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Snowedout Atlanta: An Analysis of how Stakeholders Engaged in a Facebook Online Support Group During a Crisis

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SNOWEDOUT ATLANTA: AN ANALYSIS OF HOW STAKEHOLDERS
ENGAGED IN A FACEBOOK ONLINE SUPPORT GROUP
DURING A CRISIS

A Thesis
Presented to
the Graduate School of
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In Partial Fulfillment
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Master of Arts
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by
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ABSTRACT

In 2014, snowstorms hit the southern U.S. and paralyzed the Atlanta, Georgia metropolitan area. The people of Atlanta and the surrounding areas accessed a Facebook group page, *SnowedOut Atlanta* (SOA), and some used it to strategically survive the storm. The social media posts produced by the residents of Atlanta before and after the storm provide a rich case of study for health-related, crisis communication and social media scholars.

The objective of this thesis was to investigate the use of social media for the SOA Facebook group through the analyses of wall posts. In order to explore this line of inquiry, quantitative analyses were conducted. The study examined one online support group through a content analysis of member posts to the SOA Facebook page. This analysis examined the uses of affective and cognitive needs of members of an online support group during a crisis event through the lens of uses and gratification theory (Katz et al., 1973). A total of 986 posts were coded for seven categorical variables. The content analysis yielded interesting results that shed light on the adoption of social media during a crisis or disastrous event. The results concluded that the SOA Facebook page was used to satisfy more cognitive needs as oppose to affective needs. Analyses also indicated that women posted to the page more than men.

This research had many implications for health and risk communication professionals. Future research should aim to develop a deeper understanding of why and how social media supports strategic and tactical risk communication efforts a community, organization or corporation may employ during a disastrous or crisis event.

DEDICATION

At the age of 16, I dropped out of high school. Four years later, I lost one of my biggest fans, my father. I knew at age 20 that I had to change a thing or two in my life, so I enrolled in college. Now, I am graduating with my Master's degree and I know that anything is possible in life with motivation and determination. My parents, Bradley D. and Kathleen A. Morgoch, have always been my biggest fans. Without them, I could not succeed in the many ways that I have in life. They provided me with love, support, encouragement, and most importantly logics. They taught me to question everything in life and to be a strong woman. I come from a self-made family, and I will continue this legacy throughout my research and professional work. As my initials, MLM, constitutes my family's success; MLM will be back again. Rest in Peace Pops, Gramps, Ninnie, Nana, and Uncle Teddy.

My boyfriend, Seth, must be recognized in this dedication section. Through thick and thin, sickness or health, Seth has been by my side. He has shown me love and compassion. I consider myself one of the luckiest girls alive because I have Seth in my life. I know in my heart that my father sent Seth to me from heaven above. Being the woman that I am, I know I could have done this without Seth. However, completing my Master's program with Seth in my life has made my life and this experience ten times better and more enjoyable.

Lastly, my brother, Bradley E. Morgoch, taught me life's biggest secrets. He taught me that music could make life more enjoyable, especially while going through life's trials and tribulations. In 2008, on a trip to Ohio, my brother and I sang acapella

style a Notorious B.I.G. song titled *Juicy*. After we finished our concert, my brother

dedicated the song to me. From that day on, that song has gotten me through the toughest

and roughest times. With that being said, I leave you with a remake of the Notorious

B.I.G. song *Juicy*.

This thesis is dedicated to all the teachers that thought I would never amount to
nothing, to all the people that doubted me that try to break me down when I was just
trying to get by and raise no ordinance, to all my people in the struggle, you know what I
am saying?
Uh-ha, it is all good. Baby. Baby. Baby.

[Verse One:]

It was all a dream. I use to skip school to feel more supreme.
Lounging with friends and cruising the street was all I seen.
Hanging out at the mall.
Every Wednesday, a little light lunch and focused on the cream.
I let my mind rot until I lost my pop.
Thinking about life, understanding the hard-nots.
Way back, when I did not know jack, I had to change that.
So, I enrolled in a school that we called App.
I fell in love with school, duh-ha, duh-ha.
But, I never thought I could make it this far.
Now, I am getting a MA degree about to be on the professional scene.
Time to get paid, benefits, salary, time off for vacay.
Born sinner, the opposite of a winner.
Remember when I use to think I could do no better.
Peace to Poppy, Nana, Grampy, Ninnie, Teddy, and Pat and Bill Von-Stein.
I am blowing up like you thought I would. I know Pops you always thought I could.
It is all-good.
Uh, and if you don't know, now you know.

[Chorus:]

You know very well who you are.
Do not let them hold you down, reach for the stars

You had a goal, but not that many because you are the only one
I will give you good and plenty

[Verse Two:]

I made change from the common G.E.D.
To up close and personal with a Master's degree.
And, I'm far from done because I was meant to succeed
And, I can't really believe, but I hit the books all day to spread knowledge in a thesis way.
Now, I couldn't be here without my mom and dad keeping me busy.
Understanding that I am not all that lazy.
I never thought it could ever happen, this learning stuff. I was use to serving tables and stuff.
Now, conventions keep me close like butter played toast
From the City of New York and down the east coast.
Entering the professional scene, working 32 weeks
Soon there will be sold out seats to see ML small speak.
Living life without fear, soaking up the education through my ears.
Lunches. Brunches. Interviews by the shrewd considered a fool because I dropped out of high school. Stereotypes of a rebel misunderstood, but it is still all good.
Now if you don't know, now you know.

[Chorus:]

You know very well who you are.
Do not let them hold you down, reach for the stars
You had a goal, but not that many because you are the only one
I will give you good and plenty

[Verse Three:]

Wealth of experience combined with academia
When I was in the streets, man I could not picture this
Six presentations, and a PR publication
Got three degrees; the only left is the Ph.D.
No need to rush, time will handle that
And my whole crew is smiling

Celebrating everyday because a Master is sprouting
Thinking back on the one-way track
Now, a MA degree will read a kid from the comeback
And my mom loves to show me off, of course
Smiles every time I become someone's resource
We to get fuzz when the people heard of us
No high school degree, was all that was discussed
Surviving the worst days
Now we sip champagne when we thirst-ay
You now right, I like the life I have lived because I went from negative to positive.

And, it's all good.

ACKNOWLEDGMENTS

conference in Washington, DC in 2015. Because of Dr. Weathers and her help, I will be able to see the nation's capital for the first time in my life. Not only did Dr. Weathers help guide my research, but she also acted as a role model and mentor. Dr. Weathers is a strong, professional woman. I hope one day that I model her success and professionalism. At times when I needed a research mentor, she was there. Other times when I needed life advice and general wisdom, she was there, as well. Rain or shine, day or night, I knew I could count on Dr. Weathers for help and guidance.

As the method's guru, Dr. Erin Ash is simply the best. I honor our relationship and her teachings. She taught me so much about quantitative analyses and life in general. My favorite quote from Dr. Ash is "Oh no, don't do it by hand; we let SPSS do everything!" Dr. Ash took the time to analyze my thesis results; testing each and every angle, interpreting what the numbers meant, and showing me how to record tables and charts in my thesis.

Dr. Pyle acted as the risk and crisis expert of the committee. Dr. Pyle is a kind and generous soul. Dr. Pyle helped me construct a solid abstract for my thesis and for a submission to Eastern States Communication Association. Both abstracts struck gold! I will present my research at the ECA convention in 2015 because of his help. If I came to Dr. Pyle for help, I could tell by the look in his eyes that everything was going to be okay. He gave me confidence when I did not have it and provided me with wisdom when I needed it most.

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CHAPTER ONE

INTRODUCTION

In 2014, snowstorms hit the southern U.S. and paralyzed the Atlanta, Georgia

metropolitan area. Local and network news captured the tragedies of the storm, as well as the

successes of a Facebook group, *SnowedOut Atlanta* (SOA). The people of Atlanta and the

surrounding areas who had access to Facebook used it to strategically survive the storm. The

social media posts produced by the residents of Atlanta before and after the storm provide a rich

case of study for health-related, crisis communication and social media scholars.

People engaged the SOA page to send and receive messages, among other things,

concerning information on road conditions, school closing and power outages. Considering the

timely, effective, newsworthy, and extensive distribution of crisis information exhibited in this

case, scholars should review both crisis communication and social media characteristics of SOA

in order to better understand contemporary disaster or crisis responses. This study focuses on the

disaster relief efforts taken by the Atlanta community, using social media as an online support

group in a winter-related disaster event.

The *SnowedOut Atlanta* Group (SOA)

On Tuesday, January 28, 2014, a winter storm brought snow, ice, and brutal cold

temperatures to the South, a part of the country not accustomed to or prepared for such weather

events. Accuweather (2014) claimed that the snowstorm that hit the South was "a once-in-a-10-

year" storm. In Atlanta, one of the major business hubs of the Southeast, traffic came to a halt

causing the city to be paralyzed. Interstates were clogged as commuters and school buses tried to

exit the city's metropolitan area.

Some reports on the snowstorm claimed that it was Atlanta's lack of effective pubic

transportation, and the little coordination between city officials regarding school and business closures that caused the massive gridlock (Burns, 2014). Other reports placed blamed Georgia Emergency Management Agency Director Charley English who did not warn Georgia residents about the winter storm until it was too late (Breslin, 2014). As the storm worsened Tuesday afternoon, motorists became stranded; people had to abandoned their cars, school children had to stay at school overnight, and two mothers gave birth in their cars. Some corporations such as Home Depot and Target opened their doors for the night to individuals who were stranded without food and shelter. The traffic congestion drove The National Guard to Atlanta to help stranded motorists find shelter during and after the storm (Barkhorn, 2014).

With the city and surrounding areas at a stand still, a Georgia woman reached out over social media to help stranded motorists and enabled others to help. At approximately 4:15 p.m., Michelle Sollicito created the "*SnowedOut Atlanta*" Facebook page. The page started with stranded motorists seeking road and route information. In the beginning, the page was also used as a bulletin board to post news articles about the storm and traffic.

At 5:20 p.m., Governor Nathan Deal declared the storm a state of emergency. Around 8 p.m., individuals started to use the page as a rescue mechanism as opposed to a source purely for information. The page succeeds in its rescue efforts because by 11 p.m. approximately 400 people had been helped because of the SOA page. At the end of the first night, the page had 29,000 members, and by the next morning, an additional 17,000 individuals joined the group. The social network group Sollicito created grew so big overnight that it had to be splintered into regional pages (i.e., SnowedOut East Atlanta). Sollicito reported in a media interview that by early Wednesday morning, as many as 300 people were joining the page every 15 minutes (The Atlantic, 2014). On Wednesday, the page was still being used by Atlanta residents to help people

get home and located their cars. At its peak, the SOA page had 55,415 members. The page was massively publicized on the Internet and broadcast media.

Two weeks after the first storm hit Atlanta, a second winter storm landed in the area. The second storm hit Atlanta on Wednesday, February 12, 2014. In order to avoid another winter storm crisis, city and state government officials cancelled school, as well as urged businesses to close as Governor Nathan Deal declared the storm a state of emergency before the storm actually touched ground in Georgia (Ellis, 2014). These preparations taken by the city and state officials reduced the number of winter-related accidents and instances.

Before the storm hit, the SOA was utilized. Individuals flocked to the page to provide and seek information on emergency kits, weather forecasts, power outage protocols, and route warnings. By the time of the second storm, the SOA page had approximately 53,000 members. For the most part, these 53,000 members were familiar with the page's purpose and use. As a result, the page was more structured and organized due to previous experience with the first storm. During the second storm, people used the page to send or receive route guidance and to seek information on a power outage, as well as to deliver encouragement. Not only did the people of Atlanta use the page to seek information, but utility companies also monitored the page to seek information on power outages. The SOA page helped people in Atlanta share eyewitness accounts simultaneously.

Overall, the SOA page was used to seek information, guidance, and share support. This case signifies the importance of employing social media during a disastrous event. The successes of SOA provide scholars evidence-based guidelines on how to effectively use social media during a crisis event. By analyzing the posts of this Facebook page, this study will determine the exact uses of the social media in relation to crisis communication.

Crisis Communication

Fearn-Banks (2010) define crisis communication as "transferring of information to significant persons to either help avoid or prevent a crisis, recover from a crisis, and maintain or enhance reputation" (p. 1). Crisis communication is an effective tool because it enables people to be more prepared to protect themselves from a crisis such as a natural disaster. Natural disasters are often cataclysmic in nature; they can be classified as crisis events (Burke & Zhou, 2010). Thus, crisis communication plays an important role during and after a natural disaster strikes (Fraser, 2004; Staffaroni, 2012).

Generally speaking, when a disaster hits, individuals affected directly and indirectly seek out information. During a disaster, information can be communicated through traditional media as well as online media. Online communication becomes more intertwined during times of disasters (Veil, Buehner & Palenchar, 2011). In a crisis or disaster, a variety of messages need to be communicated to different individuals, and there are many reasons individuals congregate around disaster events looking for information (Vieweg, Hughes, Starbird, & Palen, 2010). Many attempt to contact loved ones to let them know they are safe, or they look for more information about the disaster. Others look to help and offer relief. Social media is a hub for message transmission and retrieval because of its accessibility, popularity, and convenience. Accessing social media has become an everyday occurrence. During times of crises, social media users often seek information on sites such as Facebook and Twitter (Maxwell, 2012).

Social Media

As of August 2012, 69% of adults on the Internet were using social networking sites (Smith & Brenner, 2012). There has been a growing acceptance of using social networking sites during emergencies (Vieweg, Hughes, Starbird, & Palen, 2010; Yates & Paquette, 2011). Since

social media is becoming an increasingly prevalent medium for communication, it is becoming more important to study its use and how it can be employed in a strategic and effective way. Social media use is ordinary, and as such, it is becoming a prominent source for breaking news. During crises, publics' social media usage increases (Smith & Brenner, 2012). Social media is a good outlet for crisis communication because it is a source that millions of people access daily. Also, social media might be especially useful during crises, because nervous publics can be informed quickly and directly (Utz, Schultz, & Glocka, 2013).

Social networking sites such as Facebook have been used as a communication medium for crisis and disaster relief. Just as Facebook is used to transmit and receive disaster information, online support groups are used in a similar manner. Online support groups are often used to send and receive health-related information, advice, concerns, and complaints. Thus, Facebook allows for many of the same practices as online support groups.

Online Support Groups

Online support groups (OSGs) are becoming more popular. Typically, an OSG aids individuals in health or emergency related situations. In OSGs, individuals may "connect with one another through the Internet to discuss their health-related problems, concerns and strategies for better wellbeing" (Wright & Bell, 2003, p. 41). Some OSGs function as purely emotional support, or informational support, and others include a combination of support. Previous research on OSGs has found that health-related groups tend to share more emotional and informational support. Thus, OSGs are commonly used to exchange information and offer emotional support (Gooden & Winefield, 2007). An OSG that is purely cognitive will have individuals using the site to seek and share information and advice, whereas a predominantly affective OSG will share emotional support, gratitude, concerns, or complaints.

Previous research on OSGs has looked at the gendered dimension of OSG use. Studies have shown men tend to participate in information-seeking behavior, while women tend to provide comments that enhance the feeling of community such as support and suggestions (Herring, 2000). By focusing on individual users' motivations and patterns of OSG use, the current study sought to understand the primary use of social media, more specifically Facebook. As an increasing number of OSGs expand their sites and add new features, there is a growing need to understand how social media can be used to satisfy the cognitive and affect the experience of OSGs (Bender, O'Grady, & Jadad, 2008; Kamel-Boulos, & Wheeler, 2007).

Statement of the Problem

Crisis communication and social media separately have a robust research history. However, as a combined entity, research is still needed in the area (Jin, Lin & Austin, 2014). Crisis communication scholars have found that social media is an effective tool during a disastrous event (Utz, Schultz, & Glocka, 2013). Additionally, previous research suggests that social media applications "serve as a new means for disaster survivors, curious onlookers, and compassionate helpers to find information and to assist others" (Palen, Vieweg, Liu, & Hughes, 2009, p. 468). Social media is a category of channels with multiple platforms. A site such as Facebook is a place for new and old friends to gather to post content that is relevant to their lives. Facebook may be used naturally as an OSG because it is used to gather advice on life, share their opinions, and post links to other websites. OSGs are often studied under health and emergency related context because users of OSGs tend to seek and share information and emotions regarding a somewhat life changing event. Previous OSG research concludes that OSGs are a great way for information to be distributed because you can get more information to more people (Eysenbach, Powell, Englesakis, Rizo, & Stern, 2004). It provides immediate responses to large

numbers of people experiencing the same situation.

By using the case of SOA as a template, public relations professionals and citizens alike will understand the importance of social media as a valuable communication tool for risk and crisis management and recovery information. Research is needed to provide evidence-based guidelines for integrating social media into crisis management and recovery practices (Jin, Liu, & Austin, 2014). In the area of crisis communication where stakes are often high, it is especially important to provide evidence-based guidelines that effectively meet publics' expectations for communication via social media (Wright & Hinson, 2009). The SOA case offers crisis management scholars and practitioners a plethora of evidence-based data for application because of how individuals in the Atlanta area and surrounding communities used Facebook as a crisis communication message board to send and receive crisis information.

Rationale and Purpose of Study

The organic nature and abundant amount of user-generated information merits the importance of looking at the SOA case as a template for effective social media use during crises situations. This case is unique because of the social shaping of the technology of Facebook, and the social phenomena of using social media for disaster relief that unfolded naturally. Regarding this case, the only remaining inquiry is why people gravitated toward Facebook, more specifically the SOA Facebook page.

The SOA Facebook page offered everything from helpful advice to a crowdsourcing map connecting stranded motorists with nearby strangers offering shelter and assistance (Burns, 2014). People used the group to post their locations and to ask for help for themselves or their loved ones. Not only were people enlisting help, but offers of assistance were also being publicized via the page. People with large vehicles generously posted their contact information to

retrieve those stranded or bring supplies. Members also opened up their homes for shelter. The posts gained a copious amount of shares, likes, and comments from people all across the nation. Both broadcast and text-based media covered the page's effective ways to transmit and receive crisis communication.

Crisis communication and social media research as separate entities have a rich and robust history. This study aims to close this gap and present researchers an ideal, high-profile case for the analysis of crisis and social mediated communication alike. Specifically, exploration of this case provides insight into how social media can be used to send and receive crisis communication through OSGs (Maxwell, 2012). With the rise in technologies, social media has expanded the traditional approach to crisis communication, and it has enhanced the limits of OSGs. The trisection of crisis communication, social media, and OSGs, will allow us to develop better strategies and tactics of responding to, avoiding, and mitigating crises via online platforms.

Theoretical Framework

This study employs uses and gratification theory (UGT) as a theoretical framework. This theory focuses on the actions of the audience in regards to its media use (Severin & Tankard, 2001). Katz, Gurevitch, and Haas (1973) saw mass media as a way to connect or disconnect with others. They created a list of five categories that classify an individual's needs that lead them to use or access media: cognitive, affective, personal integrative, social integrative, and tension release. Research has been completed identifying uses and gratifications for a variety of technologies including mobile phones, online gaming, and entertainment media (e.g., Bartsch & Viehoff, 2010; Leung & Wei, 2000; Wu, Wang, & Tsai, 2010). Previous UGT research suggests that people seek out media to be informed or educated, to identify with characters of the situation in the media environment, for entertainment, to enhance social interaction, or to escape from the

stresses of daily life (Katz, Blumler & Gurevitch, 1974).

By taking the uses and gratifications perspective as a theoretical backbone, the current study proposes to answer the following questions: What are the motivations behind using OSGs? What were the various needs related to the use of different features available on the SOA site? How do SOA members explain their motives of using Facebook as an effective disaster relief communication platform? Can the use of Facebook be more beneficial to any particular community or organization in certain disastrous events? Finding answers to these questions can ultimately advance an understanding of the use of social media platforms as disaster relief mediums.

Overview

As a case study, the purpose of the current project is to understand why individuals used Facebook during and after the 2014 Atlanta snowstorms. In Chapter Two, this study will explore the contexts of crisis communication and social media. Additionally, it will examine OSGs as a position in understanding the success of this group's interaction and recovery efforts. UGT will be used as the reasoning behind why individuals used the SOA Facebook page. In Chapter Three, this thesis will review the methodology and data collection processes of a quantitative content analysis of the SOA Facebook page. Chapter Four will answer this study's research question and present statistical analyses. In Chapter Five, this thesis will discuss the research results, limitations, and future research implementations. Chapter Six will conclude this thesis.

CHAPTER TWO

LITERATURE REVIEW

This literature review will be divided into two main areas of scholarship. In the first section, crisis communication and social media will be addressed. Understanding the evolution of crisis communication and social media, will allow this study to better understand why individuals used Facebook to transmit and receive crisis communication. The second part of this literature review will outline OSGs and studies on motivations of OSGs individual use. Lastly, the chapter will address UGT as a position to understand why individuals used Facebook to seek help from the Atlanta community members during and after the 2014 snowstorms.

Crisis Communication

The nature of crisis communication is so pragmatic and integrative that various disciplines have explored crisis response strategies in preparation for a crisis situation (Barton, 2001). Fearn-Banks (2009) defines crises as both avoidable and unavoidable events that threaten the strategic objectives of an organization or community and, possibly, the future existence of an organization or community. As mentioned earlier, Fearn-Banks's (2010) define crisis communication as "transferring of information to significant persons to either help avoid or prevent a crisis, recover from a crisis, and maintain or enhance reputation" (p. 1). Crisis communication is vital and necessary for any organization, corporation or community (2010).

Researchers from diverse fields such as public relations, management, social mediated communication, and psychology have studied the causes, behaviors, and consequences involved in crises, and suggest ways of preventing or lessening the damage and loss of lives, goods, and properties following a crisis (Gilpin & Murphy, 2006). Previous crisis communication scholars have often explored crisis-response strategies (e.g., Coombs, 1998; Coombs & Holladay, 1996),

models for social mediated crisis communication (e.g., Jin, Liu, & Austin, 2011), crisis types and situations (e.g., Coombs & Holiday, 2002), emergent communication (e.g., Lindell & Perry, 2004; Wagner, Reggia, Uriagereka, & Wilkinson, 2003), image repair tactics (e.g., Benoit, 1997), and disaster sociology (e.g., Stallings & Quarantelli, 1985; Quarantelli & Dynes, 1977; Quarantelli, 1984). For the current study, Stallings and Quarantelli's (1985) disaster sociology research and Lindell and Perry's (2004) emergent communication research is most applicable. While this study seeks to understand the motivation of using social media to send and receive emergent information during the time of a disaster, it does not seek to understand the crisis type, origin, or source of information as these positions relate to crisis communication studies.

Crisis communication and natural disasters. While crises may take many forms, communication scholars have typically examined crises in organizational or political contexts (e.g., Cole & Fellows, 2008; Sellnow, Seeger, & Ulmer, 2002). Previous research on natural disasters includes organizational communication planning (e.g., Cole & Fellows, 2008; Drabek, Adams, Kilijanek, & Tamminga, 1981; Moe & Pathranarakul, 2006), individual behaviors in disasters (e.g., Freedy, Saladin, Kilpatrick, Resnick, & Saunders, 1994; Quarantelli & Dynes, 1977), and information-seeking behaviors during disaster (e.g., Adams, 1986; Kaniasty, & Norris, 1993; Stafaroni, 2012).

Borrowing from Coffelt, Smith, Sollitto, and Payne (2010) natural disasters are defined as "devastating phenomena that have the potent ability to wreak havoc and cause unfathomable amounts of damage to anything in their wake" (p. 13). Whether the disaster is a tornado, hurricane, flood, or ice storm, the damage can be severe, as history has shown. While these disasters may be predictable days before their arrival, the destruction they cause is no less surprising and can affect an overwhelming number of people (Coffelt et al., 2010). Because

natural disasters are often cataclysmic in nature, they can be classified as a crisis event (Burke & Zhou, 2010).

Crisis communication plays an important role during and after a natural disaster (Fraser, 2004; Staffaroni, 2012). Crisis communication is an effective tool because it empowers people so they can be more prepared to protect themselves from a natural disaster; such communication "should be used to educate, warn and inform a community of the dangers of natural disasters" (Fraser, 2004, p. 2). It has been argued that no matter where an individual resides, natural events may be predictable and anticipated (Cole & Fellows, 2008). For instance, individuals who live along the Gulf Coast expect and even accept natural phenomena as a norm of living there (Cole & Fellows). Similarly, it has been argued that communities along the Gulf Coast must be familiar with crisis communication for the communities to understand and act upon particular material regarding the probable events (Cole & Fellows).

Natural disasters reinforce the notion that crises are powerful physical and social forces that shape the lives of those directly and indirectly affected by the events (Burke & Zhuo, 2010). Just as the term "crisis" is complex, the use of "crisis communication" and "natural disaster" are also very abstract. Communication scholars have anticipated more research to identify the top tools for crisis communication and disaster management (e.g., Staffaroni, 2012). Such tools include social media that citizens use to share information on a daily basis. This study answers this call for research and is an extension to previous crisis communication research because it will examine the cognitive and affective use of social media to send and receive disaster information.

Disaster communication. When a disaster occurs, a rush of communication typically follows. Disaster communication covers all stages of a disaster including the warning, impact,

and recovery stages (Vieweg, Hughes, Starbird, & Palen, 2010; Pyle, 2014). There is a necessity for the public to be informed so they are able to keep themselves safe. During a disaster, information can be communicated through traditional and online media. On-site and online communication becomes more intertwined during times of disasters (Veil, Buehner, & Palenchar, 2011). During a crisis or disaster, a variety of messages need to be communicated to different individuals because people converge around disaster events looking for different information (Palen, Vieweg, Liu, & Hughes, 2008).

Social media such as blogs, Facebook, and Twitter can assist in the process of disseminating information to gratify needs of the audience (Maxwell, 2012). Appropriate use of social media in weather-related disaster situations can assist in information dissemination and comprehension by audiences. Social media are immediate, unfiltered, and can be accurate and perceived credible if planned appropriately. Another advantage to social media being used in weather-related disasters is that users have access to information, social support, elected leaders, and organizations (Bucher, 2002; Coombs & Holladay, 2008; Procopio & Procopio, 2007; Sutton, Palen, & Shklovski, 2008).

Crises and social media. For all publics, social media can provide emotional support during and after crises because it allows publics to virtually band together, share information, and demand resolution (Stephens & Malone, 2009). Social media might be especially useful during crises, because nervous publics can be informed quickly and directly (Utz, Schultz, & Glocka, 2013).

Not only do individuals flock to social media during times of uncertainty, but organizations also access social media. For example, organizations such as the American Red Cross and FEMA have noticed the benefits of using social media as an important communication

channel for crisis communication (Utz, Schultz, & Glocka, 2013). Nonprofit and voluntary disaster organizations have utilized social media to interact with the public and disseminate vital information regarding programs and services (Waters, Burnett, Lamm, & Lucas, 2009).

A significant amount of research has focused on the communicative functions of social media during and after different disasters (Palen, 2008; Shklovski, Palen, & Sutton, 2008). The convergence of social media has erased geographical and temporal barriers, allowing people to participate during a disaster. Previous research has shown that publics who are active social media users or become active during crises assign a higher level of credibility to social media coverage than to traditional mass media crisis coverage (Horrigan & Morris, 2005; Procopio & Procopio, 2007; Sweetser & Metzgar, 2007). Individuals place a higher level of credibility to social media because it is supported eyewitness accounts (Levi, 2012). Through such use of social media, individuals who are directly being affected by the crisis "on the ground" serve as informants to the general public by transmitting firsthand knowledge of the event. Social media users can act as watchdogs by providing and distributing integral and time-sensitive information in the form of photos and videos (Levi, 2012).

In the case of the Atlanta snowstorm, individuals who reside in the Atlanta area were neither familiar with nor expected emergency winter weather information because of the culture of Georgia, and were not given timely and appropriate crisis evacuation information from officials (Burns, 2014). These aspects, coupled with the uncertainty, paralyzed Atlanta and caused motorists to become stranded on roads in freezing temperatures (Ellis, 2014). Community members felt defeat from the storm and did what was easy and accessible. They logged on to Facebook. Facebook allowed victims of the storm to connect and communicate with individuals affected directly or indirectly with the disaster situation in real-time, but it also allowed

individuals to communication with people that they deemed as trustworthy.

Social Media

Social media is an umbrella term that is used to refer to Internet accessible applications that are built around user-generated content (Ellison & Boyd, 2013). Social media have become part of everyday life for many people (Ellison, Steinfield, & Lampe, 2007). There are many different forms of social media, designed to create interaction between users. All social media applications are characterized by a technical ease of use that facilitates production, exchange, and reception of user-generated content among social media users (Schwarz, 2012).

Facebook and crises. Facebook is a social media site that has grown exponentially for individuals seeking new ways of connecting with other individuals (Shen & Bissell, 2013). Facebook has more than 1.1 billion users worldwide (Facebook, 2014). The typical user spends about 20 minutes a day on the site, and two-thirds of users log in at least once a day (Cassidy, 2006). It has expanded well beyond its origins as a platform for sharing news among college students and has become a global information utility (Jacobson, 2014).

Much of the existing research on Facebook has focused on identity presentation and privacy concerns (e.g., Gross & Acquisti, 2005; Pomerantz & Stutzman, 2006), motives and uses of Facebook (e.g. Pempek, Yermolayeva, & Calvert, 2009), identity management and student/faculty relationships (e.g., Hewitt & Forte, 2006; Mazer, Murphy, & Simonds, 2007; Zhao, Grasmuck, & Martin, 2008), and Facebook as an online virtual community (e.g., Cheung, Chiu, & Lee, 2011; Dwyer, Hiltz, Passerini, 2007; Ellison, Steinfield, & Lampe, 2007).

Studies on Facebook's potential to aid individuals and communities during a crisis are just emerging (Zhuo, Wellman, & Yu, 2011). A recent event in which Facebook played a supporting role was during the Haitian earthquake in 2010. The advancement of technology and

social media offered the general public instantaneous ways to help share and seek information, and make donations online or by text from their mobile phones (Lai, 2010). Research on the Southern California Wildfires in 2007 found that people used Facebook for information gathering, verification and distribution as they did not get sufficient data from traditional news sources about the specific areas that caught fire (Sutton, Palen, & Shklovski, 2008). Similarly, during the Arab Spring uprisings of 2011, social media played a vital part in spreading information about the uprisings (Cottle, 2011; Zhuo, Wellman, & Yu, 2011). The role Facebook played in the Arab Spring uprisings included speedy regular contact with the outside world, a medium to express discontent for their economic condition, and a place to gain social support from people directly and indirectly affected by the crisis (Soengas, 2013). Based on numerous studies, Palen, Vieweg, Liu, and Hughes (2009) concluded that social media applications "serve as a new means for disaster survivors, curious onlookers, and compassionate helpers to find information and to assist others" (p. 468). Though some of these studies are general, social media has grown in terms of usage and importance.

Citizens and organization have begun to use Facebook as a communication medium for transmitting crisis information and fostering disaster relief. This relatively new social phenomenon has opened the doors for new research on motives for using Facebook to transmit information during an emergency (Ellison, Steinfield, & Lampe, 2007; Hjorth & Kim, 2011).

Social mobile media. Since the early 2000s accessing social media via mobile devices has become a cultural phenomenon (Hjorth & Kim, 2011). Today, mobile devices help users seamlessly and conveniently explore the Internet for information and allow users to connect and communicate with individuals around the world, at any time. There is a need for researchers to focus on the reach and spread of information via mobile devices, and, subsequently, we must

understand the role social media play, if at all, in helping people in times of disasters and crises (2011).

In news media, much has been broadcasted about the assistance of social and mobile media in the events of political rebellion or at times of crisis management (Hjorth & Kim, 2011). With the rise of social mobile media, citizens increasingly becoming witnesses to various natural disasters and are documenting these events via social media. These events have led us to question how helpful social media and mobile devices are in establishing and maintaining relationships in times of crises.

In a broad sense, the phenomenon of social mobile media and citizen journalist runs parallel with the mobile virtual community (Hjorth & Kim, 2011). Rheingold (2000) defines mobile virtual community by blending the features of virtual communities and mobile communication. Mobile media provides new effective and affective models for capturing, sharing, and monumentalizing events that encapsulated both collective and individual experiences (Hjorth, 2009). In the uprising of democracy in Iran, Egypt, and Tunisia, social media such as Twitter and Facebook took much credit for mobilizing action (Soengas, 2013). Individuals used their mobile phones to send information to the world via social media. Not only did the mobile phone help to collect and disseminate these horrific events, but it also helped shape the affective nature of the event. Worldwide individuals are using social and mobile media to upload their eyewitness accounts to social media. Social media has become an accidental crisis communication platform due to it's accessibility, features, and prominence in society.

Previous research has shown that social media users access social media platforms for newsworthy information before they access traditional media platforms (Hjorth, 2009). By exploring case studies of social mobile media usage during points of crisis, scholars and

practitioners can begin to understand social media user participation. The number of people using social media to seek information and help from their peers is expected to continue to increase (Fox & Purcell, 2010; Sarasohn-Kahn, 2008). Social media, such as Facebook, provide a new venue for individuals in emergency situations to connect with others directly and indirectly impacted by the situation.

Online Support Groups (OSGs)

The core elements of online support groups include the exchange of information along with sharing of experiences and emotions (Ashley, 2012; Eysenbach et al., 2004). Online support groups have become popular over the past few years. As some people who do not have emotional or cognitive support at home can access the Internet. Many online support groups are health and emergency related. Accessing the Internet to gain social, emotional, or cognitive support has grown in popularity. Furthermore, Yahoo! listed almost 25,000 online support groups in their health and wellness section (Eysenbach et al., 2004). As mentioned earlier, typically online support group members may "connect with one another through the Internet to discuss their health-related problems, concerns and strategies for better wellbeing" (Wright & Bell, 2003, p. 41).

Finfgeld (2000) suggests there are both advantages and disadvantages of OSGs. The positive features include no geographical or time restraints, anonymity, the opportunity to observe and being free from the social constraints associated with face-to-face interaction. Disadvantages of OSGs include delayed response, lack of nonverbal cues leading to miscommunication, and accessibility to the Internet. Computer ownership is closely linked to education and income, which limit access for some people to this type of support (Gooden & Winefield, 2007). Another drawback is that these groups may foster social isolation whereby the

only interaction people have is in cyberspace (Finfgeld, 2000). Some scholars have argued that the lack of visual cues may help or hinder connection as gender, race, age, and socio-economic status may be 'neutralized' (Ashley, 2012; Gooden & Winefield, 2007)

Haber, Cohen, Lucas, and Baltes (2007) stated "social support is a communication behavior, as fundamental to interaction as the communication behaviors of informing, persuading, or teaching" (p. 137). Support is helpful in a variety of health and disaster situations, and can have effects on levels of distress (Albrecht, Goldsmith, & Thompson, 2003). House (1981) saw that support could be offered in four types of social support: emotional, instrumental, informational and appraisal. Emotional support is the communication of love, caring, and trust; it would most likely be rendered through communication that conveys that an individual cares for, values, or identifies with another. Emotional support is important in times of stress because it leads the person to feel that they are cared for by others (Cutrona & Russell, 1990). Instrumental support involves behaviors that directly aid the individual in need (1981), and may involve providing tangible goods, services, or aid to another (Barrera, 1986; House, 1981). Examples include providing money or performing work duties for another. Informational support is given through providing information to another (1981). Informational support may be important during a stressful time, where a person gives information, advice, or guidance to help solve a problem (Cutrona & Russell, 1990). Informational support provided during times of stress has been found to reduce depressive symptoms and increase positive affect (Cutrona & Russell, 1990). A final type of support is appraisal support, which helps the person being supported engage in self-evaluation. This can also be called affirmation support where the person providing appraisal support is affirming that some action or statement made by the recipient is appropriate (Jennings, 2014).

Different OSGs offer different types of support. Some OSGs function as purely emotional support, or informational support, and others include a combination of support. Previous research on OSGs has found that health-related groups tend to share more emotional and informational support (Gooden & Winefield, 2007). With the rising popularity of OSGs, sizable research efforts have been made to explore motivations behind participation (Coulson, Buchamn, & Aubeeluck, 2007; Preece, Maloney & Krichmar, 2005), types of support exchanged among OSG members (Coulson, 2005; Jennings, 2014; Eysenbach et al., 2004), and OSGs as they relate to virtual communities (Davison & Pennebaker, 1997; Eysenbach, 2005; Rodgers & Chen, 2005; Turner, Grube, & Meyers, 2001).

Facebook allows for many of the same attributes as support groups. Similar to support groups, individuals form Facebook groups based on commonalities, such as interest in certain topics or membership in the same clubs or organizations. While Facebook may at first seem like a much more public space than online support groups, it may be more of a combination of a transitional support group and an online message board (Ashley, 2012).

OSGs as virtual communities. One of the most promising aspects of the rise of social media sites is the widespread availability of online peer-to-peer community venues, where people with common interests gather "virtually" to share experiences, ask questions, or provide emotional support and self-help. Virtual communities are social networks formed or facilitated through online media (Eysenbach et al., 2004).

Virtual communities have been defined as "social aggregations that emerge from the Internet when enough people carry on . . . public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (Eysenbach, 2005, p. 97). Virtual communities are a low-cost intervention with potentially huge psychological benefits for

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participants. As a result, health researchers have increasingly become interested in understanding virtual peer-to-peer help processes and have set up and studied virtual communities (Eysenbach, 2005). Virtual communities often have the function and character of a self-support group and as such can be classified as OSGs. Although such communities already existed in the era before the Internet, the primary medium for virtual communities today is the Internet, which includes feature such as emailing lists, web based discussion forums, and live chartrooms.

Within OSGs, individuals going through the same crises—consumers with a common health-related interest such as wanting to quit smoking or to lose weight—or informal individuals can exchange information and experiences. Thus, individuals who join and become involved in an OSG are assuming a common identity with other group members. An individual assumes the identity of having a particular problem or concern and assumes that other online members share a similar identity. Messages that are exchanged within the online group reinforce this similar identity.

There is strength in numbers where individuals can provide information, advice or support. Concerning OSGs, the "bridging of knowledge" could be one of the most powerful influences of how crises are managed and how OSGs work together.

OSGs and gender. No matter where social support is received there are gender differences in how information is transmitted and received (Walker, 2014). Research on an OSG for prostate cancer patients found that men typically focused on independence and gaining control through information-seeking, whereas women had a tendency to gain emotional support (Ashley, 2012; Seal, 2006). With regard to OSGs, studies have shown men gravitate toward sarcasm and self-advancing comments, while women tend to provide comments that enhance the feeling of community such as support and suggestions (Herring, 2000).

Research has found that OSGs are used primarily for emotional and informational needs (e.g., Rodgers & Chen, 2005; Walker, 2014). Studies that compared breast cancer to prostate cancer forums found men used online prostate cancer support groups slightly more for informational than for emotional needs (e.g., Walker, 2014). In groups that are made up mostly of people with the same gender, as well as groups that are evenly mixed, men have been found to provide information three times more often than women, while women provide more than twice as many encouraging messages than men (Klemm, Hurst, Dearholt, & Trone, 1998). Similarly, men appear to provide support that is more focused on tasks than emotion, while women provide emotional support more often than they give informational support (Burleson, 2003).

Similar to OSGs, gender norms are also evident through usage of Facebook (Ashley, 2012). Strano (2008) found specific differences in norms of self-presentation between gender and age. Similarly, research has concluded that different gender will likely use the medium (i.e., Facebook) for different purposes (e.g., Ashley, 2012). These findings are similar to previous research findings on gender differences and use of OSGs.

Over recent years there has been a proliferation in the size and number of computer-mediated patient and emergency support groups available to individuals experiencing various health-and community-related problems (Rodgers & Chen, 2005). These online communities offer individuals opportunities to communicate and seek information and support for various concerns within a network of individuals who share similar experiences. Research has shown that OSGs are a great way for information to be distributed because individuals and organizations can get more information to more people (Eysenbach et al., 2004).

Uses and Gratifications Theory

Uses and gratifications (UGT) research has its foundation in communication research

(Whiting & Williams, 2013). According to UGT, media uses are derived from goals because media consumers select specific channels to satisfy needs and achieve gratifications (Katz, Blumler, & Gurevitch, 1974). Rubin (2002) argues that uses and gratifications research is a "psychological communication perspective that stresses individual use and choice" (p. 526). At the most basic level, uses and gratifications research posits individuals actively seek the content that seems to be the most gratifying (Whiting & Williams, 2013). Thus the receiver is the one who interprets the messages and gives them meanings (Katz & Foulkes, 1962; Windahl, Signitzer & Olson, 1996). This theory states that motivations help media users understand what they can gain from consuming a media channel or what they will lose by avoiding or opting out of that media source (Clavio & Kian, 2010).

Katz et al., (1973) saw mass media as a way to connect or disconnect with others. They created a list of five categories that classify an individual's needs that lead them to use or access media. The first category is cognitive needs. In this category, Katz et al. (1973) suggest that people use media to seek information and fulfill a cognitive need. The individual who is trying to act on a cognitive need is looking for some kind of understanding. The second type of need is an affective need. This is the need to find an emotional and/or pleasurable experience. An example of this need may be a cancer patient seeking a social support group to help him/her cope with the diagnosis. The third type of need is the personal integrative need. This reflects the need many individuals have to validate themselves and is also known as the self-esteem need. These people are interested in strengthening their credibility, among others. The fourth type is the social integrative need. The social integrative need explores the social connectivity need that individuals have, and their desire strengthens their contacts with family and friends. The last need is the tension release need. The tension release need is the need that some individuals have

to escape their own realities to relieve from tension, such as watching television.

Uses and gratifications as a theory has shown its fruitfulness by expanding its lens to help explain uses for a variety of technologies including mobile phones, online gaming, and entertainment media (e.g., Bartsch & Viehoff, 2010; Leung & Wei, 2000; Wu, Wang, & Tsai, 2010;). It is important to note that gratifications sought are not necessarily gratifications obtained (Palmgreen, Wenner, & Rosengren, 1985).

UGT has been extensively applied to traditional media. Recent studies have been extended to study the gratifications of other technologies and services including the telephone, the Internet, email, video games, social media, and the mobile phone (Lev-On, 2010). The rise of the Internet and social media has created fruitful directions for further extension of UGT (Browning & Sanderson, 2012; Lev-On, 2010). Ruggiero and Voss (2014) argued that as new communication technologies offer people more choices, it is important to examine their motivations, uses, and gains as essential ingredients in the study of audiences.

UGT and social media. UGT can be relevant in helping to explain social media uses. (Sheldon, 2008). As technology, allows users to communicate with thousands, and perhaps millions, of individuals all over the world (Ruggiero & Voss, 2014). Facebook and Twitter have been the sole focus of several studies on uses and gratifications (Chung, 2014; Sheldon, 2008; Whiting & Williams, 2013). Sheldon (2008) suggests that Facebook fulfills needs traditionally filled by other media, especially when it comes to interpersonal communication needs. This study found that women were more likely to go to Facebook to maintain existing relationships, pass time, and be entertained, while men were more likely to go to Facebook to develop new relationships or meet new people.

Studies have shown that gratifications received are good predictors of media use and recurring media use (Kaye & Johnson, 2002; Palmgreen & Rayburn, 1979). For example, people use the Internet to dispense information and receive social support (Anderson, Swenson, & Kinsella, 2014). Despite people using social media in an attempt to gratify specific needs, research has found that social media sites such as Facebook and Twitter do not consistently gratify these needs (Wang, Tchernev, & Solloway, 2012). However, Chen (2011) states that UGT "suggests that people can select from many media, so if they pick Twitter and stick with it, Twitter must be meeting needs in some way" (p. 757). This means that though social media may not always gratify all needs, a user's continual use of social media signifies that at least some needs are being met on a semi-regular basis.

UGT and mobile phones. In addition to UGT applicability to social mediated research, its use is also appropriate in researching mobile phone technologies. Today, mobile devices help users seamlessly and conveniently explore the Internet for relevant information (Campbell & Kwak, 2011), and allow users to connect and communicate with individuals around the world. Mobile devices offer more access options than computable devices (Mitchell, Rosenstiel, Santhanam, & Christian, 2012), and with their tremendous growth, they are increasingly becoming more important (McCorkindale & Morgoch, 2013).

A considerable number of studies have investigated the uses and gratifications of mobile phones, both in college students (e.g., Aoki & Downes, 2003; Leung & Wei, 2000) and in adult samples (Leung & Wei, 2000; Wei, 2008). Previous uses and gratifications research on mobile phones indicates that the uses include dimensions of instrumentality, sociability, reassurance, immediate accessibility, status symbol, entertainment, communication facilitation, relationships, and mobility (Leung & Wei, 2000; Wei, 2008).

It has also become a communication device in case of emergencies (Walsh & White, 2009). Research on mobile phones and UGT found that mobile phones fulfill a social need for the user. For specific interpersonal communication use, a total of six dimensions were listed: pleasure, affection, inclusion, escape, relaxation, and control (O'Keefe & Sulanowski, 1995; Walsh & White, 2009). Also, the more a user sought entertainment and social interaction, the more time was spent using the medium.

The previous review of uses and gratifications of media, the Internet, mobile phones, and social media provide a strong foundation for the current study. UGT is a useful framework for assessing the content of the SOA Facebook page because it is a psychological communication theory that focuses on the way individuals use mass media to fulfill needs and wants (Rubin, 2002). UGT sees audiences as active communicators, making choice among communication platforms that fulfill needs (Rubin, 2002). Media use, in other words, is selected, goal-directed, and motivated. Considering this makes UGT a valuable theory in studying the motivation of social media participation during a winter disaster. As such, the following research questions are posed:

RQ1: Will affective or cognitive content appear more frequently on the SOA Facebook page?

RQ2: What type of affective content appears on the SOA Facebook page?

RQ3: What type of cognitive content appears on the SOA Facebook page?

RQ4: Does the affective and cognitive content that appears on the SOA Facebook page differ by gender?

Summary

This literature review addressed the contexts of crisis communication and social media. Through the look at history of crisis communication, we can see how the field has evolved from a study of crisis recovery, response, and mitigation, to a field that has required online communication to recover, respond, and mitigate crises. The Internet has provided crisis communication scholars a new avenue of crisis recovery. This avenue has employed social media as an information mecca for a large group of people to respond in real-time. With the triangulation of crisis communication, social media, and UGT, this study will examine SOA member usage via a content analysis and qualitative survey to better explain member motives and intentions of using Facebook. This case offers crisis management scholars and practitioners a plethora of evidence-based data applicable for real-world application.

CHAPTER THREE

METHODOLOGY

This case study utilized quantitative analysis of SOA wall posts to understand why individuals used Facebook as an OSG to communicate disaster information. Stake (1995) defines case study research as "the study of the particularity and complexity of a single case" (p. xi). The SOA group was developed organically and centrally depended on audience interaction. By using social media, the SOA group was successful in transmitting disaster relief information to residents of Atlanta and the surrounding communities. Since this group is unique in the creation and application, as well as unlike other OSG research, the case study method is most applicable for this study. This case is a single instrumental case study (Creswell, 2013), focused on an issue in a bonded time period. The SOA case was created and utilized during and after the 2014 Atlanta snowstorms. The selected period of time for this study included the days leading up to the second snowstorm to events that followed the second storm.

Content Analysis

Quantitative research is often used when a study posits a theory and tests for confirmation or disconfirmation of inquiries (Diriwächter & Valsiner, 2006). Because this study will employ UGT as a theoretical background, quantitative method best fits the research design for the content analysis. To determine the motivation of use of social media in times of disaster, a content analysis of the SOA Facebook page was conducted to determine the presence of affective and cognitive needs and, thus, motivation of social media participation. The nature of this study and a majority of the previous studies dealing with disaster relief and OSG communication through social media make it appropriate to employ this method of content analysis.

Content analysis allows a researcher to quantify concepts and analyze large amounts of text. According to Neuendorf (2002), "Content analysis is a summarizing, quantitative analysis of messages . . . and is not limited as to the types of variables that may be measured or the context in which the messages are created or presented" (p. 10). The nature of Facebook and of the SOA page, with its production of information dissemination, encourages a form of content analysis so that it can reduce the data to relevant information for interpretation.

Walker (2014) demonstrated that there are consistent patterns of uses in OSGs, and that the employment of a method, such as content analysis, is necessary to identify those patterns. Previous research on social media use in disaster relief (Gao, Barbier, Goolsby, & Zeng, 2011; Schwarz, 2012), social media and OSGs (Vitak & Ellison, 2012), and UGT (Walker, 2014; Whiting & Williams, 2013) commonly rely on content analyses to systematically observe and record social media content. Thus, the present study was modeled after previous research.

Sampling. The SOA Facebook page was exclusively used for this content analysis. The social media posts produced by the residents of Atlanta provide an abundant amount of data to analyze. Because of the heavy amount of data on the page, this study narrowed its content selection to primary posts on the SOA Facebook page. Primary posts included both original posts and reposts; comments posted to primary posts were excluded.

The time frame for this analysis was February 10, 2014, two days before the second storm, through February 14, 2014, two days after the second snowstorm. This time frame was selected because of the experience level of the group. By the second storm, the majority of members understood the purpose of the SOA Facebook page and used it accordingly. The days leading to the second snowstorm are particularly interesting because, upon arrival of the second storm, group members were posting ways to avoid and recover from winter weather-related

disasters. This activity produces another layer to this communication phenomenon because members used the page to transmit disaster mitigation and prevention information.

The SOA page grew rapidly in popularity, especially in the first night. During that night, the page received approximately 485 new members per hour. By the time of the second storm, there were 53,000 members of the SOA page. These 53,000 people help to accumulate 3,300 posts during the bonded time frame of February 10, 2014 through February 14, 2014. Because of the heavy amount of data on the SOA page, this study employed systematic sampling. Thus, it was concluded that every nth post would be analyzed to result in a final sample of the page. For this study, the total number of posts from February 10, 2014 through February 14, 2014 was 3,300. To gain a sample of 30% of SOA wall post during the second storm, every third wall post was coded. The study's final sample was comprised of 986 posts.

Coding strategy. For each post of the content analysis, posts were identified by post number, date (i.e., month, day, year), number of Facebook "Likes", and gender of poster. Each post was read through and coded for expressions of appropriate variables in a designated spreadsheet. Where expressions of variables occurred, the respective variable was coded present (1) within the appropriate cell in the spreadsheet. The coded observation warranted for multiple observations of the same variable. That is, when multiple expressions occurred in a single variable, the respected variable was coded for all expressions present. Where expressions of variables did not occur, the respective variable was coded absent (0). One row in the spreadsheet signified one post.

This study utilized a priori coding. A priori coding refers to the concept that the coding scheme is determined prior to the actual analysis (e.g., Saldaña, 2013). UGT informed the coding strategy for this study. To guide the research inquiries, this study employed two previous studies

that used UGT to determined OSG member uses. These studies include Walker's (2014) categorization of cognitive and affective user gratifications of social media and van Leuven's (2009) categorization of user information gratifications in disaster situations.

Borrowing from Walker (2014), the definitions for cognitive and affective were formed. Cognitive needs are typically defined as an intrinsic desire for information and understanding (Lind, 2009). For this study, cognitive needs represent the desire to acquire information or create knowledge and understanding (e.g., Sangwan, 2005; Walker, 2014). As defined by Walker (2014) cognitive expression were those relating to, being, or involving conscious intellectual activity, or posts the were based on or capable of being reduced to empirical factual knowledge. An example of a cognitive post is one that shares or seeks weather or route information.

Affective needs are operationalized as desire for emotion, pleasure, feelings, or support (e.g., Sangwan, 2005; Walker, 2014). Research on OSGs and social media have identified a range of emotional needs (Walker, 2014). Affective expressions were those that related to, or influenced feelings or emotions (Walker, 2014). An example of an affective post is one that expresses a level of gratitude for the group or a concern about the impact of the storm. This study will define affective needs broadly to include all emotive needs modeled after McGuire's (1974) early definition of affective needs, which also include tension relief aspects.

To gain a deeper understanding of cognitive uses of the SOA page, posts were further coded into subcategories based on van Leuven's (2009) categorizations of cognitive needs. Van Leuven (2009) noted the cognitive importance of emerging news information and citizen journalists. Because of this, van Leuven (2009) coded for eyewitness accounts. Eyewitness accounts are necessary to code for because social media is more interactive than traditional

media. Thus, it allows individuals to document and share their eyewitness accounts and experiences.

      Coding categories. Each post was coded to see if cognitive and affective needs were present (1) or absent (0). After each post was classified as affective or cognitive, posts were further coded for various subcategories. Affective subcategories include gratitude (1), support/encouragement (2), concerns (3), and complaints (4). Cognitive subcategories include information-sharing (1), information-seeking (2), and emerging information (3).

      As mentioned earlier, affective posts were further categorized into gratitude, support/encouragement, concerns, or complaint. For a post to be classified as affective/gratitude, it had to express gratitude toward the group. For a post to be classified as affective/support/encouragement, it had to contain words and phases associated with support and encouragement. Such phases included good job, we did it, keep going, and never give up. For a post to be classified as affective/concerns, it had to clearly express frustration, angst, doubt, tiredness, or similar emotions associated with tension. For a post to be classified as affective/complaints, it had to be an expression of unhappiness, or dissatisfied with the some aspect of the crisis situation. Sample posts for the affective categories are displayed in Table 1.

Table 1

Affective Sample Posts

Category	Exemplar Posts
Gratitude	"I appreciate all that you do for the people who really need it. Michelle has my number as I am going to try to get some rest today, but I will check in first thing tomorrow. God bless you all!!!!"
	"Thank you to the amazing guys and lady that gave my husband, me and our friend a ride home from the Pleasant hill road Walmart!!!!!!"
Support/Encouragement	"We did good Atlanta. We have learned"
	"Please stay indoors, report outages and help each other. We shall overcome!"
Concerns	"My coworker is stuck in Riverdale, Ga with no power and three grandbabies under the age of 3. Someone said they heard on the news the national guard will pick up people and take them to a hotel has anyone else heard this? And if so do you have a number or a website?"
	"In bed scared too death for some reason! I'm a true Georgian and I've never been through anything like this."
Complaint	"I would take a proactive "over reaction" anyday...over the late start and ultimate chaos we experienced 2weeks ago! So shut your trap those criticising the Govenor! The people of Georgia spoke loudly last time, now he's responding with action!"
	"I hope this is the last snow for this year. Cant deal with it anymore"

Cognitive posts were further categorized into information-sharing, information-seeking, or emerging information. For a post to be classified as cognitive/information-sharing, a poster must have posted some sort of information with the group. Rather if the poster was sharing information or seeking information, the intent to satisfy cognitive needs must be apparent. For a post to be classified as cognitive/information-seeking, it must be posted to the group with the intent to find information from a fellow group member. For a post to be classified as cognitive/emerging information, information must be posted from an external source about the

storm, or emerging information about the snowstorm via photos or videos. Such post will include

a clickable link to the news story, and photos, which is classified as eyewitness accounts about

the weather condition, or an original photo or video that testifies an eyewitness claim about the

snowstorm. The contrast between information-sharing and emerging information posts are that

emerging information posts share evidence of the testimony of information shared with the group

through photographs, videos, web links, and documents whereas information-sharing posts

strictly convey testimonies. Sample posts for the cognitive categories are displayed in Table 2.

Table 2

Cognitive Sample Posts

Category	Exemplar Posts
Information-Sharing	"DEKALB COUNTY SCHOOLS CLOSED FRIDAY. Don't forget they are already previously scheduled closed Monday for President's Day, unless you hear otherwise…nothing mentioned about a possible change"
	"GEMA relief is set up with food and shelter at the Mall of Georgia in Buford."
Information-Seeking	"Can anyone give me an update on the power outage situation near Webb Road? I checked the map, but it's kind of vague and my friend has turned off her phone to conserve battery for emergencies."
	"If you are currently experiencing an outage, or know of someone else experiencing one, can you post here? Some of the emergency mgt personnel want to monitor this"
Emerging Information	"Sharing from the Kennesaw Police Department: As we start to thaw out, please remain mindful of falling debris from trees, power lines, and buildings [link to story]"
	"It's coming down in Locust Grove! [proof of statement seen in photo posted]"

Additionally, posts were coded for gender. For gender identification, the researcher used

the users name and profile photo(s) to classify the user as either male (1) or female (2).

Inherently, there were some biases in selecting gender for each user. However, the researcher

classified gender to the best of her ability. If gender was unidentifiable then the research coded it as "unidentifiable" (0) and did not include the information in analysis.

Data analysis. To analyze the quantitative data, this study employed Statistical Package for the Social Science (SPSS) version 22. SPSS is an IBM statistics analysis software often used by social scientists to explore casual relationships among variables via statistical testing. For this study, descriptive statistics and frequencies were calculated and evaluated. A Chi-Square test was conducted to determine the relationship between variables.

To determine intercoder reliability, two coders coded 10% of the SOA posts in the sample (n=108). Any disagreements were resolved and thoroughly discussed between the two coders and categories were defined until reliability was established. Hayes and Krippendorff (2007) argue that the Krippendorff's alpha value should be the standard reliability measure for media content analysis. Therefore, this thesis will employ Krippendorff's alpha to determine intercoder reliability. The Krippendorff's alpha value and the percent agreements are included in Table 3.

Table 3

Inter-Coder Reliability

Category	Krippendorff's alpha	% Agreement
Affective: Gratitude	.94	99.1
Affective: Support/Encourage	.82	95.4
Affective: Concerns	.93	99.1
Affective: Complaint	.82	98.1
Cognitive: Information Share	.83	93.5
Cognitive: Information Seek	.95	98.1
Cognitive: Emerging Information	.93	96.3
Gender of Poster	1.00	100

Summary

This chapter has explored how the case study of SOA will be conducted and analyzed. This

study's investigation surrounds the use of the SOA Facebook page, and incorporated data

collected from a content analysis of the SOA page. Modeled after previous research, this analysis

will explore the affective and cognitive expressions on the SOA page while using SPSS to

conduct statistical testing.

CHAPTER FOUR

RESULTS

The purpose of this study was to examine the uses of affective and cognitive needs of members of an online support group used during a crisis event through the lens of UGT (Katz et al., 1973). The study examined one online support group through a content analysis of member posts to the SOA Facebook page. A total of 986 posts were coded for seven categorical variables: four affective categories and three cognitive. The affective categories include gratitude, support/encouragement, concern, and complaint. The cognitive categories include information-seeking, information-sharing, and emerging information.

Out of the 986 unique total wall posts, 70.8% (or 698) were written by females, and 29.2% (or 288) were written by males. This is consistent with previously research that also found that women are more likely to post to online support groups as compared to males (Walker, 2014).

To answer the first three research questions, frequencies were run and are described below. For the final research question, a chi-square test was run to explore relationships among variables. RQ1 asked: Will affective or cognitive content appear more frequently on the SOA Facebook page? For this research question (see Figure 1*)*, the frequency of affective content that appeared in the content analysis was 27.2% (or 268). Similarly, the amount of cognitive content that appeared in the content analysis was 93.4% (or 921). Percentages for frequencies do not equal 100% because coding categories were not mutually exclusive. This means that a single post may have been coded for both cognitive and affective needs.

Figure 1
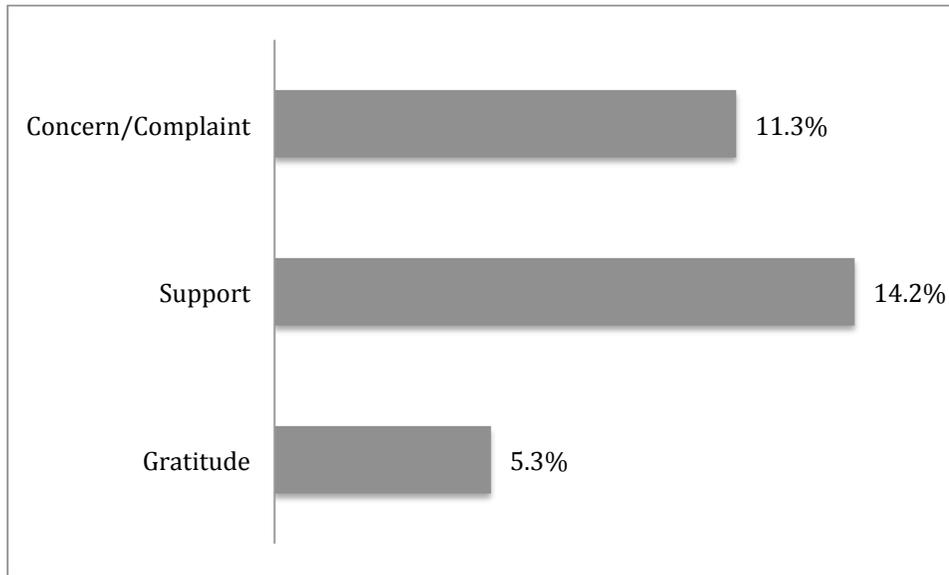
Frequency of Affective and Cognitive Content
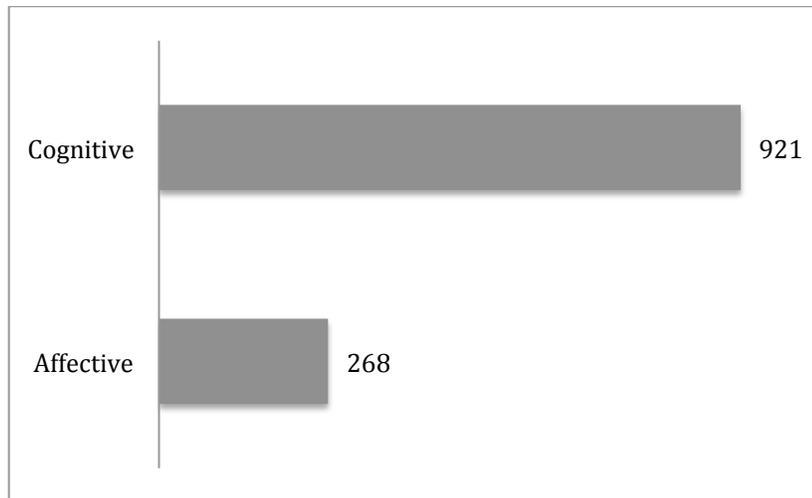
RQ2 asked: What type of affective content appears on the SOA Facebook page?

Affective content was broken down into four different categories. These categories include

affective expressions of gratitude, support/encouragement, concerns, and complaints. Frequency

levels for each category were tested. The amount of gratitude content included 5.3% (or 52)

posts, the amount of support/encouragement content included 14.2% (or 140) posts, the amount

of concern content included 7.3% (or 72) posts, and finally, the amount of complaint content

included 4% (or 39) posts. Previous research combined affective expressions of concern and

complaint in one single category labeled "concerns/complaints" (e.g., Walker, 2014). Combining

concern and complaint into one category captures the negative affective categories into one

single category. This is necessary because it allows the researcher to categorize posts into

positive affective and negative affective content. Thus, based on previous research, the

researcher combined the expressions of concerns and complaints in one single category labeled

"concern/complaint". This means the new frequency level for the category of affective

concern/complaint included 11.3% (or 111) posts. Since the researcher collapsed two categories

into one, the affective content was broken down into three different categories (see Figure 2*).

Figure 2

*Frequency of Affective Content*

RQ3 asked: What type of cognitive content appears on the SOA Facebook page? Cognitive content was broken down into three different categories. These categories include cognitive expressions of information-sharing, information-seeking, and emerging information. Emerging information posts included content such as, photographs, videos, websites, and memes. Frequency levels for each category were tested. The amount of information-sharing content included 65.3% (or 644) posts, the amount of information-seeking content included 18.4% (or 181) posts, and the amount of emerging information content included 44.3% (or 437) posts (see Figure 3*).* For the emerging information posts, frequency levels were tested and conclude that of the emerging posts 40.7% were that of photography, 37.3% of posts were that where information was shared through an external sources (i.e., websites) and 8.7% of posts were that of videos. Emerging information posts and information-sharing posts were similar in nature. The differences among the categories are that emerging information post had a validating

photo, video or websites shared with the information. This means that members were sharing evidence of their testimony with the group through a third party.

Figure 3

Frequency of Cognitive Content

Emerging Information   44.3%

Information-Seeking   18.4%

Information-Sharing   65.3%
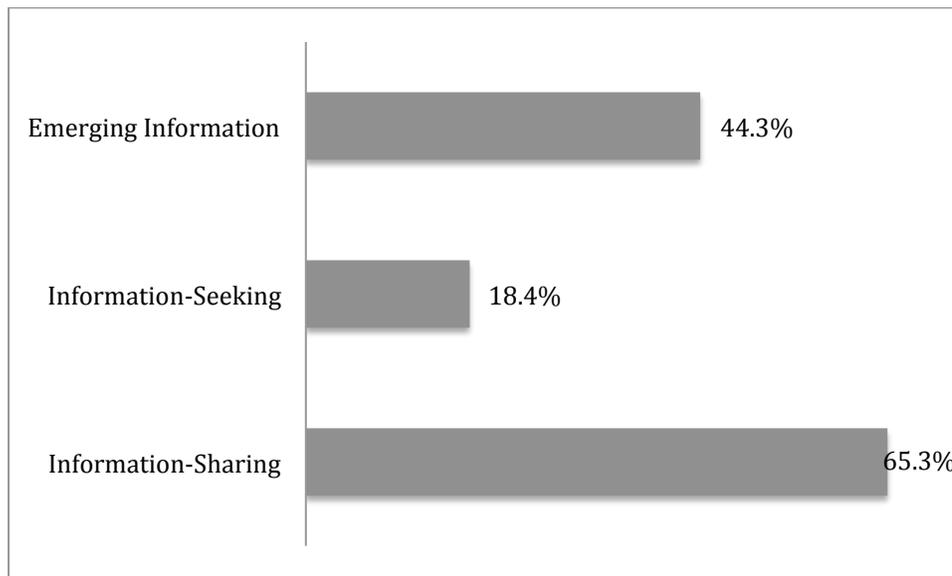
Finally, RQ4 asked: Do the affective and cognitive content that appears on the SOA Facebook page differ by gender? Previous research has noted gender differences in participation in OSGs (e.g., Ashley, 2012; Klemm et al., 1998). A chi-square test of independence was performed to examine the relation between gender and affective content. The relationship between these variable were not significant, X^2 (1, $N = 986$) = 1.31, $p = .25$. The results of the gender and affective chi-square test are presented in Table 4.

Table 4

Relations Among Gender and Affective Posts

	% of Affective Wall Posts According to Gender		
	No	Yes	Total
Male	75.3%	24.7%	100.0%
Female	71.8%	28.2%	100.0%

N = 986
X^2 (1) = 1.31, *p* = .25

Similarly, a chi-square test of independence was performed to examine the relationship between gender and cognitive content. The relation between these variable were not significant, X^2 (1, *N = 986*) = 3.14, *p* = .58. The results of the gender and cognitive chi-square test are present in Table 5.

Table 5

Relations Among Gender and Cognitive Posts

	% of Cognitive Wall Posts According to Gender		
	No	Yes	Total
Male	5.9%	94.1%	100.0%
Female	6.9%	93.1%	100.0%

N = 986
X^2 (1) = 3.14, *p* = .58

This means that there were no gender differences in content posted to the SOA Facebook page. These results do not run parallel with previous research, as males have been found to be more likely to access OSGs for cognitive needs, while females access them for affective needs (e.g., Walker, 2014). For the SOA group, male and female poster content did not discriminate.

Summary

  This chapter has explored the content analysis statistical analyses. Statistical testing was

completed by SPSS version 22; an IBM statistics analysis software often used to explore casual

relationships among variables. For this study, to answer the first three research questions,

descriptive statistics and frequencies were calculated and evaluated. To answer the final research

question, a chi-square test was conducted. The next chapter will explore and discuss these results

in further detail, as well as provide limitations of this study and suggest future research avenues.

CHAPTER FIVE

DISCUSSION

This research investigated an OSG used by community members of Atlanta and the surrounding areas through a content analysis of Facebook wall posts informed by UGT (Katz et al., 1973). The case allowed for four research questions to be addressed, revealing the frequencies of affective and cognitive content of the OSG, and the relationship between gender and content of posts. These questions can help us better understand the motivations for using social media to transmit and receive crisis recovery and management information.

Curiosity over why people frequent media and the benefits they seek from media use has generated much attention among communication scholars (Emenyeonu, 1995). With each new media platform, UGT research has helped identify the cognitive and affective reasons people actively select it (Walker, 2014). Through the exploration of affective and cognitive uses via SOA wall posts, this thesis aimed to secure a better understanding of how social media was adapted during the 2014 snowstorms in Atlanta. Of the 986 posts examined, cognitive posts were the most reacquiring with expressions of information-sharing, followed by emerging information. Following cognitive needs, affective needs were also met. Of the affective content, expressions of support were most frequent.

Affect Content

Among the affective posts were expressions of gratitude for the group, concerns for others, as well as support for those who were in need of shelter, goods, or transportation. Although SOA members used the site primarily to share information, the affective content is still interesting. Most frequent was expressions of encouragement and support to other group members. An interesting layer to the support/encouragement content was the amount of posts

where individuals offered shelter, food and transportation for individual in dire need. Among the affective content, 4.7% of posts were those that offered support to individuals who became victims of the snowstorm. An example of such a post is as follows:

"Hey folks. I'm a trucker stuck on I-285 at exit 60 (Riverdale RD). I have some food and water for anyone close to me. I'll walk up to a mile or so to help if needed. I don't have a ton but I have enough to spare to quite a few folks. If you're pregnant, have kids with you or elderly. You will be priority. Don't be afraid to ask. Times like this-we help each other."

This altruistic behavior exhibited from the group is a phenomenon within itself. Another positive affective categorization was gratitude. When SOA members expressed gratitude, it was most often about gratitude for the creator of the group, the SOA group in general, or for individuals or "heroes" who were activity helping the community. Intermingled in both affective and cognitive posts was the urge to wish safety upon others. Posters would often conclude their post on a note highlighting the importance of safety and safe driving. An example of a posts that contains safety information is as follows:

"Ice Storm Day 2 Ice/Snow to be ending today, but wind is expected to pick up. Trees and tree branches are expected to keep falling. Roads are very icy. Please stay indoors today for your safety. If you must go out, wear a helmet or hardhat under trees. And if you are driving (for what I don't know because most locations are closed): be prepared to get stuck in ice and slide on slick spots. Most residential roads have not been treated. Stay home, be safe and be warm. See earlier post for emergency shelter and phone numbers."

The finding that support/encouragement posts were more prevalent than negative affect posts runs parallel with many other OSG studies that found negative affect posts comprised less

than 4% of posts in each OSG (Chung, 2014). In this study the negative affective post mad-up more than 4% but were not the most frequent type of affective expression shared on the SOA page. While positive affect posts such as encouragement/support were most prevalent, it is important to note that complaints/concerns were expressed secondarily.

Of distinction, negative affect posts such as complaints/concerns were primarily expressed during the peak of the storm, while gratitude was typically expressed afterward. Concern posts typically expressed a level of distress about different stakeholder groups which include school children, elderly community members, and missing individuals. Additionally, posts that contained an expression of concern included those that expressed nervousness or anxiety about the safety of themselves and loved ones, as well as the side effects of the storm (i.e., power outages, school/work cancelations).

The most common complaints expressed were concerning the inconveniences of winter weather. Additionally, there was some criticism from some group members. Members who were from or currently living in a Northern climate found the severity of the 2014 snowstorms amusing and voiced their opinions on the SOA page. Group members who were using the page accordingly found the heckling from the others to be offensive. The "outsiders" who offended the group caused the "insiders" of the group to band together and thus created a stronger bond among group members. SOA members worked as group to not only mitigate weather-related crises but also to ward off any unwelcomed members. According to Granovetter (1973) social networks are composed of strong and weak ties; this SOA page represents the strength of weak ties. Expanding weak ties in a social network through the medium of the Internet, allows for a serendipitous interaction between individuals that may have very little in common (Bowerbank, 2013). Similarly, drawing from Haythornthwaite's (2005) concept of media multiplexity, it is

more likely that close ties interact through a greater quantity of communication channels. In other words, while Facebook may provide an outlet through which weak ties can offer support, strong ties may be more likely to use information posted on Facebook to initiate interaction through a more private channel, such as a phone call or face-to-face meeting.

Affect content ranged from positive to negative affect posts. In both types, group members exhibited the strength of weak ties by offering emotional support, defending one another when outsiders of the group were offensive, as well as giving shelter, food, and warmth for those in need. The altruistic nature of the SOA group supports Granovetter's (1973) theory of weak ties and position on the strength of weak ties in online group membership.

Cognitive Content

Among the cognitive posts were instances of group member sharing information, seeking information, and posting emerging information to the group page. These results run parallel to previous research that also found more cognitive uses for OSG participation (Coulson, Buchanan, & Aubeeluck, 2007; Lasker, Sogolow & Sharim, 2005).

Similar to this study, Walker (2014) found that individuals involved in a health-related crisis are most likely to access OSGs for cognitive needs such as sharing information. SOA members used the site primarily to share information; 65.3% of posts pertain to this category. The majority of shared information concerned snowfall levels, road conditions, school closings, and power outages. Group members used the page to share the knowledge that was uncovered with the individuals who had similar experiences and concerns.

Surprisingly, nearly half (44.3%) of posts contained an aspect of emerging information, or information on the storm from an external source, photos, or videos. Such posts included a clickable link to a news story, or an original photo or video that testifies an eyewitness claim

about the snowstorm. The most emerging information posted was in the form of photography (40.7%), followed by information through an external sources (37.3%) and videos (8.7%). Posts that included information from an external source contained material from local and national news coverage on the storm, strategic ways to avoid weather-related crises, and information about school closures and flight delays. Posts that included photos and videos gave eyewitness accounts to the weather and road conditions. Individuals used photography and videography to record weather events happening in real-time. The posts above mentioned highlight the citizen journalistic efforts taken by SOA group members. Meritt and McCombs (2004) define a citizen journalist as an individual who intends to publish information online meant to benefit a community. The citizen journalists of the SOA group let others know exactly what was occurring at a particular time and location. Sharing eyewitness accounts tracking the storm in real-time benefited the group. These accounts let other group members know what type of weather to expect, conditions of neighborhoods, as well as winter weather survival tips.

The citizen journalists of the SOA group acted as the watchdogs for the 2014 snowstorm. These group members were able to capture weather and road conditions more efficiently than traditional news sources because of the lack of spatial and time restraints. This is because there were over 50,000 members in the group. These 50,000 members were able to capture snow events happening in real-time from various locations around Atlanta. Traditional news outlets were not able to be at the different locations as conveniently as the SOA group members. SOA members posted videos and photos to the page to share weather and route updates in a timely and convenient manner.

Communicating with the large group, a weak tie, normalized the crisis and the group members' experiences. For SOA members, having an outlet that allows one to share with others

may counteract feelings of anxiety and fear. Members were able to find comfort in knowing that other people were experiencing the same uncertainty and searching rigorously for the similar information. Previous research on the strength of weak ties argues that Facebook users are more likely to turn to their friend network for information-based needs and to their weak tie network for support (Bowerbank, 2013). However, in some cases, weak ties, who may be better equipped to provide an individual with information, are also most likely connected to the individual through fewer channels (Haythornthwaite, 2005). Thus, social media sites may be the only channel available for accessing some of these more distant connections, like the Facebook group SOA.

For the cognitive content, members shared information on the storm and eyewitness accounts of the storm. The rise of citizen journalism and social media forces us to reexamine interactions on social media during a crisis. With technology giving us the opportunity to record and document crisis-related events, support groups can easily form via social media to send and receive information, support, videos, pictures, documents, among other things. The expansion of the definition of informational uses needs to be broadened to help delineate both the mode of cognitive needs and the type of cognitive needs to better inform OSG needs and uses.

Gender Dimension

Unlike some studies comparing men and women's use of OSGs, this study found no significant differences between cognitive and affective uses. The study did show, however, that women posted more content to the SOA page. Yet, there was no significant distinction between gender and type of content posted to the page. This is because both gender groups used the SOA as an information hub to transmit and receive crisis-related information.

Previous research suggests gender differences in participation in OSGs (Klemm et al.,

1998; Ashley, 2012) where males are more likely to access groups for cognitive needs, while females for affective needs (Walker, 2014). This research found no significance among gender and type of posts. However through random error it found that females posted 3.5% more affective content than male's posted on the SOA page. Although not significant, the percentage may suggest that females posted slightly more affect expressions to the page as compared to men who accessed the page, which runs parallel to previous research that suggests females are more likely to post affective content to an OSG site. This may be explained by gender differences in communication values. Burleson (2003) tells us that females are taught that talk is the primary vehicle through which intimacy and connectedness are created and maintained. Thus, female's communication style is more associated with the provision of emotional support, whereas men typically communicate for accomplishing instrumental tasks and for conveying information (2003).

Limitations

Although the results of this study yielded beneficial information for the field of healthcare and crisis communication professionals, there are limitations to its utility and application. The most prominent limitation to the current study is the sample size. While a case study of one community-based, crisis-related OSG yields significant insight into the use of social media, the generalizability of these results should be explored further. This may be accomplished by completing a comparative content analysis of a comparable community-based, crisis-related OSG. This would have provided additional substantiation for the claims made about this OSG.

Another limitation to this study is the bracketed time frame of the content analysis. This content analysis was conducted is the selected time frame to gain a better understanding of a matured OSG. With that being said, the content analysis only analyzed one or two crisis events

that took place on the selected Facebook group page. To gain a holistic view of the results, a second content analysis should be conducted in an effort to compare the two crisis events that took place in the same OSG. The potential generalizability of such a limited comparison is compelling, but uncertain.

This study was also limited in that the content analysis of the community-based OSG only included one social media platform, Facebook. Although Facebook is regarded as the most interactive social media platform, and therefore potentially the most conducive to dialogue, in order to have a full understanding of social media's application to health-related crisis communication recovery and management efforts, it would have been beneficial to compare all social media channels utilized by community member of the Atlanta area, such as Twitter and Instagram.

In addition to issues of sample size and limited data collection, there exists a large limitation to this study in that it has been proposed that the UGT is not the best theory to apply to the study of social media. The theory was originally developed to analyze media types such as print communication and television-mediated communication (Katz et al., 1973). Also, there is a debate among communication scholars that UGT is not a theory and more of a framework. This is because the theory of uses and gratifications does not predict behavior. UGT was employed for this thesis based on previous health and risk communication, and social media communication (e.g., Ashley, 2012; Walker, 2014). There are not any existing theories or models specifically aimed at studying social media uses, and therefore a prior theory, such as uses and gratifications, was well-fitted to the context. While the implementation of the UGT of media studies may not be ideal, it is still a useful means of categorizing data. Nonetheless, future research should explore the potential for a social media focused theory of health and risk communication.

Future Research

In order to overcome the limitations of this current study, it would be beneficial to expand this study to have a larger sample size. This would provide more generalizability to the study and allow for greater insight. A larger sample size could be gained through increasing the total number of SOA posts to be studied or by performing a comparative content analysis of a compatible OSG, as well as by including all of the social media outlets used during each crisis-related event. Since this research explored a winter-related crisis, an equivalent winter related crisis would be most ideal when conducting a comparative content analysis or case study. Another way to expand the reach of this study would be to investigate more than Facebook in the investigation of the affective and cognitive uses of social media during a winter-related crisis event. Other social media sites, such as Twitter and Instagram should all be included in the study for a full examination of the use of social media by community members facing a crisis.

Other future research avenues may include incorporating health and risk recovery and management strategies and tactics into website and mobile application design. Since citizens and constitutes alike have adopted mobile and social media use into their daily routine, opportunities need to be available for citizens to access during health and crisis events. More then ever, people are using mobile devices to access social media and newsworthy information (McCorkindale & Morgoch, 2013). Having appropriately designed websites and mobile applications will better help communities, and health and risk communication professionals alike recover and manage a crisis event.

There are many possibilities for future research within the field health and risk communication via social media. Although this study has expanded upon previous research on UGT via social media, it is just a step along the path to understanding how to utilize social media

for health and risk communication to recover and manage a crisis event. So much of the previous research has focused on determining the presence of health and risk messaging instead of the motivations behind the potential use of social media. The future of communication for health and risk communication professionals via social media should aim to develop deeper understanding of why and how social media supports strategically and tactical risk communication efforts a community, organization or corporation may employ during a disastrous or crisis event.

CHAPTER SIX

CONCLUSION

The objective of this thesis was to investigate the use of social media for the SOA

Facebook group through the analyses of wall posts. In order to explore this line of inquiry,

quantitative analyses were conducted. The content analysis yielded interesting results that shed

light on the adoption of social media during a crisis or disastrous event.

During a disaster, the actions of the public shape the resolution to the problem because of

the use of social media to help individuals (Jin, Liu & Austin, 2014). If a person has the

opportunity to inform other individuals of a hazardous situation, they can prevent damage and

even save lives. Results of this analysis revealed that an unexpected disaster like the snowstorms

that hit the southern U.S. in 2014, could lead to an increased active posting behavior in social

networking groups. Especially during the crisis, when users shared their concerns regarding

weather and road conditions, gratitude for the support group, as well as crisis mitigation tips.

All in all, the present results show that social media has offered users chances to quickly

get current and personally relevant information in the context of the snowstorms. Further, the

interactivity of these technologies has enabled those who were more affected by the crisis, to

easily communicate with like-minded peers finding a better way to emotionally and cognitively

cope with the decisive experience. Considering these special functions of social media, one

might appeal to governmental communication authorities to offer official platforms in order to

facilitate flow of information and communication in such situations marked by uncertainty.

By acknowledging the multiple uses of social media during a crisis, scholars need to further

investigate the uses and needs of individual who access as media in times of uncertainly. OSG

research has included Facebook as a prime suspect where the social phenomenon of sending and

receiving support and information takes place. Where this study concludes that more cognitive posts frequent the OSG under investigation, future research should search for a distinction between gender and type of post.

Additionally, future research should explore website and mobile phone application design inspired by OSG, crisis, and social mediated communication research for individuals and communities facing a crisis. Understanding the pressing uses and needs for a particular OSG or citizen journalistic effort will let users and scholars alike use the group site more efficiently and effectively. SOA was primarily used for sharing information on weather and road conditions before and after the storm. Having a page where users can easily find their desired information will allow user to seek and share crisis mitigation information in a timely fashion. Crises happen. At times these events are unavoidable. For SOA, social media shaped the outcome of the emergency situation. This Facebook page is a prime example of how individuals in the Atlanta metropolitan area used social mobile media as a means to communicate crisis information, and, ultimately survive the storm.

APPENDICES

Cognitive & Affective Needs of SOA Facebook Group

PART I:

(POS) Post ID _____
Mark the post ID that is noted on the PDF copy you are coding. This will be a numerical entry.

(DATE) Date _____
Note the date of the post.

(GEN) Gender
Use the first name of the poster and the Facebook profile picture to determine gender. If name is gender-neutral, if initials are used, or if profile picture is non-human, indicate "not sure".
0=Male
1=Female
2=Not sure

(LIKES) Number of "Likes" _____
Note the total number of "Likes" from each coded post. This will be a numerical entry.

PART II: SUBCHARTERIZATION OF POST

The following questions relate to the type of affective and cognitive needs expressed in posts.

(AFFGRATE) "Affective/Gratitude" If a post is considered affective, did the poster express gratitude?
0=No
1=Yes
Example 1:
"Thank you to the amazing guys and lady that gave my husband, me and our friend a ride home from the Pleasant hill road Walmart!!!!!!"

(AFFSUPP) "Affective/Support/Encouragement" If a post is considered affective, did the poster express support or encouragement?
0=No
1=Yes
Example 1:
"Please stay indoors, report outages and help each other. We shall overcome!"
Example 2:
"We did good Atlanta. We have learned"

(AFFCONC) "Affective/Concerns" If a post is considered affective, did the poster express concerns (scared, fearful)?
0=No
1=Yes
Example 1:
"In bed scared too death for some reason! I'm a true Georgian and I've never been through anything like this."

(AFFCOMP) "Affective/Complaints" If a post is considered affective, did the poster express complaints?
0=No
1=Yes
Example 1:
"I hope this is the last snow for this year. Cant deal with it anymore"
Example 2:
"My power been out almost 24 whole hours this is crazyyy wth...what was the point of having out of state power company's come if we still In the dark 24 hours later....#sad".

(COGINFOSH) "Cognitive/Information-Sharing" If a post is considered cognitive, did the poster share information?
0=No
1=Yes
Example 1:
"GEMA relief is set up with food and shelter at the Mall of Georgia in Buford"

(COGINFOSK) "Cognitive/Information-Seeking" If a post is considered cognitive, did the poster seek information?
0=No
1=Yes
Example 1:
"Can anyone give me an update on the power outage situation near Webb Road? I checked the map, but it's kind of vague and my friend has turned off her phone to conserve battery for emergencies"

(COGERINFO) "Cognitive/Emerging Information" If a post is considered cognitive, did the poster share a picture, website, or video?
0=No
1=Picture
2=Video
3=Website
4=Other** (see *Comments)*
5=Unknown/unavailable file
Example 1:
"It's coming down in Locust Grove! [proof of statement seen in photo posted]"

Example 2:

"Hey everyone just checking in from Conyers and it's ice everywhere so I'm warm and safe and I hope you are too!! [proof of statement seen in video posted]".

Example 3:

"Sharing from the Kennesaw Police Department: As we start to thaw out, please remain mindful of falling debris from trees, power lines, and buildings [link to story]"

Example 4:

"For the Midtown Atlanta area, I just got this email from my Building concierge regarding restaurants/stores that are currently open "Good Afternoon! A few residents have called down about places open in the neighborhood. Hopefully this helps. Please let us know if there is anything further we can do to assist...."""

Example 5:

"Schools closed. …. [proof of this statement seen via an "unavailable attachment"]"

(COMM) COMMENTS

If you put "4"/(Other) for the COGERINFO field, then add what emerging information was shared here.

List any meaningful information in the comments. Any questions that surface during the coding process may go here too.

**For "Other" Category: Label what "other is" is comment field. An example of an "other" may include a direct quote from an email or a third-party website (i.e., a state official website such as the police, governor's office, or sent from school district).

Appendix B: Coding Spreadsheet

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