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The Giffords shootings in Tucson: Exploring citizen-generated versus news media content in crisis management

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ABSTRACT

This study expands on previously published research into the role citizen generated content plays in the coverage of crisis situations and discusses implications for public relations practitioners who must respond to this type of coverage. Using a content analysis of newspapers and the websites of cable and broadcast news networks, the authors explored the use of both official versus non-official sources and the use of citizen generated content during coverage of the January 2011 shootings in Tucson that injured Rep. Gabrielle Giffords (D-Ariz.) and 12 others, and killed six people. Results revealed reporters were more likely to use non-official sources. Reporters also were more likely to use non-official technology sources, or citizen generated content, than official technology sources such as web-based news releases and statements. This study finds additional support for the concept that crisis managers must learn to deal with reporters' use of citizen generated content while also leveraging social media to control their organization's message during a crisis.

1. Introduction

Today's media environment thrives on people and organizations in crisis. From celebrity meltdowns to massive earthquakes, crises dominate today's news coverage. A quick review of any news website, cable news station or major daily newspaper reveals news coverage that is dominated by negative stories focusing on politicians' infidelity, plane crashes, and acts of violence. A key component of dealing with crises successfully involves controlling the flow of information. But is that even possible in today's media environment? Reporters are under more pressure than ever before to get information out quickly; therefore, a reporter may turn to a social media site, such as Facebook, YouTube or Twitter, to get information. Additionally, people are revealing more about themselves than ever before on these sites. With little more than a click, reporters, and the world, can learn instantly about victims or perpetrators of crimes. A considerable amount of anecdotal evidence, along with findings from a previously published research study (Wigley & Fontenot, 2010), reveal that journalists are relying more and more on citizen generated content in their reporting. But what does this mean for the public relations professionals who must manage the flow of information in a crisis situation? Are they still able to control the message, or have they lost control because of the easily accessible information on the web?

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2. Literature review

2.1. Crisis management

Although the term "crisis" has been defined by a number of scholars, no single definition exists. Fearn-Banks (2001) describes a crisis as "a major occurrence with a potentially negative outcome affecting the organization, company, or industry, as well as its publics, products, services, or good name. A crisis interrupts normal business transactions and can sometimes threaten the existence of the organization" (p.2). The impact of a crisis on an organization can be devastating, depending on how the organization handles the situation. A poorly handled crisis can damage a company's reputation or image, sometimes beyond repair, and lead to negative attitudes among stakeholders, lost revenue for the company and even legal problems (Fearn-Banks, 2001; Fombrun, 2000).

Crisis management most often falls under the responsibility of an organization's public relations practitioner. A number of crisis communication studies have focused on the summary and analysis of how an organization did or did not handle a crisis properly (Gallagher, Fontenot, & Boyle, 2007; Greer & Moreland, 2003; Kauffman, 2001; Vlad, Sallot, & Reber, 2006) and suggest steps for handling a crisis after it occurs. Others have focused on theoretically grounded concepts that should be considered when handling a crisis situation (Coombs, 2007; Coombs & Holladay, 2002; Wigley & Pfau, 2010). One of the key components to handling a crisis successfully is controlling the flow of information by developing and disseminating key messages to the media and an organization's publics. "Staying on message" is a common term among public relations practitioners when engaging in any type of media interview, particularly one that involves a crisis situation (Howard & Mathews, 2000; Shin & Cameron, 2003). Furthermore, a survey of crisis management practitioners and scholars reveals the importance of communicating during a crisis. For example, Fearn-Banks (2001) refers to crisis communication as the interaction (verbal, visual, or written) between an organization and its publics. This communication often occurs through the media, prior to, during, and after the crisis.

2.2. News coverage of crises

Controlling the flow of information in the event of a crisis is paramount to successfully managing a crisis. That is why public relations scholars and practitioners emphasize the importance of supplying official spokespeople to the media. Savvy practitioners know the media can do the story without them, therefore they choose to tell their own stories, rather than leaving it up to others (Howard & Mathews, 2000). Some believe that crisis situations often leave journalists dependent on official sources, thereby providing a public relations practitioner an advantage in shaping and controlling messages, especially during the early stages of a crisis. Not all research, however, supports the notion that journalists rely heavily on official sources during times of trouble; in fact, results from studies examining the use of official sources during a crisis have been mixed.

Some research findings support the idea that official sources dominate during times of crises. Powell and Self (2003) looked at business crises that harmed consumers and discovered the media relied heavily on government sources. In a study of the coverage of the 9/11 terrorist attacks, Li and Izard (2003) discovered the media rely more on government sources than other sources in a crisis situation, and Fontenot, Boyle, and Gallagher (2009) found in their survey of news coverage of Hurricanes Katrina and Rita that larger newspapers relied more on official sources than non-official sources.

Some scholars have found that non-official sources dominate during a crisis. For example, Salwen (1995) studied newspaper coverage of Hurricane Andrew, which hit southern Florida in 1992, and found that media did not rely heavily on official sources. In fact, Salwen discovered that individuals were quoted far more often than government or business officials. Fontenot et al. (2009), in their examination of the news coverage of Hurricanes Katrina and Rita, discovered that stories published within the first few days of the disaster used more non-official sources than official sources and that stories published several months after the disaster used more official sources. Nacos (1996), in a study of the news coverage of an anti-American terrorist act, found that reporters do not rely on official sources. Instead, they used a variety of sources including terrorists and their allies, families of victims and critics of the establishment.

Public relations practitioners attempt to control the message by using official spokespersons and quickly responding to media requests; however, it appears that technology, along with the media's rush to be first with information, are challenging crisis managers' efforts to control the message. Because of social media outlets such as Facebook, YouTube and Twitter, citizens have become more important players in the coverage of crises. Additionally, most mainstream TV and broadcast news outlets regularly use viewer comments, video and photographs that are supplied through social media sites. As predicted by Perse (2001), the gatekeeping function of media has all but disappeared. Many media are now operating as aggregators of information, rather than gatherers of information.

Examples of social media's impact on crisis reporting abound. When US Airways Flight 1549 landed safely in the Hudson River, the first pictures of the crash were posted on Twitter. When terrorists took over parts of Mumbai, victims tweeted to update their friends, families and the world about what was happening to them. As public relations strategist Mark Hannah stated, "We (PR professionals) used to provide information and context in crisis situations. Now, the contextualizing is being wrestled from us by a media culture that is responding before we can. However, in the case of crises, user-generated media is just as likely to inform traditional media as vice versa." Hannah (2009) also noted that PR professionals no longer have

time to strategize before bad news reaches the media and public. "Instead, we have to strategically repair the news once the public (and, thus, the media) has already broken it."

Hannah (2009) also cited the famous photograph of US Airways Flight 1549 that came not from a photojournalist but from a bystander who snapped a picture with his phone and uploaded it to his Twitter account. Long before US Airways issued an official statement, the photograph had been picked up by major news organizations, and at least one cable news station, MSNBC, had interviewed the man who took it (Hannah, 2009; Kurtz, 2009). Additionally, Twitter users provided updates from the crash landing site even before the *New York Times* published an online story (Kurtz, 2009). Even US Airways acknowledged the power of the Internet, but not social media, in its initial statement which directed people to its company website, usairways.com, for the latest information. As Hannah (2009) stated, the company was naïve to think its website would be the source of breaking information when ordinary people were using social media to disseminate information much faster.

The power of social media is not lost on every day citizens. Fox News correspondent Julie Banderas was at home tweeting when a plane crashed outside Buffalo. She sent a tweet asking for eyewitnesses and soon found one. The man did a phone interview with Banderas and later appeared on Fox News (Kurtz, 2009). According to Kurtz (2009), "Twitter is gradually becoming a factor in news events" (p. C01). But to what extent are social media and citizen generated content being used by journalists? Furthermore, what does the use of this citizen generated content via social media mean for public relations practitioners who manage crises?

2.3. Citizen generated content and crises

Research on citizen generated content is limited. It has been described as a means of bypassing traditional gatekeepers which allows viewers to witness events that would otherwise be inaccessible to them or the media (Cooper, 2007). Others believe that citizen generated content provides more authentic reporting because it is submitted by participant–observers who often find themselves in harm's way (Beckett, 2008). Furthermore, it helps bypass the journalist who may be corrupted or biased by either state or private interests (Chouliaraki, 2008). However, contrary to these scholars' definitions, the authors of this study argue that mainstream media has embraced citizen generated content as evidenced by their encouragement of citizens to submit photographs, videos and comments for public broadcast as well as their active involvement on social media websites like Facebook, Myspace, YouTube and Twitter. The media refuses to be bypassed and instead is going to where the citizen journalists are to find news. Some crisis management experts agree. Baron and Philbin (2009) state that journalists gather first-hand accounts and gauge reactions by tracking Twitter accounts, blogs, and YouTube.

One of the first crises to utilize citizen generated content occurred on April 16, 2007 when a gunman opened fire on the campus of Virginia Tech University and killed 32 students before killing himself. Perhaps one of the most memorable images of the tragedy was the first one that Virginia Tech graduate student Jamal Albarghouti sent to CNN. The video was shot from a cell phone and showed armed police surrounding a campus building as gunfire rang in the background. Similarly, on January 8, 2011, a male gunman opened fire during an outdoor meeting between U.S. Rep. Gabrielle Giffords and her Arizona constituents. Like coverage of the Virginia Tech shootings, reporters covering the Tucson shootings also relied on social media in their reporting. Media soon discovered online postings and rants by Jared Loughner, the primary suspect in the shootings. Loughner had made a number of rambling and incoherent videos and postings on sites like Myspace and YouTube. Reporters also used Facebook and Myspace to uncover information about Loughner's friends and their feelings about what he had allegedly done.

As stated earlier, a previously published research study of the coverage of the Virginia Tech shootings confirmed that reporters did rely on both citizen generated content and non-official sources in their reporting of the story (Wigley & Fontenot, 2010). The current study seeks to build on that research and gauge any changes in reporters' use of citizen generated content and non-official sources in crisis reporting. Few studies have been conducted on the topic of citizen generated content and its role in crises coverage, particularly as it applies to public relations practitioners.

3. Methodology

The Tucson shooting massacre was selected as the crisis for study because it was similar in many respects to the Virginia Tech shootings. Both crises were allegedly perpetrated by emotionally disturbed male college students. Both crises also received extensive media coverage from many of the same media outlets, and both crises involved the use of citizen generated content to report the story. Furthermore, because it occurred nearly 4 years after the Virginia Tech shootings, the Tucson shooting incident was selected for comparison so as to evaluate any changes that may have occurred in the types of sources used during a crisis.

In order to gauge the use of citizen generated content, the study utilized a content analysis to investigate the types of sources – official, non-official, and new technology, non-new technology sources – used in media coverage of the Tucson shootings. Thus, the unit of analysis was the source. Like the study which examined coverage of the Virginia Tech shootings, sources for this study were identified from three newspapers and the websites of four cable and broadcast news networks. The sample, which was collected in February 2011, included three national newspapers – *The Washington Post*, *The New York Times*, and *USA Today* – and four television news websites – *ABCnews.com*, *CBSnews.com*, *CNN.com*, and *FoxNews.com*. These were the same newspapers and television news websites that were examined during the Virginia Tech research study. The

timeline for the study was Saturday, January 8, 2011 – the day of the shootings – through Saturday, January 15, 2011 – the day the Safeway grocery store, where the shootings occurred, re-opened for business and also the day after the last funeral for one of the victims was held.

3.1. Newspapers

The Washington Post was chosen because the shootings involved Rep. Gabrielle Giffords. *The New York Times* was chosen because it is the national paper of record. Finally, *USA Today* was part of the sample because it is a national paper that devoted a good deal of coverage to the Tucson shootings. Articles from these newspapers were retrieved from LexisNexis. Only print articles that were related to coverage of the shootings were collected. Articles from the web editions of these papers were not sampled. Only news articles written by staff reporters that were located in the news sections of the newspapers were examined. Articles in the features/lifestyles, entertainment, or sports sections were not included in the sample. Opinion pieces and editorials were also excluded from the sample.

3.2. Television news websites

Four television news websites were analyzed for this study: *ABCnews.com*, *CBSnews.com*, *CNN.com*, and *FoxNews.com*. These websites were chosen because they are associated with the most-watched and most well-known cable and broadcast news networks in the nation. Again, only articles that were news articles were analyzed. No wire stories, editorials or opinion pieces were analyzed except for those wire stories with combined bylines from reporters at the sampled news organization. MSNBC.com, which also provides a search engine for NBC News, was not included in the study due to the difficulty authors had in searching and accessing appropriate articles needed through the MSNBC.com website. Additionally, it was felt that the joint ownership of NBC News and MSNBC.com might confound the study. It should be noted that newspapers and websites of news stations around Tucson were purposely not selected for the current study so the authors could make comparisons to previously published research that used these same media entities.

3.3. Operational definitions

For this study, a source was defined as any person or entity that is directly quoted or attributed as a source in the text of the news article. A total of 106 newspaper articles and 132 articles from the websites of cable and broadcast networks were accessed. From these articles, a total of 1,506 sources were analyzed. It should be noted that every source was counted, even if the same source was used by several of the news outlets.

Sources were categorized into one of four categories: official/non-technology; non-official/non-technology; official/technology; and non-official/technology (citizen generated content). Official sources were defined as government officials and spokespeople associated with government entities or bodies that were directly involved with the shootings. Technology sources were defined as the newest forms of technology used to communicate words and images such as websites, emails, social networking sites, tweets, online videos, blogs, and cell phone videos; therefore, DVDs, VHS tapes, and other "antiquated" technology were considered obsolete and not included as new technology sources.

Official/non-technology sources were defined as individuals tied to local, state, or federal government agencies or entities that were directly involved with the shootings. This included members of the U.S. Congress and their staff, state legislators with whom Giffords previously served, first responders, and law enforcement. Sources falling into this category most likely included a high level of involvement from public relations practitioners attempting to control the message.

Official/technology sources included the websites, emails, tweets, online videos, cell phone videos, and social networking sites of any of the above mentioned official sources. Again, sources falling into this category most likely included a high level of involvement from public relations practitioners attempting to control the message.

Non-official/non-technology sources included individuals not tied to any government-owned or government sponsored entity that was directly involved with the shootings. This category included community members, community organizations, churches, experts, and spokespersons for private entities such as hospitals. This category included "man-on-the-street" interviews and eyewitness accounts that were obtained in a traditional manner.

Non-official/technology sources included the websites, emails, tweets, online videos, cell phone videos, and social networking sites and blogs of any of the above mentioned non-official sources.

Two coders were trained to identify types of sources used within the news articles. To check for intercoder reliability, the authors randomly selected 24 articles, or just over 10% of the sample, for the coders to review. Using the Holsti formula, the authors measured the consistency between coders. The higher their agreement, the greater the intercoder reliability. The Holsti formula was used in order to gain a correlation coefficient that ranged from .00 (no agreement between coders) to 1.00 (full agreement between coders). The intercoder reliability test on the coding sheet as described above produced a coefficient of .82 for the four types of sources. This exceeded .70, the minimum requirement for reliability (Holsti, 1969).

In all, 1,506 sources were identified. An analysis produced a total of 644 official/non-technology sources; 7 official/technology sources; 712 non-official/non-technology sources; 143 non-official/technology sources.

For the purpose of comparing the use of various sources throughout coverage of the shootings, the crisis was divided into two stages, with the first two days of the crisis (January 8–9, 2011) representing the beginning stage of the crisis and the

Table 1
Tucson study technology source × official source crosstabulation.

	Official	Non-official	Total
Non-new technology	644	712	1,356
New technology	7	143	150
Total	651	855	1,506

Table 2
Virginia Tech study technology source × official source crosstabulation.

	Official	Non-official	Total
Non-new technology	320	735	1,055
New technology	30	76	106
Total	350	811	1,161

following six days (January 10–15, 2011) representing the latter stage of the crisis. This same length of time also was used in the study of the Virginia Tech shootings.

4. Results

The final sample for analysis included 1,506 sources, with each source representing a unit of analysis.

RQ1. To what extent did reporters use citizen generated content in their coverage of the Tucson shootings and how did it compare to the Virginia Tech shootings?

Results revealed that of the 1,506 sources identified in the Tucson shootings, 143 fell into the non-official/technology category, or citizen generated content. Therefore, 9.5% of all sources identified in the study were coded as citizen generated content. That is a 3% increase over the amount of citizen generated content found in coverage of the Virginia Tech shootings. See Tables 1 and 2.

RQ2. Were reporters covering the Tucson shootings more likely to use citizen generated content during the beginning stage of the crisis and how did this compare to the Virginia Tech shootings?

Results revealed that of the 143 sources coded as citizen generated content in the study, 53 were used during the first two days of the crisis and 90 were used during the latter stage of the crisis. Therefore, in this study, reporters were less likely to use citizen generated content during the first stage of the crisis, compared to the latter stage (37% vs. 63%). This finding is opposite what was found in the study of the Virginia Tech shootings. In that study, reporters were more likely to use citizen generated content in the beginning stage of the crisis as compared to the latter stage (64% vs. 36%).

RQ3. Overall, did reporters utilize more official or non-official sources during coverage of the Tucson shootings and how did this compare to the Virginia Tech shootings?

Results revealed that of the 1,506 sources coded in the study, 651 were coded as official sources and 855 were coded as non-official sources. Therefore, reporters were more likely to use non-official sources than official sources (57% vs. 43%). However, in coverage of the Virginia Tech shootings, 70% of sources were coded as non-official and 30% as official. See Tables 1 and 2.

RQ4. Were more official technology sources, such as official online statements and news releases, or non-official technology sources (citizen generated content) used during coverage of the Tucson shootings and how did this compare to the Virginia Tech shootings?

Results revealed that of the 150 technology sources used by reporters in the study, 7 were coded as official technology sources and 143 were coded as non-official technology sources, or citizen generated content. Therefore, reporters were more likely to use non-official technology sources, or citizen generated content, than official technology sources, such as statements and news releases from organizational websites or social media sites such as Twitter and Facebook (95% vs. 5%). In coverage of the Virginia Tech shootings, only 72% of technology sources were coded as citizen generated content. See Tables 1 and 2.

RQ5. Was there a difference in the amount of citizen generated content used by newspapers compared to cable and broadcast news websites during the Tucson shootings and how did this compare to the Virginia Tech shootings?

Results revealed that of the 143 sources coded as citizen generated content, 79 sources were used by cable and broadcast news websites and 64 were used by newspapers. Therefore, there appears to be little difference in the amount of citizen generated content used by cable and broadcast news websites and newspapers (55% vs. 45%). This is in contrast to the Virginia Tech study, where researchers found that cable and broadcast news websites were much more likely to use citizen generated content than newspapers (89% vs. 11%).

5. Discussion

The purpose of this study was to examine the media's use of citizen generated content during the Tucson shooting massacre and compare results to a similar study of the Virginia Tech shootings, which occurred nearly 4 years earlier. The study also aims to discuss implications for public relations managers who must deal with a lack of control over information flow during a crisis situation.

Results of this study revealed that 9.5% of the media surveyed for the study used citizen generated content in their coverage of the shootings, a 3% increase over the amount used in news coverage of the Virginia Tech shootings. The findings indicate that not only are media using citizen generated content to report on crises, but the amount of citizen generated content used is on the rise. These findings agree with Becker (2007) who emphasized new technology's impact on coverage of the Virginia Tech shootings. The results also demonstrate what some have described as the disappearance of the traditional gatekeeping function during a crisis (Perse, 2001). It is worth noting that reporters' use of citizen generated content has increased only slightly, and the results of this study are not what one might expect in light of the proliferation of social media sites in use today. It should be expected that reporters' use of citizen generated content in crisis reporting should continue to rise, especially because of the changing media landscape. Future research should continue to monitor reporters' use of citizen generated content during crisis situations.

Results revealed that reporters were less likely to use citizen generated content during the first stage of the crisis, compared to the latter stage. This contradicts the Virginia Tech study, which found that reporters were more likely to use citizen generated content in the beginning stage of the crisis. One possible explanation for this finding is that the Tucson shootings occurred on a Saturday morning in early January. This likely meant fewer reporters and less competition than would be expected during a weekday. With less competition and fewer breaking deadlines, reporters might not have relied so heavily on social media in order to gather information. However, an additional explanation might be due to the differences in citizen generated content used by reporters in each study. In the Virginia Tech shootings, media relied heavily on cell phone video that showed armed police surrounding a campus building as gunfire rang in the background. The video, which was made available to CNN immediately after the shootings, was used to report on the story from the beginning. In the Tucson shootings, no such cell phone video existed. Instead, the media went to social media sites for an explanation of why the shootings had occurred. Reporters used the suspect's own online postings, and those of his friends, to glean information about his possible motives in the days following the shooting. Therefore, in light of these conflicting findings, future research should continue to explore reporters' use of citizen generated content and whether it is relied on more heavily during the early or latter stages of a crisis. Knowing whether reporters favor citizen generated content in the beginning or latter stages can help public relations professionals better prepare and respond during a crisis.

This study also found that reporters were more likely to use non-official sources than official sources (57% vs. 43%); however, in coverage of the Virginia Tech shootings, 70% of sources were coded as non-official and 30% as official. One reason for this discrepancy could be attributed to the victims of the Tucson shooting. Both Giffords and one of those killed, Federal District Judge John M. Roll, were federal employees. Because the Tucson shootings involved two high-ranking government officials it stands to reason that more official sources would be used by reporters. Perhaps future studies should consider the types of people involved in the crisis and use this to determine whether a larger number of official sources will be used. However, it should be noted that even though the Tucson shootings involved two prominent government officials, reporters still used more non-official sources than official sources overall. This agrees with Nacos (1996) and Salwen (1995) who discovered that media rely more heavily on non-official sources during a crisis. However, the findings contradict other researchers who found that official sources dominate news coverage during times of crises (Li & Izard, 2003; Powell & Self, 2003). Therefore, it appears that with or without social media, public relations managers must figure out how to manage crisis situations and counter what is being said by non-official sources, even when the crisis involves people associated with the federal government. The mainstream media's use of social media to access non-official sources means public relations practitioners must learn to respond to the media and public even quicker than before. According to Hannah (2009), in today's media climate, instead of waiting for a crisis manager to develop talking points, reporters can be expected to source any information they can find among user generated content and then ask organization officials to fill in the blanks later.

Like the Virginia Tech study, this study also found that reporters were more likely to use non-official technology sources, or citizen generated content, than official technology sources, such as online statements and news releases (95% vs. 5%). In fact, compared to results of the Virginia Tech shootings, the use of official technology sources has decreased by 23%. This further suggests that crisis managers must go where the media and the public are going when crises occur: social media sites like Twitter, Facebook and YouTube. Reporters are using social media to access non-official sources, so it would stand to reason that information and statements from official sources that are distributed via social media would be embraced by reporters as well. Obviously crisis managers must go there too in order to successfully manage a crisis. Only seven of the 150 technology sources coded in this study were classified as official, and nearly all of those were attributed to organizational websites, not statements or information on social media sites. If crisis managers are only using their organizational web sites to communicate during a crisis, they are missing the mark.

Some organizations, like JetBlue (Hannah, 2009) and the U.S. Coast Guard (Baron & Philbin), have embraced technology during a crisis, but most have remained silent when it comes to social media websites. Findings from this study indicate that reporters are going to where people are and where they are talking, discussing and reporting their own news on social media sites such as Twitter, Facebook and MySpace. That means public relations practitioners must go there too. According

to Baron and Philbin (2009) ". . .the conversation can affect your organization's perceptions during an event whether you are involved in the conversation or not." As Hannah (2009) offered, the interactive nature of social media gives public relations practitioners the tools they need to be part of the conversation that is happening around their organization or company.

Results of the study also found that cable and broadcast news websites were slightly more likely to use citizen generated content than newspapers (55% vs. 45%). This is in contrast to the Virginia Tech study, where researchers found that cable and broadcast news websites were much more likely to use citizen generated content than newspapers (89% vs. 11%). Therefore, it appears that newspapers have increased the amount of citizen generated content used in crisis reporting. Perhaps newspapers, which have suffered from decreasing revenue and increasing layoffs in recent years, have decided to embrace social media as a source of information in order to stay competitive in today's media landscape. Newspapers, which have been slow to embrace technology, are now using citizen generated content to report on crises. That means that crisis managers must embrace technology as well in order to successfully communicate their message during a crisis.

During a crisis, public relations practitioners must figure out how to control the flow of information not only to the general public but to stakeholders and those directly involved in the crisis. In the case of both the Virginia Tech and the Tucson shootings, reporters used citizen generated content and relied on non-official sources. Reporters also used more citizen generated content, or non-official technology sources, than official technology sources. This tells us that crisis managers must do a better job of utilizing social media to communicate during a crisis. Perhaps if official sources are more easily accessible through social media sites, then crisis managers could assert more control over the message. Therefore, it is paramount for public relations practitioners to incorporate the use of citizen generated content into any crisis plan. As Baron and Philbin (2009) stated, "Crisis communication planning today must incorporate monitoring, active engagement with relevant sites and the use of emerging forms of social media." The authors go on to say, "When you plan for things that might go wrong, you also need to plan for the role that social media will play and how its involvement will impact your reputation."

A limitation of the present study was the sample. As mentioned previously, MSNBC.com was not included in the sample because of problems accessing the website's archives, and this could have impacted the results. Additionally, this research was based on a single case study, and although it was used to make comparisons to a previous case study, additional research is needed in order to make any broad claims.

This study advances the literature on crisis management by exploring the media's use of citizen generated content and its impact on public relations practitioners who must manage crises. This study also advances research on the use of official sources in crisis situations and provides additional evidence that media rely more heavily on non-official sources. The study provides additional support for the concept that crisis managers must do a better job of utilizing social media during a crisis situation.

An expansion of this study is needed, particularly since technology and media are changing at a record pace. Future research should explore additional crisis situations and make comparisons between and across cases. Future studies also should explore the use of citizen generated content in disaster or fast-breaking crises that involve violence, such as terrorism, accidents or natural disasters, and make comparisons to those less violent crises that involve business or health-related issues. While the current study focuses on a domestic crisis, additional research should explore crises in different countries and the role social media plays in coverage of these events. Future research also should examine the use of citizen generated content within the context of everyday news coverage, especially since many broadcast and cable stations are now encouraging viewers to go online and upload pictures and videos and provide feedback and reaction to news stories. In addition, crises managers must understand social media and how it impacts public perception; therefore, future studies should also survey public relations practitioners to assess the development and implementation of social media into their crisis planning.

This study used the concept of citizen generated content to examine media coverage of the Tucson shootings and compare it to media coverage of the Virginia Tech shootings, which occurred 4 years earlier. By using a content analysis of newspapers and the websites of cable and broadcast news networks, the authors explored the use of both official and non-official sources and the use of citizen generated content. This study is important because it lends support for crisis managers' use of social media in crisis situations. Reporters are going to social media sites during a crisis to gather information from non-official sources. Clearly, crisis managers must go there as well or risk getting left out of the conversation all together.

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