Abstract

Social media has evolved into an interactive, collaborative, conversational, and community-based platform for crisis communication worldwide over the course of the past 10 years. Crisis information has never been more accessible to immediately affected publics. Alongside this, satellite publics have the ability to stay in the know more efficiently than ever before. However, there is little known about how users consume, create, and promote the risk and crisis information through social media. There is also little known about ancillary communication that happens during a crisis. The current study analyzes the content of over 2,000 tweets using "#Prayers4Paris" and "#ParisAttacks" as search terms to find tweets that were published any time between 5 p.m. and 11:59 p.m. (EST) on November 13, 2015, the day of the terrorist attack in Paris. These tweets were placed into seven categories: (1) support, (2) frustration (w/extremists), (3) frustration (w/world leaders), (4) humor, (5) relief efforts, (6) news, and (7) fear. Data was collected from both official agencies and the general public. The study measures how accessible relief information was made to victims and families and how the general mood of content changed between 5 p.m. and 11:59 p.m.

Keywords: crisis communication, social media, Twitter, terrorism, ISIS, emergency management, relief efforts

Twitter response during the ISIS attacks in Paris

This paper will define crises from the perspective of a public relations professional and examine well-known cases of successful communication plans that rescue organizations from turmoil. Crisis cannot be avoided or predicted, but negative repercussions can be minimized with preparation and professionalism. One of the first steps in this process is differentiating between crisis, crisis communication, and crisis management. In order to manage a crisis effectively, the crisis must be communicated to alleviate or eliminate it. It is possible that the reputation of the organization is more positive after the crisis has occurred, as a result of effective crisis management (Fearn-Banks, 2002).

A crisis can be defined as a major occurrence with a potentially negative outcome affecting the organization, company, or industry, as well as its publics. Public relations professionals use problem-solving every day to handle small situations or avoid larger crisis situations. A *crisis* must be an out-of-the-ordinary occurrence that cannot be predicted (Fearn-Banks, 2002). Crisis communication is the dialog between the organization and its publics prior to, during, and after the crisis. The crisis communication plan that the organization has in place maps out specific strategies and tactics for various possible crises. The plan is designed in such a way that any spokesperson for the organization can refer to it and speak appropriately and responsibly to the media about the crisis (Fearn-Banks, 2002).

Managing a crisis requires observing the requirements of the situation, assessing the best way to keep communication under control. With effective planning, risk and uncertainty of the crisis can be minimized, allowing the organization greater control of the outcome (Fearn-Banks, 2002). The construction of a crisis communication plan deals with assessing the possible crises and having a contingency plan in place. The plan must be comprehendible for any spokesperson of the organization speaking to the media in a time of crisis. Public relations professionals apply appropriate rhetorical strategies such as denial, reducing offensiveness, corrective action and mortification (Nord, 2013).

Crisis managers measure the cost, duration, extent, and reputational impact of the crisis both in planning in advance for the possibility and in unexpected occurrences. Cost refers to the total asset value of losses, whether it is physical assets that need replaced or mortification that affects the emotions of members of the organization and its stakeholders. The duration is the assessment of how long it will take for things to blow over in the media and mapping out the timeline of execution of strategy to get through the crisis. Extent covers how many departments or offices are affected by the crisis and which ones must respond. The last, and most damaging, element is the reputational impact in which case the crisis management team must acknowledge the seriousness of the situation and make decisions that will appeal to the public and deliver transparency in a sensitive manner (Batchelor, 2003).

In addition to the written communications plan for spokespersons to access from within the company, spokespersons should have media training from the public relations professional. Reading the plan on paper and following through when speaking to a reporter can be difficult without proper training (Haddow, 2008).

On April 14, 1912, *Titanic* sunk to the bottom of the Atlantic Ocean. The designers of the ship were so confident in the ship staying afloat that they did not have enough lifeboats by half in case of an evacuation. They did not feel a contingency plan was necessary for the "unsinkable ship." The designers were proven very wrong when the ship struck an iceberg and sank. With an effective crisis communication plan, more than one thousand lives could have been saved that fateful night (Gunn, 2007).

It is hard to say that there will ever be a perfectly managed crisis. All of the planning in the world cannot prevent a natural disaster, mortification, and other crises that happen within organizations. Public relations professionals must always be prepared for the worst, and also make sure spokespersons are prepared to speak to the media on behalf of the organization (Fearn-Banks, 2002).

Literature Review

Crisis management is an essential component to all organizations in any sector. Crises cannot always be prevented, but, with careful planning, they can be minimized and managed professionally. Crisis avoidance is the best form of crisis management, but when it's too late to avoid it, companies have to know how to manage it (Bachelor, 2003). As time progresses, so does technology. Similarly, stakeholders of organizations are turning to technologically advanced channels of communication: social media.

Social media are the biggest game-changers for public relations professionals since modern broadcast television came into play. However, there are risks that come with the benefit of using the internet to communicate in a crisis. "Crisis Communications Management on the Web" discusses how companies are using the Web to communicate effectively with audiences. According to the 2008 article, the Web can serve as both a new digital environment for crisis management, but also as a trigger for crisis to begin. The authors of the article have created a model for crisis management in the virtual world. The four parts of the model include issues management, planning-prevention, crisis, and post-crisis. Issues management refers to the smaller scale of crisis management, handling smaller issues that arise that can lead to crisis if not managed appropriately. Planning-prevention, crisis, and post-crisis refer to the research, execution, and evaluation of the crisis communication plan.

Apologies from executive officers or spokespersons have proven to be very effective in ensuring the satisfaction of loyal customers after a corporate mistake. The method of this study included the examination of a CEO public apology broadcasted via YouTube. Blackberry CEO Mike Lazaridis issued a public apology after a service failure affected Blackberry customers worldwide for three consecutive days in October 2011. 278 Blackberry customers were given a survey with 25 questions about their reactions to the apology and accessibility. They found that the persuasiveness of the apology positively and significantly affected satisfaction with the company after the apology, indicating that apologies have a direct impact on customer satisfaction. Persuasiveness of the apology also mediated the relationship between attitudes towards the CEO and satisfaction (Manika, Papagiannidis, Bourlakis, p. 93).

"Variability in Twitter Content Across the Stages of a Natural Disaster: Implications for Crisis communication" looks at the management and Twitter response before and during Hurricane Sandy that demolished parts of the New Jersey shoreline in October 2012. The researchers looked at the official Twitter accounts of the New Jersey government and disaster relief effort agencies during the prodromal and acute stages of the storm. The method of the study included analyzing tweets using "#sandy" at peak social media times of the day and dividing them into five categories: information, affect display, humor, insult, and spam. The data suggest that information concerning specific behavioral recommendations was difficult to locate

at best.

The researchers used three specific research questions:

1. How does the balance between affect display and useful information shift over the course of the storm?
2. What specific information regarding relief efforts is available through Twitter as the prodromal stage develops?
3. How does available information on Twitter change as a widespread crisis moves from the prodromal to acute stages?

These three questions ultimately lead to the bigger question: how can we improve this for future disasters?

The researchers found there was alarming amount of humor found in the tweets and not enough information for victims and families of victims. Often, Twitter users will use a trending hashtag (i.e. #sandy) and tweet something along the lines of "Glad I'm not in Jersey! #sandy," which will contribute to the trend, but not the purpose of the trend which is for victims to refer to for emergency information. It is worthy to note that the humorous tweets diminished drastically when the hurricane actually made landfall and destroyed homes, among other things. In other words, even people in other regions of the world who were not directly impacted by the hurricane had the decency to see the seriousness of the situation after it actually hit.

A study was conducted at Indiana University Southeast in 2004 on the execution of NASA's crisis communications after the Columbia disaster in 2003. Space shuttle Columbia exploded in the sky 16 minutes before its scheduled landing time at Kennedy Space Center in central Florida. This quickly led to critics calling for the space shuttle program to be eliminated and put NASA's image at stake. The initial response to NASA's crisis communications was ~~very~~ receptive. Jenkins (2003) labeled NASA's response to the Columbia tragedy "a crisis-communications triumph" and proposed that it could serve as a "handbook" for managing crises (p. 8). Zeeck (2003) gushed that, "NASA is now giving a tuition-free tutorial in Advanced Public Relations 301: Crisis Communications" (p. A2). The paper proposes that while the general American public, media, and Congress were impressed by the efforts of NASA in the crisis management, NASA's organizational culture is fundamentally flawed. Using examples of past disasters, Apollo 13 and Challenger, it was clear to critics that fundamental flaws existed in the organization. Specifically, the crisis communications plan was created without consultation from the public affairs staff and therefore, was not executed in synchrony (Kauffman p. 4).

This study was conducted at the University of Mississippi following the BP Oil Spill in the

Gulf of Mexico (Deepwater Horizon oil spill) in April 2010. The researchers mainly analyzed the Twitter feed of the company following the spill. Applying situational crisis communication theory, what they found was unexpected. Of the 1,161 BP tweets, the researchers found reputation repair strategies and responsibility attribution. The most noteworthy is the responsibility attribution, as the theory states PR message are typically low in responsibility attribution (Swain, p. 1). Amidst BP's reputation repair efforts, a spoof Twitter account (@BPGlobalPR), that was detrimental to the execution of the crisis communications plan. In the months following the spill the BP Twitter account, they raised their audience to 95,000, while the spoof account had 128,000 followers. The spoof account would put out sarcastic messages such as, "Yes, we disabled the alarms on the Deepwater Horizon. Oh, like you've never hit the snooze button?" (Hatton, 2010).

Research Questions

This study will observe and analyze tweets using "#Prayers4Paris" and "#ParisAttacks" that were published any time between 5 p.m. and 11:59 p.m. (EST) on November 13, 2015, from both official agencies and the general public regarding the terrorist attacks across the Paris region. The tweets will be grouped into the following categories for each hashtag: support/love and sadness emotions, frustration towards extremist groups, frustration towards world leaders/policy, humor, relief efforts, news, and fear.

RQ 1: How accessible is relief information for victims and families of the November 13, 2015, ISIS attacks in Paris?

RQ 2: Does the mood of the tweets shift between 5:00 p.m. and 11:59 p.m.?

Methodology

Using content analysis, tweets are sampled using "#Prayers4Paris" and "#ParisAttacks" that were sent any time between 5 p.m. and 11:59 p.m. (EST) on November 13, 2015, and categorized into: support, frustration (extremists), frustration (world leaders), humor, relief efforts, news, or fear. Data was collected from both official agencies and the general public. Once the data is collected, percentages are calculated to answer RQ 1. After seeing the percentages were calculated, the answer to RQ 2 can be interpreted based on the content of the tweets.

Instruments

Twitter.com and Microsoft Excel were the instruments used in this study. Twitter has an advanced search feature that allows users to tailor search results to specific hashtags, people, date ranges, and more. This feature is used in social media analytics, crime investigation, and to search deeper into trending topics (Patton, 2105).

Analysis

Data was collected in 15-minute increments, for example, from 5:00-5:15, there were 7 news-related tweets. After 5:15, tweets started over counting until 5:30 and there was a total at the end for each category and a grand total of 2159 tweets by 11:59 p.m. RQ 1 asked how accessible tweets relating to relief efforts with the mass amounts of tweets going through the main hashtags through support, frustration, and fear. There were an overwhelming number of support tweets that could easily bury the news and relief effort tweets for someone looking for direction in the crisis. Crises naturally create a need for not only information, but also for human conversation and compassion (Sutton, 2008). After all data was collected, the percentages of each category were calculated by dividing the total for each category by the grand total of tweets collected.

RQ 2 asked how the mood or tone of the tweets shift from 5:00 p.m. to 11:59 p.m. If there was a spike in the number of frustrated tweets towards world leaders between 7:00 and 7:15, then there is a good chance one of the world leaders just gave a press conference with which users did not agree. There were also spikes in the fear category that suggestes either another explosion or massacre took place in that time frame or the news is travelling the other areas of the world and the users there are expressing their fear.

Researchers at Communication Quarterly performed a similar study about Hurricane Sandy and collected data using tweets with "#Sandy" at peak social media times over the four days leading up to the disaster in October 2012. Something interesting about their data is that they found a severe shift in mood from Day 1 to Day 4 as the storm got closer to making landfall. In the beginning, there were lots of humorous tweets and not a lot of support tweets or relief efforts. Day 4 was mostly relief efforts and humor. The support tweets were not as impactful until real damage the east coast was done in the acute stages of the storm (Spence, 2015).

It is noteworthy to point out that this was the first event that was not of natural cause to utilize "Safety Check" on Facebook. The feature has been used in several natural disasters worldwide since it's launch in October 2014. "Safety Check" uses geolocation to identify affected areas, and must be activated by Facebook in order for people to alert their friends that

they are safe. The feature was originally designed for natural disasters but Mark Zuckerberg had no hesitation to activate the feature for victims in Paris (Chappallet-Lanier, 2015).

Limitations and Future Research

According to White, during response efforts, using a hashtag in a tweet may be time-critical during response efforts and are used for a quick viral dissemination and fast response due to urgent need (White, 2011). In future research, researchers should either use only one hashtag to collect data, or use two, but not at the same time. By using the Twitter Advanced Search feature, using both hashtags only retrieved tweets that appeared together in one tweet. While 2159 tweets used both, there could have been relief efforts using only one of the two hashtags that would be useful to victims. Some limitations to this research include that the hashtags observed primarily cover France only, not other ISIS-affected areas on that day like Lebanon, Kenya, Iraq, and Syria.

References

Chappeller-Lanier, T. (2015). A new use for Facebook's Safety Check. *The Atlantic*. Retreived

   from theatlantic.com.

Patton, D. (2015). Gang violence, crime, and substance use on Twitter: A snapshot of gang

   communications in Detroit. *Society for Social Work and Research.*

 Spence, P., Lachlan K. A., Xialing, L & del Greco, M. (2015). Variability in Twitter Content

   Across the Stages of a Natural Disaster*: Implications for Crisis Communication,

   Communication Quarterly*, 63(2), 171-186.

Sutton, J., Palen, L., & Shklovski, I. (2008), Backchannels on the Front Lines: Emergent Uses of

   Social Media in the 2007 Southern California Wildfires, *Proceedings of the 5th International

   ISCRAM Conference, May, Washington, DC*, pg. 1–9.

White, C. (2011). Social Media, Crisis Communication, and Emergency Management:

   Leveraging Web 2.0 Technology. *CRC Press*. Chp. 1. pg. 31.

Fern-Banks, K. (1996). *Crisis communications: A casebook approach*. Mahuah, NJ. Lawrence

   Erlbaum.

Gonzalez-Herrero, A. & Smith, S. (2008). Crisis communications management on the web: How

   Internet-based technologies are changing the way public relations professionals handle

   business crises. *Journal of Contingencies and Crisis Management*. 16(3) pp. 144-153.

Hatton, B. (2010), BP's PR crisis shows why social media matters, *Daily Post*.

Kauffman, J. (2005). Lost in space: a critique of NASA's crisis communications in the Columbia

   disaster. *Public Relations Review*. 31 pp. 263-275.

Jenkins, K. (2003). NASA hits the right note in response to the latest crisis. *PR Week*. pp. 8.

Manika, D., Papagiannidis, S. & Bourlakis, M. (2015). Cana CEO's YouTube apology following

   a service failure win customer's hearts? *Technological Forecasting and Social Change*. 95

   pp. 87-89.

Spence, P. R., Lachlan, K. A., Lin, X. & del Greco, M. (2015). Variability in Twitter content

   across the stages of a natural disaster: implications for crisis communication, *Communication

   Quarterly,* (63)2 pp. 171-186.

Swain, K. A. (2015) BP's reputation Repair Strategies during the Gulf Oil Spill. *Journal of Risk

   Analysis and Crisis Response*, 5 (1) pp. 2-15

Zeeck, D. (2003). NASA has learned from its mistakes in crisis management. *The News Tribune*.

   pp. A2.