfK.

Mental health history. Upon entry into the GfK panel, participants completed items modified from the Centers for Disease Control and Prevention's National Center for Health Statistics annual National Health Interview Survey (U.S. Department of Health & Human Services, National Center for Health Statistics, 2015) to assess physician-diagnosed mental health ailments (coded as 1 if previously diagnosed with anxiety disorder and/or depression; coded 0 for no prior diagnosis). Because about 28% of the sample was missing mental health data at the time of the first survey, values were imputed using sequential hot deck imputation (Andridge & Little, 2010).³

TV watching habits. GfK collected information about typical TV watching habits prior to the BMB. On a 5-point Likert-type scale ranging from 1 (*never*) to 5 (*3 times/week*), participants indicated how often they watched each of 117 cable and broadcast TV networks. The mean frequency across all channels was calculated.

Demographics, political affiliation, and religion. The following demographics were provided by GfK upon entry to the panel (and updated annually): education level, ethnicity, gender, marital status, income, age, and employment status, along with religious and political party affiliation.

Wave 1.

Acute stress to the BMB. The Stanford Acute Stress Reaction Questionnaire (Cardeña, Koopman, Classen, Waelde, & Spiegel, 2000) assessed acute stress in the aftermath of the Boston Marathon bombings. Participants

² In addition to the data described here, panelists completed two additional waves of data collection between the Waves 2 and 3 reported in this article; data collected during these waves are not relevant to the questions in this article and are not discussed further.

³ Sequential hot deck imputation uses respondents' data on the known predictors of anxiety and depression disorders to identify an appropriate donor for the missing mental health data (see Holman et al., 2014). All analyses discussed later were conducted first without imputed mental health and then with imputed mental health; the pattern of findings remained the same. Imputed data were used in all analyses to retain the sample and maximize power.

Table 1
Dates When Variables were Collected and Number of Participants at Each Wave

Measure	Wave 1 April–May 2013 (N = 4,675)	Wave 2 Oct.–Nov. 2013 (N = 3,588)	Wave 3 April–June 2015 (N = 3,341)	Wave 4 June–July 2016 (N = 3,199)
Direct BMB exposure	X			
Acute stress to BMB	X			
Fear of future terrorism		X		
Functional impairment		X		X
Lifetime exposure to violence		X		
Watched beheading video(s)			X	
Recent exposure to violence				X
Fear of future negative life events				X
Global distress				X
Pulse shooting media exposure				X

Note. Mental health history was collected by GfK prior to the start of the study. GfK also provided information previously collected on demographics (updated at each wave), political affiliation, religious affiliation, and television-watching habits. BMB = Boston Marathon bombings.

reported the experience of 30 symptoms using a 6-point rating scale ranging from 1 (*not experienced*) to 6 (*very often experienced*). Ratings were summed across all items to create a total score ($\alpha = .96$).

Direct BMB exposure. Direct exposure to the bombings was measured by having participants indicate whether they or someone close to them was present at or near the site, injured, or killed in the BMB. Direct exposure was coded as 1 (all others were coded as 0).

Wave 2.

Fear of future terrorism. Fear and worry about future terrorism (Silver, Holman, McIntosh, Poulin, & Gil-Rivas, 2002) was measured using the following items: “How often in the past week have you had fears about the possibility of another terrorist attack (e.g., bombing, hijacking, etc.)?” and “I worry that an act of terrorism (e.g., bombing, hijacking, etc.) will personally affect me or someone in my family in the future.” Items were rated on a 5-point Likert-type scale ranging from 1 (*never*) to 5 (*all of the time*) and were summed to create a total score ($\alpha = .82$; $r = .70$).

Functional impairment. Impaired functioning was assessed using four items modified from the 36-item Short Form Health Survey (Ware & Sherbourne, 1992). Items

were rated on 5-point Likert-type scale ranging from 1 (*none of the time*) to 5 (*all of the time*). The mean of the items was calculated ($\alpha = .87$).

Lifetime exposure to violence. Respondents were asked whether they had experienced eight violent events during childhood, in adulthood before the BMB, or in adulthood after the bombings (e.g., being physically attacked or assaulted, being coerced with threats of harm to oneself or one’s family, having combat experience, being hit or pushed by one’s partner or spouse, having sexual relations under force or threat, having lost someone close to suicide, having lost someone close to homicide, and suffering a loss in a tragedy or disaster in one’s community caused by people [e.g., shooting, bombing]; Blum, Silver, & Poulin, 2014; Holman, Silver, & Waitzkin, 2000). Occurrences of each exposure were dummy-coded and summed.

Wave 3.

Assessment of exposure to beheading video(s). To assess whether participants had viewed any of the beheading videos, we asked individuals the following question: “Did you watch one (or more) of the ISIS beheading videos?” Individuals could then select one of the following three choices: *Yes, all of it*; *Yes, part of it*; and *No, none of it*.

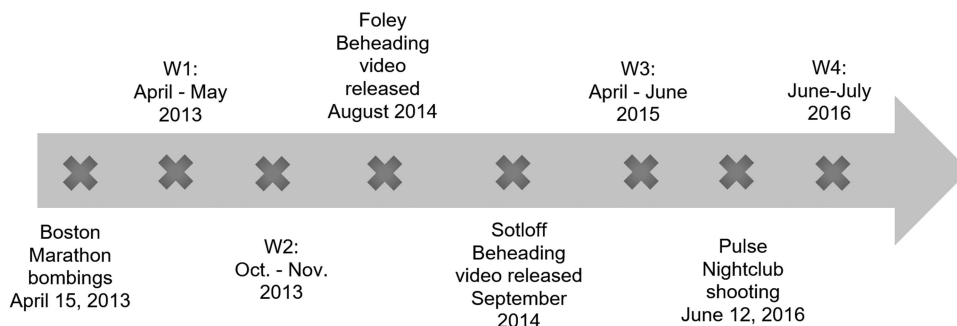


Figure 1. Temporal Relationship Between Data Collection Waves, Boston Marathon bombings, ISIS Beheadings, and Pulse Nightclub shooting. W1–W4 = Waves 1–4.

Only a small percentage of the sample watched an entire video, so the first two groups were combined ($n = 877$, unweighted). A dichotomous variable was then created in which *No, none of it* was coded as 0 and *Yes, all of it* and *Yes, part of it* were each coded as 1.

Wave 4.

Fear of future negative life events (including terrorism).

The same stem question used to assess fear of future terrorism at Wave 2 was used to assess fear of future negative life events (including terrorism) at Wave 4, with two items assessing each of the following categories: future terrorist attack, a natural disaster, and violence. Each of the items was rated on the same Likert-type scale and the mean of the items was calculated ($\alpha = .91$).

Functional impairment. The same measure completed at Wave 2 was completed to assess functional impairment ($\alpha = .88$).

Global distress. A shortened version of the Brief Symptom Inventory-18 (Derogatis, 2001) was used to determine the extent to which participants were distressed by nine items that load onto three subscales (anxiety, depression, somatization) using a 5-point rating scale ranging from 0 (*not at all*) to 4 (*extremely*). Ratings across items were summed ($\alpha = .88$).

Recent exposure to violence. Participants were asked whether in the last year they had experienced any of the same eight violent events assessed at Wave 2. All events that occurred were dummy-coded and summed.

Pulse Nightclub shooting media coverage. Because the Pulse Nightclub shooting occurred shortly before Wave 4, participants reported the number of hours per day they spent consuming media about the attack (TV, radio, online news, pictures—videos, or text updates on social media). Ratings were made on a 13-point rating scale, and ratings for all items were summed. Outliers (2.19%) were capped at 3 *SDs* above the mean.

Analytic Strategy

Analyses were conducted using Stata Version 14.2 (Stata Statistical Software, 2015). Due to the oversampling of individuals from the Boston and New York metropolitan areas, region was used as a covariate to account for the fact that some participants lived in regions that had experienced more terrorist-related events. All results presented are weighted and standardized.

To examine predictors of viewing a beheading video, we conducted a prospective logistic regression analysis by entering several individual-level predictors—including demographics, lifetime exposure to violence, frequency of typical TV watching, mental health history, direct exposure to the BMB, and previously reported fear of future terrorism—into the model. Three additional prospective analyses were conducted to examine whether watching a beheading video

was associated with increased fear of future negative events (including terrorism), functional impairment, and global distress approximately two years after the videos were released.

We first explored the bivariate relationship between viewing a beheading video and each prospective outcome of interest across three bivariate regression analyses. In all analyses, individuals who watched all of a video and those who watched part of a video were grouped together after a series of *t* tests⁴ revealed there were no significant differences between these two groups on any of the outcome variables measured (unweighted $n = 147$ who watched all of a video, and $n = 877$ individuals watched at least part of one).

To determine whether the relationship between viewing a beheading video and each of the three prospective outcomes still held after controlling for other potential predictors, an ordinary least squares regression analysis was conducted for each outcome variable. In each analysis, whether individuals watched a beheading video was entered as a predictor, while controlling for demographics and several previously collected variables: fear of future terrorism, functional impairment, BMB-related acute stress (measured 10 months before the beheading videos were aired), prior physician-diagnosed mental health, TV watching habits, direct BMB exposure, lifetime exposure to violence, and recent exposure to violence (see Holman et al., 2014; Silver et al., 2013).

Other than Wave 1 mental health, missing data across all analyses were limited; individuals were dropped if they were missing data from any points of data collection, leaving 2,676 participants with which to examine predictors of watching a beheading video and at least 2,238 for examining correlates of watching it.

Qualitative Analysis of Motivations

To examine motivations for watching these videos, we used a qualitative analysis to identify self-reported motivations for watching or not watching a beheading video using an open-ended item that followed the initial question of whether they watched a video. Participants who selected *Yes, all of it* were asked to provide a free response to the question “Why did you choose to watch it?” Those who selected *Yes, part of it* were

⁴ The first *t* test revealed that mean global distress for those who watched all of a video ($M = 4.68$, $SD = 6.14$) did not significantly differ from that of those who watched part of a video ($M = 4.89$, $SD = 6.05$), $t(735) = .35$, $p = .72$; Cohen's $d = .03$, 95% confidence interval (CI) $[-.16, .23]$. The second *t* test revealed that mean fear of future negative events, including terrorism, for those who watched all of a video ($M = 2.29$, $SD = .86$) did not significantly differ from that of those who watched part of a video ($M = 2.36$, $SD = .82$), $t(725) = .85$, $p = .40$; Cohen's $d = .09$, 95% CI $[-.11, .28]$. The last *t* test revealed that mean functional impairment for those who watched all of a video ($M = 1.53$, $SD = .81$) did not significantly differ from that for those who watched part of a video ($M = 1.53$, $SD = .79$), $t(735) = -.01$, $p = .99$; Cohen's $d = -.01$, 95% CI $[-.19, .19]$.

asked “Why did you choose to watch it and what made you stop?” Those who selected *No, none of it* were asked “Why did you choose not to watch it?” Participants received an unlimited text box that expanded as they typed their response (if they completed a hard copy of the survey, they were provided with five lines for this response). The open-ended nature of this question provided rich insight into why individuals chose to expose themselves—or not—to highly graphic images. Independent coders coded all the responses provided by those who watched all of a video ($n = 139$), a random subset of the responses provided by those who watched part of a video ($n = 350$), and a random subset of the responses provided by those who watched none of a video ($n = 350$; see the [online supplemental materials](#) for details about the qualitative coding procedures).

Results

Frequency of Watching a Beheading Video

About 25% (weighted $n = 819$) of this representative national sample reported having watched a beheading video; of those, about 20% (weighted $n = 656$) reported watching part of one and about 5% (weighted $n = 163$) reported watching all of one.

What Predicts Watching a Beheading Video?

Several variables prospectively predicted watching at least part of a beheading video. Some demographic variables (e.g., Christian, male, unemployed), as well as frequency of typical TV watching and lifetime exposure to violence, predicted watching at least part of a beheading video (see [Table 2](#)). Age was only a marginally significant predictor of watching at least part of a video. Additionally, fear of future terrorism predicted watching (see [Table 2](#)).

Does Watching Prospectively Predict Negative Psychological Outcomes?

Global distress. At the bivariate level, individuals who watched at least part of a beheading video reported more global distress approximately two years after the beheading videos went viral than did those who did not watch a video. This relationship held after controlling for prior distress, lifetime violence exposure, recent exposure to violence, and all other covariates (see [Table 3](#)).

Fear responses. At the bivariate level, individuals who watched at least part of a beheading video also reported more fear of future negative events, including terrorism, about two years after the videos, relative to those who did not watch a video. This relation held after controlling for previous fear of terrorism and all other covariates (see [Table 3](#)).

Table 2
Predictors of Watching a Beheading Video (N = 2,676)

Variable	Odds ratio	SE	95% CI
Demographics			
Region			
Boston	.77	.17	[.50, 1.17]
New York	.90	.17	[.62, 1.31]
Gender (male) ^a	1.37*	.18	[1.06, 1.78]
Age	1.01*	.01	[1.00, 1.02]
Income	1.05	.04	[.98, 1.13]
Race—ethnicity ^b			
Black, non-Hispanic	1.22	.30	[.75, 1.99]
Other, 2+ races, non-Hispanic	1.10	.30	[.64, 1.89]
Hispanic	1.41	.31	[.91, 2.18]
Education ^c			
Less than high school	.70	.21	[.39, 1.28]
High school	.80	.14	[.56, 1.12]
Some college	.89	.14	[.66, 1.22]
Employment status (unemployed) ^d	1.47*	.22	[1.10, 1.97]
Marital status ^e			
Married—cohabitating	1.02	.19	[.70, 1.47]
Widowed—divorced—separated	1.18	.30	[.71, 1.95]
Political affiliation ^f			
Independent	.99	.17	[.72, 1.38]
Democrat	.74	.14	[.52, 1.06]
Religious affiliation ^g			
Non-Christian, religious	1.62	.48	[.91, 2.89]
Christian	2.10**	.41	[1.43, 3.07]
Other covariates			
Television-watching habits	1.32*	.12	[1.10, 1.57]
Direct BMB exposure	1.11	.28	[.67, 1.83]
Prior mental health DX	1.12	.13	[.89, 1.41]
Prior fear of future terrorism	1.12*	.05	[1.03, 1.22]
Lifetime violence exposure	1.12*	.06	[1.01, 1.25]
Model statistics	$\chi^2(23, N = 2,676) = 89.81$, $p < .001$, $R^2 = .06$		

Note. CI = confidence interval; BMB = Boston Marathon bombings; DX = diagnosis of anxiety and/or depression.

^a Female was the referent group. ^b White, non-Hispanic was the referent group. ^c Bachelor's degree or higher was the referent group. ^d Employed was the referent group. ^e Single was the referent group. ^f Republican was the referent group. ^g Nonreligious was the referent group. * $p < .05$. ** $p < .001$.

Functional impairment. At the bivariate level, individuals who watched at least part of a beheading video reported more functional impairment about two years after the videos went viral relative to those who did not watch a video. However, after controlling for functional impairment measured prior to watching and all other covariates, this relationship was no longer significant (see [Table 3](#)).

Self-Reported Motivations for Watching a Beheading Video

Results from a qualitative analysis of a subset of responses provided by 2,972 participants who gave details about their motivations for watching all, starting and stopping, or not watching a beheading video are presented in [Tables 4](#) and [5](#). There was much overlap in the motivations for watching reported by participants who watched all or

Table 3

Predictors of Fear of Global Distress, Fear of Future Negative Events, and Functional Impairment (Wave 4)

Variable	Global distress		Fear of future negative events		Functional impairment	
	<i>n</i>	β [95% CI]	<i>n</i>	β [95% CI]	<i>n</i>	β [95% CI]
Analyses type						
Bivariate	2,771		2,734		2,766	
Watched part/all of beheading video		.36 [.19, .54]**		.44 [.30, .58]**		.27 [.12, .42]*
Multivariate	2,254		2,238		2,254	
Watched part/all of beheading video		.21 [.07, .34]*		.25 [.14, .37]**		.10 [-.02, .21]
Demographics						
Region						
Boston		-.13 [-.25, -.01]*		-.16 [-.31, -.01]*		-.08 [-.20, .03]
New York		.01 [-.17, .19]		.02 [-.12, .16]		<.01 [-.15, .15]
Gender (male) ^a		.01 [-.10, .12]		-.15 [-.26, -.05]*		.11 [.01, .21]*
Age		-.04 [-.12, .04]		-.06 [-.13, .01]		-.02 [-.09, .04]
Income		-.07 [-.13, -.01]*		-.06 [-.11, -.003]*		-.08 [-.13, -.04]**
Race—ethnicity ^b						
Black, non-Hispanic		.02 [-.23, .26]		.11 [-.17, .39]		-.10 [-.31, .11]
Other, 2+ races, non-Hispanic		.21 [-.15, .56]		-.002 [-.23, .22]		.17 [-.10, .43]
Hispanic		.13 [-.09, .35]		<.01 [-.18, .19]		.02 [-.16, .20]
Education ^c						
Less than high school		.12 [-.33, .58]		-.05 [-.33, .22]		.08 [-.32, .48]
High school		-.001 [-.14, .14]		-.08 [-.22, .05]		-.07 [-.18, .04]
Some college		-.05 [-.18, .08]		-.02 [-.14, .11]		-.07 [-.19, .04]
Employment status (unemployed) ^d		<.01 [-.14, .15]		-.08 [-.20, .04]		.07 [-.05, .20]
Marital status ^e						
Married—cohabitating		.03 [-.12, .18]		.11 [-.04, .26]		-.09 [-.23, .04]
Widowed—divorced—separated		.21 [-.04, .45]		.12 [-.07, .31]		.02 [-.19, .24]
Political affiliation ^f						
Independent		-.04 [-.19, .11]		-.09 [-.21, .04]		-.10 [-.23, .03]
Democrat		<.01 [-.17, .18]		-.10 [-.23, .04]		-.09 [-.24, .05]
Religious affiliation ^g						
Non-Christian, religious		-.14 [-.42, .14]		-.21 [-.43, -.001]*		-.11 [-.32, .10]
Christian		-.13 [-.29, .03]		-.04 [-.20, .11]		.01 [-.11, .13]
Other covariates						
Television watching habits		-.03 [-.10, .04]		.02 [-.04, .08]		-.02 [-.08, .04]
Direct BMB exposure		.10 [-.11, .31]		.01 [-.16, .19]		.05 [-.09, .20]
Prior mental health DX		.09 [.02, .15]*		.09 [.03, .14]*		.08 [.02, .14]*
Prior fear of future terrorism		.15 [.08, .23]**		.36 [.30, .43]**		.09 [.02, .16]*
Prior acute stress to BMB		.15 [.06, .24]*		.12 [.06, .19]**		.06 [-.01, .13]
Prior functional impairment		.25 [.17, .33]**		.06 [-.01, .12]		.45 [.37, .53]**
Lifetime violence exposure		-.04 [-.11, .02]		.01 [-.05, .07]		-.03 [-.09, .04]
Recent exposure to violence ^h		.10 [<.01, .20]*		.06 [-.01, .13]		.08 [<.01, .17]*
Pulse Nightclub media exposure		.18 [.09, .26]**		.18 [.11, .25]**		.07 [-.001, .14]
Model statistics		$F(28, 2225) = 11.50$; $p < .001$; $R^2 = .35$		$F(28, 2209) = 16.64$; $p < .001$; $R^2 = .38$		$F(28, 2225) = 16.95$; $p < .001$; $R^2 = .37$

Note. CI = confidence interval; BMB = Boston Marathon bombings; DX = diagnosis of anxiety and/or depression.

^a Female was the referent group. ^b White, non-Hispanic was the referent group. ^c Bachelor's degree or higher was the referent group. ^d Employed was the referent group. ^e Single was the referent group. ^f Republican was the referent group. ^g Nonreligious was the referent group. ^h Analyses revealed that the pattern of results remained the same when violent events in the past 12 months were included and when violent events in the past 2.5 years were included. Thus, only events that occurred in the past 12 months were included to provide a more appropriate measure of recent exposure to violence.

* $p < .05$. ** $p < .001$.

watched part of a video. There was also overlap between the motivations for stopping and not watching any at all reported by those who watched part or none of a video. Among those who watched all or part of a beheading video, commonly reported reasons were (a) to gain information and verify the video's authenticity, (b) to satisfy curiosity or interest, and (c) not knowing why or watching was unintentional. Among those who reported either starting

to watch a beheading video and stopping or refraining from watching altogether, the most commonly cited reasons were (a) not wanting to watch it or general avoidance of news and (b) finding the video to be emotionally upsetting. Further, a sizable portion of those who chose not to watch any of a beheading video reported choosing to refrain from doing so because they did not want to support ISIS.

Table 4
Motivations for Watching All or Starting to Watch a Beheading Video

Theme and example	% of responses ^a	
	Watched all (<i>n</i> = 139)	Started (<i>n</i> = 350)
Gain information and verify authenticity "It was a news story and I was attempting to obtain more information."	55.40	20.57
Curious/interested "It was the first one and I was curious to know what it showed. I have not watched any further beheadings."	24.46	14.0
Shown on the news ^b "It was on the news."	10.07	37.43
Other "Death doesn't bother me."	7.19	2.00
Strong emotional motivations "I was horrified by the event."	6.47	
Religious motivations "To try to understand why Muslims hate the rest of the world so much."	5.04	
Social sharing "My husband asked me to watch it."	3.60	
Unintentional, don't know why "I didn't think the whole thing would be shown."	3.60	8.29
Easily available "Available time."		2.86
No reason given		22.0

^a Totals more than 100% because some responses reflect multiple themes. ^b About 10% of those who indicated watching all of the video reported doing so because it was shown on the news. However, news programs showed only an edited portion of the video, so these individuals may not have actually seen a full beheading video.

Discussion

This 3-year prospective, longitudinal study of a representative U.S. national sample identified the demographic, experiential, and emotional correlates of choosing to watch an ISIS beheading video. We further demonstrated that watching the video was prospectively associated with negative

mental health outcomes approximately two years after the videos went viral. Findings revealed that about one quarter of this representative U.S. national sample viewed at least part of a beheading video. Further, results from the quantitative analyses were clear: Individuals with preexisting fears of future terrorism were more likely to watch a video of a

Table 5
Motivations for Not Watching or Stopping a Beheading Video

Theme and example	% of responses ^a	
	Watched none (<i>n</i> = 350)	Stopped (<i>n</i> = 350)
Didn't want to watch it or avoidance of news "I generally do not watch TV or online videos. I see and saw no purpose in watching the beheadings."	73.71	28.57
Emotionally upsetting "Too sad."	15.14	28.86
Didn't seek them out or weren't available "Was not available."	10.29	
Didn't want to support ISIS "Didn't want to give them the satisfaction."	8.86	2.57
Other "I watched the beheading of Daniel Pearl a few years back and I still regret doing that."	4.86	3.14
Just saw what was on news "The beheadings were not shown on broadcast television."	2.57	
Respect for family or victims "In sympathy with the parents and relatives of the person being beheaded."	2.29	2.86
Didn't want repetition of images "I needed to see how evil looks but do not wish to keep seeing it except on TV news."		2.86
Reason outside their control for video stopping "... Poor Internet service."		4.57
No reason given		35.43

Note. ISIS = Islamic State of Iraq and Syria (terrorist group).

^a Totals more than 100% because some responses reflect multiple themes.

terrorist-perpetrated beheading. Watching a beheading video was associated with functional impairment at the bivariate level, but this relationship did not hold after accounting for other covariates. However, watching a beheading video was associated with fear of future negative events and global distress about two years after the beheading videos went viral, and these findings held while statistically controlling for acute stress and fear of future terrorism measured at least 10 months before ISIS released the beheading videos. This bolsters our confidence that watching graphic coverage may exacerbate preexisting fears and increase psychological symptomatology, demonstrating the negative psychological impact of viewing graphic media produced by terrorists. Watching such coverage may assist terrorists in achieving their goal of instilling fear.

Individual-Level Predictors of Watching

Several individual-level characteristics were associated with greater likelihood of watching a beheading video. Greater TV consumption prior to the BMB and being unemployed, Christian, and male all predicted watching. Although past research has suggested individuals under 18 exhibit the greatest desire to watch violent TV (Bushman, 2006), being older was a marginally significant positive predictor of watching. Notably, prior mental health conditions did not predict watching a beheading video. However, experiencing more violent events across one's life span did predict watching one. Future research is needed to further explore the relationship between violent victimization and watching real graphic violence, because past research that induced fear of victimization found that it decreased subsequent interest in fictional movies depicting victimization (Wakshlag, Vial, & Tamborini, 1983). Findings also revealed that history of lifetime violent victimization was not associated with global distress but recent violent victimization and watching a beheading video were, suggesting that real-life violent experiences do not inoculate individuals against the potential impact of media depictions of real violence. Moreover, the fact that exposure to a beheading video was more strongly associated with global distress than was recent violent victimization suggests that exposure to violence via media can be more impactful than are individuals' own life experiences with violence.

Consistent with a body of research indicating that individuals are drawn to frightening stimuli (Keogh et al., 2001; MacLeod, Mathews, & Tata, 1986), individuals reporting greater fear of future terrorism approximately 10 months prior to ISIS's releasing of the beheading videos were more likely to watch a beheading video. Moreover, watching a beheading video was associated with greater fear of future negative events, including terrorism, almost two years after their release. Of course, one cannot be certain whether viewing a beheading video frightened individuals who were

previously not afraid or whether those who were previously afraid intensified their fear by watching. However, the longitudinal nature of the study bolsters confidence that fear motivates individuals to view graphic media of terrorist acts and that in turn individuals become more fearful after viewing this content. For terrorists to take advantage of this process is not new, because executions were previously performed in front of large audiences and sensationalized via publicity to spread fear (Weimann, 2008). However, viewers may not realize these graphic ISIS videos are propaganda intended to instill fear the way executions of the past were and that in viewing these videos, they may be fulfilling the terrorists' goals.

Motivations for Watching

The quantitative analyses revealed the characteristics of those who attend to graphic media coverage. However, we also sought to answer *why* individuals attend to this coverage by qualitatively analyzing participants' self-reported motivations for watching (or not watching) a beheading video. Our design was well suited for exploring this question because data were collected anonymously online. This minimized any bias in responding, because there was no way for participants' responses to be linked back to them and there were no study personnel or other participants present while the survey was completed. Moreover, social desirability in self-reported motivations was not a concern, because there are no established social norms surrounding reasons that individuals tune in to coverage of graphic newsworthy events.

Although the quantitative analyses revealed that preexisting fears of future terrorism are important predictors of who is most likely to attend to this graphic content, these reasons did not emerge when coding participants' self-reported reasons for watching. Instead, individuals commonly indicated their motivation to watch was to gain more information, consistent with research suggesting that after a crisis, individuals seek out further information (Austin, Fisher Liu, & Jin, 2012; Ball-Rokeach & DeFleur, 1976).

The portrayal of beheading videos in the media may have played a role in motivating individuals to watch them in important ways, as well as influenced viewers' responses to them. First, the media may broadcast incomplete or limited coverage of an event, which potentially seeds ambiguity that individuals may feel compelled to resolve by seeking information on platforms without editorial oversight (e.g., social media). Second, during the string of released beheading videos, the media typically broadcasted still images of the moments before victims were beheaded, opting not to air the gruesome footage entirely. The media often alluded to the graphic nature of these videos and the websites where they could be found online and warned viewers about their content. This constellation of factors may have increased the

curiosity participants in this study felt about the content of these videos. Curiosity may have also been bolstered by the warnings the media gave about the graphic nature of the content due to a reactance effect (Bushman & Stack, 1996). Indeed, people often act to regain their autonomy when their ability to engage in a certain behavior is removed (Brehm & Brehm, 1981). Media descriptions of their extreme graphicness may also have predisposed individuals who watched to experience distress. Research has supported this notion, finding that the expectation of graphic images of violence may increase distress, even in the absence of any actual depictions (de Wied, Hoffman, & Roskos-Ewoldsen, 1997). Thus, urging viewers not to watch these videos due to their graphic nature may have had a hand in motivating them to do so anyway and made them more susceptible to negative psychological responses.

Insights Gleaned From the Qualitative Data

The majority of motivations individuals reported for watching all or for starting to watch a beheading video were cognitive in nature (i.e., to gain information or curiosity); only a few individuals reported emotional motivations for watching a full video. In contrast, individuals reported emotional and cognitive reasons for stopping a video at about the same frequency. Because individuals retrospectively reported their motivations for watching, it is possible that many individuals felt compelled to come up with a rational justification for viewing real, highly graphic content. However, it is also possible that many individuals do tune in to real graphic news coverage for cognitive reasons (i.e., gaining information), without realizing the emotional impact this coverage may have on them, causing them to turn away. Furthermore, although the cognitive reasons many individuals gave for watching a video do not map onto the predictors of watching identified in the quantitative analyses (i.e., fear of terrorism and violent victimization), these two sets of findings are not inconsistent. It is possible that the curiosity or desire to gain information that prompted individuals to watch a video stemmed from prior fear of future terrorism or past victimization, but such insights may lie outside of awareness. It is also possible that an individual's motivation for viewing (i.e., cognitive or emotional) may also have predicted psychological correlates of viewing, but we were unable to quantitatively explore this, because few in the subsample ($n = 9$) reported an emotional reason for watching. Additionally, such analyses would be further complicated by the fact that some individuals listed multiple motivations for their behavior (about 15% of those who watched all of a video, about 6% of those who started, about 8% of those who stopped, and about 26% of those who watched none).

Contributions and Limitations

When reporting their motivations, participants completed all surveys anonymously, reducing the likelihood that they hid their true motivations for viewing. Nonetheless, the open-ended responses that participants provided about their motivations were post hoc explanations for behavior, and it is possible that individuals might not possess insight into the real reason(s) for their behavior. Consistent with this notion, experimental research has found that individuals often have difficulty accurately identifying processes that influenced their responses (Nisbett & Wilson, 1977), such as not realizing that something they saw may have influenced their behavior (Bertrand & Mullainathan, 2001). Furthermore, the discrepancy between predictors of viewing identified by the quantitative analysis and participants' self-reported motivations for viewing in the qualitative analyses provides evidence that individuals may not truly know why they watched a video or, at the very least, individuals may have failed to consider other important factors that drove their behavior. This discrepancy suggests unconscious motivations for watching and highlights the importance of mixed-methods research because the quantitative and qualitative data, in tandem, provide a more nuanced understanding of the predictors and motivations for viewing graphic media.

The quantitative analysis of data obtained in the present study compared those who watched all or part of a video to those who watched none of it. Participants were grouped in this fashion because a series of *t* tests revealed no significant difference between those who watched all and those who watched part on any of the outcomes of interest. However, it is possible that there are some differences in the predictors of watching all or part of the video that the present study failed to capture. Moreover, those who saw only part of beheading video were still exposed to a certain death image in which the victim's fate was clear (Winkler, El Damanhoury, Dicker, & Lemieux, 2016). Nonetheless, because we did not ask individual questions about exposure to the various videos posted by ISIS, we are unable to address whether there was a dose-response relationship regarding the number of videos to which respondents were exposed.

Another limitation of the quantitative analyses is that the beheading videos first went viral in August 2014, but participants were not asked whether they had viewed one until about eight months later. However, due to the highly graphic nature of the beheading videos that depicted a live gruesome murder and the effort required to seek one out, it is highly likely that participants could accurately recall whether they chose to watch one or not. Furthermore, although we cannot identify when exactly participants watched a video, this does not pose a problem for the analyses, because all predictor variables used to identify who watched a video were gathered prior to the release of the beheading videos and prior to when they went viral.

Additionally, although viewing a beheading video was associated with subsequent global distress and fear of future negative events, these correlations do not enable us to make causal statements. It is possible that another individual-level characteristic, shared by those who chose to watch a beheading video, accounts for the greater fear of future negative events and global distress observed. Nonetheless, use of a longitudinal design, controlling for covariates (including demographics, mental health history, prior TV consumption, past violent life experiences, recent violent experiences, and Pulse Nightclub shooting media exposure), and statistically accounting for prior distress and fear of terrorism in each analysis helps rule out reverse causation and the possibility that another individual-level characteristic accounts for the findings. The results strongly implicate exposure to beheading videos as responsible for increased negative psychological consequences. However, it should be noted that only negative correlates of viewing were explored. Had we explored positive outcomes, it is possible that we would have also identified some beneficial correlates of viewing, such as support for military responses or humanitarian involvement, as other researchers have found (Grizzard et al., 2017). Thus, although our findings implicate real graphic media exposure in subsequent negative psychological symptoms, potential benefits need to be explored and weighed when making decisions about disseminating and viewing this coverage.

Conclusions and Future Directions

This study is the first to identify how many individuals watched a highly graphic video, who these individuals are, and their reported motivations for doing so—an important addition to the literature. Until now, there has been speculation about who views real graphic images, but the few studies that have addressed this topic have been hampered by limited samples and cross-sectional designs. Although the present study supported past research findings that viewing graphic coverage is associated with psychological distress, future research should explore what aspects of the video were particularly distressing (e.g., sounds or perhaps a single highly graphic image). This more nuanced relationship between aspects of graphic imagery and distress needs to be explored, and studies with experimental designs could help shed new light on the mechanisms by which graphic imagery exposure is linked with distress.

The current media landscape offers easy access to images and videos of community traumas as they unfold with ever-increasing frequency. New forms of media seem to expose individuals to more graphic content than ever before. Unlike a newsroom in which an editor reads and checks a story and even more editors read stories that are potentially problematic or controversial, editors in online newsrooms focus on modifying stories for the Internet and quickly

releasing them (Singer, 2003). Many graphic images and videos of news events online do not go through any sort of editing process, because technology enables bystanders to record an event that they witness with their mobile phone and upload it directly to social media (Antony & Thomas, 2010). However, even if traditional news outlets do not directly show the horrific news videos available on the Internet, they may still be culpable for individuals seeking to view this content. By constantly discussing horrific videos on the news, as was done with the ISIS beheading videos, news programs may inspire fear and draw individuals' attention to these videos, consistent with the literature on attentional bias (Field, 2006).

It is imperative that traditional and new media outlets continue to actively cover important events and keep the public informed. However, given the mounting evidence of the negative psychological consequences associated with exposure to graphic imagery on the news, it is essential to better understand the aspects of graphic coverage that cause the most distress. News organizations could use this information when deciding how to present their stories, and media consumers could make informed choices about what coverage to watch and what to avoid. At the media consumer level, it may also be important for individuals to be made aware of the potential psychological risks of being exposed to graphic imagery in the media. The findings from this study suggest that when individuals are afraid of the horrific acts of violence occurring in the world, they may be drawn to graphic coverage of these types of events, which may only exacerbate their fears. If these fears then motivate individuals to seek out more graphic coverage in the future, they may find themselves locked in a spiral of fear. Future research is needed to determine whether individuals are falling into a perpetual cycle of fear when they seek out graphic media and if so, how best to prevent it.

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Received May 23, 2018

Revision received November 25, 2018

Accepted December 2, 2018 ■