A Qualitative Study of Media Dependency Theory on TikTok Citizen Journalists

by

Jaron D. Paschke, M.A.

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in Strategic Media

School of Communications and the Arts, Liberty University

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Abstract

The purpose of this dissertation was to determine the problem with depending on citizen journalism for news updates on TikTok during Hurricane Ian. To accomplish that, three types of qualitative content analysis were deployed to answer three separate but related research questions. First, a conventional content analysis was used to determine if the communicative roles of citizen journalists differed from their mainstream media counterparts during a crisis. Second, a summative content analysis was used to determine how effective crisis communications from citizen journalists were when compared to those produced by the mainstream media. Lastly, a directed content analysis was used to determine the motivations that underwrote user comments on TikTok videos produced by citizen journalists and mainstream media organizations. This dissertation was an important first step in determining why TikTok users often depend on their peers for news updates during a crisis instead of professional journalists. This study was based on an emergent design that was rooted in the cybernetic and sociopsychological tradition of communication studies. Results from this study indicated that while citizen journalists' existence is necessary, exclusively relying on them for news updates during a crisis such as Hurricane Ian could threaten one's personal safety.

Keywords: citizen journalism, mainstream media, TikTok, Hurricane Ian, crisis

Copyright Page

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Dedication

I want to dedicate this dissertation to the first person who ever believed in me. Thank you, Mom. Without your countless sacrifices, unwavering support, and life lessons, I would not have made it to the end of this journey. Mom, you are grace incarnate, my greatest teacher, and everything I hope to be in life.

To my wife, who cooked every meal and completed every task that I could not during this process, you are my *everything*. You fiercely supported me without hesitation or complaint for over three years. You are my best friend, the love of my life, and more than I will ever deserve. I thank God every single day for putting you in my path. I promise to use this education as a tool to build an incredible future for us both.

To my nephews and nieces, always remember, anything I can do you can do better. This dissertation is but a fraction of what I am confident you will accomplish one day. Each of you is special and has the power to change the world for the better. Take risks, be bold, and dream big. If you follow these three rules, you will have no regrets. Above all else, take care of each other and *always* hold each other to high standards.

Acknowledgments

I would like to first thank Dr. Cynthia Morrill for introducing me to film studies and encouraging me to become an educator. Without a doubt, you are one of my greatest heroes. Enrolling in your class changed the entire course of my life for the better.

Next, I would like to say thank you to Dr. Scott Brown. I am so lucky to have a friend, mentor, and educator like you in my life. Thank you for always believing in me, challenging me to grow, and giving me opportunities.

I would like to also say thank you to Dr. Piers Britton, who taught me that hard work does not mean good work. Dr. Britton, your uncompromising academic standards forced me to grow and become the man I am today. Watching your fierce intellect at work has been one of the great joys of my life.

Most importantly, I would like to express my sincerest thanks to Dr. Sandra Romo, Dr. Shannon Leinen, Dr. Carol Hepburn, and Dr. Robert Mott. Each of you invested an immeasurable amount of time and effort into me to ensure that I would succeed in this program. I am eternally grateful for the advice that each of you gave me while writing this dissertation.

Table of Contents

]	Framing Theory	36
S	Situational Crisis Communication Theory	37
Introduction to	the Problem	37

Problem Statement	\$8
Purpose Statement	;9
Significance of Study	;9
Research Questions	10
Definitions4	1
Summary	13
Chapter 2: Literature Review	15
Overview4	15
Situation to Communication Tradition4	6
Cybernetic Tradition 4	17
Sociopsychological Tradition5	;0
Theoretical Framework5	;2
Transactional Model of Communication5	;3
Media Dependency Theory5	;4
Cognitive Alterations 5	;6
Affective Alterations5	;8
Behavioral Alterations 5	;9
From the Audience to the Individual 6	50
Agenda-Setting Theory 6	52
First-, Second-, and Third-Level Agenda-Setting6	55
Agenda Melding 6	55
Framing Theory 6	6
Frame Building 6	57
Frame-Setting vs. Frame-Sending 6	58
Situational Crisis Communication Theory6	59

The Victim Cluster	69
The Accidental Cluster	70
The Intentional Cluster	70
Threats & Crisis Response Strategies	71
Related Literature	72
Perspectives on News Distribution in America	73
A Dangerous Access Point	75
The Rise of Citizen Journalism	78
From Street to Tweet	79
Trust, Mistrust, and Distrust	80
The Role of the Media and Citizen Journalists During Crisis	81
TikTok	84
Coverage of Hurricane Ian	86
Scholarly Gaps in Media Dependency Theory	87
Scholarly Gaps in Agenda-Setting Theory	89
Scholarly Gaps in Framing Theory	90
Scholarly Gaps in Situational Crisis Communication Theory	91
RQ1: Do the Communicative Roles of Citizen Journalists Differ From Mainstream News Organizations on TikTok When Reporting a Crisis?	
RQ2: How Effective Are the Communications of Citizen Journalists When Compared to Mainstream News Organizations on TikTok During Crisis?	93
RQ3: What Are the Motivational Factors Behind User Comments During a Crisis?	95
Summary	96
Chapter 3: Methodology	97
Overview	97

	Research Method and Design	98
	Similar Emergent Research	102
	Research Questions	104
	Setting	105
	Participants	106
	Procedures	108
	Researcher's Role	110
	Data Collection	111
	Data Analysis	114
	Coding	116
	Trustworthiness	118
	Credibility	119
	Dependability and Confirmability	120
	Transferability	121
	Standard Measurements	121
	Internal Validity	122
	External Validity	123
	Reliability	123
	Objectivity	124
	Ethical Considerations	125
	Hindsight Bias	125
	Summary	126
Chapte	er 4: Results	127
	Overview	127
	Participants	127

Data Analysis	
Conventional Content Analysis Results 1	32
Comedy1	35
Concern 1	38
Gratitude1	39
Damage1	40
Survival1	43
Summative Content Analysis Results1	44
Quantitative Performance 1	45
Manifest Content Analysis1	47
Latent Content Analysis 1	51
Directed Content Analysis Results 1	64
Understanding1	66
Orientation1	67
Play 1	68
Summary1	70
Chapter 5: Discussion 1	71
Overview1	71
Summary of Findings1	71
Citizen Journalists' Flexible Approach to Crisis Communication 1	72
Effective Citizen Journalist Crisis Communications 1	73
Recreational TikTok Use During Crisis 1	74
Discussion 1	75
RQ1: Do the Communicative Roles of Citizen Journalists Differ From Mainstream Media Organizations on TikTok When Reporting a Crisis?	.75

RQ2: How Effective Are the Communications of Citizen Journalists When Compared to Mainstream Media Organizations on TikTok During a Crisis? 178
RQ3: What Are the Motivational Factors Behind User Comments During a Crisis?
Implications
Theoretical
Methodological
Practical
Delimitations and Limitations186
Future Research
Summary
References
Appendices

Table 1	
Table 2	
Table 3	
Table 4	
Table 5	
Table 6	
Table 7	
Table 8	
Table 9	
Table 10	
Table 11	
Table 12	
Table 13	
Table 14	
Table 15	

Figure 1	225
Figure 2	226
Figure 3	. 227

List of Abbreviations

Department of Homeland Security (DOHS)

Federal Emergency Management Agency (FEMA)

World Health Organization (WHO)

Chapter 1: Introduction

Overview

The COVID-19 pandemic was the first in human history where social media was widely used to distribute news intended to protect the public's health (Patel et al., 2021; WHO, 2020). While social media afforded users a variety of benefits during the COVID-19 pandemic, its overabundance of misinformation undermined global response efforts intended to control the spread of the disease (Patel et al., 2021, WHO, 2020). In fact, the World Health Organization (WHO) expressed that the COVID-19 pandemic generated an infodemic, or a glut of information and disinformation, wherein many social media users regularly and purposefully attempted to distribute incorrect information for their own personal gain (2020). The contradictory messages distributed to the public during the COVID-19 pandemic caused anxiety, panic, physical harm, and an overall mistrust in mainstream news organizations (Handarkho et al., 2022; Liu & Liu, 2020; Patel et al., 2021; Scoy et al., 2021; WHO, 2020).

This is not the first time that contradictory information spread by the mainstream media contributed to a generalized mistrust toward it. For example, some argued that the dramatized, contradictory, and sensationalized stories about the American GIs in the Vietnam War (1955–1975) left a population of viewers in permanent doubt of the media's credibility (Huebner, 2005). Others have suggested that mistrust in the media increased after the Bush Administration disseminated propaganda (e.g., reports on weapons of mass destruction) using mainstream media outlets (Kellner, 2004). Minority groups who survived Hurricane Katrina's destruction in 2005 have even expressed that their trust in the mainstream media severely waned when the natural disaster was reported on inaccurately (Voorhees et al., 2007). The accumulation of such

contradictory news reports contributed to the largest decline in Americans' confidence and trust in the mainstream media since 1935 (Swift, 2016).

The mainstream media cannot be held entirely responsible for the public's declining trust and confidence in them, however. In fact, much of the decline in confidence and trust in the mainstream media can be attributed to information and communication gaps created by governmental organizations, such as the Federal Emergency Management Agency (FEMA). During Hurricane Katrina, for example, Michael Chertoff, former Secretary of Homeland Security, and Michael Brown, former Director of FEMA, did not speak publicly for several days after the natural disaster because of their strained professional relationship (Garnett & Kouzmin, 2007). The lack of communication between federal agencies greatly contributed to FEMA's ineffective response to Hurricane Katrina and generated information and communication gaps in how the crisis communications were being managed and distributed (Garnett & Kouzmin, 2007). For this reason and others, Hurricane Katrina "was as much a communication disaster as it was a natural and bureaucratic disaster" (Garnett & Kouzmin, 2007, p. 171). Such misinformation and communication gaps limited the quality of communications the mainstream media could deliver to the public.

To determine how governmental organizations such as FEMA can reduce information gaps and improve the quality of information provided to the public through outlets such as the mainstream media, it is important to define crisis communication and outline its importance. Broadly, Coombs (2010) defines crisis communication as "the collection, processing, and dissemination of information required to address a crisis situation" (p. 20). Coombs (2010) splits crisis communication into three specific categories: (a) precrisis, (b) crisis communication, and (c) postcrisis. In the precrisis phase of crisis communication, information concerning risks, decision making, and potential crisis management strategies are collected (Coombs, 2010). Crisis communication, however, concerns only the collection, processing, and dissemination of information to the public (Coombs, 2010). Postcrisis occurs after the crisis has concluded and involves a dissection of crisis management efforts and all follow-up communications that may or may not be needed (Coombs, 2010). During the crisis communication phase, it is imperative that governmental organizations collect, process, and disseminate accurate information because the mainstream media will quickly report what is disseminated to a broader audience.

When errors in crisis communication are made by governmental organizations, it is imperative that such issues are documented during the postcrisis phase and anticipated during future precrisis events. However, this is not always the case. In the postcrisis phase of Hurricane Katrina, the United States Department of Homeland Security (DOHS) "generated a 217-page document that outlined lessons learned from Hurricane Katrina" (Oyer et al., 2010, p. 4). A study that compared lessons learned from Hurricane Katrina, which occurred in 2005, to crisis communications during Hurricane Gustav in 2008 found that crisis communications had not improved (Oyer et al., 2010). Although crisis communications from FEMA during Hurricane Gustav were "twice as verbose as their Hurricane Katrina counterparts, they actually contained far less information on how to prepare for the crisis or what FEMA's role would be" (Oyer et al., 2010, p. 7). In brief, when governmental organizations fail to implement lessons learned from past crisis communications and continually make similar mistakes, mistrust in the mainstream media—which often relay governmental crisis communications to a broader audience—may also be negatively impacted.

The accumulation of information gaps, misinformation, and disinformation, regardless of who created or caused it, contributed to the growing mistrust or skeptical attitude towards those who relay such inaccuracies to the greater public (e.g., the mainstream media; Lenard, 2008). However, a skeptical attitude or mistrust towards the mainstream media is not entirely bad (Lenard, 2008). Lenard (2008) asserts that mistrust motivates citizens to be vigilant of their governments, legislators, and fellow citizens. Such a mistrust, to some extent, serves as a checks and balances system that ensures institutions are working properly (Lenard, 2008). That said, it is not the mere presence of mistrust in the mainstream media that is cause for concern. Rather, it is the historic rate at which mistrust in the mainstream media grew in response to the COVID-19 infodemic that is alarming (Liu & Liu, 2020; Patel et al., 2021; Scoy et al., 2021; WHO, 2020). The growing presence of mistrust in the mainstream media suggests that the public is inching towards distrust, or "a suspicious or cynical attitude" that is "inimical to democracy" (Lenard, 2008, pp. 312–313). Distrust manifests when a person, institution, or organization commits repeated trust offenses and for this reason is no longer trusted as a viable source of information (Lenard, 2008). If mistrust transforms into distrust, the personal safety of the public could be threatened. Lenard (2008) contends that distrust can result in the downfall of the governmental institutions designed to keep the public safe and functioning. It is imperative to gain a greater understanding of how the infodemic impacted crisis communication.

While the presence of a doubtful or skeptical attitude (e.g., mistrust) towards the mainstream media is normal (Lenard, 2008), the alarmingly high rates of mistrust produced by the infodemic are cause for great concern (Liu & Liu, 2020; Patel et al., 2021; Scoy et al., 2021; WHO, 2020); especially in the context of a natural disaster, which presents some of the most immediate and violent threats to the public. Natural disasters, such as hurricanes, earthquakes, and tornados, often strike quickly and locally and can have devastating consequences. Since the public may use the mainstream media to receive updates on evacuations, shelter in place

guidelines, and more, it stands to reason that historically high rates of mistrust caused by the infodemic may negatively impact the credibility of crisis communications during natural disasters. Furthermore, because mistrust is the precursor to distrust, which can threaten the institutions (e.g., democracy) designed to keep the public safe and functioning, it is important to investigate how the mistrust generated by the COVID-19 infodemic impacted natural disaster reporting more so than other types of crises.

It is not enough to simply examine how historically high levels of mistrust in the mainstream media negatively impacted crisis communications during a natural disaster. Since America's declining trust in the mainstream media coincided with a rise in online citizen journalism, it is possible that users sought out alternative news outlets in the wake of an accumulation of inaccurately reported news stories. Citizen journalists are particularly dangerous in the context of natural disaster and crisis communication for several reasons. First, citizen journalists are beholden to no one. Unlike professional journalists, who are bound to a code of standards and ethics such as those produced by the Society of Professional Journalists, citizen journalists are not required to report information accurately during a crisis. Similarly, a citizen journalist is not required to conduct a postcrisis phase evaluation of their organizations, such as the 217-page document produced by the Department of Homeland Security (DOHS) after Hurricane Katrina (Oyer et al., 2010). Rather, citizen journalists may instead continually make errors without severe consequences or recompense. It is therefore imperative that the growing mistrust in the mainstream media be analyzed in the context of citizen journalists, whom Americans are migrating towards more and more frequently after the COVID-19 infodemic. For those reasons, this qualitative study examined the communicative roles of citizen journalists on TikTok during a natural disaster and investigated how effective their messages were when

compared to those distributed by the mainstream media, a topic that is inadequately understood and therefore a current gap in strategic media scholarship.

Background

Humankind has recorded and distributed news as far back as 59 B.C.E., when the authors of the Acta Diurna disseminated official updates in Rome on papyrus paper and stone tablets (Wright, 2016). Although stone and paper are no longer the preferred medium of most journalists, the authors of the Acta Diurna laid the foundation for modern journalism by distributing topical information to the public. In this sense, echoes of modern journalism can be found throughout time and in many different countries (Wright, 2016). However, it was not until the early 20th century that journalism became professionalized (Winfield, 2008). In the early 1900s, several schools for journalism were founded, the National Press Club was created, and salaries for trained professionals grew exponentially (Winfield, 2008). The history and importance of this transition is well-documented and occurred mostly in response to amateur journalists oversaturating the field (Winfield, 2008). From a social perspective, the professionalization of journalism marked a significant societal effort intended to tame misinformation, acknowledge amateur journalism as a threat to society, and bind professional journalists to a modern set of widely agreed-upon standards of ethical practice (Winfield, 2008).

The Path Toward Mistrust

Mistrust in the mainstream media has been gradually building over time in response to a steady flow of contradictory and inaccurate news reports (Huebner, 2005; Kellner, 2004; Voorhees et al., 2007). It is important to note, however, that there is not one single event that all scholars cite as the beginning of this path toward mistrust in the mainstream media. Rather, it is the accumulation of these contradictory and inaccurate news reports that have paved the path

towards mistrust. Although the professionalization of journalism was an apt solution for controlling the narrative in the early 20th century, inaccurate stories were still occasionally reported to the public. Exemplifying this, the *Chicago Tribune* printed and distributed over 150,000 newspapers with the inaccurate headline, "Dewey Defeats Truman," the morning after Truman won the 1948 presidential election (Baime, 2020). Despite publishers correcting such inaccuracies, various instances of inaccurate reporting have gradually led audiences to doubt the media's credibility and ultimately express mistrust in them (Huebner, 2005; Kellner, 2004; Voorhees et al., 2007).

Some scholars argue that a gradual mistrust toward the mainstream media has been building since the Vietnam War (1955–1975; Tumber & Palmer, 2004). In fact, scholars have noted that many people believed the media's opposition to the Vietnam War was in large part why the United States was defeated (Huebner, 2005; Tumber & Palmer, 2004). Specifically, scholars have cited the contradictory news reports produced by the mainstream media during the Vietnam War as one reason for why the public began expressing mistrust (Huebner, 2005). While the mainstream media would regularly distribute stories of American GIs helping civilians by warning them of incoming attacks, they also frequently published horror stories about the abuse of innocent civilians (Huebner, 2005).

Perhaps the most well-known of these Vietnam horror stories is the burning of civilians' huts in Cam Ne, which left innocent bystanders without shelter in the harsh elements of the jungle (Huebner, 2005). Despite there being plenty of positive stories about American GIs in circulation, the horror stories produced by the media were simply more provocative, sensational, and dramatic than their positive counterparts. Contradictory news reports of the Vietnam War did not just change the public's perception of the government and the military; they also catalyzed a

mistrust in the media for a select population of viewers (Huebner, 2005). Although the Vietnam War is acknowledged by some as the creator of America's mistrust in the mainstream media, a brief review of more recent contradictory news reports demonstrates that other events and various types of crises contributed to a decline in media credibility (Huebner, 2005; Kellner, 2004; Voorhees et al., 2007).

After the Vietnam War

Perhaps one of the most damaging blows to the mainstream media's credibility occurred shortly after the Vietnam War in 1981 (Eason, 2009). That year, a young Black *Washington Post* reporter named Janet Cooke won the Pulitzer Prize for Journalism, the highest honor a journalist can receive (Eason, 2009). The story Cooke published followed an 8-year-old heroin addict named Jimmy, which was a pseudonym Cooke used to protect the identity of the individual (Eason, 2009). Cooke's detailed description of Jimmy's injection scars and struggles evoked mass media attention (Eason, 2009). Shortly after Cooke was awarded the Pulitzer Prize, however, she admitted that she fabricated the entire story (Eason, 2009). In this sense, the highest honor a journalist can receive was awarded to a fabricator, a liar, and a deceiver (Eason, 2009). Eason (2009) notes that this instance of fabrication negatively altered the public's perception of minorities in the professionalized field of journalism.

This fabricated story also coincided with the HIV/AIDS epidemic in America, wherein intravenous drugs could spread a dangerous and misunderstood disease. At a pivotal time in the United States where the media were trying to spread facts about HIV/AIDS intended to protect the public's health, fabricated stories were recognized by the highest journalistic authorities as factual. It cannot be overstated that Cooke's deception and other incidents contributed to the public's growing mistrust in the mainstream media. Although the negative impact and

implications of Cooke's actions are worthy of acknowledgement, the consequences of such fabrication pale in comparison to the falsehoods produced during the United States' invasion of Iraq.

In 2003, the invasion of Iraq was rationalized by the U.S. government and mainstream media as a preventative measure to locate and destroy weapons of mass destruction (Kellner, 2004). However, it was ultimately determined that such weapons of mass destruction were not present and therefore the primary rationale for the invasion of Iraq was irrational. While some might argue that this was ultimately a failure of the president and military intelligence, there were noted journalistic failures during this time as well. During this time, print and television journalists spread propaganda intended to rally support for a baseless invasion through their mainstream media outlets (Kornblut, 2005). Journalists failed to filter information for the public and exercise the editorial judgement that would otherwise protect the public from misinformation. To complicate the matter further, an investigation also revealed that at least three separate journalists were paid to promote Bush Administration policies to curry favor with the public (Kornblut, 2005). Such an event no doubt caused some to question the journalistic integrity and ethics of those from whom they receive their news reports. Though the presence of disinformation (e.g., the existence of weapons of mass destruction) in the mainstream media did not immediately threaten the safety of the public, the mistrust generated by it further complicated crisis communication.

Mistrust and Natural Disaster

Mistrust in the mainstream media presents a valid and immediate threat to public safety during natural disasters such as hurricanes, earthquakes, and tornados. For example, contradictory reports distributed to the public during Hurricane Katrina, a natural disaster that occurred in 2005, directly threatened the lives of many Louisiana residents (Voorhees et al., 2007). During this natural disaster, "the Bush administration used the media to spread disinformation about what caused the flooding, whether it could have been foreseen or prevented, and problems in federal disaster relief" (Voorhees et al., 2007, p. 416). While the presence of disinformation in the mainstream media did not immediately threaten the safety of the public, the mistrust generated by it complicated crisis communication. In this case, the mainstream media were unable to filter disinformation and exercise the appropriate editorial judgement that may have positively impacted the safety of Louisiana residents during Hurricane Katrina.

Louisiana residents depended on the media for updates about Hurricane Katrina, evacuation warnings, and accurate information about the flooding (Voorhees et al., 2007). Though television reports facilitated the evacuation of countless residents, "race and especially class played major roles in who was left behind" (Voorhees et al., 2007, p. 416). In fact, minority groups who survived the Hurricane Katrina disaster of 2005 described news coverage of the event as inaccurate and misrepresentative of their personal experience (Voorhees et al., 2007). The mainstream media's inability to provide an equitable understanding of Hurricane Katrina's impact negatively impacted their credibility, threatened individual safety, and contributed to the public's gradually building mistrust in them (Voorhees et al., 2007).

Like disinformation, insufficient information and poor information management have also complicated crisis communication during natural disasters. If reports about a natural disaster are ambiguous or slow to emerge, the public will likely begin to spread rumors (Homeland Security, 2018). Insufficient information and poor information management have a variety of causes, including but not limited to lack of verification from official sources and lack of data (Homeland Security, 2018). Insufficient information and its ambiguity can also compel audiences to search for other more informative sources (Ball-Rokeach & DeFleur, 1976). However, by attempting to resolve ambiguous news reports, viewers often increase the chances that they will encounter misinformation and disinformation, which is especially dangerous during natural disasters. Generally, the public begins to spread rumors and attempts to resolve ambiguous news reports while the mainstream media are still gathering additional information (Homeland Security, 2018). Such complications were observed during the 2015 Nepal earthquake, which killed nearly 10,000 people (Homeland Security, 2018). One study found that a variety of information management-related issues (e.g., insufficient information) delayed effective response to the 2015 earthquake (Hall et al., 2017). Insufficient information and poor information management during natural disasters also contribute to the building mistrust in the mainstream media.

The Advent of Social Media

The advent of social media further complicated the mainstream media's ability to filter misinformation and disinformation from the news during a crisis. Social media democratized news and made it nearly impossible for the mainstream media to exclude amateurs from reporting on the news. Although social media afforded users a seemingly limitless number of ways to participate in the news, emerging social media platforms (e.g., TikTok) also created new opportunities for citizen journalists to abuse their personal outlets and distribute misinformation or disinformation. Exemplifying this, citizen journalists have been observed hashtag hijacking, or placing crisis-related hashtags in their unrelated posts to attract users, gain clout, and ultimately cause more confusion for the public during a crisis. The threat of misinformation and disinformation is further exacerbated by recent negative perceptions of professional journalism that were formed during the COVID-19 pandemic (Liu & Liu, 2020; Patel et al., 2021; Scoy et al., 2021; WHO, 2020). In several studies, users described the professional news updates they received from the mainstream media during the COVID-19 pandemic as contradictory and unreliable and even stated that their relationship with professional news was permanently altered (Liu & Liu, 2020; Patel et al., 2021; Scoy et al., 2021; WHO, 2020).

The negative perceptions of the mainstream media can in large part be attributed to the infodemic that accompanied the COVID-19 pandemic (Patel et al., 2021; WHO, 2020). During the infodemic, misinformation and disinformation were spread by professional journalists for both personal and political advancement (Patel et al., 2021; WHO, 2020). In response to this, citizen journalists on social media observed increases in followers on emerging social media platforms such as TikTok. This study therefore operated on the belief that audiences have become dependent on citizen journalists for news updates in response to the public's declining trust in the mainstream media.

Hurricane Ian

While Hurricane Katrina and the 2015 South Nepal earthquake make for interesting misinformation and disinformation case studies, a more recent natural disaster has yet to be explored in the context of citizen journalism. In 2022, Hurricane Ian made landfall in Florida, producing 150-mile-an-hour winds, killing hundreds of people and leaving the entire country of Cuba without electricity (Omer, 2022). Unlike Hurricane Katrina and the 2015 South Nepal earthquake, Hurricane Ian occurred during a time when mistrust in the mainstream media was especially high due to the ongoing COVID-19 infodemic. Exploring how news updates about Hurricane Ian were impacted by the ongoing infodemic and, more specifically, the historically high rates of mistrust was a necessary step towards developing strategies intended to protect the

public against misinformation and disinformation during a natural disaster. New insights into how the infodemic impacted crisis communication were generated by investigating how the communicative roles of the mainstream media and citizen journalists differed during Hurricane Ian, how effective the communications of citizen journalists were when compared to mainstream media organizations, and the motivations that underlie users' comments on TikTok.

Historical Foundations

The origin and meaning of the term "citizen journalism" have been widely debated over the years (Allan, 2009). While many have offered definitions of the phrase that distinguish it from its professional counterpart (Ornebring, 2013; Watson, 2011), others have simply suggested that there is no perfect description of citizen journalism awaiting discovery (Allan, 2009). It is also worth noting that attempts to define such a complicated term reveal much about the author's personal motives and beliefs (Allan, 2009). For that reason, this study operated on the belief that it was more useful to determine when the phrase entered the public's lexicon and describe the type of amateur material that qualifies as citizen journalism rather than offer an unjustified definition (Allan, 2009). To accomplish that, it was necessary to provide a brief history of breaking news and pinpoint when professional news organizations became dependent on citizen journalists for content.

A Brief History of Breaking News

The term "breaking news," or unpredictable news reports that break up regularly scheduled programming (Lewis & Cushion, 2009), can be traced back to 1906 when telegraphers representing various news agencies prefaced their messages with "flash" or "bulletin" (Weigel, 2012). With that in mind, journalists have a long and well-documented history of desiring to be the first to report newsworthy updates that only increased in response to the introduction of the television and later the internet (Allan, 2009; Lewis & Cushion, 2009; Weigel, 2012). It should therefore come as no surprise that events worthy of breaking the news were often tied to crisis, such as a natural disaster (Allan, 2009). What may be surprising to some, however, is that breaking news was frequently accompanied by early indications of citizen journalism's potential despite the term having not yet entered the public's lexicon (Allan, 2009). For example, the assassination of President John F. Kennedy in 1963 was not professionally filmed by a journalist but instead accidentally captured by an untrained bystander named Abraham Zapruder. Similarly, the 1994 Northridge earthquake responsible for the deaths of 57 people and for injuring thousands more, was first reported on the internet by an online user (Allan, 2009). It is therefore important to examine citizen journalism through the lens of crisis because professional journalism is most reliant on its citizens' perspectives during times of social instability caused by crisis.

Professional journalists' desire to be the first to report breaking news did not change with the arrival of social media in 1997. What did change, however, was professional journalists' willingness to regularly depend on content generated by citizens to break news first (Allan, 2009). Though the arrival of Indymedia in 1999 and the creation of South Korea's OhMyNews.com contributed to this gradual shift in attitude (Ornebring, 2013), most agree that it officially occurred following the 2004 South Asian tsunami, when over 250,000 people died in a single day (Allan, 2009). After this event, citizens posted a seemingly endless number of individual accounts and pictures to various online outlets (Allan, 2009).

A Shift in Attitude Towards Citizen Journalism

For the first time in history, professional journalists found themselves regularly depending on citizen journalists for content (Allan, 2009). Such a dependency is historically

significant because it proved that the preconditions needed for citizen journalism to thrive were predicated on advancing and accessible technology (e.g., social media, phones, digital cameras, blogs, the internet, etc.). The shift in attitude towards citizen journalism is also significant because it suggests that technological advancements following the tsunami (e.g., the iPhone) would continue to empower individual citizens to participate in the news and increase the professional media's reliance on citizen journalists. This is not to say that professional journalists and the mainstream media they represent have never been dependent on citizen journalists for content. In fact, some of the most jarring pictures and video footage come from the perspectives of citizen journalists. Examples of such footage include the 1963 assassination of former President John F. Kennedy, the 1994 Northridge earthquakes, and the 2005 Katrina hurricane. However, the 2004 tsunami marked a pivotal shift in attitude towards content produced by citizen journalists that was made possible through advancing technology. Professional journalists' dependence on content produced by citizen journalists has increased over time and developed in response to both the advent of the smart phone and social media platforms such as TikTok.

Although the smart phone and social media have a variety of benefits, each became particularly problematic during the COVID-19 pandemic, and more specifically, during the infodemic that accompanied it. Advancing mobile technology and increased access to it empowered users to regularly interact with the glut of unreliable information produced by the COVID-19 infodemic, leaving citizens unsure of whom to place their trust in (Liu & Liu, 2020; Patel et al., 2021; Scoy et al., 2021; WHO, 2020). Since then, the follower counts of citizen journalists on TikTok have continually increased, and positive perceptions of professional journalism have decreased (Liu & Liu, 2020; Scoy et al., 2021). For this reason, it is important to explore how the communicative roles of citizen journalists currently differ from professional journalists on TikTok when reporting a natural disaster. By exploring the communicative roles of citizen journalists, it is possible to reveal new insights into why users are trusting citizen journalists for news updates instead of the mainstream media during a natural disaster. It is also important to explore how effective the communications of citizen journalists are when compared to the mainstream media during crises and determine the motivational factors behind user comments on TikTok during crises. Results from such a study may provide insights into how citizen journalists create effective messages that attract social media users.

Societal Foundations

Watson (2011) argues that four interdependent sociological preconditions must exist for citizen journalism to emerge in a modern society. The first precondition necessary is the existence of advanced technology, and more specifically, advanced digital technology (Watson, 2011). A society with advanced digital technology can be characterized as one that offers its citizens both widespread access to the internet and the social media applications that make self-publication possible (Watson, 2011). The second social precondition necessary for citizen journalism to manifest is the presence of an active and engaged audience, rather than a passive one (Watson, 2011). For citizen journalism to form, an active audience, or one that regularly engages with media messages, must be present (Watson, 2011). Active audiences, and by extension citizen journalism, cannot manifest without the advanced digital technology that makes reliable global communication and consistent audience interactivity possible (Watson, 2011).

For citizen journalism to manifest in society, a third precondition must also be met: "individuals must meet the precondition that they participate in digital culture, a 'lived' experience' of cyberspace" (Watson, 2011, p. 5). The lived digital experience consists of three separate elements: participation, remediation, and bricolage (Deuze, 2006; Watson, 2011). To satisfy the third precondition, users must consistently involve themselves in the digital culture (participate), correct or critique information using new media (remediation), and create something new using a multitude of existing artifacts (bricolage) such as a blog (Deuze, 2006; Watson, 2011). The fourth and final precondition necessary for citizen journalism to emerge is an organizational transition in the news media, or the creation of digital spaces wherein the public can directly interact with news agencies online (Watson, 2011). Although the news media have only recently begun distributing information through their own company accounts, such a phenomenon, along with others, can be viewed as an organizational transition in the news media purposed toward both increasing and generating audience interaction with them (Watson, 2011).

Although these four preconditions had been satisfied in time for the arrival of the 2004 tsunami in South Asia, no one could have anticipated the rate at which each precondition would evolve. Consider advanced digital technology as an example of a precondition for citizen journalism that has evolved exponentially since 2004. Since each social precondition for citizen journalism is reliant on and shaped by that which came before it, it stands to reason that the technological advancements of the last 18 years would have impacted each precondition that followed. Advancing digital technology has since created more actively engaged audiences, generated a more authentic lived experience in cyberspace, and catalyzed several organizational transitions in the news media landscape. Presently, all four social preconditions for citizen journalists are not just satisfied; they are as powerful as they have ever been. In effect, citizen journalists have increased in number, attracted more attention from the public, and gained a larger audience.

Theoretical Foundations

Qualitative inquiry is predicated on an emergent design (Creswell & Poth, 2017). The research protocol must be extremely malleable, allowing for all aspects of the process to change as data are collected (Creswell & Poth, 2017). An emergent design allows for each aspect of the protocol to change, including but not limited to the research questions, forms of data collection, and participant types (Creswell & Poth, 2017). The emergent design does not permit a theory to be prescribed or tested. Instead, it allows for theory to emerge from the collected data. I assumed, however, that this investigation might produce results consistent with four communication theories. These include media dependency theory, agenda-setting theory, framing theory, and situational crisis communication theory.

Media Dependency Theory

Ball-Rokeach and DeFleur's (1976) media systems dependency theory posits that an individual's ability to accomplish their goals is predicated on the resources the media make available to them (Ball-Rokeach et al., 1984). Thus, an individual's type of media dependency is a function of both their individual goal and the available resources (Ball-Rokeach et al., 1984). Media dependency theory contends three types of individual media dependencies exist: understanding dependency, orientation dependency, and play dependency (Ball-Rokeach et al., 1984). The type and intensity of media dependency that manifest are shaped by the goals of an individual (Ball-Rokeach et al., 1984). Similarly, the type and intensity of media dependency that manifest could have cognitive, affective, or behavioral consequences (Ball-Rokeach & DeFleur, 1976; Ball-Rokeach et al., 1984; Grant et al., 1991). For example, a cognitive consequence of increased media dependency is the creation and resolution of ambiguity (Ball-Rokeach & DeFleur, 1976). This is particularly important during times of social instability or

crisis because an individual's dependency on the media rises and falls in response to their ability to reconcile ambiguity (Ball-Rokeach, 1985).

The advent of social media and its absorption into our everyday lives has changed the original theoretical conceptualization of media dependency theory (Lee, 2011). Social media has altered individuals' dependency on the media by empowering users with the tools to create and distribute their own news (Lee, 2011). Although users were once reliant on the mainstream media to accomplish their individualized goals, social media empowered them to rely on each other (e.g., citizen journalists, other users, etc.) to achieve them (Lee, 2011). Exemplifying this, Lee (2011) notes that YouTube was used to meet the emotional needs of users following the passing of Michael Jackson. Specifically, users depended on YouTube comment sections to facilitate their grieving and express their emotions (Lee, 2011).

Since Lee's (2011) study explored fan-made and professionally-made YouTube videos, her results have important implications for citizen journalist content. If videos posted by mainstream news organizations during a crisis can be used to facilitate grieving, an affective consequence of media dependency, it stands to reason that similar cognitive, affective, and behavioral consequences might also be associated with depending on citizen journalists for news updates. This is particularly problematic because citizen journalists are not formally trained and do not "filter information" for the public or "exercise editorial judgement" (Ornebring, 2013, p. 44). For this reason, individuals may experience a variety of cognitive, affective, and behavioral consequences that are predicated on inaccurate reports from unreliable citizen journalists. If social media users have in the past used mainstream news outlets to facilitate their grieving—an affective consequence of media dependency—it stands to reason those social media users might also experience cognitive consequences such as attitude formation and agenda-setting.

Agenda-Setting Theory

McCombs and Shaw's agenda-setting theory argues that the media can influence which stories reach public view (McCombs & Shaw, 1963; McCombs & Reynolds, 2002; McCombs et al., 2014). It is important to note that Ball-Rokeach and DeFleur's (1976) media dependency theory encompasses agenda-setting within its framework and argues that it is a cognitive consequence of media dependency. According to agenda-setting theory, the media influence what stories, political figures, and opinions are given the most attention. In effect, agenda-setting theory argues that the public's attitudes, opinions, and behavior are at least to some degree a byproduct of the media's influence (McCombs & Reynolds, 2002; McCombs et al., 2014). Although there are many facets of agenda-setting theory, it is easiest to conceptualize it as "the transfer of issue salience from the news media to the public agenda" (McCombs et al., 2014, p. 787). That said, increased interest in agenda-setting theory has catalyzed investigations into different agenda types outside of the traditional media (Bantimaroudis et al., 2010; Kliger-Vilenchik, 2011; McCombs et al., 2014).

The widespread diffusion of social media, blogs, and video platforms such as YouTube has made it possible for individuals to set their own agendas by producing their own content (Antony & Tomas, 2010). Exemplifying this, YouTube audiences used uploaded footage of the 2009 Oscar Grant shooting and more specifically the comment sections of these videos to critique the video, praise the cameraperson, and call for a response (Antony & Tomas, 2010). Rather than relying on the resources and agendas made available by the mainstream media, users relied on one another for video footage and discourse. The advent of social media empowered individuals to express themselves, source information from one another, and create their own agendas.

Framing Theory

First proposed by Gregory Bateson in 1972, framing theory contends that the presentation of messages, or how they are framed, can impact audience reception (Bateson, 1972). Framing refers to a process wherein individuals construct their viewpoints on specific issues in response to messages (Chong & Druckman, 2007). Since individuals frame their perspectives on topics using their own individual experiences, framing is closely related to individual attitude and belief systems. Framing theory is therefore predicated on the idea that all issues can be "viewed from a variety of perspectives and be construed as having implications for multiple values or considerations" (Chong & Druckman, 2007, p. 104). Bateson (1972) contends that framing can impact how spectators process information and make decisions based upon what is presented to them.

In many instances, scholars have used framing theory to understand how the mainstream media cover natural disaster (Herzog, 2014; Houston et al., 2012; Perida et al., 2022). For instance, a recent study examined how Nigerian newspapers framed large-scale flooding and found that how the media frame a natural disaster can positively impact disaster risk reduction (Ganiyu et al., 2017). Since the Nigerian media were found to be least active before a natural disaster, scholars recommended that the media begin to distribute "proactive frames" intended to inform the public about how they can reduce disaster risk (Ganiyu et al., 2017, p. 151). If the mainstream media can frame a story and impact audience reception, it stands to reason that citizen journalists with large subscriber counts can behave similarly.

Situational Crisis Communication Theory

First proposed in 2007 by Timothy Coombs, situational crisis communication theory "offers a framework for understanding how crisis communication can be used to protect reputational assets" (Coombs, 2007, p. 163). Situational Crisis Communication can predict stakeholder reactions to crisis and evaluate reputational threats posed by crisis (Coombs, 2007). Coombs (2007) outlines three separate types of crises in his theoretical framework for crisis response. These include the victim cluster, the accidental cluster, and the intentional cluster (Coombs, 2007). It is important to identify the type of crisis to predict stakeholder reactions and create appropriate responses.

Situational crisis communication theory has been used in the past to explore how organizations repair public image following a crisis (Ki & Nekmat, 2014). In a recent survey of various Fortune 500 companies, it was found that organizations frequently apologize to repair reputational damage following a crisis and appease stakeholders (Ki & Nekmat, 2014). In a similar study that examined Red Cross crisis responses, scholars found that the non-profit only deployed strategies consistent with situational crisis communication theory about a third of the time, which was detrimental to their reputation (Sisco et al., 2010). In sum, situational crisis communication theory uses a set of evidence-driven strategies that can be used to manage and mitigate crisis response (Coombs, 2007).

Introduction to the Problem

More than half of the human population depends on social media to accomplish their individualized goals (e.g., news gathering, meeting friends, etc.; Dixon, 2022; Riffe et al., 2008). While the advent of social media has in some cases facilitated the completion of those goals, it has also presented us with new challenges, especially during natural disasters. Specifically, the increasing pervasiveness of misinformation and disinformation on social media has become detrimental to digitally mediated communications regarding the health and safety of users during natural disasters (Scoy et al., 2021). These challenges are further complicated by the growing population of online citizen journalists, whose subscriber counts indicate that users are no longer depending on the mainstream media for news updates (Raza et al., 2022).

Problem Statement

The problem is that social media users have become dependent on citizen journalists for information during natural disasters and are thus vulnerable to the spread of misinformation and disinformation that could negatively impact their personal safety. Recent research found that public health messaging during COVID-19 created mistrust in the mainstream media and a yearning for a reliable source of information (Scoy et al., 2021). Similar articles also found that exposure to the mainstream media during COVID-19 resulted in panic, anxiety, and a permanently altered relationship with the mainstream media (Liu & Liu, 2020). In the wake of this altered relationship, the rising subscriber counts of online citizen journalists on TikTok accounts indicate that users have turned to alternative news sources to gather updates during natural disasters (Raza et al., 2022). These research articles, as well as other recent projects that investigate crisis, fall short in that they did not examine how crisis communication during natural disasters was impacted by the COVID-19 infodemic (Canary et al., 2022; Handarkho et al., 2022; Liu & Liu, 2020; Scoy et al., 2021). To develop a further understanding of this problem, this study examined the communicative roles of citizen journalists, how effective their messages were when compared to the mainstream media, and the goals of users who interacted with citizen journalist content (Canary et al., 2022; Handarkho et al., 2022; Liu & Liu, 2020; Scoy et al., 2021).

Purpose Statement

The purpose of this qualitative content analysis was to understand the problems associated with users depending on citizen journalists on TikTok for news updates during crises. Through three types of qualitative content analysis, I determined that the problem with exclusively depending on citizen journalists for news updates during crises is that viewers are more susceptible to misinformation and disinformation. Since stakeholders (e.g., followers) have fewer behavioral expectations of citizen journalists, there are also less severe consequences for their distribution of inaccurate information than those consequences a mainstream media organization might face from spreading falsities. This study revealed results consistent with media dependency theory, which conceptualizes the types of motivational goals and consequences associated with depending on the media (Ball-Rokeach, 1985; Ball-Rokeach & DeFleur, 1976). In addition, results consistent with agenda-setting theory, which is encompassed within media dependency theory and conceptualizes how the media's ability to determine which stories, political figures, and topics enter the public sphere of discussion, were also observed (McCombs, 2002; McCombs et al., 2014). Further, results consistent with framing theory, which contends that the presentations of messages, or how they are framed, can impact how audiences receive and perceive them, were also observed (Bateson, 1972). Lastly, this study observed results consistent with situational crisis communication theory, which "offers a framework for understanding how crisis communication can be used to protect reputational assets" (Coombs, 2007, p. 163).

Significance of Study

This study contributed to and advanced past strategic media studies by exploring links between the COVID-19 infodemic, citizen journalism, and crisis communication during Hurricane Ian, a current gap in strategic media scholarship. Since the mainstream media became dependent on citizen journalists for content, this study examined their communicative roles from a media dependency, agenda-setting, framing, and situational crisis communication perspective. Exploring the communicative roles of citizen journalists, the effectiveness of their messages, and the user goals associated with their TikTok accounts during a natural disaster generated new findings with practical implications. For example, the findings from this study can be strategically used by mainstream media news organizations to increase their organization's trustworthiness, an aspect that is particularly important to repairing organizational reputation after the COVID-19 infodemic. This study also contributed to the field of strategic media by generating findings that offer a deeper understanding of how the conceptualization of media dependency, and by extension agenda-setting, has changed in response to a consistently evolving technological landscape. Similarly, this study also contributed to the field of strategic media by exploring how framing and situational crisis communication has evolved in response to emerging social media platforms such as TikTok. Finally, this study contributed to the field of strategic media by revealing new insights into the motivational factors that underlie the formation of dependencies on citizen journalists during a natural disaster.

Research Questions

Three research questions guided this qualitative content analysis. The first question sought to determine if the communicative roles of citizen journalists differed from mainstream news organizations on TikTok when reporting a crisis. This research question revealed new insights into how citizen journalists act as strategic communicators during natural disaster on TikTok, an insufficiently explored social media platform. The second research question determined how effective the crisis communications from citizen journalists were when compared to mainstream media organizations on TikTok during a crisis. I determined effectiveness through a combination of quantitative (e.g., number of likes, comments, saves, shares, word frequency, etc.) and qualitative (e.g., interpretation of the context, usage of language, implicit meaning, explicit meaning, etc.) factors. A criterion for effectiveness is further outlined in Chapter Two. Since communication scholars and practitioners have struggled to understand why users have become increasingly dependent on citizen journalists for news updates, this research question examined what makes the communications from citizen journalists effective. The third and final question centered around determining the motivational factors behind user comments during a crisis. By determining the motivational goals of TikTok users during a crisis, this study unveiled new information about what compels users to seek out news updates from sources that are not bound to a journalistic code of ethics. I used publicly available TikTok data to arrive at my conclusions and did not conduct any interviews.

RQ1: Do the communicative roles of citizen journalists differ from mainstream media organizations on TikTok when reporting a crisis?

RQ2: How effective are the communications of citizen journalists when compared to mainstream media organizations on TikTok during a crisis?

RQ3: What are the motivational factors behind user comments during a crisis?

Definitions

Citizen Journalist: A citizen journalist has no institutional affiliation or formal training (Ornebring, 2013). Since they have no institutional affiliation, they are not bound to any journalistic code of ethics that would otherwise prevent them from purposefully spreading misinformation. They do not "filter information" for the public or "exercise editorial judgement" (Ornebring, 2013, p. 44). Citizen journalists involve themselves in the news making process.

Crisis: A crisis is "a serious threat to the basic structures or the fundamental values and normal of a system, which under time, pressure, and highly uncertain circumstances necessitates making critical decisions" (Rosenthal et al., 1989, p. 10).

Crisis Communication: This dissertation subscribed to Coombs' (2010) definition of crisis communication, which is, "the collection, processing, and dissemination of information required to address a crisis situation" (p. 20).

Crisis Management: This dissertation used Coombs' (2007) definition of crisis management, which asserts that crisis management represents "a set of factors designed to combat crisis and lessen the actual damage inflicted by the crisis" (p. 4).

Mainstream Media: The traditional news outlets that audiences have historically migrated toward during a crisis. Examples of mainstream news organizations include but are not limited to CNN, Fox News, MSNBC, ABC, NBC, and CBS.

Disinformation: A falsehood that is purposefully spread to deliberately mislead and persuade consumers (Stahl, 2006). Disinformation typically refers to the type of false information that is spread by governments (Stahl, 2006).

Distrust: A skeptical or cynical attitude that generates in response to the actions of others (Lenard, 2008). Distrust manifests when people (e.g., journalists, fellow citizens, etc.) are labeled untrustworthy due to repeated trust offenses (Lenard, 2008).

Effectiveness: This study drew from Pieter et al. (2021) and defined effectiveness as the coexistence of both high engagement and reach. A video's level of effectiveness is based on quantitative factors such as likes, saves, shares, comments, followers, plays, and more. This study, in part, sought to determine how the use of language (e.g., implicit meaning, explicit meaning, keywords, etc.) impacted TikTok effectiveness.

Fake News: A type of disinformation, oftentimes generated by the mainstream media, that includes inaccurate or misleading statements designed to manipulate the audience (Baptista & Gradim, 2022). Fake news often includes a type of structure that is opportunistic and intentionally designed to attract the attention of readers (Baptista & Gradim, 2022).

Infodemic: A glut of information that purposefully attempts to distribute incorrect updates and undermine global response efforts to stop the spread of disease and advance the agendas of specific individuals, groups, or political parties (WHO, 2020).

Misinformation: An inaccurate or misleading report that is distributed to the public (Stahl, 2006). Unlike disinformation, which is purposefully spread, misinformation is characterized by a lack of intent (Stahl, 2006).

Mistrust: A cautious and skeptical attitude towards political and social happenings (Lenard, 2008). Mistrust depends on trust in other citizens as we depend on other non-governmental citizens to regulate abuses of authority (Lenard, 2008). Mistrust compels citizens to analyze political and social events for inaccuracies (Lenard, 2008).

Natural Disaster: Natural disasters, such as tornados, earthquakes, or hurricanes, are disasters in which nature is the catalyst (Alagona, 2006).

Trust: A necessary and reciprocating aspect of human relationships (Lenard, 2008). When a person trusts another person or a governmental entity, they express a willingness or attitude to make themselves vulnerable (Lenard, 2008).

Summary

Chapter 1 offered a background for the problem(s) associated with depending on citizen journalists for news updates during natural disaster. To accomplish that, this chapter provided a scholarly overview of the origin of the term citizen journalist and outlined the social

preconditions necessary for citizen journalism to manifest. Chapter 1 also traced the origin of the public's growing mistrust in the media and outlined various instances throughout history where the media's credibility was challenged. Chapter 1 further provided a background on media dependency theory, agenda-setting theory, framing theory, and situational crisis communication theory, then rationalized why a qualitative analysis of TikTok content may produce results consistent with these theories. Currently, there are no studies that directly examine links between citizen journalism, Hurricane Ian, TikTok and the mistrust caused by the infodemic. The goal of this qualitative content analysis is therefore to fill this gap in academic literature and begin a new discussion on the various problems associated with depending on citizen journalists for news updates during natural disasters and the consequences of allowing citizen journalists to determine which topics enter the public's eyeline.

Chapter 2: Literature Review

Overview

Chapter 1 introduced the problem statement, purpose statement, significance statement, and research questions for this study. Chapter 2 uses the information provided in Chapter 1 to further explore how the public's mistrust in the media has grown over time and in response to the media's consistent delivery of contradictory information. Chapter 2 offers a brief overview of Craig's (1999) seven traditions of communication. The purpose of this overview is to situate the study into two distinct traditions of communication studies: The cybernetic tradition and the sociopsychological tradition of communication studies. In part, Chapter 2 uses scholarship to justify why a study that explores the communicative roles of citizen journalists, and the effectiveness of their messages will impact two distinct traditions of communication studies rather than one.

Chapter 2 also provides a theoretical framework for this study by overviewing media dependency theory, agenda-setting theory, framing theory, and situational crisis communication theory. This chapter explains how each theory developed in response to changing media landscapes and uses scholarship from communication studies to further rationalize the need for this study. However, it is important to note that the interdisciplinary nature of communication studies allows for the inclusion of other fields or disciplines. Exemplifying this, agenda-setting theory has historically been used to study many different agenda types that do not include the media at all (Bantimaroudis et al., 2010; Kliger-Vilenchik, 2011; McCombs et al., 2014). For this reason, it is important to note that Chapter 2 draws from a variety of fields and disciplines that emphasize communication for the purposes of advancing the significance for this study. Chapter 2 introduces a variety of interdisciplinary scholarly literature intended to justify why this study is necessary. This section begins with a very brief history of news distribution, details the rise of citizen journalism in America, and describes the role of citizen journalists during a crisis. Chapter 2 concludes by offering an overview of current gaps in scholarly literature related to media dependency theory, agenda-setting theory, framing theory, and situational crisis communication theory. The summary section explains how results from this study will narrow or eliminate scholarly gaps entirely.

Situation to Communication Tradition

Communication is a widely debated and multi-layered term that until recently did not have established and well-defined boundaries (Craig, 1999). Prior to Craig's (1999) introduction of the seven traditions of communication, scholarly discourse about communication theory was boundless. In other words, communication theorists did not demonstrate a common purpose, rarely referenced each other's work, and did not subscribe to a generalized canon of communication theory (Craig, 1999). This boundless approach to communication scholarship made it difficult to determine what did and did not qualify as communication studies scholarship. It also prevented scholars from easily tracing the direction of the field's development. For this reason, Craig (1999) argued that communication studies did not actually exist as a field of study. However, he also noted that the field would manifest in response to scholars engaging in the "socially important goals, questions, and controversies that cut across various disciplinary traditions, substantive specialties, methodologies, and schools of thought that presently divide us" (Craig, 1999, p. 120). To outline clearer boundaries for scholars, Craig (1999) introduced seven separate communication traditions wherein scholars could situate their theories, scholarship, and perspectives.

These seven traditions of communication include the (a) rhetorical tradition, (b) semiotic tradition, (c) phenomenological tradition, (d) cybernetic tradition, (e) sociopsychological tradition, (f) sociocultural tradition, and (g) critical tradition. Each of these traditions are conceptualized and categorized according to their own specific definition of communication, their relevant problems, and their respective theories (Craig, 1999). The rhetorical tradition of communication, for example, examines how discourse is created through rhetoric, argumentation, and persuasion (Macguire, 2006). Scholars of the rhetorical tradition view communication as discourse wherein speech generates meaning and consequence (Macguire, 2006). Conversely, scholars from the semiotic tradition of communication view communication as "intersubjective mediation by signs and symbols" and contend that meaning is generated in people (Craig, 1999, p. 133; Macguire, 2006). One's theoretical perspective on how communication generates meaning in part determines a theory's placement in the seven traditions of communication.

This study drew from two separate traditions of communication: the cybernetic tradition, which explains how complex systems influence specific processes, and the sociopsychological tradition, which provides evidence-driven reasoning for how the human mind processes communication and information using existing scholarship on cognition, biology, and more (Craig, 1999; Littlejohn et al., 2017).

Cybernetic Tradition

The cybernetic tradition conceptualizes communication as "information processing" and explains how many types of complex systems function and malfunction (Craig, 1999, p. 141). Cybernetics perceives communication in terms of a causal feedback loop wherein input is adjusted according to observed moment-to-moment output (Wiener, 1948). Gage (2007) offers the metaphor of a boat and the helmsman to effectively conceptualize cybernetics. He notes that the helmsman processes information on a moment-to-moment basis and steers according to the feedback he receives from the boat, adjusting as needed to produce his desired result (Gage, 2007; Wiener, 1948). If a storm, crosswind, or mechanical failure occurs, it becomes more difficult for the helmsman to produce his intended result (Gage, 2007). Cybernetics refers to these metaphorical storms, crosswinds, and mechanical failures as noise (Gage, 2007). One-onone conversation is perceived by cybernetics no differently than the boat and helmsman. Each interlocutor processes information on a moment-to-moment basis to deliver their information accurately and optimally. If noise enters the causal feedback loop, however, it becomes difficult for everyone to produce their desired output. Cybernetics is therefore concerned with eliminating and explaining noise, bugs in systems, and malfunctions (Craig, 1999; Macguire, 2006).

The cybernetic tradition of communication heavily emphasizes the existence of large and complex systems in which "interacting components form something more than the sum of their parts" (Littlejohn et al., 2017, p. 42). If a particular component fails, the efficiency of the entire system is negatively impacted. For this reason, cybernetics is largely informed by sociologists such as Durkheim (1933), who conceptualized society as many different parts that can influence and impact social order. Exemplifying this, Durkheim (1933) argues that a capitalist society is a large and complex system that distributes labor accordingly. Similarly, disorder within a capitalist society is also perceived by Durkheim (1933) to cause ripples across the entire large and complex system. However, Durkheim (1933) did not view humans as individuals but instead as a collective. Cybernetics, however, perceives humans as individuals who make distinct choices in response to the complex system, or systems within a system, that they exist within. Like the helmsman who steers the boat in the ocean, cybernetics perceives individuals as making

a variety of choices that are purposed toward self-regulation and producing a desired output. Cybernetics conceptualizes individuals as constantly existing within a causal feedback loop.

The cybernetic tradition of communication played an important role in this study for two reasons. First, media dependency theory, agenda-setting theory, framing theory, and situational crisis communication theory all emphasize the existence of large and complex systems. For example, the creators of media dependency theory, Ball-Rokeach and DeFleur (1976), argued that individual behavior can be linked to three interdependent social structures: (a) society, (b) media, and (c) audiences. They conceptualized a large and complex social system in which society, the media, and audiences play key roles in producing individual cognitive, affective, and behavioral effects onto individuals (Ball-Rokeach & DeFleur, 1976). In fact, one of the cognitive effects in the dependency model proposed by Ball-Rokeach and DeFleur (1976) is agendasetting. While agenda-setting theory is more concerned with how these interdependent structures determine and place an agenda in front of audiences, it too posits that a large interdependent system is responsible for influencing how and what people think about a variety of topics (McCombs et al., 2014).

Second, these theories are also concerned with how individuals process information according to noise. Exemplifying this, media dependency theory is largely concerned with how social instability produces effects that require individuals to self-regulate their own feedback loop (Ball-Rokeach et al., 1976). During a crisis, for example, individuals may have higher media dependency and process information differently than during times of stability (Ball-Rokeach et al., 1976). Similarly, agenda-setting theory is concerned with how the media's agenda shapes public opinion and their ability to process information (McCombs et al., 2014). Exploring the communicative roles of citizen journalists, the mainstream media, and the effectiveness of their messaging during natural disasters contributed to cybernetics because it provided new insights on the large, interdependent, and complex systems that oftentimes govern theories such as but not limited to media dependency theory and situational crisis communication theory.

Craig (1999) emphasizes the importance of such an exploration using the traditions of cybernetics. He calls for communicators to examine communication processes from a "broader, systemic viewpoint" and notes that individuals may not be able to control some outcomes due to shifts in the interdependent systems that govern them (Craig, 1999, p. 162). Like the helmsman in a heavy storm, only so much can be done to compensate for an individual's environment. While individuals are perceived to have agency in this tradition, the limits of their own output power are frequently governed by forces that are outside the control of the everyday individual.

Sociopsychological Tradition

The sociopsychological tradition conceptualizes communication as "a process of expression, interaction and influence" wherein individuals can both interact as well as influence one another (Craig, 1999, p. 143). In this tradition, humans are perceived as social individuals with minds that process communication differently. Theories from the sociopsychological tradition view communication as cause-and-effect, connecting what is known about communication to cognition, biology, and more (Littlejohn et al., 2017; Macguire, 2006). Craig (1999) notes that communication, from the perspective of the sociopsychological tradition, can occur in several spaces and formats. These include but are not limited to standard person-to-person conversation or technological communication (Craig, 1999). The sociopsychological tradition is concerned with how "interposed elements" mediate person-to-person communication (Craig, 1999, p. 143). Unlike the semiotic tradition, which is concerned with how sign systems

mediate communication, the sociopsychological tradition investigates how personalities, cognition, and emotions impact communication in interposed spaces (Craig, 1999).

The sociopsychological tradition seeks to understand the cause-effect relationship of social behavior and develop practices that improve those behaviors (Craig, 1999). For instance, a study from the sociopsychological tradition might investigate how instructional video tutorials can be designed in a way to minimize the possibility of cognitive overload (Mayer, 2005). Specifically, a study from this tradition may seek to investigate methods for reducing essential overload using a specific generation of participants (e.g., millennials, Generation Z, etc.) who are known to have specific learning preferences and personality traits that influence memory and one's ability to learn. The interposition of technological media, such as an instructional video tutorial, would permit scholars to explore how differing attitudes, personality traits, and emotions impact one's uptake of information from differing media types. The sociopsychological tradition contends that individual reactions to the communications expressed by others are influenced by one's personality, attitude, emotions, and more (Craig, 1999). Considering that, the sociopsychological tradition heavily opposes the concept that human beings are always rational (Craig, 1999). In fact, this tradition frequently argues that the limitations placed on individuals by their personality traits, negative attitudes, or emotions can negatively impact one's individual autonomy (Craig, 1999).

The sociopsychological tradition of communication played an important role in this study. First, an exploration into the motivational factors that compel users to comment during a crisis provided new insights into how users are influenced by citizen journalists. Second, since cybernetics ignores how motivation, personality, attitude, and emotion impact communication, investigating the motivational factors that underlie user behavior during a crisis allowed for a well-rounded and dual-perspective approach (Craig, 1999).

Media dependency theory, agenda-setting theory, and framing theory all contend that cognitive consequences occur in response to interaction with the media. For example, media dependency theory argues that five separate types of cognitive outcomes can result from increased dependency on the media. These include attitude formation, the creation or resolution of ambiguity, and the clarification of values (Ball-Rokeach & DeFleur, 1976). Agenda-setting theory also contends that cognitive consequences can result from interaction with media. Namely, it contends that at the individual level, frequent interactions with a particular agenda type will shape and reshape individual memory and opinion (Carpentier, 2014). This concept, known as accessibility, suggests that the more a story is accessible to the public, the more audiences will interact and remember the story at hand (Carpentier, 2014). Framing theory, however, contends that "communicators make conscious or unconscious framing judgements in deciding what to say, guided by frames (often called schemata) that organize their belief systems" (Entman, 1993, p. 53). Like media dependency theory and agenda-setting theory, framing theory also contends that communication is a dynamic process that occurs at the cognitive level.

Theoretical Framework

I use theory, or an evidence-driven explanation for one's reality, in this study to call attention to the potential consequences that could arise from depending on citizen journalists for news updates during crises (Littlejohn et al., 2017). Prior scholarship suggested that evidence consistent with media dependency theory, agenda-setting theory, framing theory, and situational crisis communication theory would be observed following data analysis (Antony & Tomas, 2010; Canary et al., 2022; Charzana & Naile, 2012; Ho et al., 2015). Each of these theories are couched in two separate communication traditions: the cybernetic tradition and the sociopsychological tradition of communication. Theory and communication traditions will be used as tools intended to shape and inform the interpretation of data. The next section of this study will provide a scholarly overview of media dependency theory, agenda-setting theory, framing theory, and situational crisis communication theory and trace the public's building mistrust in the mainstream media and citizen journalism.

Transactional Model of Communication

Proposed by Shannon and Weaver (1949), the transactional model of communication addresses the "fundamental problem with communication," which is the difficulty that accompanies "reproducing at one point either exactly or approximately a message selected at another point" (p. 1). Such a reproduction is often complicated by noise, or a signal disturbance, that can occur between message transmission and reception. Due to its concern with noise, the transactional model of communication is often associated with the cybernetic tradition of communication.

The transactional model of communication has been used as the basis for understanding communication exchanges, such as those between television directors and their audiences (Hall, 1973). Hall (1973) contended that televisual messages delivered to audiences have three possible outcomes: (a) dominant/hegemonic, (b) negotiated, or (c) oppositional. In other words, an audience can decode a message exactly as the director intended it to be understood (e.g., dominant hegemonic), with only some aspects of the original encoding (e.g., negotiated) or in a way that is completely contrary to the original message (e.g., oppositional; Hall, 1973). Predicated on the transactional communication model, the encoding and decoding model

proposed by Hall (1973) assumes that communication systems should and can compensate for a variety of variables and not just the message the sender intended to deliver (Shannon & Weaver, 1949). Since the transactional model of communication has been used to further understand televisual communication, it stands to reason that it can also be applied to online messages delivered to social media users.

For that reason, this study perceived communication through the lens of Shannon and Weaver's (1949) transactional model and assumed that communication through social media can result in many interpretations and thus misinterpretation or the spread of misinformation. Such a transaction between either the mainstream media and the public or citizen journalists and their subscribers is particularly dangerous in the context of a natural disaster, wherein misinterpretation of messages can immediately threaten public safety.

Media Dependency Theory

In their seminal essay, "A Dependency Model of Mass-Media Effects," Ball-Rokeach and DeFleur (1976) proposed and conceptualized media systems dependency theory. Otherwise known as media dependency theory, Ball-Rokeach and DeFleur's (1976) model offered one explanation for how the interdependent relationships between the media, society, and audiences have the capacity to produce cognitive, affective, and behavioral consequences. Much like Durkheim (1933) and Marx (1961), Ball-Rokeach and DeFleur (1976) conceptualized a theoretical model that studied audiences in the context of large complex social systems. While Ball-Rokeach and DeFleur (1976) took inspiration from sociologists such as Durkheim (1933) and Marx (1961), they were not interested in society's dependence on divisions of labor and classes. Rather, they were concerned with how social instability in society produced changes in the media that inevitably impacted audience dependency on news updates. Ball-Rokeach and DeFleur (1976) conceptualized a model for mass-media effects that is predicated on an interdependency, which is defined as "the relationship in which the satisfaction of needs or the attainment of goals by one party is contingent upon the resources of another party" (Ball-Rokeach & DeFleur, 1976, p. 6). Initially, Ball-Rokeach and DeFleur (1976) used the terms needs and goals interchangeably to describe how audience members satiate their needs. Ball-Rokeach and DeFleur (1976) outline these needs, noting that they include developing a deeper understanding of the world, engaging in it meaningfully, or escaping from it entirely (Ball-Rokeach & DeFleur, 1976).

Later iterations of media dependency theory, however, preferred the term goals to needs (Ball-Rokeach, 1985). Namely, scholars were partial to the term goals rather than needs because it more accurately conceptualized the problem-solving nature of media dependent individuals (Ball-Rokeach, 1985). The creators of media dependency theory also took issue with some of their own broad terminology, such as the media or society, which did not specifically define what they were or their limitations (Ball-Rokeach, 1985). Specifically, they took issue with conceptualizing audiences as a collective without agency rather than individuals (Ball-Rokeach, 1985). Despite changes in terminology and perspectives on individuals, the premise of media dependency theory remained the same: the more an individual depends on the media to meet their needs or goals, the greater the consequences might be (Ball-Rokeach & DeFleur, 1976; Ball-Rokeach et al., 1984; Ball-Rokeach, 1985).

Cognitive Alterations

Ball-Rokeach and DeFleur (1976) outline five separate cognitive consequences that can occur from increased media dependency. These include the creation and resolution of ambiguity, agenda-setting, attitude formation, belief system expansion, and value clarification or conflict. Beginning with the first or cognitive alteration, ambiguity occurs when a spectator receives either unclear or not enough information to decide on the meaning of a particular event (Ball-Rokeach & DeFleur, 1976). In effect, audiences are inclined to seek out additional information to resolve the conflicting or unclear information (Ball-Rokeach, 1976). For this reason, the media play an important role in creating and distributing ambiguous news reports to audiences. Since the media decide which stories to distribute to audiences, they simultaneously limit the number of possible interpretations (Ball-Rokeach & DeFleur, 1976). The media play an important role in shaping the social reality of the audience (Ball-Rokeach & DeFleur, 1976).

The second cognitive alteration that can occur from increased media dependency is attitude formation (Ball-Rokeach & DeFleur, 1976). This cognitive consequence of media dependency is predicated on the idea of informational flow, or the idea that individuals are constantly encountering a flow of information from various technological modalities. Whilst encountering this flow, attitudes are formed in response to the introduction to new political figures, new technology, and current events (Ball-Rokeach & DeFleur, 1976). Like the helmsman who has no destination, media dependency theory conceptualizes the audience's dependency on the media as constant information processing (Gage, 2007). Although individuals selectively choose which media or flows, they prefer to expose themselves to, individuals are often influenced by local figures who point them toward specific types of information (BallRokeach & DeFleur, 1976). For this reason, proponents of media dependency theory argue that attitudes may be formed after exposure to informational flow.

The third cognitive alteration that can occur from increased media dependency is agendasetting. Media dependency theory is an all-encompassing theory that incorporates agenda-setting theory. According to Ball-Rokeach and DeFleur (1976), "neither themselves nor their opinion leaders control the selection activities of the media that sort among potential topics for presentation or among available sets of information about those topics" (Ball-Rokeach & DeFleur, 1976, p. 11). Audiences allow the media to control the topics delivered to them because they do not have enough time to develop attitudes, understandings, and beliefs about all topics (Ball-Rokeach & DeFleur, 1976). As a result, audiences allow the media to gather and construct their informational flow to be familiar with at least some topics (Ball-Rokeach & DeFleur, 1976). After this, however, audiences selectively expose themselves to the various topics within one's informational flow (Ball-Rokeach & DeFleur, 1976). These choices are based on one's personality, emotions, motivations, and more.

The fourth cognitive alteration that may occur from media dependency is the expansion of one's belief systems. This cognitive alteration asserts that everyone has a "breadth dimension" with a finite number of categories and beliefs that fill those categories (Ball-Rokeach & DeFleur, 1976, p. 13). However, as an individual continues to expose themselves to the informational flow provided by the media, it is possible that one's breadth dimension can be expanded. Generally, this is a process that occurs slowly and through many different exposures. Ball-Rokeach and DeFleur (1976) offer the examples of attitudes toward plastic bags, clean energy, and automobiles. Proponents of media dependency theory therefore contend that the media shape social identity and belief systems by limiting the number of topics available for consumption. The fifth and final cognitive alteration that may occur from media dependency is value clarification (Ball-Rokeach & DeFleur, 1976). Defined as "preferred modes of conduct," values play an important role in shaping and changing how individuals understand the world (Ball-Rokeach & DeFleur, 1976, p. 13). The media creates the conditions necessary for value clarification by presenting them with a flow of information that catalyzes value conflict between audience group types. Ball-Rokeach and DeFleur (1976) offer the example of the Civil Rights Movement, wherein broad media coverage of various events caused value conflicts between audiences and various social groups. Exemplifying this, the Civil Rights Movement "posed a conflict between individual freedom (e.g., property rights) and equality (e.g., human rights)" (Ball-Rokeach & DeFleur, 1976, p. 14). As individuals are exposed to their informational flow of content, they steer themselves towards their preferred modes of conduct. Through value conflicts, values are clarified. Thus, the media have the potential to cause value conflicts, clarify values, and determine the direction of social identity.

Affective Alterations

Ball-Rokeach and DeFleur (1976) outline three separate affective consequences that can occur from increased media dependency: (a) desensitization or numbing; (b) increase in fear, anxiety, or trigger-happiness; and (c) changes in morale and alienation of specific groups. Beginning with the first affective alteration, Ball-Rokeach and DeFleur (1976) contend that consistent exposure to violent media messages may numb or desensitize viewers to their effect. The consequence of this affective alteration is that it may negatively impact viewers' empathy And willingness to assist others who are in need (Ball-Rokeach & DeFleur, 1976).

The second affective alteration may also play an important role in disabling audiences' willingness to help others. Ball-Rokeach and DeFleur (1976) also argue that prolonged or

increased selective exposure to media messages that illustrate one's surroundings as dangerous could raise one's anxiety and fear. This is particularly dangerous because it may result in increased violent behavior that is rooted in fear and anxiety. Media messages therefore have the capacity to incite violence and disable or disrupt harmony.

This is particularly evident in the third affective alteration proposed by media dependency or decreases in morale and alienation of specific groups. If audiences consistently encounter negative media messages about a group (e.g., African Americans or Middle Easterners), the morale of the collective audience would also decline (Ball-Rokeach & DeFleur, 1976). Further, such negative messages also have the potential to cause these same groups to be alienated in society. Consider the discrimination faced by those of Middle Eastern descent following the September 11, 2001, terrorist attacks. As the media sowed fear, anxiety, and trigger-happiness into their media messages about such groups, morale decreased, and they were to some extent discriminated against.

Behavioral Alterations

Although cognitive and affective alterations are worth examining, the action produced by them is arguably the most concerning to most (Ball-Rokeach & DeFleur, 1976). There are two behavioral alterations that may occur in response to media messages: (a) activation or "instances in which the audience members do something that they would not otherwise have done as a consequence of receiving a media message" (Ball-Rokeach & DeFleur, 1976, p. 16), and (b) deactivation, or when people behave differently than they would have because of a media message (Ball-Rokeach & DeFleur, 1976). As one could imagine, both activation and de-activation can have many positive outcomes. Ball-Rokeach and DeFleur (1976) note that exposure to pro-social content will continually increase one's social involvement. Conversely, exposure to violent content will have the opposite effect (Ball-Rokeach & DeFleur, 1976). Since the media shape the informational flow audiences gather their content from, they in turn intentionally shape where action is directed and not directed.

From the Audience to the Individual

Media dependency theory eventually shifted attention away from the audience and toward the individual using individual media dependency theory (Ball-Rokeach, 1985). Using a micro rather than macro perspective on dependency, individual media dependency theory explored how the interdependencies that link the media, social systems such as politics, and emerging or advancing technology impact individual dependency (Ball-Rokeach, 1985). For example, scholars used individual media dependency—an offshoot of media dependency theory—to investigate how television and informercials altered structural media relationships (Grant et al., 1991; Skumanich & Kintsfather, 1998; Stewart et al., 1993).

According to individual media dependency theory, there are three distinct types of dependencies, each of which have their own distinct subtypes (Ball-Rokeach et al., 1984). These include (a) understanding, (b) orientation, and (c) play (Ball-Rokeach et al., 1984). These dependency types can be expressed individuate of one another or simultaneously (Ball-Rokeach et al., 1984). It is also important to note that goals and motivations underlie each dependency type expressed. Understanding dependency, or the first dependency type, is expressed by those in search of a deeper understanding of the world and themselves (Ball-Rokeach et al., 1984). Two subtypes of understanding dependency exist within this schema: (a) social understanding, and (b) self-understanding (Ball-Rokeach et al., 1984). If a person develops a dependency on the media to improve their understanding of their surroundings, they are expressing social understanding, or the first subtype of understanding dependency (Ball-Rokeach et al., 1984). Conversely, if one develops an understanding dependency that is aimed toward increasing their knowledge about themselves, they would be expressing the second subtype of understanding: self-understanding (Ball-Rokeach et al., 1984).

The second media dependency type highlighted by Ball-Rokeach et al. (1984) is orientation dependency. If a person expresses this dependency type, they are interacting with a media message to develop tactics for interacting with and acting around others (Ball-Rokeach et al., 1984). There are two subtypes of orientation dependency: (a) action orientation, and (b) interaction orientation. The first subtype, or action orientation, occurs when an individual views a particular media message to learn how to orient themselves to action (Ball-Rokeach et al., 1984). Consider courtroom television as an example where one could express orientation dependency, and more specifically action orientation. For instance, one may watch a particular television show for the purpose of informing their actions, such as learning how to file an injunction (Ball-Rokeach et al., 1984). Conversely, a person may express the second subtype of orientation dependency, interaction orientation, if they watch a courtroom show to learn how to interact with lawyers or plaintiffs (Ball-Rokeach et al., 1984).

Play dependency, or the individual media dependency type, occurs when an individual is using a media message for recreation (Ball-Rokeach et al., 1984). This dependency type has two separate subtypes: (a) solitary play, and (b) social play (Ball-Rokeach et al., 1984). It is important to note that each subtype serves a different purpose. Namely, each subtype works to satiate different motivational goals (Ball-Rokeach et al., 1984). First, one might express solitary play when they are using media as a vehicle to obtain isolated relaxation and pleasure (Ball-Rokeach et al., 1984). Conversely, one experiences social play when a media message is used to facilitate a social exchange (Ball-Rokeach et al., 1984). Social play is particularly interested in the context of social media, wherein individuals such as citizen journalists may use unconventional platforms as interactive spaces for social exchange.

Between 1976 and 1998, scholars were largely interested in the affective consequences of individual dependency on television for news updates (Grant et al., 1991; Miller & Reese, 1982; Skumanich & Kintsfather, 1998; Stewart et al., 1993). This should come as no surprise as the Vietnam War ended in 1975 and scholars were eager to further understand the effects of in-home media dependency. Exemplifying this, scholars explored topics ranging from how television influences attitudes towards the female body (Meadows, 1997) to queer media usage and social identity (Morton & Duck, 2000). The spread of technology, such as television, presented an opportunity for scholars to examine changes in the structural relationships initially presented by media dependency theory. Despite structural changes to the initial conceptualization offered by Ball-Rokeach and DeFleur (1976) and a shift in focus from the collective audience to the individual, media dependency theory and its offshoots never veered from its initial thesis.

Agenda-Setting Theory

Agenda-setting theory argues that the media have the power to shape the public's opinions by determining which content does and does not reach the audience's view (Cohen, 1963; Lippman, 1922; Luo et al., 2019). Though it did not receive its formal title until 1963, scholars had previously conceptualized aspects of agenda-setting theory in 1922 (Lippman, 1922; McCombs & Shaw, 1963). For example, Lippmann (1922) argues that there is a direct connection between the images in the collective conscience and the messages distributed by the media. He contends that the media influence how the public constructs pictures in their heads, or their pseudo-environment (Lippman, 1922). He also argues that the influence of perception and opinion in one's pseudo-environment can have direct consequences on behavior in their actual

environment (Lippman, 1922). Proponents of agenda-setting theory argue that the media work to set the agenda on behalf of its audience because the real environment is far too complex and large for the public to completely understand (Lippman, 1922). He states, "We are not equipped to deal with so much subtlety, so much variety, so many permutations and combinations" (Lippman, 1922, p. 3). For this reason, the media is a necessary institution that serves to dilute the seemingly limitless amount of news into a simpler and more digestible model (Lippman, 1922).

Cohen (1963) expanded on the works of Lippmann (1922). Specifically, Cohen (1963) emphasized the importance of government-press relationships by exploring the influence of media messages on foreign policy formation. While Lippmann (1922) perceived the public as a collective, Cohen (1963) offered a more individualized approach to the transfer of issue salience. Namely, Cohen (1963) contended that the media has little effect on determining what individuals think but can determine what individuals think about (Kiousis et al., 2006). For this reason, Cohen (1963) contributed to the construction of agenda-setting theory by offering a perspective on the transfer of issue salience that conceptualizes the public as individuals with separate thoughts and outcomes. Although Lippmann (1922) perceived the public as a collective conscience, Cohen (1963) perceived the audience as unique individuals who respond to the topics that are shown to them. By determining what does and does not reach the public's view, the media controls which mental images appear in one's pseudo-environment and to some extent constructs the real environment (Cohen, 1963; Lippman, 1922).

Agenda-setting theory was formally developed in 1968 by McCombs and Shaw, who studied correlations between the salience of issues in the media to the public perceptions of issues. It was determined that the media has a considerable impact on the judgement of voters (McCombs & Shaw, 1968). Specifically, McCombs and Shaw (1968) found a direct correlation between media messages and voter perceptions of important issues. For example, while the media covered three separate candidates who represented a variety of ideals and issues, "the judgments of voters seem to reflect the composite of the mass media coverage" (McCombs & Shaw, 1963, p.182). In this case, the judgments and perceptions of voters were heavily influenced and reflective of the agenda set by local and mainstream media (McCombs & Shaw, 1963). Seeing that the media influences what stories, political figures and opinions are given the most attention, the public's attitudes, opinions, and individual behavior are at least to some degree a byproduct of the media's overt influence (McCombs & Reynolds, 2002; McCombs et al., 2014).

Since the introduction of agenda-setting theory, scholars have regularly demonstrated that the public's judgments and perceptions are directly related to the intensity of the media's coverage on a particular issue (Luo et al., 2019; McCombs et al., 1997). However, other types of agenda-setting have also been introduced over time. These include public agenda-setting, media agenda-setting, and policy agenda-setting, each of which have their own respective terms and repercussions (McCombs et al., 2014). Although agenda-setting theory has expanded in a variety of ways, its central thesis has remained the same. To organize the evolution of the theory, scholars introduced first-, second- and eventually third-level agenda-setting from a different perspective (McCombs et al., 2014). Although emerging and advancing technology has changed how the public accesses the media's agenda (e.g., TikTok, Instagram, Snapchat, Twitter, etc.), it is still the primary source through which the public obtains information about their environment

(Luo et al., 2019). As information becomes more horizontally distributed, however, the media may eventually become a secondary source for news gathering (Mythen, 2009).

First-, Second-, and Third-Level Agenda-Setting

As agenda-setting theory broadened, three levels of agenda-setting were created: (a) firstlevel agenda-setting, (b) second-level agenda-setting, and (c) third-level agenda-setting (Kiousis et al., 2006; McCombs et al., 2014). The first level of agenda-setting posits that increased coverage of "objects" in the news (Kiousis et al., 2006, p. 34), such as political figures, topics, and celebrities, results in heightened public interest in those same objects (Kiousis et al., 2006; Kiousis & McCombs, 2004). The Chapel Hill study performed by McCombs and Shaw (1968) is an excellent example of first-level agenda-setting in action as it demonstrated how increased media attention given to topics correlated to audience perception of important topics.

Conversely, the second level of agenda-setting is not concerned with how the attributes of those objects impact informational salience (Kiousis et al., 2006). During the 1995 Spanish governor elections, scholars found a positive correlation between voter agenda and media coverage of candidate attributes (McCombs et al., 1997). Finally, the third level of agenda-setting contends that viewers use stored cognitive information to create an informational network of nodes in their mind's eye (Cheng, 2016). According to the third level of agenda-setting, the transfer of salience to these various nodes in one's cognitive network of attributes is a product of the media's transfer of salience (Cheng, 2016). The third level of agenda-setting theory has been demonstrated in a variety of scholarly studies (Cheng, 2016).

Agenda Melding

While agenda-setting theory broadly focuses on the issue of transfer salience from one entity to another, scholars have also expressed interest in how individuals join groups of people with similar perspectives and undergo a melding of agendas (Matthews, 2009; Shaw et al., 1999). Agenda melding is particularly fascinating in the context of social media because individuals can join online communities that represent their collective agendas. The widespread diffusion of social media, blogs, and video platforms such as YouTube has made it possible for individuals to set their own agendas (Antony & Tomas, 2010). Exemplifying this, YouTube audiences used uploaded footage of the 2009 Oscar Grant shooting and more specifically the comment sections of these videos to critique the video, praise the cameraperson, and call for a response (Antony & Tomas, 2010). Rather than relying on the resources and agendas made available by the mainstream media, users relied on one another for video footage and discourse. The advent of social media empowered individuals to express themselves, source information from one another, and create their own agendas.

Framing Theory

Bateson proposed framing theory in 1972. Bateson's (1972) theory posits that the presentation of messages, or how they are framed, can impact how audiences receive and ultimately interpret them (Bateson, 1972). Entman (1993) states, "Framing essentially involves selection and salience. To frame is to select some aspects of a perceived reality and make them more salient in a communicating text" (p. 52). Framing is directly related to how specific aspects of a story are highlighted, defined, evaluated, and treated (Entman, 1993). He offers the example of the "cold war" to illustrate his point, noting that framing emphasizes specific "foreign events—say, civil wars—as problems, identified their source (communist rebels), [and] offered moral judgments (atheistic aggression)" (Entman, 1993, p. 52). In layman's terms, when a specific narrative for a story is chosen and empowered, other narratives are unchosen and disempowered.

Entman (1993) highlights four separate locations wherein framing occurs during communication: (a) the communicator, (b) the text, (c) the receiver, and (d) the culture. With respect to how framing occurs in communicators, Entman (1993) argues that audiences make decisions known as "framing judgements" when they are exposed to media messages (p. 52). Such judgments are informed by the internal frames, "often called schemata," which each person uses to shape their personal belief systems (Entman, 1993, p. 52). However, framing also occurs within the text, wherein "the presence or absence of certain keywords" influences reception (Entman, 1993, p. 52). The receiver is of chief importance during framing as the schemata which influences an individual's reception of a message can produce an interpretation that either agrees or disagrees with the included text (Entman, 1993). Finally, framing judgments are also informed and organized by culture, which Entman (1993) defines as a "demonstrable set of common frames" that is present in the thinking of a group of people (p. 53). Framing theory therefore subscribes to the idea that framing is informed by large-scale systems, such as culture, and argues that such framing occurs at various stages.

Frame Building

Advances in framing theory have revealed other concepts, such as frame building, that are central to understanding the structural qualities of news reports. Specifically, frame building refers to how internal and external elements influence the design of news reports (Vreese, 2005). Internal factors that might influence the design of frames include but are not limited to the individual schemata of journalists and the news organization that governs them (Vreese, 2005). The external factors that influence frame building, however, are those changes in culture that are often an outgrowth of political or social movements (Vreese, 2005). Frame building is especially interesting in the context of citizen journalism, since the only internal factor that influences the design of their frame is their personal schemata. Unlike a professional journalist, whose framing judgements would be compared to the values of the news agency they represent, citizen journalists build and distribute frames according to their own personal belief systems without repercussion. Frame building therefore highlights all four aspects of the framing process conceived by Entman (1993), specifically how internal and external aspects shape each of the four processes.

Frame-Setting vs. Frame-Sending

Bruggemann (2014) notes that journalistic framing lies on a "continuum between framesetting and frame-sending" (p. 64). Frame-setting refers to the "interaction between media frames and individuals' prior knowledge" (Vreese, 2005, p. 52). Bruggemann (2014) elaborates on frame-setting further, noting that it specifically refers to how journalists provide their personal interpretation of a situation. Such an interaction between media frames and individuals' prior knowledge about an issue can impact public interpretation and evaluation of a media message (Vreese, 2005). Conversely, frame-sending refers to the practice of "relaying the frames as present by different public actors" (Bruggeman, 2014, p. 64). It is worth noting that pure framesetting will rarely occur in professional journalism, since the journalistic production process is a process of "collective sense-making" and includes checks and balances (Bruggeman, 2014, p. 64). The same is also true for frame-sending, and for this reason, it is most likely that messages from professional reporters will be a combination of frame sending and setting (Bruggeman, 2014). Unlike professional journalists, however, citizen journalists are not responsible for taking part in any collective sensemaking. Rather, citizen journalists can operate on either end of the continuum and express pure frame-setting and pure frame-setting.

Situational Crisis Communication Theory

In 2007, Coombs proposed situational crisis communication theory, which offered "a framework for understanding how crisis communication can be used to protect reputational assets" within an organization (Coombs, 2007, p. 163). Coombs (2007) notes that the term organization is superior to corporation because the framework offered by situational crisis communication theory extends beyond for-profit businesses such as major corporations. Coombs' (2007) framework perceives crisis through the lens of reputational threat. In this context, reputation is defined as "an aggregate evaluation stakeholders make about how well an organization is meeting stakeholder expectations based on its past behaviors" (Coombs, 2007; Wartick, 1992). Coombs (2007) perceives crisis through the lens of reputation because threats to reputational assets can impact profits, customer interest, organizational performance, and more.

A crisis, in the context of Coombs' (2007) theory, is defined as "a sudden and unexpected event" that can threaten the reputation and financial performance of an organization (p. 164). Further, a crisis can threaten and even harm the physical, emotional, and individual finances of organizational stakeholders (Coombs, 2007). Crisis can also impact a variety of stakeholder types, including but not limited to customers and an organization's employees (Coombs, 2007). Three separate types of crises are outlined in Coombs' (2007) theoretical framework for crisis response and management: (a) the victim cluster, (b) the accidental cluster, and (c) the intentional cluster. It is important to identify the type of crisis to predict stakeholder reactions and create appropriate responses.

The Victim Cluster

The first crisis type outlined by Coombs (2007), the victim cluster, presents a mild threat to organizational reputation. In the event of a victim cluster crisis, an "organization is viewed as

the victim of the event" (Coombs, 2007, p. 168). Examples of victim cluster crisis include but are not limited to natural disasters or "acts of nature that can damage an organization" (Coombs, 2007, p. 168). An earthquake, for example, qualifies as a victim cluster crisis because of the threat it presents to an organization's supply lines, facilities, employees, and therefore, its reputational assets. In terms of natural disaster, the threat to organizational reputation is low; however, other victim cluster crisis types do have a stronger threat potential (Coombs, 2007). Additional types of victim cluster crises include rumors, workplace violence, and product tampering or malevolence (Coombs, 2007).

The Accidental Cluster

In the accidental cluster crisis type, "organizational actions leading to the crisis were unintentional" (Coombs, 2007, p. 168). Examples of accidental clusters include technical-error accidents and technical-error product harm (Coombs, 2007). Unsurprisingly, the accidental cluster presents a moderate rather than mild threat to organizational reputation given that such incidents can result in negative impacts to reputational assets. Coombs (2007) highlights "challenges" as one of the primary accidental cluster crisis types and defines them as "stakeholders claiming an organization is operating in an inappropriate manner" (p. 168). The term "challenges" is purposefully ambiguous and is usually reserved for political and social insensitivity (Coombs, 2007). That said, these challenges that threaten reputational assets can manifest in a variety of shapes and sizes (Coombs, 2007).

The Intentional Cluster

The intentional cluster crisis type, also known as the preventable cluster, presents a severe threat to organizational reputation (Coombs, 2007). In these circumstances, organizations "knowingly placed people at risk, took inappropriate actions or violated a law/regulation"

(Coombs, 2007, p. 168). Examples of intentional cluster crises include human-error accidents, human-error product harm, organizational misdeeds that result in zero injuries, violation of laws or regulations, and organizational misdeeds with injuries (Coombs, 2007). The intentional cluster, which is preventable, results in stakeholders being placed directly in harm's way. For example, if a human error caused harm to several individuals and resulted in a product recall, an organization's customer base may refuse to buy from said organization in the future. Such an event presents a threat to organizational reputation by exposing the lack of checks and balances within an organization.

Threats & Crisis Response Strategies

Coombs (2007) recommends that crisis managers follow a two-step process when evaluating reputational threats during crisis. First, Coombs (2007) recommends that crisis managers determine the level of organizational responsibility attached to the crisis. Since each crisis type produces different levels of organizational responsibility and threats to reputational assets, it is imperative that organizations determine which cluster their event falls under (Coombs, 2007). After assessing reputational threat, an organization should consider the "crisis history and prior relationship reputation," which are two "intensifying factors" (Coombs, 2007, p. 168).

Intensifying factors, such as unfavorable history of crisis, escalate threat potential to organizational reputation. For example, while a victim cluster would normally present a lesser threat to reputational assets than an accidental cluster, an organizational history of poor crisis management during such events would escalate a victim cluster's threat potential to a higher level. After determining the level of organizational responsibility and considering intensifying factors, a crisis response strategy can be developed (Coombs, 2007). Such strategies are "used to

repair the reputation, to reduce negative affect and to prevent negative behavioral intentions" (Coombs, 2007, p. 170). While Coombs (2007) offers examples of crisis response strategies, he also highlights that no perfect list for crisis response will ever be generated.

Related Literature

The previous section explained how the cybernetic tradition and the sociopsychological tradition of communication will inform this study. The purpose of this section, however, is to provide an overview of scholarly literature on media dependency theory, agenda-setting theory, framing theory, and situational crisis communication theory. This section will also explain how knowledge gaps in the cybernetic and sociopsychological tradition of communication will be closed through this study. Specifically, this section will use media dependency theory, agenda-setting theory, framing theory, and situational crisis communication theory to call further attention to the potential consequences that can arise from sourcing news from citizen journalists during a crisis.

Current and past research has acknowledged that physical, mental (e.g., anxiety, panic, mistrust, etc.), and societal consequences can occur from receiving a glut of contradictory messages during a crisis (Antony & Tomas, 2010; Coombs, 2007; Liu & Liu, 2020; Patel et al., 2021; Scoy et al., 2021; Vreese, 2005; WHO, 2020). Scholars have also used these four theories to develop a further understanding of how a natural disaster is reported (Ganiyu et al., 2017; Ki & Nekmat, 2014; Sherman-Morris, 2005; Waters, 2014; Whaley & Tucker, 2004). However, scholars have not yet examined the communicative roles of citizen journalists on TikTok, how effective their messages were when compared to those distributed by the mainstream media, and the motivational factors that underlie user comments on TikTok during Hurricane Ian.

Perspectives on News Distribution in America

Print media have always competed with emerging technology. For over 200 years, newspapers and journals served as America's primary outlet for news distribution (Stamm, 2011). When the radio achieved widespread accessibility and popularity in America during the 1920s, newspapers began purchasing radio stations or starting their own to compete with radio (Stamm, 2011). In fact, some of these radio stations are still in existence today, such as the Chicago Tribune's WGN (Stamm, 2011). In 1940, Stamm (2011) notes, newspapers owned 30% of all radio stations in America. To guarantee their survival, print media conglomerates shifted their strategy from a singular media to a multimedia approach that guaranteed their control over the flow of information (Stamm, 2011). Print news distribution and the radio provided the catalyst for mass media consumption in America. While these technologies significantly changed the way Americans consumed news updates, they also changed how the mainstream media distribute news. These technologies also provided the basis by which media effects theories, such as agenda-setting theory, could be examined. The term "media" no longer referred to the print media but a collection of mass media technologies used to control the flow of information (Stamm, 2011).

The distribution of news in America has changed over the course of history and in response to emerging technology. What has not changed, however, is the American public's growing desire to be constantly informed (Boorstin, 1962). While print media such as newspapers used to be regarded as highly reliable, their effort to continually satiate the public's desire for consistent news and lure the public's eye away from other competing organizations resulted in the creation of the pseudo-event (Boorstin, 1962). According to Boorstin (1962), the pseudo-event is a purposefully ambiguous news story that caters to an audience's yearning to

stay informed. Generally, a pseudo-event is an artificial story whose purposeful ambiguity keeps audiences returning to a particular information vendor (Boorstin, 1962). As the media continually distributed pseudo-events into print media, the public's desire to stay informed increased alongside the scope of what could be considered newsworthy (Boorstin, 1962). To keep up with the public's demand for information, print media continually manufactured and metaphorically killed celebrities (Boorstin, 1962). As demand for information increased, however, the television eventually became the primary source through which Americans received their news (Huebner, 2005).

To compensate for the public's desire to stay informed, CNN introduced the 24-hour televised news cycle in 1980 (Cushion & Lewis, 2010). Several events led to the introduction of the 24-hour news cycle, the most important of which was the Vietnam War (Cushion & Lewis, 2010). Newscasts during the Vietnam War brought the atrocities of war directly into the living rooms of Americans (Huebner, 2005). While different organizations represented political figures and American GIs differently, they each worked to provide the public with newsfeeds that would satiate their desire for consistent updates (Huebner, 2005). In the case of the Vietnam War, the stakes were extremely high, and stories were also highly dramatized or sensationalized (Huebner, 2005). The urgency of war atrocities, among other reports, no doubt contributed to the perceived necessity of a 24-hour news cycle.

The digital revolution and the advent of social media would eventually accelerate media convergence, or the continual process by which individual technologies converge and share resources (Jenkins, 2006). The iPhone is an example of media convergence (Jenkins, 2006). While emails, phone calls, and cameras used to exist on separate technologies and devices, the iPhone converged these technologies together and allowed them to take place from one single device (Jenkins, 2006). Jenkins (2006) contends that media have always been converging and will continue to do so. However, the convergence of distinct technologies into one's mobile phone is a particularly important benchmark in the history of American news distribution because it empowered individuals to satiate their constant desire for information more efficiently than any device that came before it. It also provided Americans with a dangerous access point into a world of unregulated social media content produced by citizen journalists that was not subject to the ethical standards and of professional journalistic practice.

A Dangerous Access Point

After the September 11, 2001, terrorist attacks on the World Trade Center and the Pentagon, scholars became heavily interested in how social instability impacts media effects (Birkland, 2004; Lachlan et al., 2009; Lowrey, 2009). While scholarship that explored crises existed prior to the September 11 terrorist attacks (Skumanich & Kintsfather, 1998; Walter & Hornig, 1992), it was not as pervasive. However, increased access to in-home televisions brought increased scholarly attention to crises occurring all over the world (Lachlan et al., 2009; Lowrey, 2009). For this reason, scholars mainly explored the media effects produced in the context of television (Sherman-Morris, 2005). As emerging technologies (e.g., iPhone, social media, etc.) became more accessible, however, scholars naturally turned their attention away from television (Lachlan et al., 2009; Lowrey, 2009) and toward YouTube, Facebook, and more (Canary et al., 2022; Jung, 2012; Lee, 2011; Scoy et al., 2021).

Lee (2011) outlined how the advent of social media permanently altered how individuals receive and distribute news. Namely, Lee (2011) explored how social media users depend on YouTube to grieve and express emotion during a crisis. Lee (2011) found that users depended on the comment sections of YouTube videos to facilitate their grieving and express emotions about those who they lost. With these results in mind, Lee (2011) contends that social media changed how individuals depend on the media. Unlike Ball-Rokeach and DeFleur's (1976) initial conceptualization of media dependency theory, users are no longer dependent on the resources of the mainstream media for news updates (Lee, 2011). Instead of only depending on the mainstream media (CNN, MSNBC, Fox News, etc.) for updates, social media users could now source content from one another. Exemplifying this, Jung (2012) used media dependency theory to explore social media habits of users during a crisis. He found that most users do not use social media to find news updates (Jung, 2012). Instead, users deploy social media to contact their friends and family to ensure they are safe (Jung, 2012). In this example, social media users chose to seek updates from one another rather than the mainstream news media (Jung, 2012).

Although social media empowered its users to meet individual goals more accurately, it also provided users with a *dangerous access point* into the public's unregulated collective unconscious and a seemingly limitless amount of unregulated content that is not governed by journalistic ethics or standards. Such unprecedented access to both information and misinformation is particularly dangerous in the context of crisis, wherein public entities use social media channels to distribute accurate information. Several studies were recently conducted on the distribution of misinformation and fake news during the COVID-19 pandemic (Apuke & Omar, 2020; Canary et al., 2022; Liu & Liu, 2020; Scoy et al., 2021). For example, Apuke and Omar (2020) found that receiving news updates from friends and public figures is quite dangerous for two reasons. First, it is more difficult to detect fake news from a friend rather than a stranger because one often perceives their herd as trustworthy and reliable (Apuke & Omar, 2020). Second, individuals are less likely to detect fake news from public figures they are emotionally attached to because their respect for them clouds their judgement (Apuke & Omar, 2020).

Social media permanently changed how information is distributed by creating a horizontal instead of vertical informational flow (Mythen, 2009). This change in informational flow is evident in Antony and Tomas' (2010) agenda-setting study of the Oscar Grant shooting footage, wherein YouTube users depended on citizen journalist content to collaboratively express opinions, praise the videographer, and process the event. Importantly, Antony and Tomas (2010) were able to observe how users, empowered by social media, created their own agenda through online interactive discourse. In this instance, users depended on one another for news updates rather than the mainstream media. Although the horizontal distribution of information has a variety of benefits, it has no doubt made it more difficult to locate reliable news updates (Mythen, 2009).

The horizontal distribution of information is further complicated by the increasing number of online citizen journalists who are not bound to the standards or ethics that the mainstream media are. The Society of Professional Journalists, for example, is America's oldest journalistic organization and is dedicated to the practice of ethical reporting (SPJ, 2022). The code of ethics presented by the organization includes four principles: (a) seek truth and report it, (b) minimize harm, (c) act independently, and (d) de accountable (SPJ, 2022). This code of ethics elaborates on each principle as well, noting that ethical journalism should be accurate, fair, honest, respectful to human beings, and serving the public (SPJ, 2022). Citizen journalists, however, defy all these principles. They are not required to seek out truth let alone report it, minimize harm, or be held accountable for misreporting. Advancing mobile technology, while it has many benefits, is in some cases a *dangerous access point* into a seemingly limitless amount of unregulated citizen journalist content that is not governed by journalistic ethics or standards.

The Rise of Citizen Journalism

While citizen journalism has a variety of international roots, such as the arrival of Indymedia in 1999 and the creation of South Korea's OhMyNews.com, whose headline reads "Every citizen as a reporter," its increasing pervasiveness in America is directly related to the United States' founding ideals (Ornebring, 2013). Specifically, the United States' emphasis on free speech, free press, and the right to assemble have accelerated the rise of citizen journalism. The First Amendment of the U.S. Constitution states:

Congress shall make no law respecting an establishment of religion or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceable to assemble and to petition the government for a redress of grievances. (U.S. Const. amend. I)

For this reason, posting news as an American citizen journalist, sourcing news from other Americans, and interacting with one another in the comment sections (e.g., assembling) provided by such citizen journalists are expressions of one's cultural values. Exploring the communicative roles of American citizen journalists, the effectiveness of their messages, and the motivational factors that underlie user behavior will therefore provide new insights into how governmental policies and cultural ideals contribute to the creation of media dependency and agenda melding.

It is impossible to trace an indisputable origin point of citizen journalism in America (Allan, 2009). While many have offered contrasting definitions (Ornebring, 2013; Watson, 2011; Zeng et al., 2004), others have contended that no perfect definition will ever exist (Allan, 2009). For this reason, it is more effective to determine when the term "citizen journalist" entered the

public's lexicon and describe the type of amateur material that qualifies as citizen journalism (Allan, 2009). Despite the creation of websites such as Indymedia in 1999 and OhMyNews contributing to the spread of the term, most scholars agree that the term officially entered the public's lexicon during the 2004 South Asia tsunami (Allan, 2009; Zeng et al. 2004). After this natural disaster, professional journalists' desire to be first forced them to rely on the "amateur photographs, video footage and eyewitness accounts" produced by citizen journalists (Zeng et al., 2004, p. 4). Although citizen journalist is an ambiguous term, it somehow captured "the countervailing ethos of the ordinary person's capacity to contribute to professional news coverage" (Zeng et al., p. 4). Allan (2009) echoes these sentiments, noting that citizen journalists have the unique ability to stand witness and testify in a way that professional journalists do not. The mainstream media's willingness to regularly depend on citizen journalists for content was an outgrowth of their desire to be the first to report news. That said, this shift is significant because it suggests that technological advancements following the tsunami (e.g., iPhone) would continue to empower individual citizens to participate in the news and increase the professional media's reliance on citizen journalists.

From Street to Tweet

Professional journalists worked alongside citizen journalists for some time after the 2004 tsunami (Ritonga & Syahputra, 2019). Likewise, citizen journalists worked alongside professional journalists on the street, collaborating as a team to distribute news. This was mostly because citizens trusted the media and because social media websites such as Twitter were not yet established (Ritonga & Syahputra, 2019). However, after the mass media began to affiliate with political parties and social media became widely accessible, citizens began using platforms such as Twitter to deliver news information to one another (Ritong & Syahputra, 2019). Dubbing this transition as "from street to tweet," Ritonga and Syahputra (2019) argue that dependency on the mass media for information waned in response to the rise in social media (p. 78).

While there were many impacts of this transition, it is important to note that the polarization of political groups was the most notable (Ritong & Syahputra, 2019). For this reason, it is argued that this transition from street to tweet promoted the posttruth era, wherein citizens no longer respect the mainstream news for its lack of truth, polarizing stories, unregulated content, hateful citizen journalism, and fake news (Ritong & Syahputra, 2019). A negative attitude toward the mainstream media preceded the COVID-19 infodemic and formed in response to the 2016 American presidential election. The street to tweet transition in citizen journalism, however, was further complicated by the infodemic produced by the COVID-19 pandemic. Audiences' trust in the mainstream media continued to wane in response to the overabundance of information, which was often contradictory (Liu & Liu, 2020; Scoy et al., 2021). For this reason, scholars have suggested that crisis management strategies cater to a mistrusting audience rather than a consistently trusting one (Jennings et al., 2021).

Trust, Mistrust, and Distrust

Trust, mistrust, and distrust are very different concepts that can each impact crisis management and crisis response (Jennings et al., 2021). Lenard (2008) argues that trust is "central to all human relationships" and that its absence can have detrimental consequences (p. 1). For instance, lack of trust in election outcomes can threaten democracy, and lack of trust in crisis response teams can lead to irresponsible behavior (Jennings et al., 2021; Lenard, 2008). Trust is therefore "driven by the assumption that the focus of trust has your interests at heart" (Jennings et al., 2021, p. 1177). By contrast, mistrust assumes the other person does not have your best interest in mind. Lenard (2008) defines mistrust as "a cautious attitude towards others; a mistrustful person will approach interactions with a careful and questioning mindset" (p. 312). A distrusting person, however, is cynical and suspicious of others (Lenard, 2008). Above all other trust types, distrust is the most threatening to democracy (Lenard, 2008). If a democratic nation is "characterized by distrust," there is reason to worry about its stability (Lenard, 2008, p. 313). In a posttruth era following an infodemic where individuals are disenchanted with the mainstream media and citizen journalists have used social media to transition from street to tweet, it is imperative that the communicative roles of citizen journalists, the effectiveness of their messages, and the motivational factors that underlie user comments be explored.

The Role of the Media and Citizen Journalists During Crisis

Mass media are responsible for "influencing the unfolding perception and management" during a crisis, crisis management, and crisis response (Novak & Vidoloff, 2011, p. 83). More specifically, however, they are assumed to serve four distinct functions. First, the media are responsible for informing the public about hazardous situations and evacuation orders (Novak & Vidoloff, 2011). Second, the media are responsible for providing response information, such as existing risks and how to reduce or completely avoid them (Novak & Vidoloff, 2011). Third, the media facilitate crisis response by disseminating official updates to first responders and coordinating informational distribution (Novak & Vidoloff, 2011). The fourth function is to assist with rebuilding a community by repairing social connections, reconstituting social order, and offering explanations as needed (Novak & Vidoloff, 2011).

While the mass media serve these distinct functions, they rely on a large pool of "observers, recorders and cameras on the ground" to accomplish their goals (Novak & Vidoloff, 2011, p. 184). Such large-scale coordination can no doubt lead to mistakes and the distribution of unreliable information from unofficial sources (Watson, 2014). During the BP Oil Spill, for example, regular journalistic routine was disrupted by the chaos, and in those moments, journalists relied heavily on unofficial sources during the first stage of the crisis (Watson, 2014). Given that the media control the public's perspective on a crisis, reliance on unofficial sources could be detrimental to the public's behavior adjustment (Jennings et al., 2021; Watson, 2014). Unlike the mass media, which are beholden to the public and oversight institutions, citizen journalists have no official governing authority.

Citizen journalists are beholden to no one. Their role is to witness an event and provide personal testimony. Though citizen journalists have followers (e.g., stakeholders) that they should not alienate, they are not responsible for telling the public to evacuate, helping firstresponders, or rebuilding a community. Such lack of responsibility is particularly alarming when examined through the lens of crisis response, wherein information distributed by the media is intended to inform the public about evacuation orders (Novak & Vidoloff, 2011). Consider, for example, how a citizen journalist could advise against home evacuation during wildfires despite official orders and imbue mistrust into their fellow social media users (Novak & Vidoloff, 2011). Citizen journalists can use their ability to bear witness and provide testimonies on social media to instantly distribute information that runs contrary to mainstream media's primary narrative.

Social media can, however, be an effective tool to facilitate crisis communication. For instance, scholars have shown that during the COVID-19 pandemic, Facebook was used to distribute reliable information on the virus (Canary et al., 2020). Specifically, Facebook was used to distribute evidence-driven information on disease risk, vaccines, and testing locations (Canary et al., 2020). While a portion of these may have been misinformation, it cannot be

overstated that social media has potential for good. For this reason, Eriksson (2018) recommends five separate best practices for using social media during a crisis to facilitate response and coordinate management.

For social media to be used as an effective tool, Eriksson (2018) argues that a social media message must first create dialogue, include the correct message, utilize the correct distribution channel and post at the correct time of day. Second, Eriksson (2018) contends that social media channels must first perform "precrisis work," such as building their network of friends prior to a disaster (p. 533). In doing so, the government entities responsible for distributing crisis-reliable information and updates have a built-in network of friends or followers who they can immediately inform (Eriksson, 2018). Third, Eriksson (2018) notes that monitoring social media is integral to providing reliable updates. Specifically, he highlights the importance of relying on unofficial sources such as citizen journalists to access footage and topics of public debate (Eriksson, 2018). Fourth, Eriksson (2018) recommends prioritizing traditional media over social media when distributing information. Specifically, he recommends this because social media is much less reliable than its traditional counterparts (Eriksson, 2018). Finally, Eriksson (2018) also recommends that despite its lack of reliability, social media can still be used as a tool to strategically transmit crisis information immediately and directly to users.

If the media are responsible for "influencing the unfolding perception and management" during a crisis but rely on the resources provided by citizen journalists to perform their job, this suggests that the initial conceptualization of media dependency and agenda-setting has shifted (Novak & Vidoloff, p. 83). The best practices for using social media as a crisis response tool provided by Eriksson (2018) also echo this sentiment. Consider the third, fourth and fifth best practices recommended by Eriksson (2018) as examples of this resource shift. Each of these suggests that the media, which used to control the narrative, are now dependent on the resources of citizen journalists on social media to create agendas. Despite social media's lack of reliability, which Eriksson (2018) notes in his fourth best practice, he admits that it is a necessary tool that the media must adapt to using. Since effective health communication during a crisis can mean the difference between life and death, it is important to explore the communicative roles of citizen journalists, what makes their messages effective, and what compels users to source information from citizen journalists rather than the mainstream media during a crisis. In doing so, it is possible to generate new insights on how the media's dependency on citizen journalists for resources impacts information transmission in a posttruth era.

TikTok

TikTok was introduced to the American public in 2017, making it a relatively new, emerging, and quickly evolving social media platform. For this reason, much scholarly attention has recently been devoted to the platform (Li et al., 2021; Olvera et al., 2021). TikTok is a Chinese-owned social media platform that allows users to watch curated short-form content and share videos with others as well. Users can include popular music in their videos to make them more appealing or humorous as well as insert image filters. Each TikTok user also has access to a For You Page, which includes an endless stream of curated short-form video content that is provided to the user based on previous likes and dislikes of various content. Users can save videos, text message them to others, and select which categories they are or are not interested in.

While there are many unharmful aspects of TikTok, a recent study found that TikTok was widely used during the COVID-19 pandemic as an authoritative information channel (Li et al., 2021). In other words, users used TikTok to locate information on a variety of COVID-19-

related topics (Li et al., 2021). A recent study found that videos that created alarm or emotional concern about COVID-19 resulted in much higher user engagement and views (Li et al., 2021). If users rely on TikTok as an authoritative information channel but do not understand alarming videos could be produced solely to generate clout, social instability may ensue.

TikTok has made its own internal efforts to protect various demographics and the broader public from the dangers of its social media platform. For example, TikTok users who are 16 or younger cannot use the direct messaging feature (TikTok, 2023). Similarly, TikTok users who are younger than 18 years old are ineligible to host a livestream (TikTok, 2023). In fact, some of the features included in the app have been the subject of much recent controversy. Namely, the concerns with the platform are derived from fear that the Chinese-owned platform is using TikTok to threaten American national security (Thorbecke, 2023). As a result, the platform has recently implemented new rules to protect users and more specifically, those under the age of 18. As of March 2023, users under the age of 18 are no longer eligible to spend more than 60 minutes per day on TikTok without entering a passcode (Thorbecke, 2023).

While TikTok's community guidelines claim that the platform refuses to celebrate violence or suffering (e.g., graphic deaths, human remains, real-world physical violence), one can easily find videos of George Floyd's death and the many violent protests that followed (Krutrok & Akerlund, 2020; TikTok, 2023). Researchers have also noted that fatal footage of other international events, such as the 2020 explosion at the Beirut Airport, are still widely accessible on the platform. Though TikTok attempts to monitor information that is distributed using its community guidelines, some content regularly slips through the cracks. If the platform allows information contrary to its community guidelines to be easily accessible by its users, it stands to reason that it cannot be fully trusted to protect the public from harmful and even life-

threatening information. Exemplifying this is the rise in the number of deaths from internet challenges started by TikTok users (Elkhazeen et a., 2023). In 2020, a 15-year-old girl participated in The Benadryl Challenge, wherein one takes dangerous levels of diphenhydramine to induce a high. Misuse of the drug resulted in the 15-year-old's death (Elkhazeen et al., 2023). Although changes were later made to community guidelines to discourage TikTok users from participating in online challenges, TikTok's historical inability to ensure all users are consistently viewing safe and accurate information suggests that similar events will reoccur.

Coverage of Hurricane Ian

Hurricane Ian produced 150-mile-per-hour gusts, killed over a hundred people across multiple states, and left the entire country of Cuba without electricity (Omer, 2022). Newburger (2022) notes that Hurricane Ian caused the largest insured loss since Hurricane Katrina, with nearly 65 billion dollars in insurance claims. In total, the hurricane resulted in over 110 billion dollars in damages to Florida alone. Cuba experienced similar destruction (OCHA, 2022). The United Nations Office for the Coordination of Humanitarian Affairs (OCHA), a multi-national emergency unit designed to improve worldwide disaster response, noted that over "30,000 houses were damaged" in Cuba (OCHA, 2022, n.p.). In Cuba, "over 5,000 people were evacuated from their homes," and there was a significant loss to exports (e.g., milk, tobacco, livestock, etc.; OCHA, 2022, n.p.).

During this time, Florida locals posted amateur footage of the storm, damage produced by the storm, and even alligators in the flood water on TikTok. One TikTok user even recorded and posted their final message to their mother and father, thanking them for all they had done for them. The mainstream news frequently highlighted the destruction caused by the hurricane and emphasized death tolls, insurance payments, and perilous rescue stories (Ramirez, 2022; Salahieh & Andone, 2022). CNN regularly used amateur footage provided by citizen journalists to demonstrate how their lives were impacted by the category four hurricane (Ramirez, 2022; Salahieh & Andone, 2022). Ultimately, the mainstream media and citizen journalists distributed content that emphasized the real-world destruction produced by the storm.

The high volume of TikTok posts on and during Hurricane Ian suggests that individuals were using the platform to meet their individual goals. This is particularly dangerous given that individuals using citizen journalist content might be doing so to learn about safe passages and survival methods. Exploring the motivational factors behind user comments will provide new scholarly insights into why some individuals depend on one another for news updates rather than mainstream media news organizations. The high volume of citizen journalist TikTok posts during Hurricane Ian suggests that the messages spoken by citizen journalists play an important role in determining their effectiveness.

Scholarly Gaps in Media Dependency Theory

Media dependency theory has been criticized in the past for several reasons. First, the creators of media dependency theory have argued that the terms used to conceptualize the structural frameworks of the theory (e.g., media, society, audience) are too broad (Ball-Rokeach & DeFleur, 1976). Although the creators of media dependency theory acknowledge that these terms are very broad, they have expressed that there are benefits to keeping the structural framework flexible (Ball-Rokeach & DeFleur, 1985; Ball-Rokeach et al., 1984). Since the structural frameworks of media dependency theory change in response to emerging and changing technology, the broad terminology allows it to persist throughout time and maintain relevancy (Ball-Rokeach & DeFleur, 1985; Ball-Rokeach et al., 1984). For this reason, media dependency

theory's adaptability can be seen as both a pro and a con. These loose terms have not been applied or explored in the context of crisis communications and citizen journalism.

Media dependency theory has also been criticized for providing little insight into the motivational determinants for dependency (Ball-Rokeach & DeFleur, 1985). To rectify this, a sociological framework was created by Ball-Rokeach and DeFleur (1985) that outlined these motivational determinants. In this sociological framework, the creators of media dependency theory described the micro and macro variables that have the capacity to influence media dependency (Ball-Rokeach, 1985). While macro-level variables are concerned with dependencies on social systems (e.g., politics, the media, etc.), micro-level variables investigate dependency on the individual level (Ball-Rokeach & DeFleur, 1985; Ball-Rokeach et al., 1984; DeFleur & Ball-Rokeach, 1982). At the micro level, there exist three motivational goals that influence dependency. These include understanding, orientation, and play (Ball-Rokeach et al., 1984). Exemplifying this, an individual's media dependency may arise from their desire to better understand the world around them (Ball-Rokeach et al., 1984). That said, the sociological framework initially posed by Ball-Rokeach and DeFleur (1985) has not been examined in the context of citizen journalism.

Critics of media dependency theory have also argued that there has been little investigation into the factors that shape low dependency on the media (Riffe et al., 2008). Similarly, there have been no scholarly studies into the factors that shape low dependency on citizen journalism. A national probability study found that while some users' internet searches are often shaped by their demographic, there is much to understand about why others from that same demographic behave differently (Riffe et al., 2008). Although earlier studies generated by the creators of media dependency theory suggest that the audience does not act in a coordinated fashion or control enough resources to ever do so, the shift from a vertical to horizontal distribution of information produced by social media suggests that they may finally have the resources to do so (Ball-Rokeach & DeFleur, 1985; Mythen, 2009).

Scholarly Gaps in Agenda-Setting Theory

There are a variety of gaps in agenda-setting theory, particularly as it relates to agendamelding (McCombs et al., 2014). Since "the dynamics of agendamelding shift over time," and communities of people are socialized to the prevailing media technologies of their time, new technologies constantly produce new methods by which individuals can meld agendas (McCombs et al. 2014, p. 799). While World War II soldiers were socialized to the newspaper and the radio, recent younger generations, such as Generation Z, are socialized to emerging social media platforms that have a variety of functions, uses, and capabilities (McCombs et al., 2014). Specifically, it has been noted that social media facilitates agenda melding by providing "routes of information, coordination, recruitment, and social support" for agenda-setting and agenda-building (McCombs et al. 2014, p. 799).

Since emerging technologies and social media platforms such as TikTok frequently present new ways for communities to build and meld their agendas, gaps in agenda-setting scholarship are created alongside advancing technology. Similarly, emerging crises also produce new opportunities for agenda-setting to be explored within the context of misunderstood technologies. Agenda-setting theory scholars have also noted the media has become increasingly fragmented in response to emerging technology (Muddiman et al., 2013). While there used to be a limited number of news channels, the choices are now seemingly endless (Muddiman et al., 2013). However, it is important to note that these decisions have important consequences that should be considered in the context of agenda-setting (Muddiman et al., 2013). Scholars have noted that different news networks may cover similar topics but present different attributes about those topics (Muddiman et al., 2013). Such a difference in presentation may purposefully "lead audiences to different conclusions about the political world in which they live" (Muddiman et al., 2013, p. 216). As emerging technologies and social media platforms further fragment the public agenda, it is important to examine online figures gaining followings to ensure they are not misleading audiences.

Currently, third-level agenda-setting contends that viewers use stored cognitive information to create an informational network of nodes in their mind's eye (Cheng, 2016). Third-level agenda-setting notes that the transfer of salience to these various nodes in one's cognitive network of attributes is a product of the media's transfer of salience (Cheng, 2016). Namely, scholars have previously examined this in the context of hashtags on TikTok but did not produce any results (Guo & Liu, 2022). There is currently no scholarship that examines thirdlevel agenda-setting in the context of Hurricane Ian, citizen journalism, and TikTok.

Scholarly Gaps in Framing Theory

There are a variety of salient gaps in framing theory literature. For example, there is no conceptualization of framing that every scholar agrees upon (Carrgee & Roefs, 2004). Carragee and Roefs (2004) note that some studies reduce frames to "story topics, attributes, and issue positions" (p. 218). Borah (2011) notes that scholars such as Gamson and Modigliana (1989) reduce framing to metaphors and catchphrases using the concept of interpretive packages. Since there is no widely agreed upon conceptualization of framing or definition of frame that all scholars use, it is difficult to consistently connect results from framing studies to communication studies, especially when framing is used to study a variety of topics (Borah, 2011).

Scholars have used framing theory to explore reports from the mainstream media for many years (Ganiyu et al., 2017). In fact, there are even studies that use framing theory to explore the impact of citizen journalism (Araiza et al., 2014). However, there are currently no studies that use framing theory to explore how the COVID-19 infodemic impacted the framing of media messages on TikTok during Hurricane Ian. Although this study is based on an emergent qualitative design, it is possible that results from an exploration into the media messages produced by the mainstream media and citizen journalists on TikTok during natural disasters will reveal new insights into framing theory. If emerging technologies can impact how messages are framed, it stands to reason that new insights into the conceptualization of framing may be produced by an investigating into an insufficiently investigated social media platform (e.g., TikTok).

Scholarly Gaps in Situational Crisis Communication Theory

While situational crisis communication theory provides a variety of crisis response strategies to organizations along with tools to evaluate and assess crises, Coombs (2007) notes that there will never be a complete list of perfect crisis response strategies. In this sense, there will always be gaps in situational crisis communication theory that are narrowed and enlarged by emerging technology and new disasters. The flexible design of Coombs' (2007) theory is therefore constantly in flux. Exploring the communicative roles of citizen journalists on TikTok during Hurricane Ian is a necessary step to potentially expanding Coombs' (2007) list of crisis response strategies. Coombs' (2007) malleable design for optimal crisis communication ensures that the theory will continually develop, adapt, and shift in response to a changing technological landscape. To evaluate response to a crisis, situational crisis communication theory uses a two-step process that provides consideration to crisis history and prior reputation (Coombs, 2007). Since the reputation of many mainstream news organizations was negatively impacted by the COVID-19 infodemic, it stands to reason that some people may not trust crisis communications from the mainstream media as much as they used to. Exploring how trust has declined in response to the infodemic is an important step in advancing situational crisis communication theory scholarship. Furthermore, although Coombs' (2007) theory accounts for intensifying factors such as crisis history and prior reputation, there are currently no studies that use situational crisis communication theory to investigate what role said factors played during Hurricane Ian. There are also no studies that explore these intensifying factors on TikTok as well.

RQ1: Do the Communicative Roles of Citizen Journalists Differ From Mainstream News Organizations on TikTok When Reporting a Crisis?

RQ1 investigated if the communicative roles of citizen journalists differed from mainstream news organizations on TikTok when reporting a crisis using a conventional qualitative content analysis. Determining how the communicative roles of citizen journalists differed from their mainstream news counterparts was important for three reasons. First, since no scholar has previously investigated the communicative roles of citizen journalists on TikTok during Hurricane Ian, this study expanded the field of communication studies and narrowed salient gaps in scholarship by deepening our understandings of how citizen journalists behave during a crisis. Second, investigating the communicative roles of mainstream news organizations clarified the purpose of mainstream news organizations' presence on TikTok during a crisis. Considering the infodemic negatively impacted the mainstream media and in some cases permanently altered social media users' relationship with it forever (Liu & Liu, 2020; Patel et al., 2021; Scoy et al., 2021), further clarification was needed on the role that the mainstream media should play on social media during natural disasters. Third, the findings from an investigation facilitated the development of an audience-centered strategy designed to both protect the public from information that might be life-threatening and appropriately inform them.

RQ2: How Effective Are the Communications of Citizen Journalists When Compared to Mainstream News Organizations on TikTok During Crisis?

RQ2 investigated how effective the communications of citizen journalists were when compared to mainstream news organizations on TikTok during a crisis. Determining how effective the communications of citizen journalists were when compared to mainstream news organizations on TikTok during a crisis was important for three reasons. First, when I conducted this study, there was no scholarship that analyzed the effectiveness of crisis communications distributed by citizen journalists on TikTok during Hurricane Ian. For this reason, investigating what made their messages effective expanded the field of communication studies, narrowed salient gaps in literature, and clarified understandings about what distinguishes their strategy from the mainstream media's reporting style. Second, exploring how effective the communications of citizen journalists are when compared to mainstream news organizations on TikTok during a crisis clarified what about these messages and their communications made them effective or ineffective. Third, exploring how effective the communications of citizen journalists were when compared to mainstream news organizations on TikTok during a crisis was important because the social media platform (e.g., TikTok) is largely misunderstood in the context of citizen journalism and crisis (Li et al., 2021; Olvera et al., 2021). Although TikTok attempts to protect its users and has been used for good, it has also repeatedly shown that it is a dangerous

access point into violent content and misinformation (Elkhazeen et al., 2023; Krutrok & Akerlund, 2020).

Effectiveness was determined through a combination of quantitative (e.g., number of likes, comments, saves, shares, word frequency, etc.) and qualitative (e.g., keywords, interpretation of the context, usage of language, implicit meaning, explicit meaning, etc.) factors during a summative content analysis. This study drew from Pieter et al. (2021) and defined effectiveness as the coexistence of both high engagement and user reach. A video's level of effectiveness was based on quantitative factors such as likes, saves, shares, comments, followers, plays, and more. This study also sought to determine how the use of language (e.g., implicit meaning, explicit meaning, keywords, etc.) impacted TikTok effectiveness. In a recent study that examined the effectiveness of TikTok as a product promotion tool, the authors found that the application is extremely effective for several reasons (Pieter et al., 2021).

First, TikTok users can download and access the content for free (Pieter et al., 2021). Second, the authors found that the application contained a highly diverse range of content that is easy to navigate for all demographics but especially younger generations (Pieter et al., 2021). Third, the application reliably provided TikTok users with accurate recommendations for additional topics that they were regularly interested in (Pieter et al., 2021). In short, this study showed that TikTok made users feel informed, satiated, and helped because they were able to identify, understand, and determine if they would like to purchase a product or not (Pieter et al. 2021).

With respect to product marketing, Pieter et al. (2021) outlines a criterion for effectiveness. They assert that effective product marketing on TikTok is predicated on the workability of the application and more specifically, the quality of information provided to users about the product (Pieter et al., 2021). High-quality information allows TikTok users to make judicious decisions about purchasing or not purchasing a particular product. The effectiveness of TikTok and, by extension, the quality of engagement and information delivered to a user, are therefore directly related to the language used to inform users about an item (Pieter et al., 2021). For this reason, quantitative factors (e.g., reach, number of likes, comments, etc.) that suggest high engagement are key indicators that users are informed and that the messaging is effective.

If TikTok has historically been used as a successful digital application for product marketing (Pieter et al., 2021), it stands to reason that it can also be a useful tool for marketing crisis updates. Facebook (Canary et al., 2021) and TikTok (Li et al., 2021) have been used in the past to provide users updates on a crisis. Apart from this study, however, there has yet to be a study that investigated how effective the communications of citizen journalists were when compared to mainstream news organizations on TikTok during Hurricane Ian. Drawing from Pieter et al. (2021), this study defined effectiveness as the coexistence of both high-engagement (e.g., reach, number of likes, comments, number of comments, etc.) and high reach. A summative content analysis was most appropriate for this research question because it evaluated the relationship between the quantitative factors that defined effectiveness (e.g., number of comments, likes, saves, plays, etc.) and compared them to qualitative elements (e.g., context, implicit meaning, explicit meaning, etc.) responsible for making them effective.

RQ3: What Are the Motivational Factors Behind User Comments During a Crisis?

RQ3 explored the motivational factors behind user comments during a crisis through a directed qualitative content analysis. Investigating the motivational factors behind user comments during a crisis was important for three reasons. First, prior to this study, there was no scholarship that explored the motivational factors behind user comments during Hurricane Ian.

Investigating the motivational factors behind user comments expanded the field of communication studies and narrowed salient gaps in scholarship by clarifying what compels users to rely on one another rather than mainstream news organizations during a crisis. Determining why TikTok users choose to use these spaces to interact with one another was a critical first step to developing an audience-centered strategy designed to protect the public from misinformation during a crisis. Second, investigating the motivational factors behind user comments during a crisis also revealed why users who source news from mainstream news organizations have different motivations than those who source news from citizen journalists. Third, determining the motivational factors behind user comments during a crisis also revealed new insights into the consequences associated with depending on citizen journalists and mainstream news organizations.

Summary

Chapter 2 detailed key issues related to citizen journalism and provided a theoretical framework to direct this study. This chapter also overviewed a variety of related and interdisciplinary literature to support the significance of this study. Here, various gaps in scholarly literature were identified. Namely, the literature shows that there is an insufficient understanding of why users have begun to depend on citizen journalists for news updates during a crisis rather than mainstream news organizations. Developing a further understanding of the role that citizen journalists play on TikTok during a crisis is essential to developing evidence-driven safeguards against misinformation, improving media credibility, and protecting public health or safety. To accomplish that, it is important to determine how the communicative roles of citizen journalists differ from mainstream news organizations on TikTok when reporting a crisis. Determining how effective the crisis communications of citizen journalists are when compared to

mainstream news organizations on TikTok is an equally important query. Developing a further understanding of what attributes (e.g., hashtags, songs, video types) create the most effective types of videos is essential to understanding why some users have begun to rely on unconventional sources for news updates during a crisis. Exploring the motivational factors that underlie user comments during a crisis will also provide additional information on the shift from reliance on mainstream news organizations to citizen journalists. By exploring the dependency types expressed by users in the comment sections of both citizen journalist and mainstream news organizations' TikToks during a crisis, new insights emerge on what motivates users to migrate toward amateur rather than professional content.

Chapter 3: Methodology

Overview

The purpose of this qualitative content analysis was to understand the problems associated with social media users depending on citizen journalists from TikTok for news updates during a crisis. It was important to understand why people were depending on alternative news sources that were not regulated by any journalistic ethics or standards of practice, especially since more than half of the human population depends on social media to accomplish their goals (e.g., maintaining friendships, finding information, etc.; Dixon, 2022; Riffe at al., 2008). While citizen journalist dependency was well researched prior to the COVID-19 pandemic (Allan, 2009; Ornebring, 2013; Watson, 2011; Zeng et al., 2004), there is little understanding of how the infodemic impacted users' relationship with citizen journalism during natural disasters. For this reason, a qualitative investigation into the communicative roles of citizen journalists, how effective their messaging is when compared to mainstream media organizations, and the motivational factors behind user comments narrowed gaps in literature concerning natural disaster, citizen journalism, crisis communication, and social media.

Since qualitative inquiry is predicated on an emergent design, this qualitative content analysis allowed for all aspects of its process (e.g., research questions, artifacts, participant types, etc.) to change as data were collected (Creswell & Poth, 2017). Further, the emergent design of this qualitative content analysis did not allow for a specific theory to be prescribed (Creswell & Poth, 2017). Instead, it allowed for the presence of theory to organically emerge through analysis. This chapter overviews the research method, design, research questions, setting, participants, procedures, the researcher's role, data collection procedures, data analysis procedures, trustworthiness, and ethical considerations that were used in this investigation.

Research Method and Design

The purpose of this qualitative content analysis was to understand the problems associated with social media users depending on citizen journalists from TikTok for news updates during a crisis. In this study, qualitative content analysis was defined as "a research method for subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (Hseih & Shannon, 2005, p. 1278). Qualitative content analysis was the best choice for this study because it observed users in their natural setting (Hseih & Shannon, 2005). There are three distinct approaches to qualitative content analysis: conventional, directed, or summative (Hsieh & Shannon, 2005). Each of these approaches were used to extract meaning from content and text data (Hsieh & Shannon, 2005). These three approaches can be distinguished by a variety of elements, including but not limited to their coding schemes and threats to trustworthiness (Hseih & Shannon, 2005). This study used all three subtypes of content analysis, sometimes in combination to bolster trustworthiness, which are each based on the naturalistic paradigm (Hseih & Shannon, 2005).

Conventional qualitative content analysis is often used when there is little to no scholarship on a particular topic (Hsieh & Shannon, 2005). A conventional qualitative analysis begins with reading all the text data to understand it in its entirety (Hsieh & Shannon, 2005). After reading the text word by word, the researcher can begin generating codes by highlighting the words and phrases from the data that reflect concepts (Hsieh & Shannon, 2005). From this process, categories and subcategories for specific codes that are evocative of more than one concept will emerge (Hsieh & Shannon, 2005). These codes are then situated into broad categories known as themes based on their relationship to the existing categories (Hsieh & Shannon, 2005). The researcher then acts as an instrument who develops definitions for all themes, categories, subcategories, and codes (Hsieh & Shannon, 2005). Collected text data are then analyzed to determine if results reflect existing theories of interest (Hseih & Shannon, 2005). Conventional content analysis was most appropriate for determining the communicative roles of citizen journalists and mainstream news organizations during natural disasters because it allowed said roles, and their potential subroles, to emerge organically from an analytical review of both audiovisual and text data.

A directed qualitative content analysis is deployed when prior scholarly research exists but requires additional investigation (Hseih & Shannon, 2005). Unlike conventional qualitative analysis, which is inductive, directed qualitative content analysis is deductive. For this reason, the researcher often begins with categories, subcategories, and codes from previous research prior to familiarizing themselves with the data. Using an existing theory's terminology, which in this case is terminology from media dependency theory, researchers apply coding schemes to text data to corroborate, disprove, or extend an existing theory (Hseih & Shannon, 2005). The researcher then generates working definitions for all categories, subcategories, and codes (Hseih & Shannon, 2005). It is recommended that scholars using a directed approach read the transcript, apply existing coding schemes, and then reread it to identify text that could not be categorized (Hseih & Shannon, 2005).

The researcher would then be responsible for developing new code for any concepts or thoughts that could not be situated into the previous template (Hseih & Shannon, 2005). It is important to note that a directed content analysis is often followed by a conventional content analysis of the same material to ensure that any material that was unable to be coded is captured into a new category (Hseih & Shannon, 2005). A directed and conventional qualitative content analysis is most appropriate for determining the motivational factors that underlie user behavior during a natural disaster for two reasons. First, a directed content analysis attempts to situate the collected data into existing theoretical codes and categories (e.g., play, orientation, understanding, etc.) and allows others to organically emerge if they cannot be situated. Second, such an approach also allows for acknowledgment of a longstanding theory's (e.g., media dependency theory) relevance and attempts to expand upon it.

A summative qualitative content analysis is used to identify and quantify keywords, phrases, and content in text data for the purpose of "understanding the contextual use of words or content" (Hseih & Shannon, 2005, p. 1283). The first step in a summative content analysis is identifying and then quantifying words or content in text data (Hseih & Shannon, 2005). This can occur before or during data collection (Hseih & Shannon, 2005). These keywords can be chosen using a variety of approaches (Schaaf et al., 2022). Scholars have previously recommended that keywords chosen should encompass central research concepts and reflect terminology relevant to previous studies (Schaaf et al., 2022). In reference to keyword quantification, Hseih and Shannon (2005) state, "this quantification is an attempt not to infer meaning but, rather, to explore usage" (p. 1283).

Summative content analysis uses a combination of manifest content analysis and latent content analysis to quantify the use of words and explore their contextual usage (Hseih & Shannon, 2005). In a manifest content analysis, researchers count the number of times a word or piece of content was used (Hseih & Shannon, 2005). In addition to quantifying word usage, content analysis also explores the explicit meaning of text data. Conversely, latent content analysis explores the implicit meaning of text or content data and is therefore concerned with interpretation of underlying meanings (Hseih & Shannon, 2005). A summative qualitative content analysis was most appropriate for determining the effectiveness of messages distributed by citizen journalists and mainstream news organizations during a natural disaster for two reasons. First, a review of both the implicit and explicit meanings of text data could be correlated to the audiovisual messages (e.g., what is shown and said) distributed by citizen journalists and mainstream news organizations to develop a further understanding of how language used in TikToks impacts behavior and thus shapes media dependency. Second, since summative content analysis correlates language to quantifiable factors (e.g., likes, comments, shares, etc.), valuable insights into the relationship between user engagement and keywords used by content creators can be generated.

A combination of conventional, directed, and summative content analysis was most appropriate for this study because they each explore the building blocks of language as communication and the contextual meaning of text data (Hseih & Shannon, 2005). However, qualitative content analysis and its subtypes do not just quantify text data (Hseih & Shannon, 2005). Rather, they also investigate language use by categorizing text data into meaningful categories that reveal insights about human communication (Hseih & Shannon, 2005). It is also important to note that each of these methods can be used to investigate participants in a natural setting without disturbing their social reality (Hseih & Shannon, 2005).

Although there are a variety of benefits to using qualitative content analysis (e.g., inexpensive, data is readily available, etc.), these methods do have their disadvantages. Exemplifying this, qualitative content analysis is largely susceptible to implicit bias and misinterpretation of data (Elo & Kyngas, 2007). Without barriers to account for implicit bias and misinterpretation, such as bracketing, the trustworthiness and validity of the entire study can be threatened (Elo & Kyngas, 2007). It has also been stated that qualitative content analysis is time-consuming (Creswell & Creswell, 2018; Creswell & Poth, 2017). Scholars suggest that researchers implement strategies to expedite data collection and analysis (Creswell & Creswell, 2018; Creswell & Poth, 2017). This study used a computer-assisted qualitative analysis software called *NVivo 12* to expedite data analysis and reduce the potential for inaccuracy (Creswell & Creswell, 2018; Creswell, 2018; Creswell & Poth, 2017).

Similar Emergent Research

Researchers have used emergent qualitative content analysis to accomplish similar research goals in the past (Lee, 2011). For example, Lee (2011) explored the extent to which YouTube can be used as a tool for facilitating emotional expressions following the death of a public figure. Using media dependency theory, Lee (2011) conducted a qualitative content analysis of YouTube comments. Specifically, Lee (2011) used a combination of directed and conventional content analysis to analyze 60 randomly sampled but popular Michael Jackson YouTube videos. Since directed content analysis begins with preexisting theoretical categories, Lee (2011) began by creating several theory-based categories of emotion. The comments from these videos were then correlated to quantifiable factors such as number of comments, demographic factors such as gender expression, and the effects of duration on messaging. In other words, Lee (2011) used YouTube comments and the death of Michael Jackson to investigate how YouTube facilitates emotional expression, how the expression of emotion changes over time, and how gender impacts the expression of emotion on social media. Results from this exploration demonstrate that users can rely on YouTube as a digital space for communal grieving.

Since directed content analysis did not accurately capture the entire data set, Lee (2011) also used conventional content analysis to allow new categories for emotional expression to emerge organically. Where Lee's (2011) research fell short, however, is that it did not account for how the audiovisual messages presented to users could impact the expression of emotion. In fact, Lee (2011) does not account for how the visuals and those messages spoken by YouTubers (e.g., audio) may have impacted the reception of messages. Despite this, it is important to note that the combination of directed and conventional qualitative content analysis has been used successfully in the past to analyze user comments on social media. In short, Lee's (2011) research demonstrates that previous qualitative research rooted in an emergent design has been successfully completed.

While Lee's (2011) tested model was used as the foundation for this dissertation, my purpose differed from Lee's investigation and therefore necessitated some modifications. For instance, Lee's (2011) research fell short in that it did not consider how audiovisual material, or what is shown and stated, shapes user behavior. Since a tenet of media dependency theory is that increased dependency, especially during times of crisis, alters behavior, it stands to reason that

such an exclusion is a missed opportunity. This research project performed a directed qualitative content analysis of user comments to fill this gap. Rather than solely investigating emotion, this project more broadly explored what compelled users to traffic towards these video types and interact with them during a natural disaster. Thus, this research improved upon Lee's (2011) by allowing for categories beyond emotional expression to organically emerge from a directed content analysis.

Lee's (2011) research also fell short in that it did not perform a manifest or latent content analysis of user comments to determine how the implicit and explicit meanings of text data (e.g., comments) were shaped by the audiovisual artifacts. For this reason, this dissertation performed a summative qualitative content analysis and explored the relationships between quantifiable factors on TikToks (e.g., likes, shares, comments, etc.) and the implicit or explicit meanings of TikToks posted by citizen journalists and mainstream media organizations during a natural disaster. In short, Lee's (2011) research was used as the foundation for this dissertation's design and was modified in a variety of ways; including but not limited to supplementing her design with a summative content analysis.

Research Questions

While researchers have previously used qualitative content analysis to explore user behavior during crisis on social media (Antony & Tomas, 2010; Lee, 2011; Scoy et al., 2021), there is little understanding of how the infodemic impacted users' relationship with citizen journalism. Three evidence-based research questions were included to investigate the problems associated with depending on citizen journalists from TikTok for news updates during crisis:

RQ1: Do the communicative roles of citizen journalists differ from mainstream news organizations on TikTok when reporting a crisis?

RQ2: How effective are the communications of citizen journalists when compared to mainstream news organizations on TikTok during a crisis?

RQ3: What are the motivational factors behind user comments during a crisis? **Setting**

The setting for this study was TikTok, a Chinese-owned social media platform introduced to the American public in 2017 that allows users to watch curated short-form content and share videos. TikTok was selected as the setting for this study because it is a relatively new, emerging, and quickly evolving social media platform. In the United States alone, there are 113.5 million users as of January 2023 and almost two billion users worldwide (Ceci, 2023). Although much scholarly attention has recently been devoted to the platform (Li et al., 2021; Olvera et al., 2021), there is little understanding of the communicative roles of citizen journalists on TikTok during a crisis, what makes their messages effective, and the motivational factors behind users' comments.

TikTok implements a variety of rules and guidelines for its users. Namely, these rules restrict underage users from interacting with inappropriate content. For instance, users under 13 years old cannot post or comment and the content is curated for their demographic (TikTok, 2023). Similarly, users under the age of 18 are not allowed to spend more than 60 minutes a day on the platform without entering a password (TikTok, 2023). Despite its attempts to protect audiences, scholars have shown that users relied on the platform to retrieve reliable information about the COVID-19 pandemic (Li et al., 2021). A recent study found that videos that created alarm or emotional concern about COVID-19 resulted in much higher user engagement and views (Li et al., 2021). If users rely on TikTok as an authoritative information channel but do not understand alarming videos could be produced solely to generate clout, misinformation could be

spread. It was important to investigate concerns over citizen journalism on TikTok rather than any other social media platform because it is quickly growing in popularity and is largely misunderstood in the context of both citizen journalists and crisis (Li et al., 2021; Olvera et al., 2021).

Participants

Three sets of participant types were included in this study: mainstream news organizations, citizen journalists, and TikTok users who interacted with mainstream news organizations and citizen journalists. In this study, mainstream news organizations are best defined as the traditional news outlets that audiences have historically migrated toward during a crisis. This study included five separate news organizations and, more specifically, their officially verified TikTok pages. These included CNN, Fox News, CBS, ABC, and NBC. While it is important to note that each organization had different political agendas that impacted the nature of their programming, they each represented a part of a broader whole that could be and has been described as the mainstream media (Shearer & Mitchell, 2021). This study purposively sampled two TikTok videos posted during Hurricane Ian from these five separate entities—10 in total—to represent the communicative roles and messaging attributes of the mainstream news media.

Second, 10 citizen journalists from TikTok who posted about the Hurricane Ian crisis also served as participants in this study. As stated in Chapter 1, a citizen journalist is someone who has no institutional affiliation or formal training (Ornebring, 2013). Citizen journalists are not bound to any journalistic code of ethics that would otherwise prevent them from purposefully spreading misinformation. They do not "filter information" for the public or "exercise editorial judgment" (Ornebring, 2013, p. 44). By choosing citizen journalists who fit this definition, the threshold for bias was reduced. Since roughly 60% of TikTok users are female and 40% are male (Ceci, 2023), I chose six female citizen journalists and four male citizen journalists via purposive sampling to represent the broader user population. I also made further efforts to ensure that the participants broadly reflected the racial demographic of all TikTok users. In total, 18% of TikTok users are White, 30% are Black and 31% are Hispanic (Pew Research Center, 2021). Since there is limited data on the remaining 21% of users, this study assumes that categories outside of those who identify as White, Black, or Hispanic exist in this space. These include but are not limited to Asian, Native American, and Native Hawaiian. Participants were purposively sampled to broadly reflect the gender and racial demographic of TikTok users overall. In total, two White, three Black, three Hispanic and two Asian citizen journalists were purposively chosen as participants in this study.

Last, this study purposively sampled TikTok commentors who interacted with videos posted by either mainstream news organizations or citizen journalists during Hurricane Ian. I purposively sampled 10 commentors from each of the 10 mainstream news organization videos and their 10 citizen journalist counterparts as participants in this study. Like the previous population, efforts were made to ensure that the 200 commentors chosen broadly reflected both the gender and racial demographic of those who use the platform. Since some TikTok users do not have profile pictures, videos, or information on their profile that would otherwise reveal their observable racial or gender identity, only commentors who have a profile picture posted were purposively sampled. In total, 40 White, 60 Black, 60 Hispanic, and 40 Asian or other commentors were purposively sampled. Of these commentors, 60% were women and 40% were men.

Procedures

The first step in this study was to obtain approval from the Institutional Review Board (IRB) at Liberty University. Once I received notification of approval, a new TikTok was created specifically for this study, and purposive sampling began. First, two TikTok videos on Hurricane Ian from CNN, Fox news, CBS, ABC, and NBC were purposively sampled. Then, TikTok videos on Hurricane Ian were purposively sampled from two White, three Black, three Hispanic and two Asian citizen journalists, ensuring that six out of 10 videos were posted by women and four out of 10 were posted by men. Next, 10 comments from each of the 20 videos were purposively sampled to reflect the observable racial and gender demographic of the entire platform. These included 40 White, 60 Black, 60 Hispanic, and 40 Asian commentors. During this purposive sampling, I ensured that 60% of these commentors were women and 40% were men. To reduce bias, all samples were coded with pseudonyms when inserted into NVivo 12, a computer-assisted qualitative analysis software, and arising bias will be bracketed and documented to "draw awareness to presuppositions regarding the topic" (Tufford & Newman, 2012, p. 88). Using the content purposively sampled from citizen journalists and mainstream news organizations, I conducted a conventional qualitative content analysis to investigate the communicative roles of these parties. I began by reading all text data entirely and word-by-word (Hsieh & Shannon, 2005). After this, I inductively generated codes by highlighting words and phrases that reflected overall concepts (Hsieh & Shannon, 2005). Then, I developed definitions for the categories, subcategories, and codes to determine if the communicative roles of citizen journalists and mainstream news organizations differed.

Using the content purposively sampled from both citizen journalists and mainstream news organizations, I then performed a summative content analysis to determine how effective the communications of citizen journalists were when compared to mainstream news organizations on TikTok during a crisis. To explore the context of text usage, I began by identifying and quantifying keywords in the content or text data presented using *NVivo 12* (Hseih & Shannon, 2005). During this phase, I also quantified other content in these posts, such as number of comments, shares, plays, views, and more. Once identification and quantification were completed, a combination of manifest content analysis and latent content analysis was used to explore the contextual usage of the text data in *NVivo 12*. Explicit and implicit meanings of text data were then compared to quantified factors such as favorites, likes, and number of comments to determine effectiveness. These factors were then used to determine how effective the communications of citizen journalists were when compared to mainstream news organizations on TikTok during crisis.

Lastly, using the content purposively sampled from TikTok users' comments, I performed a directed content analysis to determine the motivational factors behind user comments during a crisis. Since prior scholarship on the motivations of media dependency exists (Ball-Rokeach et al., 1984), I began with categories and subcategories related to the theory. Using an existing theory's terminology, which in this case was terminology from media dependency theory, I applied coding schemes using *NVivo 12* to all the content and text data to corroborate, disprove, or expand upon media dependency theory (Hseih & Shannon, 2005). Since I did not have to develop new codes, and all data could be situated into existing terminology, a conventional qualitative content analysis was not necessary and did not follow the directed content analysis (Hseih & Shannon, 2005).

Researcher's Role

I acted an instrument who collected and interpreted data from citizen journalists and mainstream news organizations on TikTok during Hurricane Ian (Creswell & Creswell, 2018; Creswell & Poth, 2017). Since I acted as an instrument responsible for collecting and interpreting data from TikTok, it was important that steps were taken to ensure that my own personal biases did not contaminate data analysis. First, I present bias as a person who has completed a B.A. in Media Studies and an M.A. in Film Studies. For this reason, I have my own suppositions about mass media, citizen journalism, and its impact on the public. Second, since race, religion, gender, and sexual orientation can also impact how one interprets reality, it is important to note that I am a White Christian heterosexual who identifies as male. Lastly, as a current higher educational professional who has served in various staff and faculty positions across public, private, and UC institutions, I have my own suppositions about generational learning preferences and their impact on student behavior.

While sampling, I bracketed my biases to ensure that my interpretation of results was not predicated on my own personal experiences with social media, citizen journalism, or mainstream news (Tufford & Newman, 2012). Bracketing allowed me to document any presuppositions or arising bias during data collection and analysis for the purpose of making the audience aware of assumptions held by me (Creswell & Poth, 2018; Tufford & Newman, 2012). To strengthen research findings and minimize bias, I also ensured that I was not personally acquainted with any content creators (Creswell & Creswell, 2018). After I collected data from multiple different TikTok pages, I analyzed data and inserted them into *NVivo 12* to further reduce the potential for inaccuracy (Creswell & Creswell, 2018). Following this, I performed a combination of conventional, directed, and summative content analysis to answer each research question.

Data Collection

Qualitative data traditionally use a combination of interviews, documents, audiovisual materials, or observations for their artifacts (Creswell & Poth, 2017; Saldana & Omasta, 2017). However, this study only collected data from two separate qualitative artifact types: audiovisual materials and documents. There were no interviews of TikTok users, professional journalists, or citizen journalists conducted in this study. The collection of these artifact types allowed for the included research questions to be answered and for data to be triangulated, thus increasing the project's validity and trustworthiness. The audiovisual artifacts used in this study were TikToks, each of which contained different types of material (e.g., still-images, graphics, etc.). It is also important to note that the audio from the TikToks collected for analysis was transcribed into text for analysis. Moreover, the documents used in this study were e-documents (e.g., comment sections of TikToks) and not physical pieces of paper. Other types of quantifiable data, such as likes, comments, shares, etc., were also collected to facilitate the correlation of the data. These qualitative artifact types were most suitable for answering the included research questions because they had the potential to "evoke within its viewer a possible story of its history, or an explanatory purpose for its presence" (Saldana & Omasta, 2017, p. 63). In other words, each of these artifacts could be used to create a larger picture of the world and uncover new insights about how people create meaning using different objects (Saldana & Omasta, 2017).

To correlate the data, or to identify and show how relationships between the data sets (e.g., likes, comments, text data, audiovisual data, etc.) emerged purely from this research, I took several steps, each of which differed from research question to research question. First, to determine if the communicative roles of citizen journalists differed from mainstream news during Hurricane Ian, it was important to compare the audiovisual data of citizen journalists to

the audiovisual data published by mainstream media organizations during Hurricane Ian. In addition to comparing the imagery shown in each of these TikToks, the audio was transcribed from each of these artifacts, compared, and used to allow the answer to this research question to emerge purposefully and purely. To allow the data to emerge purely and purposefully, I immersed myself in the data by reading through it multiple times, then engaging in pairing and clustering. By comparing the audiovisual data from these artifacts, it was possible to determine if the communicative roles of citizen journalists differed from mainstream organizations during Hurricane Ian.

To determine how effective the communications of citizen journalists were when compared to mainstream news organizations on TikTok during a crisis, I compared the audiovisual data from citizen journalists and mainstream news organizations on Hurricane Ian. This included comparing the audiovisual (e.g., what is shown) and text data (e.g., transcribed audio) collected from both citizen journalists and mainstream news organization to their respective quantifiable elements such as text frequency, number of likes, and number of comments. By comparing what is shown or spoken in these TikToks, it was possible to determine how effective the communications of these parties were during a crisis. The purpose of this comparison extends beyond word counts or counting likes. Instead, the goal of this correlation is to demonstrate how keywords, imagery, and implicit and explicit meanings of text can enhance the effectiveness of messaging during a natural disaster.

To determine which motivational factors underlie user comments during crisis, the text data (e.g., comments from each video) were compared to the audiovisual messages presented by both citizen journalists and mainstream media organizations. To accomplish this, I immersed myself in the data, read through it multiple times, then paired, and clustered the data. The results from this comparison were then compared to the three motivational goals (play, orientation, and understanding) associated with media dependency theory using a directed content analysis. During this comparative and immersive process, I allowed new categories that could not be situated into the motivational goals associated with media dependency theory to emerge purely and purposefully. In all three instances, I played a pivotal role in correlating the data and overall research.

This study examined two videos from five separate mainstream news organizations, 10 videos from 10 separate citizen journalists, and 10 comments from each included video or 200 separate comments. The five separate mainstream news organizations that were included in this paper were: CNN, Fox News, CBS, ABC, and NBC. Although there were dozens of news networks that could have been used in this study, it was not within the scope and timeline of this study to include them all. Rather, these five were chosen because they have been credited as parts of a whole that broadly represents the mainstream media (Shearer & Mitchell, 2021).

The ten separate citizen journalists and 200 separate TikTok commentors were chosen purposively to reflect the actual population of TikTok users. This paper explored videos posted between September 15, 2022, and October 15, 2022, when over 100 people were confirmed dead from Hurricane Ian (Omer, 2022). Although Hurricane Ian officially occurred from September 23, 2021, to September 30, 2021, the inclusion of the dates leading up to it and the dates that followed allowed for a holistic perspective on the events build-up and aftermath (Omer, 2022).

Data collection occurred over the course of 30 days between June 1, 2023, to June 30, 2023, and after IRB approval. Since the artifacts were publicly and readily available on TikTok, there was no need for an extended amount of time to collect data. Data collection, however, was conducted in two separate stages over the course of these 30 days. I first collected audiovisual

data from all five mainstream news organizations and 10 citizen journalist TikTok accounts. This included any audiovisual content readily available to other social media users such as video, hashtags, still-images, graphics, and more. I then collected e-text data (e.g., TikToks) from the comment sections of these accounts.

Data Analysis

Qualitative content analysis is a research method used to structure the subjective interpretation of text data through coding and theme identification (Hseih & Shannon, 2005). While qualitative content analysis and its subtypes have been cited as having drawbacks, such as being subject to inaccuracy, subjectivity, and implicit bias, they are the best available methods for extracting meaning from the content of text data (Creswell & Creswell, 2018; Creswell & Poth, 2017; Hseih & Shannon, 2005). For this reason, a combination of conventional, directed, and summative content analysis was used in this study to investigate the research questions. Using a combination of these approaches to content analysis, rather than just a single approach, also increased the trustworthiness and validity of the findings (Hseih & Shannon, 2005). Table 1 shows the steps I will take to code and analyze qualitative data.

First, a conventional content analysis was used to determine if the communicative roles of citizen journalists differed from mainstream news organizations on TikTok when reporting a crisis. This conventional content analysis included text and audiovisual data from 10 citizen journalists and 10 mainstream news organizations during a crisis. Conventional content analysis was conducted by generating codes and then categories through the highlighting of words and phrases that reflect concepts in *NVivo 12*. I continually coded until the point of saturation, or when repeated data analysis fails to generate new insights (Saunders et al., 2018). Definitions were then be developed for all categories, subcategories, and codes (Hsieh & Shannon, 2005).

Second, a summative qualitative content analysis was conducted to determine how effective the communications of citizen journalists are when compared to mainstream news organizations on TikTok during a crisis. This summative content analysis included text and audiovisual data from 10 citizen journalists and 10 mainstream news organizations during a crisis. The summative content analysis began by identifying and quantifying relevant keywords in both audiovisual and text data using *NVivo 12* (Hseih & Shannon, 2005). After keywords were identified and quantified, a combination of manifest content analysis and latent content analysis was deployed to explore the relationship between contextual usage of those words and the video's popularity or effectiveness. A manifest content analysis was first used to count the number of times a word or piece of content is spoken and to determine its explicit meaning (Hseih & Shannon, 2005). A latent content analysis of the text data was then used to investigate the implicit meaning of text to explore the relationship between implied meaning and video effectiveness.

Last, a directed qualitative content analysis was used to explore the motivational factors behind user comments during a crisis. This directed qualitative content analysis examined 10 comments from each of the 20 TikToks posted by either citizen journalists or mainstream news organizations. Since directed content analysis is deductive, this process began with categories, subcategories, and codes from previous research (Hseih & Shannon, 2005). Using an existing theory's terminology, which in this case is terminology from media dependency theory, coding schemes were applied to the data to corroborate, disprove, or expand upon an existing theory (Hseih & Shannon, 2005). Working definitions for all categories, subcategories, and codes were then generated to determine the motivational factors behind user comments. Since saturation was achieved, a conventional content analysis was not conducted or required. Table 2 illustrates how a directed and conventional qualitative content analysis can be used to investigate the motivational factors behind user comments during a crisis using existing media dependency terminology.

NVivo 12 is a computer-assisted qualitative analysis software used to analyze unstructured data (Dhakal, 2022). *NVivo 12* was used in this dissertation to organize, visualize, and analyze qualitative data (Dhakal, 2022). *NVivo 12* has a variety of benefits that made it the perfect choice for this qualitative investigation. First, *NVivo 12* allows its users to manage and analyze a variety of data types, including the e-documents and audiovisual artifacts that are included in this study (Dhakal, 2022). For this reason, *NVivo 12* facilitated the organization and analysis of hundreds of comments and dozens of TikTok videos. Second, researchers have noted that using *NVivo 12* for a qualitative data analysis bolsters the quality, accuracy, and reliability of their findings (Dhakal, 2022). By using *NVivo 12* to manage, organize, and analyze qualitative data, I reduced the threshold for human error. *NVivo 12* also has a variety of features that simplified and sped up identifying links between data and emergent themes (Dhakal, 2022). *NVivo 12* was therefore used to determine connections reliably and quickly between e-documents, audiovisual artifacts, and emergent themes.

Coding

This dissertation deployed and modified Forman and Damschroder's (2007) method of coding for qualitative content analysis. Codes are best defined as "classification systems for the analysis of qualitative data," and they can "represent topics, concepts, categories, events processes, attitudes, or beliefs that represent human activity and thought" (Forman & Damschroder, 2007, p. 48). Primarily, codes "reorganize data" to simplify interpretation and allow for an understanding of the data that extends beyond its face value (Forman &

Damschroder, 2007, p. 49). Through coding, a clear picture of human activity and thought emerges that would otherwise not be possible from a mere transcript of text data (Forman & Damschroder, 2007). To develop a coding scheme and a codebook, the researcher must reorganize the data into relevant and "mutually exclusive categories" whose meanings do not "overlap" (Forman & Damschroder, 2007, p. 49).

Following the creation of such categories, the researcher is responsible for providing consideration to how the coded data will look upon retrieval and how the organized data can be used during data analysis (Forman & Damschroder, 2007). Through this iterative process, a codebook is developed, and preliminary coding begins (Forman & Damschroder, 2007). During preliminary coding, Forman and Damschroder (2007) recommend that qualitative researchers familiarize themselves with the data, highlight relevant passages, and annotate as needed. Following codebook creation and preliminary coding, said codes can then "be applied to all the text in the data set" (Forman and Damschroder, 2007, p. 55).

It is recommended that researchers take notes during this time and provide reasoning for why each portion of text data can be situated into a code (Forman and Damschroder, 2007). When coding is finalized, data can be interpreted, preliminary conclusions can be drawn, and further analysis can be conducted (Forman and Damschroder, 2007). While Forman and Damschroder (2007) recommend using an intercoder agreement and several others to bolster validity, reliability, and more, this project instead incorporated other strategies intended to bolster objectivity and prevent subjectivity (e.g., audit trail, inclusion of discrepant information, etc.). Other than this, however, the coding process presented by Forman and Damschroder (2007) was adhered to for text data. To qualitatively code video data (e.g., what is shown and not stated) that could not be transcribed and collected as text data, this dissertation deployed the cyclical analytical process proposed by Jacobs et al. (1999). The cyclical analytic process, which is a qualitative approach to video analysis, included "watching, coding, and analyzing the data, with the goal of transforming the video images into objective and verifiable information" (Jacobs et al., 1999, p. 718). The goal of the cyclical analytical process was to develop "objective codes" that could be analyzed, interpreted, and linked to what was shown in the videos (Jacobs et al. 1999, p. 718). To accomplish that, I first watched and rewatched all video content (Jacobs et al., 1999). Next, I developed objective codes and applied them accordingly. After this, I analyzed the codes, interpreted them, and determined if categories and themes emerged from visual patterns.

Trustworthiness

In qualitative research, trustworthiness can be defined as "the systematic rigor of the research design, the credibility of the researcher, the believability of the findings, and the applicability of the research methods" (Rose & Johnson, 2020, p. 434). It is recommended that qualitative researchers take a variety of steps to ensure that qualitative analyses are trustworthy (Rose & Johnson, 2020). While some have argued that establishing a criterion for trustworthiness is a futile effort that will never result in a widely agreed upon set of standards (Rose & Johnson, 2020), this study argues that trustworthiness is rooted in credibility, dependability, confirmability, and transferability (Creswell & Creswell, 2018; Hseih & Shannon, 2005). This study used a variety of methods to ensure that the findings were trustworthy. These included but were not limited to triangulating data and including discrepant information.

Credibility

Credibility can be defined as the believability of qualitative findings (Rose & Johnson, 2020). Conventional, summative, and directed qualitative content analysis each have unique research designs that present their own threats to credibility (Hseih & Shannon, 2005). During a conventional content analysis, a researcher may fail to generate a complete understanding of their data's context and therefore fail to identify all relevant categories and subcategories (Hseih & Shannon, 2005). Such a misunderstanding of the context can result in conclusions that do not accurately reflect the data (Hseih & Shannon, 2005). For this reason, data was triangulated using multiple artifact types and reviewed over a period of 30 days to increase credibility and minimize the likelihood of conclusions not accurately reflecting findings (Creswell & Creswell, 2018; Creswell & Poth, 2017; Hseih & Shannon, 2005).

The credibility of a summative content analysis' results may be threatened if the researcher pays little attention to the broad meanings presented in the text data (Hseih & Shannon, 2005). To ensure that this does not occur and thus improve the credibility of findings, the researcher will demonstrate that identified keywords are consistent with the implicit and explicit interpretation of the text (Hseih & Shannon, 2005). It is also recommended that researchers deploy evidence-driven methods, such as choosing keywords from central research concepts, to identify keywords accurately (Hseih & Shannon, 2005). For this reason, I chose the top 15 most frequently spoken or written keywords from each participant group and ensured that said keywords reflected central research concepts.

A directed content analysis, however, is limited by its approach to qualitative analysis using prior theory (Hseih & Shannon, 2005). Given that the process is deductive rather than inductive, researchers are more likely to produce results in support of their research question (Hseih & Shannon, 2005). To prevent this from occurring, increase the credibility of findings, and therefore bolster the trustworthiness of this analysis, scholars recommend that qualitative researchers—despite their approach—take extensive notes, use a computer-assisted qualitative analysis software, outline how their personal or professional experiences might contaminate interpretation of text data, and include findings that are discrepant to the included findings (Creswell & Creswell, 2018). Each of these activities was performed to increase the credibility and trustworthiness of findings.

Dependability and Confirmability

Dependability is concerned with qualitative analyses' repeatability and stability (Anney, 2014; Rose & Johnson, 2015). Dependability is an important aspect of all qualitative aspects because it allows other researchers to replicate findings (Rose & Johnson, 2015). Historically, dependability is established using various strategies including audit trails, data triangulation, and member checking (Anney, 2014). For this study, data triangulation of text and audiovisual data was used as a method for improving the dependability of the findings. I also generated a detailed audit trail through which other researchers can replicate similar studies.

Confirmability, however, is concerned with how analyses are supported by data rather than personal bias (Rose & Johnson, 2020). There are a variety of methods that scholars recommend to encourage objective interpretation of data. These include but are not limited to triangulating data, including discrepant information, and adopting and practicing reflexivity, or including comments from the researcher about their role and biases (Anney, 2014; Creswell & Creswell, 2018). While data triangulation and the inclusion of discrepant information was included in the data analysis process to improve confirmability, this study primarily relied on reflexivity to ensure that data is supported by results rather than personal biases (Anney, 2014; Rose & Johnson, 2020).

Scholars have noted that keeping a reflexive journal or a book of notes on all events, personal reflections, or arising biases is central to reliably cross-checking data with interpretation of the findings (Anney, 2014; Creswell & Creswell, 2018). To prove confirmability, I triangulated data, included discrepant information, and kept a reflexive journal throughout the duration of the study.

Transferability

Transferability is concerned with how "analyses can be transferred to other contexts" with other participants (Rose & Johnson, 2005, p. 436; Anney, 2014). Researchers have noted that transferability is bolstered through purposive or purposeful sampling (Anney, 2014). This study collected a group of participants intended to reflect the observable racial and gender identity of TikTok's user population to prove its transferability. Researchers have also argued that thick descriptions also bolster transferability (Anney, 2014). A thick description is a type of research method in which the researcher illuminates all steps in the research process (Anney, 2014). For this reason, this study provided thick descriptions of how codes, categories, and their subcategories were developed during its qualitative content analysis.

Standard Measurements

Establishing a criterion for useful data is integral to both collecting accurate data and successfully converting unstructured data to its structured counterpart prior to analysis. Since terms such as useful, good, or bad data are value judgements more than useful empirical terms, it is important to outline scholarly-driven standard measurements that bolster the validity, reliability, and objectivity of the collected qualitative data. Devers (1999) notes that there are

four criteria traditionally regarded as the standard measurements for high-quality qualitative data and research: internal validity, external validity, reliability, and objectivity. This dissertation used these four elements as its standard measurements for high-quality data. This dissertation also collected audiovisual data and text data from citizen journalists, mainstream media organizations, and TikTok users that broadly reflected the population of the social media application's users at large (e.g., gender, race, etc.) These four elements were used as standard measurements for high-quality data and worked to establish an inclusive/exclusive criterion

Internal Validity

To ensure that the collected qualitative data is internally valid, the data must "correctly map the phenomenon in question" (Devers, 1999, p. 1147). Although this is not a phenomenological study, this qualitative content analysis took steps to ensure that the data appropriately collected and accurately captured the various elements contained within the research questions. To bolster internal validity and "map the phenomena" correctly, three steps were taken (Devers, 1999, p.1147). First, efforts were made to ensure that the three populations sampled (citizen journalists, mainstream media organizations, and TikTok users) accurately reflected the users distributing and receiving news. For example, the 10 separate citizen journalists and 200 separate TikTok commentors were collected through purposive sampling to reflect the actual population (e.g., race, gender, etc.) of TikTok users at large. Further, quantifiable data (e.g., text frequency, likes, comments, shares, etc.) were collected from users' natural social media setting (TikTok) rather than a manufactured experimental setting. By purposively sampling these three populations from a natural setting, triangulating the data, and ensuring that they reflect the broader population of TikTok users at large, the internal validity of this project was increased.

External Validity

External validity, however, is "the degree to which findings can be generalized to other settings similar to the one in which the study occurred" (p. 1147). To ensure this study is externally valid, it is important to purposively sample qualitative data from a natural setting that is like other natural settings in existence. Since this project is collecting all its data from TikTok, a short-form social media application that shows videos to its users, it stands to reason that findings from this study could be applicable to other social media applications that offer similar content. Instagram, for example, has its own short-form video application known as Reelz, while YouTube has a similar application known as YouTube Shorts; each of these are nearly identical to TikTok. Purposively sampling short-form video content and text data that are similarly available on other types of social media applications increases the degree to which findings can be generalized to other settings because they are extremely similar. Further, since mainstream media organizations and citizen journalists report on natural disasters on these other platforms as well (e.g., Instagram Reelz, YouTube Shorts, etc.), it stands to reason that the findings from this study can be generalized to this population's behavior across multiple different social media applications. TikTok was chosen to examine exclusive of other social media applications because it predates both Instagram Reelz and YouTube Shorts, is much more widely used, and has had much danger associated with its usage.

Reliability

Devers (1999) defines reliability as "The extent to which findings can be replicated or reproduced by another investigator" (p. 1147). Leung (2015) notes that determining reliability in qualitative research is "challenging and epistemologically counterintuitive," and for this reason, reliability is determined through "consistency" (p. 1). While marginal variabilities in qualitative

research are acceptable, it is important for the researcher to deploy a method that maximizes the reliability of the findings and research overall (Leung, 2015). To bolster the reliability of these findings, this project utilized the constant data comparison method, which has been used in qualitative content analysis before and serves to ensure that the data collected are accurate (Downe-Wamboldt, 2009; Leung, 2015). The constant data comparison method was used to ensure that results are consistent and accurate from the start of data collection to the end of data analysis. Reliability of findings is also increased by including discrepant information (Anney, 2014). For those reasons, including results that are inconsistent or outliers is integral to ensuring that findings are reliable to the reader.

Objectivity

Devers (1999) defines objectivity as "the extent to which findings are free from bias" (p. 1147). Zahle (2020) notes that qualitative researcher's data is "objective to the extent that it, in conjunction with true assumptions, possesses a combination of good-making features" (p. 1). These "good-making features" should be integrated within one's data collection and data analysis protocol to improve objectivity (Zahle, 2020, p. 1). For this reason, this study triangulated data, included discrepant information, performed an audit trail, acknowledged hindsight bias as a threat, and relied on reflexivity to enhance the objectivity of this study. Although triangulation, the inclusion of discrepant information, and an audit trail were used to improve objectivity, reflexivity was the primary method used to enhance objectivity (Anney, 2014; Rose & Johnson, 2020). By keeping a reflexive journal that archived all events during data collection and data analysis, which included but were not limited to personal reflections, relevant thoughts, and arising biases, the objectivity of the data collection and analysis was enhanced (Anney, 2014; Creswell & Creswell, 2018).

Ethical Considerations

This dissertation sought to understand the problems associated with depending on citizen journalists for news updates during a crisis. To conduct this scholarly investigation ethically and properly, I anticipated ethical issues and created barriers intended to protect all parties (Creswell & Creswell, 2018). Researchers are responsible for protecting participants' anonymity, promoting integrity, thus preventing misconduct that might negatively reflect on the institutions they represent (Creswell & Creswell, 2018). To ensure that research was conducted responsibly and ethically, Liberty University's IRB assessed the study's approach for ethical concerns that could have put participants at risk. All data collected from citizen journalists, mainstream news organizations, and TikTok users were always stored on a password-protected computer in a locked office. The reflexive journal containing all notes on my experience was also kept in the same office. To protect the identities of these TikTok users and minimize negative impacts of unconscious and hindsight bias, my reflexive journal and data did not include any identifiable information about participants (e.g., name, username, etc.).

Hindsight Bias

Since this research study collected data from the past, specifically between September 15, 2022, and October 15, 2022, it was subject to hindsight bias. Scholars have noted that hindsight bias occurs when prior knowledge influences how a researcher interprets results (Bernstein et al., 2007). Otherwise known as the "I knew it all along phenomenon," hindsight bias can negatively impact an objective interpretation of past event (Bernstein et al., 2007, p. 1374). For this reason, I kept a reflexive journal that archived rationale for how and why all decisions were made, which is a proven method for minimizing the impact of hindsight bias (Bernstein et al., 2007). Ialso

(Bernstein et al., 2007). Both the reflexive journal and the audit trail were used to cross-check findings against underlying assumptions inherent to the researcher.

Summary

Chapter 3 described the conventional, directed, and summative qualitative content analysis and outlined why a combination of these approaches was most suitable for this investigation. To accomplish that, this chapter overviewed the research methods, design, research questions, setting, participants, procedures, the researcher's role, data collection procedures, data analysis procedures, trustworthiness, and ethical considerations that were used in this investigation. This chapter also overviewed the advantages and disadvantages associated with deploying a combination of qualitative content analysis. Regarding disadvantages, this chapter also included a variety of strategies intended to bolster and improve its trustworthiness, credibility, dependability, confirmability, and transferability. These methods include but are not limited to data triangulation, providing thick descriptions, creating audit trails, and keeping a reflexive journal. Exploring the communicative roles of citizen journalists, how effective their messages are when compared to mainstream media organizations, and the motivational factors behind user comments is a critical first step to improving the public's information literacy and reestablishing the mainstream media's credibility.

Chapter 4: Results

Overview

The purpose of this qualitative content analysis was to understand the problems associated with users depending on citizen journalists for news updates during natural disasters on TikTok. In this chapter, I provide a detailed overview of participants and report results from a conventional, summative, and directed qualitative content analysis. First, I report findings from a conventional content analysis of citizen journalist and mainstream media TikTok communications during Hurricane Ian. Second, I report findings from a summative content analysis of citizen journalist and mainstream media TikToks to determine the effectiveness of these participants' communications. This chapter lastly reports findings from a directed content analysis of user comments posted during Hurricane Ian and clarifies their motivations. In doing so, this chapter reveals the problems associated with TikTok users depending on citizen journalists during a natural disaster.

Participants

Three sets of participant types were purposively sampled for this investigation: mainstream news organizations, citizen journalists, and TikTok users. First, this study sampled five separate news organizations: CNN, Fox News, CBS, ABC, and NBC. Two TikToks were sampled from each of the five mainstream media organizations, resulting in 10 total TikToks sampled. Table 3 contains descriptive data collected from each of the mainstream news organizations' TikToks and appropriate column headers for each of the 10 videos. These column headers include quantitative measurements such as likes, plays, comments, saves, shares, and the number of hashtags each organization's TikTok had at the time of purposive sampling.

Table 3

	Organizations	Video Likes	Plays	Comments	Saves	Shares	Hashtags
Ν	CNN	2	2	2	2	2	2
	Fox News	2	2	2	2	2	2
	NBC	2	2	2	2	2	2
	CBS	2	2	2	2	2	2
	ABC	2	2	2	2	2	2
Mean	CNN	1374	70700	27.0	57.5	169	4.00
	Fox News	4487	309454	99.5	212	388	2.00
	NBC	10741	110150	84.5	393	257	3.50
	CBS	42550	759750	255	1051	329	4.00
	ABC	2062	75000	70.5	72.5	408	3.00
Standard deviation	CNN	190	2828	2.83	16.3	170	0.00
	Fox News	6293	426168	141	299	548	2.83
	NBC	10691	60882	50.2	415	198	0.707
	CBS	26092	212344	87.0	339	139	0.00
	ABC	18.4	3960	46.0	19.1	327	1.41

Descriptive Data—Mainstream Media

10 citizen journalists who posted TikToks during Hurricane Ian were also purposively sampled as participants in this study. The citizen journalists sampled were purposively chosen to reflect the average racial and gender demographics of TikTok users overall. For this reason, two White, three Black, three Hispanic, and two Asian citizen journalists were purposively sampled as participants in this study (Pew Research Center, 2021). Of these participants, 60% were female and 40% were male (Pew Research Center, 2021). Table 4 contains descriptive statistics and appropriate column headers for each of the 10 citizen journalist videos. These column headers include demographic data such as race and gender as well as quantitative measurements such as likes, plays, comments, saves, shares, and the number of hashtags each citizen journalist had at the time purposive sampling was conducted.

Table 4

	Gender	Race	Video Likes	Plays	Comments	Saves	Shares	Hashtags
N	White	Male	2	2	2	2	2	2
		Female	0	0	0	0	0	0
	Hispanic	Male	1	1	1	1	1	1
		Female	2	2	2	2	2	2
	Black	Male	1	1	1	1	1	1
		Female	2	2	2	2	2	2
	Asian	Male	0	0	0	0	0	0
		Female	2	2	2	2	2	2
Mean	White	Male	907800	6.00e+6	3820	28450	4391	8.00
		Female	0	0	0	0	0	0
	Hispanic	Male	2229	1.30e+6	2460	2206	1453	4.00
		Female	2362	754728	159	212	66.5	3.00
	Black	Male	1378	575200	1230	2101	376	12.0
		Female	23200	4.15e+6	3798	23948	386	5.50
	Asian	Male	0	0	0	0	0	0
		Female	2319	453000	305	999	3962	3.50
Standard deviation	White	Male	1.26e+6	3.39e+6	2336	13081	5057	1.41
		Female	0	0	0	0	0	0
	Hispanic	Male	0	0	0	0	0	0
		Female	3110	1.05e+6	204	232	62.9	1.41
	Black	Male	0	0	0	0	0	0
		Female	17536	1.34e+6	3301	21146	544	2.12
	Asian	Male	0	0	0	0	0	0
		Female	2645	274640	71.4	846	4774	0.707

Descriptive Data – Citizen Journalists

This study also purposively sampled 10 comments from each of the 20 TikToks collected for this study. Efforts were made to ensure that the 200 comments collected for this study broadly reflected the average gender and racial demographics of TikTok users. For this reason, 40 White, 60 Black, 60 Hispanic, and 40 Asian commentors and their comments were purposively sampled (Pew Research Center, 2021). While 60% of the collected participants were female, only 40% were male (Pew Research Center, 2021). Table 5 contains descriptive statistics and appropriate column headers for each of the 100 TikTok users who commented on the collected citizen journalists' videos. Table 6, however, contains descriptive statistics and appropriate column headers for each of the 100 TikTok users who commented on the collected citizen journalists for each of the 100 TikTok users who commented on the collected TikToks posted by the mainstream media during Hurricane Ian.

Table 5

	Race	Gender	Ν	Mean	Median	SD	Minimum	Maximum
Replies	White	Male	4	15.250	0.000	30.500	0	61
		Female	16	8.063	2.500	12.788	0	51
	Black	Male	9	21.000	2	26.889	0	65
		Female	21	8.286	2	15.399	0	56
	Hispanic	Male	16	7.688	1.000	18.113	0	73
		Female	14	18.357	0.000	64.971	0	244
	Asian	Male	10	0.100	0.000	0.316	0	1
		Female	10	4.400	0.500	8.501	0	27
Likes	White	Male	4	15575.000	0.000	31150.000	0.00	62300.0
		Female	16	872.063	288.500	1113.943	0.00	3270.0
	Black	Male	9	1054.444	32.000	1795.470	0.00	5417.0
		Female	21	365.667	73.000	504.389	0.00	1417.0
	Hispanic	Male	16	648.688	25.000	1689.705	0.00	6013.0
		Female	14	517.214	9.500	1446.328	0.00	5485.0
	Asian	Male	10	8.100	0.000	24.569	0.00	78.0
		Female	10	675.300	34.500	1975.949	0.00	6296.0

Descriptive Data – Citizen Journalist Commentors

This study was guided by three research questions intended to determine the problems associated with depending on citizen journalists on TikTok for news updates during a natural disaster. To accomplish that, this study aimed to determine if the communicative roles of citizen journalists differed from mainstream news organizations on TikTok when reporting a crisis, how effective the communications of citizen journalists were when compared to mainstream news organizations on TikTok during a crisis, and what the motivational factors behind user comments are during a crisis. The data were collected using purposive sampling of publicly available TikTok content that included audiovisual and e-text artifacts. A modified version of Forman and Damschroder's (2007) method of coding for qualitative content analysis was deployed in this study. Following Forman and Damschroder's (2007) method for coding qualitative content, I

conducted analysis to draw conclusions on all text data. Where applicable, I used a modified version of the cyclical analytic process to qualitatively code video data or what was shown in each video (Jacobs et al., 1999). This section presents results based on a conventional, summative, and directed qualitative content analysis.

Table 6

	Race	Gender	Ν	Mean	Median	SD	Minimum	Maximum
Replies	White	Female	14	1.5000	0.00	2.624	0.00	8.00
		Male	6	6.3333	2.00	8.406	0.00	17.00
	Black	Female	11	0.3636	0.00	0.924	0.00	3.00
		Male	19	0.6842	0.00	2.982	0.00	13.00
	Hispanic	Female	18	0.3889	0.00	1.420	0.00	6.00
		Male	12	0.0833	0.00	0.289	0.00	1.00
	Asian	Female	17	0.1176	0.00	0.332	0.00	1.00
		Male	3	0.0000	0.00	0.000	0.00	0.00
Likes	White	Female	14	172.4286	3.50	381.516	0.00	1190.00
		Male	6	327.3333	1.50	677.525	0.00	1693.00
	Black	Female	11	6.0909	1.00	13.561	0.00	46.00
		Male	19	3.9474	0.00	11.043	0.00	45.00
	Hispanic	Female	18	2.8333	0.00	7.358	0.00	27.00
		Male	12	2.3333	0.00	4.619	0.00	15.00
	Asian	Female	17	0.1765	0.00	0.393	0.00	1.00
		Male	3	0.0000	0.00	0.000	0.00	0.00

Descriptive Data—Mainstream Media Commentors

Data Analysis

Conventional Content Analysis Results

A conventional content analysis was deployed to determine if the communicative roles of citizen journalists differed from the mainstream medias during a crisis such as Hurricane Ian.

Results based on a conventional content analysis revealed six themes and nine subthemes. Themes included comedy, concern, gratitude, concern, damage, and survival. Subthemes included farce, satire, concern for animals, religious gratitude, property damage, environmental damage, future damage, shelter in place, and disaster preparation. A theme was defined as "an organization of two or more categories that represent an underlying meaning. Themes describe behaviors, experiences, or emotions that occur throughout categories" (Kleinkeksel et al., 2020, p. 128). Subthemes, however, were defined as a concept that can be organized underneath a theme but differentiated using distinguishing characteristics.

These themes and subthemes emerged following a conventional content analysis of 10 TikToks posted by citizen journalists and 10 TikToks posted by the mainstream media during Hurricane Ian. In total, I sampled 504 words from both groups to arrive at the conclusions presented in this section. Table 7 overviews the communicative roles of citizen journalists, and Table 8 overviews the communicative roles of mainstream media organizations. Although there was some overlap, there were characteristics that distinguished the communicative roles of citizen journalists from their mainstream counterparts. This section will overview findings from a conventional content analysis of audiovisual and e-text data from both citizen journalists and mainstream media organizations. This section also provides examples that justify why these themes were significant and repetitive enough for them to emerge as themes. Figure 1 in the appendices illustrates a step-by-step audit trail for this conventional content analysis, which is based on Hseih & Shannon's (2005) approach.

Table 7

Qualitative Data—Communicative Roles of Citizen Journalists

Meaning Units (Examples)	Theme	Definitions	Sub-Theme	Definitions
Hurricane Ian is causing major flooding, we need to evacuate immediately. Evacuate, I live in a penthouse on the 43 rd floor in Miami lol.			Satire	When one uses comedy to ridicule institutions and society rather than specific individuals.
He probably would've stayed out there watching it all go down if my mom hadn't yelled at him lol	Comedy	When one uses comedy to quell public fear and anxiety surrounding the storm.		When one's behavior is considered ridiculous or
Yo this is mad. No this is relaxing you should try it. Nah no way dude. You got a speaker? I'm telling you it's nice. This is the most Florida thing I've ever seen with my own two eyes!			Farce	unsafe but entertains others.
Kitten stuck in Hurricane Ian. Worst is yet to come.	Concern	When one uses TikTok as a device to express anxiety, worry, or apprehensiveness.	Concern for animals.	Using TikTok to express anxiety about the well- being of other people or animals.
Thanks to God, I made it out alive.	Gratitude	When TikTok is used to express thankfulness.	Religious gratitude	When TikTok is used to express thankfulness directly to God.
Hurricane Ian has us bucketing out some of this water		When TikTok is used to archive all	Property damage	When destruction from Hurricane Ian, such as flooding or heavy winds, results in property damage.
Dolphin washed up after 20-foot storm surge! Insane experience for all the haters there was no cell service to reach out to any wildlife control.	Damage	types of damage from Hurricane Ian.	Environmental damage	When destruction from hurricane Ian, such as flooding or heavy winds, results in environmental damage.

Table 8

Qualitative Data—Communicative Roles of the Mainstream Media on TikTok

Meaning Units (Examples)	Theme	Definitions	Sub-Theme	Definitions
Water has been sucked out of the Manatee River at the Bradenton Harbor in Bradenton, Florida ahead of Hurricane Ian's landfall.			Environmental damage	When destruction from Hurricane Ian, such as flooding or heavy winds, results in property damage.
Yea the wind makes for some traumatic pictures. But it's the blowing water that will make the most dramatic difference for these peoples' lives for the next foreseeable future. When this wind dies and the sun comes out, the nightmare is just beginning for these folks. Then comes the flooding water and the mold problems, oh, and the lost days of work. This storm is going to hurt John. All you can do is hope for minimum blood sweat and tears.	Damage	When TikTok is used to archive all types of damage from Hurricane Ian.	Future damage	When destruction from Hurricane Ian, such as flooding or heavy winds, results in property damage.
The governor is saying today if you haven't evacuated it is too late.	Survival	When TikTok is used to	Shelter in place	When mainstream news organizations encourage viewers to shelter in place.
If you are located along the path to the Hurricane. Now is the time to prepare.	Survival	communicate reliable survival methods	Disaster preparation	When mainstream news organizations encourage viewers to prepare for the pending storm.

Comedy

The first theme to emerge following a qualitative content analysis of audiovisual and etext data from citizen journalists was comedy, which in this case is defined as a TikTok user using humor to quell public fear and anxiety. In these cases, humor was used to quell public fear and anxiety surrounding Hurricane Ian and its perceived threat. Since the mainstream news media did not deploy comedy when reporting Hurricane Ian, they were not included in this section. However, citizen journalists frequently posted videos that were underwritten by some type of comedy. Two subthemes also organically emerged following an analysis of the data. These subthemes included satire and farce.

Satire. Of all the purposively sampled citizen journalists' TikToks, the video with the highest engagement (e.g., most likes, comments, plays, etc.) deployed a type of comedy known as satire. This type of comedy is defined as comedy that is used to ridicule institutions and society rather than a specific individual. For example, one citizen journalist mocked the evacuation and by extension the governmental institutions who distributed it. He stated, "Hurricane Ian is causing major flooding, we need to evacuate immediately. Evacuate, I live in a penthouse on the 43rd floor in Miami Iol." While satirizing governmental evacuation orders, this TikTok user also provided a tour of his glamorous apartment in Miami. In doing so, the TikTok user demonstrated that he did not need to evacuate or listen to governmental authorities because of his penthouse location on the 43rd floor of his apartment building.

This same TikTok user included a description in his post that reads, "Ian got nothing on us," indicating that he was confident that his penthouse would not be impacted by the flood. In fact, this TikTok user even used this opportunity to promote his apartment building by hashtagging his post with a #realestate. This same TikTok post also hashtagged the makeup the user wore in the video using #hauslabsfoundation. While the post itself is specifically satirical and works to impugn the credibility of the evacuation order, other parts of the post, such as its hashtags, are so absurd and irrelevant they read as comedy. In this case, one must ask if the TikTok user is self-aware and trolling users with their brazen confidence.

Some commentors were quick to warn the TikTok user that Hurricane Ian could negatively impact a person despite their location on the 43rd floor of an apartment complex in

Miami, Florida. For instance, one commentor stated, "What happens when the first or second floor gets flooded?" Such an incident would no doubt leave the TikTok user in a dangerous and compromised position for having not evacuated when they were told to. Another commentor exclaimed, "Until the power goes out and you have to walk 43 stories down." Beyond only having to walk 43 stories down, power outages could also prevent this TikTok user from reaching necessary emergency services by phone. Or even worse, such power outages could also prevent emergency services from reaching this person if they have a life-threatening emergency in their home. This video serves as a reminder that in some cases, citizen journalists use TikTok to make fun of evacuation orders designed to keep people safe. In this example, however, the citizen journalists attempted to satirize the government and frame evacuation orders as an exaggeration that were not accepted by their audience members.

Farce. Unlike satire, farce is a type of comedy that occurs when one's behavior is considered ridiculous or unsafe but ultimately entertaining to those who watch it. Such buffoonery was identified as a subtheme in citizen journalist TikTok videos. Exemplifying this, one citizen journalist's TikTok featured a man in a pool toy floating in the floodwaters during the storm. Specifically, a man filmed a fellow Floridian floating down dangerous neck-high floodwaters on a pool doughnut while playing music and holding a frying pan to hit any alligators who may threaten him. An audio transcription between both men reads, "Yo this is mad. No this is relaxing you should try it. Nah no way dude. You got a speaker? I'm telling you it's nice." While one person in the video acknowledges the behavior is unsafe but funny, the other seems unconcerned with the dangers of the floodwater, including but not limited to wildlife, sewage in the water, and drowning.

Although the buffoonery may be considered comedic to some, it is evident that some citizen journalists framed the flooding as less serious than was advertised by the mainstream media. In this case, the floating man's behavior is both ridiculous and unsafe. However, his behavior prompts many comedic reactions from commentors. For instance, one TikTok user said, "When life gives you water, you find a floaty and some pots and make it a party." Other commentors expressed concern for the behavior, noting, "it's all fun and games until a gator or a cottonmouth shows up." The TikTok of this man entertaining others with his irresponsible and unsafe behavior suggests that citizen journalists play an important role in bringing levity to a serious situation. This TikTok also indicates that citizen journalists serve the important role of communicating how not to behave during crises such as Hurricane Ian.

Concern

The second theme that emerged from this qualitative content analysis of audiovisual and e-text data from citizen journalists was concern, which in this case is defined as the expression of anxiety for the well-being of others. Several TikToks posted by citizen journalists, for example, were used to express concern for others. Since the mainstream news media did not express concern when reporting Hurricane Ian, they were not included in this section. However, citizen journalists frequently posted videos that were underwritten by some type of concern for others. Specifically, one subtheme organically emerged following a conventional content analysis of the data. This subtheme is known as concern for animals. Audiovisual and e-text data purposively sampled from citizen journalists demonstrated that TikTok users often use the social media platform to communicate reminders that animals are also threatened by natural disasters such as Hurricane Ian and the destruction that often accompanies them. **Concern for Animals**. One of the most frequent subthemes identified from citizen journalists was concern for animals. Defined as the expression of anxiety about the well-being of animals, this subtheme covered a wide range of domesticated animals (e.g., dogs, cats, etc.) and wildlife. For example, one TikTok user posted a video of a kitten stuck atop a bench surrounded by rising floodwaters. The description read, "Kitten stuck in hurricane Ian. Worst is yet to come." Here, the TikTok user expresses concern for the kitten he cannot help and all other animals that will no doubt be negatively impacted by the flooding that Hurricane Ian has caused. This video prompted other TikTok users to comment and ask for updates on the kitten. They stated, "was the cat saved?" Another user posted a video of him in neck high water stated, "I'm underwater. I'm outside. I'm worried about my dogs. I'm okay. This is how high the water is now." As was the case with the kitten, commentors also repeatedly asked for updates on his dogs. Citizen journalists used TikTok to showcase animals in danger and express concern for other animals in the surrounding area.

Gratitude

The third theme that emerged from this qualitative content analysis of audiovisual and etext data from citizen journalists was gratitude, which in this case is the expression of thankfulness. However, it was a specific type of gratitude, hereafter known as religious gratitude, that was expressed by TikTok users during Hurricane Ian. Audiovisual and e-text data purposively sampled from citizen journalists demonstrated that some use TikTok to communicate thankfulness during a natural disaster. It is important to note that mainstream news media did not deploy religious gratitude when reporting Hurricane Ian and for this reason were not included in this section. **Religious Gratitude**. Expression of religious gratitude was the least frequent subtheme expressed by citizen journalists. Defined as an expression of thankfulness that is directed towards God, religious gratitude was expressed by one user in his TikTok's description. It stated, "Thanks to God, I made it out alive." Commentors reinforced this religious gratitude, expressing sentiments such as, "Thank God you are okay." Other sentiments such as prayer emojis were deployed by TikTok users to indicate they were praying for their safety. Citizen journalists were observed using TikTok as medium through which to acknowledge God's existence and express gratitude for keeping them safe during Hurricane Ian. Citizen journalists were also observed using the medium to pray for the safety of others after seeing the destruction Hurricane Ian caused.

Damage

The fourth theme that emerged from this qualitative content analysis of audiovisual and e-text data from both citizen journalists and mainstream media organizations was damage. In this case, damage is defined as using TikTok to communicate and archive all types of damage from Hurricane Ian. Three types of damage or subthemes emerged from this analysis. These types or subthemes included property damage, future damage, and environmental damage. While there was some overlap, it is apparent that mainstream news organizations highlighted damage more than their citizen journalist counterparts to attract viewers.

Property Damage. Overview of property damage was one of the most frequently identified subthemes collected from citizen journalists' TikToks. This subtheme can be defined as any content that reviews damage to personal property, such as housing, caused by Hurricane Ian. One TikTok user showed their family taking buckets of water out of their pool to highlight the ongoing damage happening to their property. The description of the video read, "Hurricane

Ian has us bucketing out some water." Since bucketing out the water could be interpreted as an inefficient means of containing the problem, commentors were quick to offer advice on how to handle the problem. Specifically, these commentors noted that there should be a valve that can be used to drain the pool and prevent overflow from the rain. For example, one TikTok user stated, "There should be a reverse flow or backwash." In this case, citizen journalists used TikTok to communicate the damage to their property caused by the storm and even received criticism for their handling of the situation in the face of crisis. Since the mainstream media did not have any stories specifically concerned with property damage during the storm, they were not included in this section.

Environmental Damage. Communication of environmental damage was of particular interest to both citizen journalists and mainstream media organizations when reporting Hurricane Ian on TikTok. For that reason, this subtheme was applied several times to both groups of participants. Defined as any content that reviewed damage to the environment, such as the ocean and/or surrounding wildlife, environmental damage was of chief concern to both parties. For example, one citizen journalist posted a video of a dolphin that washed ashore following a 20foot storm surge and even dragged it back into the ocean. The description of the video read, "Dolphin washed up after 20-foot storm surge! Insane experience for all the haters there was no cell service to reach out to any wildlife control." While some commentors contended that he should have contacted experts, others praised the citizen journalist for his actions.

The mainstream media also reported damage to the environment. One mainstream news organization expressed, "Water has been sucked out of the Manatee River at the Bradenton Harbor in Bradenton, Florida ahead of Hurricane Ian's landfall." This showcasing of the storm's impact on local rivers shows the power of the storm surge and the environmental damage it caused. This video solicited diverse responses. In many cases, commentors argued that citizen journalists provided better coverage of the storm and executed it more professionally. One commentor stated, "yea, regular people on TikTok have better coverage than CNN." Another commentor criticized CNN for their poor audio in the hurricane, stating, "can't hear anything you just said." In this case, citizen journalists and mainstream news organizations both use TikTok to communicate ongoing environmental damage caused by Hurricane Ian.

Future Damage. The fourth and final damage subtheme, future damage, was only collected from mainstream news organizations and not citizen journalists. Defined as any content that discusses how residents will be impacted in the future from Hurricane Ian, future damage was the least frequently identified subtheme found after a review of mainstream news data. One reporter stated:

Yea the wind makes for some traumatic pictures. But it's the blowing water that will make the most dramatic difference for these peoples' lives for the next foreseeable future. When this wind dies and the sun comes out, the nightmare is just beginning for these folks. Then comes the flooding water and the mold problems, oh, and the lost days of work.

In this case, the reporter did not review any immediate damage but was concerned with what is to come. Commentors were quick to express disbelief of the damage to come and stated, "omg these beautiful houses that got flooded will cost a lot of money." Mainstream news organizations, in this case, used TikTok to communicate both immediate and future damage surrounding Hurricane Ian.

Survival

The fifth and final theme that emerged from this qualitative content analysis was survival, which can be defined as content that communicates reliable survival methods to its viewers. While this theme was not applicable to citizen journalists, it did appear several times in the data sampled from mainstream news organizations. After a qualitative content analysis of purposively sampled mainstream media TikToks, two subthemes emerged: shelter in place and disaster preparation.

Shelter in Place. The first subtheme that exists within the survival category includes shelter in place, which can be defined as any communication that encourages its viewers to shelter in place. A CBS news reporter reviewed the shelter in place orders from the governor and stated:

This is one of the high schools that is now packed full of families. We interviewed two different families who are both there with 2-month-old babies. They decided to get out early. The governor is saying today if you haven't evacuated it is too late.

This report of a local storm shelter not only communicates the seriousness of Hurricane Ian but also the stage of the storm. Commentors were in some cases outraged by the location of this shelter given that it was in a low-level building. One TikTok user stated, "I am shocked at how many places for evacuations are low buildings. How does that help with the water levels?" Others, however, were completely unaware that evacuation orders and shelter in place orders were distributed. One TikTok user exclaimed, "Wait evacuate for what, what did I miss?" TikTok was used by the mainstream media during a crisis to communicate shelter in place orders and locations. That said, these orders also revealed how underinformed some of the public is with respect to ongoing natural disasters. **Disaster Preparation**. The second subtheme identified within the survival theme is disaster preparation, which can be defined as any communication that encourages viewers to prepare for the storm. Unlike a shelter in place subtheme, a disaster preparation subtheme signifies that viewers can still go and get items necessary for survival or evacuate. For this reason, a disaster preparation subtheme is defined as any communication that encourages viewers to prepare (e.g., buy items, place sandbags, evacuate, etc.) for the incoming storm. During her broadcast, one CBS TikTok video stated, "If you are located along the path to the hurricane, now is the time to prepare." While some commentors on this TikTok confirmed that they were beginning to prepare for the incoming storm, others noted that they were not in the path of the storm and thankfully, would not be preparing. TikTok was used by mainstream news organizations during a crisis to compel citizens to prepare and showcase the path of the storm.

Summative Content Analysis Results

A summative content analysis was deployed to determine how effective crisis communications of citizen journalists were when compared to their mainstream media counterparts. A summative content analysis was most appropriate for this research question because it evaluates the relationship between the quantitative factors that shape effectiveness (e.g., number of comments, likes, saves, plays, etc.) and compares them to qualitative elements (e.g., context, implicit meaning, explicit meaning, etc.) responsible for making them effective. This summative content analysis was made up of a manifest content analysis and a latent content analysis.

Results from the manifest content analysis revealed three separate categories of words that included storm descriptors, storm updates, and personal updates. Results from the latent content analysis, however, revealed three themes consistent with situational crisis communication theory. These themes included deny, diminish, and bolstering crisis-response strategies. Six subthemes consistent with situational crisis communication theory also emerged, which included victimage, denial, justification, ingratiation, mockery, and exacerbation. These themes and subthemes emerged following a summative (e.g., manifest, and latent) content analysis of 10 TikToks posted by citizen journalists and 10 TikToks posted by the mainstream media during Hurricane Ian. In total, 504 words were sampled from both groups to arrive at the conclusions presented in this section. This section reports on the effectiveness of each participant group's TikToks during Hurricane Ian using a combination of quantitative and qualitative findings. Figure 2 in the appendices illustrates a step-by-step audit trail of this summative content analysis, which is based on Kleinheksel et al.'s (2021) approach.

Quantitative Performance

The communications from citizen journalists attracted on average more likes per video $(\mu = 296,325)$ than their mainstream media counterparts $(\mu = 12,243)$. This same quantitative trend continues when various metrics are compared. For example, citizen journalists have a much higher number of plays $(\mu = 2,459,066)$, comments $(\mu = 1,985)$, saves $(\mu = 1,152)$, hashtags $(\mu = 5.6)$ and shares $(\mu = 4,214)$ than their mainstream counterparts. In almost every category, citizen journalists outperformed their mainstream counterparts. The mainstream media had a significantly lower number of plays $(\mu = 265,011)$, comments $(\mu = 107)$, saves $(\mu = 357)$, hashtags $(\mu = 3.1)$ and shares $(\mu = 310)$. However, the mainstream media had more total profile likes $(\mu = 52,464,083)$ than citizen journalists $(\mu = 499,880)$ and a much higher number of followers $(\mu = 2,623,900)$ than their amateur counterparts $(\mu = 9,627)$. This data suggested that number of followers and total profile likes do not necessarily impact a video's effectiveness or reach. An overview of these averages can be found in Table 9. Additional descriptive statistics

on the quantitative performance of both citizen journalists and the mainstream media can be found in Table 3 and Table 4.

Table 9

Metrics	Citizen Journalists	Mainstream Media
Likes	296,325	12,243
Saves	1,152	357
Shares	4,214	310
Comments	1,985	107
Followers	9,627	2,623,900
Hashtags	5.6	3.1
Plays	2,459,066	265,011
Total Profile Likes	499,880	52,464,083

Quantitative Data—Effectiveness Comparison

It is important to note that it was not within the scope of this dissertation to define a quantitative threshold for TikTok effectiveness, nor will any singular definition meet the needs of all scholars in all situations. Instead, the purpose of these averages was to provide a partial summative assessment of each participant group's quantitative performance that in part explains how effective crisis communications of citizen journalists were when compared to those distributed by mainstream media organizations on TikTok during Hurricane Ian. To determine why there are dramatic differences in these groups' quantitative performances, it is important to explore the quantitative and qualitative factors responsible for shaping their effectiveness. This

includes exploring the surface level meaning of text through a manifest content analysis and the implied or underlying meaning of text through a latent content analysis.

Manifest Content Analysis

A manifest content analysis was conducted to determine the explicit or surface-level meaning of text data spoken and written by citizen journalists and mainstream news organizations on TikTok during Hurricane Ian. Manifest content analysis investigates the surface or explicit meaning of text (Kleinkeksel, et al., 2020). According to Kleinkeksel, et al. (2020), "The purpose of qualitative manifest content analysis is to transcend simple word counts and delve into a deeper examination of the language in order to organize text into categories that reflect a shared meaning" (p. 128). It is through these categories, and their shared meanings, that the explicit meaning of the communications is revealed. For this reason, text data from each participant group were collected from TikTok, transcribed, and imported into *NVivo 12*. Using the word frequency feature in *NVivo 12*, the top 15 most frequently written or spoken words were identified in TikToks posted by either citizen journalists (Table 10) or mainstream media organizations (Table 11). The length of these words was also determined.

While 370 words were sampled from 10 separate TikToks produced by mainstream news organizations, only 134 words were sampled from 10 separate citizen journalists' TikToks. The top 15 most frequently written or spoken words from both participant groups were then situated into three categories. These three categories included storm descriptors, storm updates, and personal updates. Results from this manifest content analysis revealed that citizen journalists provided more frequent storm descriptor keywords than their mainstream counterparts but less frequent storm update keywords. That said, the frequency at which personal update keywords were deployed by citizen journalists and mainstream news organizations was comparable. I

explain and explore the explicit or surface meaning of these categories within the context of each participant group in this section.

Storm Descriptors. Within the top 15 keywords most frequently spoken or written by each participant group, storm descriptors or words used to describe Hurricane Ian were deployed. Storm descriptors can be defined as words that describe the storm or where it is headed. Words such as high, low, and going were used by both participant groups to describe aspects of the storm. Consider the word "high," which was deployed by both participant groups fairly frequently, as an example of a descriptor. In one case, a citizen journalists used TikTok to show and describe how high the flood waters from Hurricane Ian were. He stated, "Tm underwater. I'm outside. I'm worried about my dogs. I'm okay. This is how high the water is now." In the case of the word "going," a mainstream media outlet stated, "We are going to get the worst of it by 2AM eastern time." Another organization similarly described what is going to happen with the storm and stated, "we know that the storm surge is coming, and it is going to inundate this river and this base very quickly." While both participant groups deployed storm descriptors, the top 15 most frequently spoken or written words from citizen journalists contained more storm descriptors.

Storm Updates. Within the top 15 keywords most frequently spoken or written by each participant group, words used to provide storm updates on Hurricane Ian were frequently deployed. Storm updates can be defined as words that provide information on the impact and location of the storm. For example, words such as winds, rainfall, and Florida were used by both groups to describe the impact of the storm and what it was doing throughout its various stages. Consider the word "winds," which was used frequently by both groups, as an example of this. One mainstream news organization stated, "Literally, the winds have been pushing back the

water on the river." Another organization similarly stated, "Well, we're past 90 mph right now. The wind has picked up." While both participant groups deployed storm updates, the top 15 most frequently spoken or written words from mainstream news organizations contained more words concerned with storm updates than their citizen journalist counterparts.

Table 10

Categories	Words	Length	Frequency
Storm descriptors	High	4	8
	Back	4	5
	Low	3	5
	Full	4	3
	Rising	6	3
	Hurricane Ian	12	21
	Storm	5	8
	Florida	8	5
Storm updates	Winds	5	5
	Flooding	8	5
	Visibility	10	4
Personal Updates	Barricaded	10	3
	Candles	7	3
	See	3	4
	Watching	8	3

Quantitative Data—Citizen Journalists' Word Frequency

Table 11

tegories Words Length		Frequency	
Now	3	9	
Going	5	6	
High	4	4	
Hurricane Ian	11	47	
Winds	5	20	
Florida	7	17	
Water	5	12	
Coast	5	6	
Storm	5	5	
Tampa	5	4	
Rain	4	4	
Landfall	8	3	
Families	8	4	
Home	4	4	
Man	3	4	
	NowGoingHighHurricane IanWindsFloridaWaterCoastStormTampaRainLandfallFamiliesHome	Now3Going5High4Hurricane Ian11Winds5Florida7Water5Coast5Storm5Tampa5Rain4Landfall8Families8Home4	

Quantitative Data—Mainstream Media Word Frequency

Personal Updates. The top 15 keywords most frequently spoken or written by each participant group also provided personal updates on themselves or locals in the path of the storm. For this reason, the personal update category is defined as those words used to describe locals and their survival behavior in the face of Hurricane Ian. Exemplifying this, words such as

barricaded, families, and watching were deployed by both participant groups. For instance, one citizen journalist provided a personal update on their family during the storm and stated, "How my family prepared for hurricane Ian. Barricaded windows. Survival backpacks, first aid, battery packs, armed, lots of food." Similarly, mainstream news organizations provided updates on locals using words from this category and stated, "This is one of the high schools that is now packed full of families. We interviewed two different families who are both there with 2-monthold babies." In this case, the word "families" is used twice. Both participant groups in this case had a comparable number of personal update keywords in their top 15 most frequently spoken or written words.

Latent Content Analysis

A latent content analysis was conducted to determine the implicit meaning (e.g., underlying meaning) of the analyzed text (Kleinheksel et al., 2021). Unlike manifest content analysis, which is concerned with analysis of what is on the surface, latent content analysis is concerned with the "underlying meaning" of text (Kleinheksel et al., 2021, p. 130). According to Kleinheksel et al. (2021), themes or "two or more categories" that are grouped by a common principle represent the underlying meaning of text (p. 128). To determine themes or the underlying meanings of the data, Kleinheksel et al. (2021) recommends identifying what one is attempting to find in the data prior to beginning one's latent content analysis. Since this latent content analysis was concerned with determining how effective the communications of citizen journalists were when compared to mainstream media organizations on TikTok during crisis, it was important to understand how the underlying meaning of the language made crisis communications effective (Pieter et al., 2021).

To accomplish that, Kleinheksel et al. (2021) also notes that "the outcome for latent content analysis is to discover the underlying meanings in text" using existing models and theoretical frameworks (p. 133). The benefit of this approach is that the underlying meanings (e.g., themes) of text spoken or written by both participant groups can be understood through an existing theoretical framework that permits the researcher to begin with a priori codes (Kleinheksel et al., 2021). For that reason, this study assumed that the effectiveness of crisis communications was closely related to the deployment of the "evidence-based crisiscommunication guidelines" proposed in Coombs' (2007) situational crisis communication theory (p. 163). It was not the intention of this latent content analysis to interpret the implication of every word individually; nor is that the purpose of latent content analysis to begin with (Hsieh & Shannon, 2005; Kleinheksel et al., 2021). Rather, the purpose of this latent content analysis was to understand how and if themes in the language used by citizen journalists and mainstream media organizations ran parallel to the crisis response strategies provided by Coombs' (2007) situational crisis communication theory. Since Coombs' (2007) framework is intended to empower crisis managers to protect the reputational assets of an organization in the face of crisis, explaining how situational crisis communication theory relates to citizen journalism is necessary. Further, determining what reputational assets citizen journalists on TikTok stand to lose or gain during a crisis such as Hurricane Ian and articulating how citizen journalists on TikTok qualify as "organizations" is also necessary (Coombs, 2007).

Coombs (2007) largely uses the term "organization" rather than "corporation" because his theory is intended to be applicable to a variety of "organizational forms" that are more inclusive (p. 163). The term organization was specifically chosen because it is not limited to organizational forms that are "for-profit" (Coombs, 2007, p. 164). Coombs (2007) structures his theoretical framework in such a way that organizational forms beyond the mainstream media, such as citizen journalists on TikTok, could qualify as organizations. One characteristic of organizations is a "valuable, intangible asset," known as a reputation, which is both "evaluative" and threatened during crisis (Coombs, 2007, p. 164). During a crisis, "stakeholders compare what they know about an organization to some standard to determine whether or not an organization meets their expectations for how an organization should behave" (Coombs, 2007, p. 163). Coombs (2007) expands on this, noting that organizations also have reputational assets that can "attract customers, generate investment interest, improve financial performance" and more (p. 164). Citizen journalists are therefore encompassed within Coombs' (2007) conceptual term "organization" because they have a reputation, followers, or stakeholders and the chance to acquire financial returns on their efforts if their videos are sold to the mainstream media. Unlike the mainstream media, it is worth noting that just because citizen journalists have followers or stakeholders, it does not mean they are beholden to them. Citizen journalists are anomalous. Despite this, they are necessary. Coombs (2007) echoes these sentiments, noting that posts "from social media on the internet, such as weblogs or blogs, is critical for some crises" (p. 164).

During a crisis, TikTok followers (e.g., stakeholders) "compare what they know about an organization to some standard to determine whether an organization meets their expectations for how an organization should behave" (Coombs, 2007, p. 164). Admittedly, a failure to meet stakeholders' expectations is a much larger problem for mainstream news media that have a long and storied branding identity. Citizen journalists therefore have an advantage over mainstream media organizations when posting about a crisis because there are fewer expectations for how they should behave or interact with the public from their stakeholders. While citizen journalists' reputation and reputational assets are fewer and less important to their "organization," they still

operate as crisis managers during crises such as natural disasters. Citizen journalists behave quite similarly to mainstream media organizations. For example, since mainstream news organizations cannot be in all places at once, citizen journalists serve as on the ground operators who shoot and distribute live footage to the public via social media (e.g., Facebook, TikTok, Twitter, etc.). Unlike mainstream news organizations who cannot post certain videos because the content would be triggering and/or contrary to the expectations of their stakeholders, citizen journalists operate as crisis managers who can provide immediate, transparent, and realistic updates on a crisis without concern for their stakeholders. Considering this variable, it was important to understand how the underlying meaning of language used by both citizen journalists and mainstream news organizations was deployed to attract viewers and manage crises.

Situational crisis communication theory offers evidence-driven response strategies used to "repair the reputation, to reduce negative effect and to prevent negative behavioral intentions" (Coombs, 2007, p. 170). These strategies, which include denial, diminish, and rebuild, are predicated on either accepting responsibility for mishandling a crisis or at the very least reducing the negative impact that would otherwise accompany not meeting stakeholder expectations. Considering that "responsibility is the conceptual link" between crisis-response strategies used by organizations and expectations of stakeholders (Coombs, 2007, p. 170), it is important to clarify that these strategies are not exclusively deployed only to accept responsibility for a crisis. Rather, they are also deployed to meet the expectations of stakeholders (e.g., followers) during a crisis. Although the amount of responsibility, number of stakeholders, and type of consequences differ when citizen journalists and mainstream news organizations are compared, they are both subject to online scrutiny when they post. As organizations deploy these crisis response strategies are strategies and "show greater concern for victims, stakeholders perceive the organization as

taking greater responsibility" (Coombs, 2007, p. 170). That said, organizations are not always claiming responsibility for causing the crisis when deploying these strategies. Rather, these organizations are instead acting in a way that is consistent with their stakeholders' expectations of them, which is in turn a claim and expression of responsibility.

The three crisis responsibility strategies offered by Coombs (2007) are used as a theoretical framework for interpreting the underlying meaning of text spoken or written by both participant groups. To determine the underlying meaning or themes of text spoken or written by citizen journalists and mainstream news organizations, Kleinheksel et al. (2021) recommends developing a priori codes that are based on literature to ensure a scholarly approach is taken. For that reason, the a priori codes chosen for this latent content analysis are based on Coombs' (2007) crisis response guidelines, which are used to better understand the communications from citizen journalists and mainstream media organizations during Hurricane Ian. Since these a priori codes did not adequately capture all the data collected from both participant groups, additional codes were created. After this, all codes were combined to create categories as well as themes and subthemes. This section reveals results based on a latent content analysis of audiovisual and e-text data purposively sampled from 10 citizen journalists and 10 mainstream news organizations during Hurricane Ian on TikTok. This section will first overview all themes and subthemes that emerged to reveal the underlying meaning of text. Table 12 and Table 13 overview results from this latent content analysis.

Table 12

Meaning Unit	Themes	Definition	Sub-Themes	Definitions
My family prepares like it's the end of the world lol.	Diminish crisis response strategies	When crisis managers argue that a crisis is "not as bad as people think," they attempt to diminish threat perception" (Coombs, 2007, p. 171).	Justification	Justification occurs when "Crisis mangers minimize the perceived damage of the crisis" (Coombs, 2007, p. 170).
Hurricane Ian is causing major flooding, we need to evacuate immediately. Evacuate, I live in a penthouse 43 rd floor Miami lol.	Deny crisis response strategies	When an organization denies the truth and attempts to frame the situation in a way that alleviates the probability of reputational harm (Coombs, 2007)	Denial	Denial occurs when "crisis managers assert that there is no crisis" (Coombs, 2007, p. 170).
My dad during Hurricane Ian. Reporting on Facebook Live. Watching the storm roll in. Switching between Univision and Telemundo News. Trying to see the neighbor's yard.			Mockery	Mockery occurs when crisis managers make fun of individuals who are prepping for the storm to minimize perceived fear of the pending disaster.
I'm underwater. I'm outside. I'm worried about my dogs. I'm okay. This is how high the water is now.	w "F on re st Bolstering Crisis Response Strategies th even	Bolstering occurs when organizations "protect the organizational reputation, praise stakeholders for their efforts during the crisis" and evoke sympathy from viewers since	Victimage	Victimage occurs when crisis managers "remind stakeholders that the organization is a victim of the crisis too" and when victims of the storm are highlighted (Coombs, 2007, p. 170).
The poor dolphin was so dry. He washed up, on shore and we must get him help. The dolphin knew we were there to help. Try after try I finally was able to get her back home.		they are a victim of the crisis (Coombs, 2007, p. 172).	Ingratiation	Ingratiation occurs when crisis managers "praise stakeholders and remind them of good works by the organization" (Coombs, 2007, p. 170).

Qualitative Data—Latent Content Analysis Results of Citizen Journalist TikToks

Table 13

Meaning Unit	Themes	Definition	Sub-Themes	Definitions
Hello. This is Vanessa Romo. I am usually a sports reporter, but I am on vacation in Tampa Florida. But that vacation was cut short. Hurricane Ian was supposed to make its way directly to Tampa but just today or yesterday it went East and hit directly under Tampa. But we are still getting the effects of it now. They say that we will get heavy wind, a lot of rain. We are going to get the worst of it by 2AM eastern time. Fortunately, I am not in an evacuation zone.	Bolstering crisis response strategies	Bolstering occurs when organizations "protect the organizational reputation, praise stakeholders for	Victimage	Victimage occurs when crisis managers "remind stakeholders that the organization is a victim of the crisis too" and when victims of the storm are highlighted (Coombs, 2007, p. 170).
Yea the wind makes for some traumatic pictures. But it's the blowing water that will make the most dramatic difference for these peoples' lives for the next foreseeable future.		their efforts during the crisis" and evoke sympathy from viewers since they are a victim of the crisis (Coombs, 2007,	Exacerbation	Exacerbation occurs when crisis managers create crisis frames intended to imbue fear into the viewer.
So, some would say why should I not do what Kerry is doing and go out and walk around in the hurricane? We do our very best to try to try to use the protection of buildings, to get into a parking garage, to use these just moments where we're out there to demonstrate.		p. 172).	Ingratiation	Ingratiation occurs when crisis managers tell stakeholders about "past good works done by the organization" (Coombs, 2007, p. 170).

Qualitative Data—Latent Content Analysis Results of Mainstream Media TikToks

Deny Crisis Response Strategies. The first theme that emerged from this latent content analysis, which is consistent with Coombs' (2007) guidelines, is known as deny crisis response. Coombs (2007) notes that deny strategies are often deployed by organizations to "frame" a crisis in a specific way (p. 171). Specifically, they frame crisis in such a way that the organization, whether mainstream news or citizen journalist, will not "suffer any damage from the event"

(Coombs, 2007, p. 171). Crisis managers "deny the truth" to spare themselves "reputational harm" (Coombs, 2007, p. 171). There are three deny crisis-response strategies. They include scapegoat, denial, and attack the accuser. That said, denial was the only deny crisis-response strategy observed in this research study that is consistent with situational crisis communication theory (Coombs, 2007). Mockery, however, organically emerged as an additional subtheme that fits within the principles of the deny crisis-response strategies. Both strategies were only observed in citizen journalists, and for that reason, mainstream news organizations are not discussed in this section. This section explores, explains, and defines relevant subthemes for the purpose of determining the underlying meaning of the text and provides examples from both participant groups to justify the emergence of these themes.

Denial. When crisis managers "assert that there is no crisis" or even contend that there is no need for action, they are exhibiting denial (Coombs, 2007, p. 170). While denial was not expressed by mainstream media organizations, it was expressed several times by citizen journalists who denied that the disaster was existent or as bad as the mainstream media were making it out to be. For this reason, denial was the first subtheme of the deny crisis-response strategies that emerged. Exemplifying this, one citizen journalist expressed denial during the disaster by denying an evacuation was necessary. He stated, "Evacuate, I live in a penthouse on the 43rd floor in Miami, Iol." Coombs (2007) notes that organizations use denial to "establish a crisis frame" and "remove any connection between the organization and the crisis" (p. 171). By denying that a crisis exists and contending that reports from official sources are exaggerated, this citizen journalist impacts the credibility and reputational assets of mainstream news organizations encouraging evacuation. As noted earlier, however, this TikTok user did not

successfully deny the crisis as several commentors expressed their unacceptance of his perspective.

Mockery. Mockery occurs when crisis managers make fun of individuals to minimize the perceived threat of a crisis. In the event of Hurricane Ian, citizen journalists deployed mockery to dilute the perceived threat during the storm. While mockery is concerned with the threat of perception, justification is concerned with the perceived damage. For example, one citizen journalist mocked her father for appropriately preparing for the storm. She stated, "My dad during Hurricane Ian. Reporting on Facebook Live. Watching the storm roll in. Switching between Univision and Telemundo News. Trying to see the neighbor's yard." During this overview of what her father was doing, the young lady showed herself laughing at her father's behavior, suggesting she believed it was outrageous to behave in such a manner. Unlike denial, however, mockery does not deny the crisis exists at all. Rather, mockery perceives the behavior of those in the crisis as dramatic despite the incoming disaster. It is important to note that mainstream news organizations did not deploy mockery to minimize the perceived threat of the storm. For this reason, they are not mentioned in this section. Mockery organically emerged as a subtheme during this latent content analysis.

Diminish Crisis-Response Strategies. The second theme to emerge from this latent content analysis, which is also consistent with Coombs' (2007) situational crisis communication theory, is known as a diminish crisis response. Coombs (2007) argues that diminish crisis-response strategies seek to "argue that a crisis is not as bad as people think" (Coombs, 2007, p. 171). Should a diminish crisis-response strategy dilute the public's perception of a perceived threat, it stands to reason it was successful. Failure to diminish perceived threats occurs when those who comment on a video, for example, entirely "reject the crisis manager's frame" and

continue to subscribe to an opposing frame (Coombs, 2007, p. 171). Coombs states (2007), "Stakeholders will be given competing frames and will select the frame provided by the source they find most credible" (p. 171). There are four types of diminish crisis-response strategies and they include excuse, justification, compensation, and apology (Coombs, 2007). However, justification was the only subtheme observed in this theme. Further, it was the only present among citizen journalists. This section explores, explains, and defines these relevant subthemes for the purpose of determining the underlying meaning of the text.

Justification. When "Crisis mangers minimize the perceived damage of the crisis," justification occurs (Coombs, 2007, p. 170). This crisis-response strategy is known as justification because the minimization of the perceived damage justifies the crisis manager's behavior. This subtheme of diminish was not identified within the mainstream media group. However, citizen journalists did exhibit this crisis-response strategy. While reflecting on her family's preparation for Hurricane Ian, which included an overview of canned food, boarded windows and more, one citizen journalist stated, "My family prepares like it's the end of the world lol." In this example, the citizen journalist attempts to minimize the perceived threat of incoming damage that Hurricane Ian will cause by framing her family's behavior as foolish.

Bolstering Crisis-Response Strategies. The third and final theme to emerge from this latent content analysis, which is consistent with Coombs' (2007) theory, were bolstering crisis-response strategies. Unlike other crisis-response strategies, bolstering "offers a minimal opportunity to develop reputational assets" (Coombs, 2007, p. 172). When deploying bolstering crisis-response strategies, such as victimage, crisis managers can "protect the organizational reputation, praise stakeholders for their efforts during the crisis," and evoke sympathy from viewers since they are a victim of the crisis (Coombs, 2007, p. 172). Three types of bolstering

exist according to Coombs (2007), and they consist of reminder, ingratiation, and victimage. However, only ingratiation and victimage emerged as subthemes of bolstering during this latent content analysis. Further, exacerbation organically emerged as a subtheme of bolstering during this latent content analysis. Bolstering was exhibited by both citizen journalists and mainstream media organizations. This section explores, explains, and defines these relevant subthemes for the purpose of determining the underlying meaning of the text. This section also provides examples that justify why these themes were significant and repetitive enough for them to emerge as relevant themes.

Exacerbation. When crisis managers worsen public perceptions about a crisis and remind them how it will get worse, they are exacerbating the crisis. This subcategory emerged frequently in the mainstream news participant group, but not at all in the citizen journalist participant group. One mainstream news reporter demonstrated exacerbation when they stated:

Yea the wind makes for some traumatic pictures. But it's the blowing water that will make the most dramatic difference for these peoples' lives for the next foreseeable future. When this wind dies and the sun comes out, the nightmare is just beginning for these folks. Then comes the flooding water and the mold problems, oh, and the lost days of work. This storm is going to hurt John. All you can do is hope for minimum blood sweat and tears. Sorry, I am having trouble standing up and cannot tell if you're talking to me or not.

Here, the reporter discussed how the storm will worsen and how its effects will be dramatically worse than what is currently visible. In doing so, the reporter exacerbated an already dramatic crisis and reminded the public that the foreseeable future will be filled with blood, tears, mold, and more. By reminding the public that Hurricane Ian is worsening and reporting from a location that will continue to get more dangerous, this mainstream news organization protected its reputational assets by aligning its communications with its stakeholders' expectations of them.

Ingratiation. When crisis managers tell stakeholders about "past good works done by the organization," they are exhibiting ingratiation, which is the second and final subtheme of reminders (Coombs, 2007, p. 170). During Hurricane Ian, both citizen journalists and mainstream news organizations deployed ingratiation. For example, one citizen journalist posted themselves saving a dolphin during the storm surge of Hurricane Ian. He stated, "The poor dolphin was so dry. He washed up, on shore and we must get him help. The dolphin knew we were there to help. Try after try I finally was able to get her back home." In doing so, the citizen journalist reminded the public about the past good works he did and ingratiated himself. Similarly, mainstream news organizations also exhibited ingratiation. For example, one news organization showed their reporter in the middle of the storm wearing a baseball helmet enduring the storm. During this scene, he stated:

So, some would say why should I not do what Kerry is doing and go out and walk around in the hurricane? We do our very best to try to try to use the protection of buildings, to

get into a parking garage, to use these just moments where we're out there to demonstrate. In this case, the reporter reminded those listening that their organization is doing their very best to stay safe and put themselves in dangerous situations so their viewers can have accurate and up-to-date reports. By ingratiating themselves, mainstream news organizations and citizen journalists please their stakeholders by reminding them that they are performing the services that are expected of them.

Victimage. When crisis managers "remind stakeholders that the organization is a victim of the crisis too" or when victims are of the storm are highlighted, victimage occurs (Coombs,

2007, p. 170). Both mainstream news organizations and citizen journalists expressed victimage. For this reason, victimage emerged as the second subcategory. Exemplifying this, one mainstream news organization posted a TikTok about a reporter whose vacation was ruined because of Hurricane Ian. A transcription of the audio reads:

Hello. This is Vanessa Romo. I am usually a sports reporter, but I am on vacation in Tampa Florida. But that vacation was cut short. Hurricane Ian was supposed to make its way directly to Tampa but just today or yesterday it went East and hit directly under Tampa. But we are still getting the effects of it now. They say that we will get heavy wind, a lot of rain. We are going to get the worst of it by 2AM eastern time. Fortunately, I am not in an evacuation zone.

The news reporter reminded others that she, a member of the collective organization, is a victim of Hurricane Ian and has had her personal life impacted by the storm. Despite not being in the evacuation zone, Vanessa's vacation has been negatively impacted. Vanessa also provided an update on Hurricane Ian, explaining the expectations of the storm's behavior in the coming hours. Vanessa served as a crisis manager who protected the reputational assets of her mainstream media organization by behaving in a way that was consistent with her stakeholders' expectations of her organization's brand.

Citizen journalists also deployed victimage as a tactic to protect their organization's reputational assets. For example, one citizen journalist on TikTok stated, "I'm underwater. I'm outside. I'm worried about my dogs. I'm okay. This is how high the water is now." In this case, the citizen journalist showed themselves swimming in floodwater surrounded by vehicles that are nearly consumed by the dangerous floodwater. Such an online video and transcription no doubt indicated that the citizen journalist is a victim of the crisis. Unlike the mainstream news

organizations who deployed victimage, however, citizen journalists showed themselves in real danger and provided a perspective on Hurricane Ian that the mainstream media was unable to capture. Another citizen journalist showed an island ruined by the hurricane and stated, "Our island is hurting was able to go back and see the devastation to our community and to our home." While mainstream news deployed victimage to meet the expectations of their stakeholders, they were not as potent as those first-hand accounts distributed by citizen journalists.

Directed Content Analysis Results

A directed content analysis of 200 user comments was deployed to determine the motivations that underlie user comments during Hurricane Ian. Figure 3 illustrates a step-by-step audit trail of this directed content analysis, which is based on Hsieh and Shannon's (2005) approach. 100 comments were sampled from both citizen journalist and mainstream media TikToks posted during Hurricane Ian. Since a directed content analysis is deductive and based on prior scholarship, I began with codes and categories, each of which were based on media dependency theory (Hsieh & Shannon, 2005). Emergent themes included understanding, orientation, and play, each of which had their own subthemes. Results suggested that the motivations that underlie user comments are largely the same for those who post on mainstream media and citizen journalist TikToks during crisis. Results from this directed content analysis can be found in Table 14 and Table 15. Since saturation was achieved using terminology from media dependency theory, a conventional content analysis was neither conducted nor necessary. For this reason, these results also reaffirm media dependency theory and reinforce its relevance to current communication scholars. This section overviews findings from this directed content analysis and articulates the differences found in each participant group.

Table 14

Directed Content Analysis Results—Comments on Citizen Journalist TikToks

Meaning Units	Theme	Sub-Theme	Definitions
Omg I just couldn't even IMAGINE being in that position, especially with my 3 dogs. I am so sorry you went through that but am so happy you're ok.	Understanding	Self-understanding	When media are used to learn more about oneself.
Sorry for asking. How does it feel when the hurricane coming? How does it sound?		Social understanding	When media are used to obtain a better understanding of the world around them.
Why would you fill up the tub? sorry I don't understand.	Orientation	Action orientation	When media are used to learn how to orient themselves to action.
But are we going to talk about the lady driving through that in her vehicle?	Play	Social play	When media are used to facilitate social exchanges.
This is hilarious lol		Solitary play	When media are used to obtain pleasure or relaxation.

Table 15

Meaning Units (Examples)	Theme	Sub-Theme	Definitions
Is Savannah Georgia in the safe zone?	Understanding	Social understanding	When media are used to obtain a better understanding of the world around them.
Is no one going to comment on the baseball helmet?	Play	Social play	When media are used to facilitate social exchanges.
This is so sweet I love it.		Solitary olay	When media are used to obtain pleasure or relaxation.

Directed Content Analysis Results—Comments on Mainstream Media TikToks

Understanding

The first theme that emerged following this directed content analysis of user comments of citizen journalists and mainstream media TikToks was understanding. Understanding dependency, or the first dependency type, is expressed by those motivated to find a deeper understanding of the world (Ball-Rokeach et al., 1984). Two subthemes and thus subtypes of understanding dependency were also identified during his analysis: (a) social understanding, and (b) self-understanding (Ball-Rokeach et al., 1984). While both self-understanding and social understanding were observed in comments on citizen journalist TikToks, only social understanding was identified in TikTok comments posted to mainstream news organizations during Hurricane Ian.

Self-Understanding. Ball-Rokeach et al. (1984) argue that those who depend on the media to learn more about themselves are motivated by self-understanding. This subtheme was not identified in comments on mainstream news TikToks and for that reason is not included in

this section. However, self-understanding was identified in five comments on citizen journalists' TikToks. While this does not represent a significant percentage of commentors, its presence does demonstrate that some users are dependent on media for developing a deeper understanding of themselves. For example, one commenter stated, "Omg I just couldn't even IMAGINE being in that position, especially with my 3 dogs." In this case, the user is expressing an understanding of their own limitations, inability to imagine being in a position, and an overall personal development of self-understanding. Here TikTok was used by commentors during Hurricane Ian to develop a further understanding of themselves and their own limitations if placed in a crisis.

Social Understanding. Ball-Rokeach et al. (1984) contend that those who depend on the media to obtain a better understanding of the world around them are motivated by social understanding. This subtheme was identified in comments on citizen journalist and mainstream media TikToks. While social understanding was identified in 11 comments on citizen journalist TikToks during Hurricane Ian, mainstream media commentors expressed social understanding in 18 different comments. One commentor who posted on a citizen journalist TikTok stated, "Sorry for asking. How does it feel when the hurricane coming? How does it sound?" Comparatively, one commentor who posted on a mainstream media TikTok covering Hurricane Ian stated, "Is Savannah Georgia in the safe zone?" In both cases, users from both participant groups were dependent on media, whether posted by amateur or professional journalists, to obtain an improved understanding of the world around them.

Orientation

The second theme identified following a directed content analysis of user comments of citizen journalists and mainstream media TikToks was orientation dependency. Orientation dependency is expressed when an individual interacts with the media to develop strategies for

interacting with and around others or in certain situations (Ball-Rokeach et al., 1984). While two subtypes of orientation dependency exist, only one was identified during this directed content analysis. Known as action orientation, this subtheme was only identified in comments posted to TikTok by citizen journalists during Hurricane Ian. This subtheme was not identified in comments posted to TikTok by mainstream media during Hurricane Ian. For this reason, the mainstream media are not included in this section.

Action Orientation. The first and only orientation subtheme identified is known as action orientation. Ball-Rokeach et al. (1984) argue that those who use the media to orient themselves to action are expressing action orientation. This subtheme was identified in only two comments post to citizen journalist TikToks during Hurricane Ian. After watching a video of a citizen journalist showing that she filled her bathtub prior to the arrival of the hurricane, one commentor posted to a citizen journalist TikTok stating, "Why would you fill up the tub? Sorry I don't understand." Here, the commentor used citizen journalism on TikTok during Hurricane Ian to learn how to prepare for a disaster and was therefore motivated by action orientation. While some commentors who posted on citizen journalists' TikToks were motivated by action orientation, it was a very small amount of TikTok users.

Play

The third, final, and most consistently identified theme in this directed content analysis was play dependency, which occurs when an individual is motivated to interact with the media for recreational purposes (Ball-Rokeach et al., 1984). There were two types of recreation, or play dependencies, identified during this directed content analysis. These include solitary play and social play, which each serve to satiate different motivational goals. While solitary play and social play were identified in comments posted to citizen journalist and mainstream media TikToks posted during Hurricane Ian, most user comments were motivated by social play.

Solitary Play. When an individual is motivated to use the media to obtain pleasure or relaxation, they are expressing solitary play. In these instances, individuals are motivated by the acquisition of positive feelings, such as happiness. Expressions of solitary play, though expressed, represent a small portion of all sampled comments. For example, only four comments posted to citizen journalists' TikToks during Hurricane Ian could be situated into the solitary play subtheme. One of these comments was posted to a citizen journalist TikTok that featured a man floating down floodwater in a pool toy. The comment stated, "this is hilarious lol." Two comments posted to mainstream media TikTok's posted during Hurricane Ian were also placed into the solitary play subtheme. One of these two comments was posted to a video filmed by the mainstream media on TikTok during Hurricane Ian and featured the rescue of an old man. This commentor stated, "This is so sweet, I love it." In these six different cases, commentors from both participant groups were motivated to use the media to obtain and express happiness.

Social Play. When an individual is motivated to use the media to facilitate social exchanges, they are expressing social play. Solitary play was present in most of the comments posted on both participant groups' videos. In the case of those who commented on citizen journalist TikToks during Hurricane Ian, 78 out of 100 comments were motivated by social play. In one video posted by a citizen journalist on TikTok during Hurricane Ian, one commentor stated, "But are we going to talk about the lady driving through that [the floodwater] in her vehicle?" Similarly, those who commented on mainstream media TikToks posted during Hurricane Ian represent 80 out of 100 sampled comments. Exemplifying this, one user observes an anchorman wearing a baseball hat and posts a comment to a mainstream news organization's

TikTok that reads, "Is no one going to comment on the baseball helmet?" On average, 79% of total comments collected from both participant groups represented individuals motivated to use the media as a tool that facilitates social exchanges.

Summary

Chapter 4 provided the results from three different types of qualitative content analysis to determine the problem with depending on news updates from citizen journalists during a crisis. Chapter 4 first reviewed results from a conventional qualitative content analysis of 20 TikToks posted during Hurricane Ian. Then, this chapter explained how six themes and nine subthemes organically emerged from this analysis to justify the presence the roles of communicative roles of citizen journalists and mainstream media organizations during a crisis. Second, Chapter 4 provided results based on a summative content analysis, which is made up of both a manifest and latent content analysis, of 20 TikToks posted during Hurricane Ian. Chapter 4 offered the results from both these analyses and explained how they are consistent with situational crisis communication theory. Chapter 4 lastly provided results from a directed content analysis of 200 comments posted to videos posted on TikTok by citizen journalists and mainstream news organizations during Hurricane Ian to determine the motivational factors behind user comments during a crisis. These results showed, in large part, that the motivational factors that underlie user comments are very similar in both participant groups and consistent with media dependency theory..

Chapter 5: Discussion

Overview

The purpose of this dissertation was to understand the problems associated with social media users depending on citizen journalists from TikTok for news updates during Hurricane Ian. To accomplish that, Chapter 5 first provides a detailed summary of a conventional, summative, and directed qualitative content analysis. Then, Chapter 5 provides a detailed discussion on the results from Chapter 4, interprets them through the lens of scholarship, and provides answers to each of the three research questions. Chapter 5 also reviews the methodological and practical implications of these findings. Following that, Chapter 5 provides an overview of the delimitations and limitations of this research project and makes evidence-driven recommendations for future research conducted on similar topics. In doing so, Chapter 5 articulates the problem with depending on citizen journalists for news updates during Hurricane Ian and makes appropriate recommendations for improving information literacy and crisis communications in a postinfodemic era.

Summary of Findings

This section presents a summary of this dissertation's major findings. First, this section provides a summary of the different communicative roles played by citizen journalists and mainstream news organizations during Hurricane Ian. Then, this section provides a summary of the qualities that made citizen journalist TikToks effective and their mainstream counterparts ineffective. Lastly, this section presents a summary of major findings from an exploration into the motivational factors that underlie TikTok users' comments during Hurricane Ian. These findings were used to shape and inform a discussion on each research question presented in the following section.

Citizen Journalists' Flexible Approach to Crisis Communication

Results from a conventional content analysis of 20 TikTok videos posted during Hurricane Ian revealed that citizen journalists took a much more flexible approach to crisis communication than their mainstream media counterparts. This is perhaps best explained by the fact that followers (e.g., stakeholders) have fewer expectations of citizen journalists than mainstream media organizations. Unlike the mainstream media, which must strive to always meet the expectations of their stakeholders—each of which is predicated on their organization's branding, mission, history, and values—citizen journalists can communicate more flexibly and without severe consequences during a crisis. TikTok users' migration toward citizen journalist content that includes comedy, for example, indicates that citizen journalists serve needs during a crisis that the mainstream media cannot fulfill.

Considering the seriousness of something such as a natural disaster, it should come as no surprise that mainstream media organizations were not behaving as comedians when reporting such serious topics. If the mainstream media did deploy comedy when reporting on Hurricane Ian, it would likely run contrary to their stakeholders' expectations of them. Communicating damage caused by the natural disaster, however, is behavior that stakeholders expect from their mainstream media. Those expectations, however, limited the flexibility of mainstream media's approach to crisis communication and were observed as being detrimental to their overall reach. Since mainstream media operate within the scope of their stakeholders' expectations and their organizational mission, values, and branding, audiences migrate to other alternative news outlets (e.g., citizen journalists) for information that cannot be provided by their primary news sources. This suggests that audiences have needs in the postinfodemic era that the mainstream news media are unable to meet.

Effective Citizen Journalist Crisis Communications

An assessment of the quantitative performance of each TikTok using measurable factors (e.g., plays, comments, likes, etc.) revealed that citizen journalists significantly outperformed the mainstream media's TikTok videos in almost every category. In some cases, citizen journalists outperformed their mainstream counterparts by factors of 10 or more. However, the mainstream media had more total profile likes and followers than citizen journalists, which suggests that these categories have little to do with a TikTok's overall saturation. In six out of eight quantitative categories (e.g., plays, comments, likes, etc.) used to define a video's effectiveness, citizen journalists outperformed their counterparts. Citizen journalists' crisis communications were therefore significantly more effective than their mainstream counterparts. The effectiveness of citizen journalists' TikToks and, by contrast, the ineffectiveness of mainstream media organizations' TikToks can in part be attributed to the keywords chosen for their posts, their frequency, and their explicit or implicit meanings.

The effectiveness of crisis communications on TikTok from both participant groups was closely related to the explicit meaning of keywords. The top 15 keywords sampled from both participant groups showed that citizen journalists more frequently deployed text that described the storm (e.g., high, going, now, etc.). That said, the mainstream media more frequently deployed text that provided updates on the storm (e.g., landfall, coast, etc.). Each participant group, however, deployed a comparable amount of personal update words used to describe the situations of locals (e.g., barricaded, families, etc.). These results indicate that citizen journalists' emphasis on describing the storm through their first-person experience may have positively impacted how effective their reach and saturation were. While the explicit or shared meanings of these keywords and their three categories (e.g., personal updates, etc.) played a role in shaping

the effectiveness of these messages, implied meanings also impacted how effective citizen journalist messages were.

A variety of themes (e.g., implied meanings) consistent with Coombs' (2007) situational crisis communication theory emerged following a latent content analysis of citizen journalists' TikToks during Hurricane Ian. Although citizen journalists deployed all three types of crisis-response strategies, which included diminish, deny, and bolster, the mainstream media only deployed bolstering crisis-response strategies. The diversity of crisis-response strategies deployed by citizen journalists was one possible explanation for why they had more effective posts than the mainstream media. Consider denial as an example of a strategy that was not and could not be deployed by the mainstream media without consequence. While citizen journalists can deny the seriousness of an issue to downplay it without severe consequence, mainstream media organizations cannot, especially during a natural disaster. The effectiveness of crisis communication is arguably influenced by the keywords used, their frequency, and the explicit or implicit meanings of a message's chosen text.

Recreational TikTok Use During Crisis

Results of a directed content analysis revealed that the motivations underlying user comments are largely the same for those who post on mainstream media and citizen journalist TikToks during a crisis. In both cases, the majority of commentors expressed a desire to use TikTok recreationally to have and redirect social exchanges. Otherwise known as a play dependency, and more specifically, a social play dependency, these findings were particularly problematic in the context of crisis because they imply that TikTok users are not using crisis communications on the platform for their intended purpose. These results indicate that TikTok users, or at the very least those who commented on the sampled population, were motivated by a personal desire to have, and redirect social exchanges. These results corroborated Ball-Rokeach and DeFleur's (1975) media dependency theory and suggest that people are still largely dependent on the media, whether amateur or professional, during times of social instability (e.g., natural disaster). Whether posting to mainstream media or citizen journalist TikToks, the motivations of commentors suggest that crisis communications are being used as recreational interactive spaces. Despite how media platforms and information distribution has changed since the inception of media dependency theory, the dependency types or motivations outlined by Ball-Rokeach et al. (1984) are still applicable.

Discussion

This section discusses the findings of each research question and articulates why citizen journalists' existence is problematic but necessary. First, this section discusses why differences in communicative roles could be problematic for the audiences. Then, this section explains why citizen journalist' crisis communications were more effective than their mainstream media counterparts on TikTok during Hurricane Ian. Lastly, this section explains the consequences of TikTok users relying on crisis communications as a space for recreation. By answering these three separate research questions, the problem with depending on citizen journalism for news updates during a crisis such as Hurricane Ian is revealed and elucidated.

RQ1: Do the Communicative Roles of Citizen Journalists Differ From Mainstream Media Organizations on TikTok When Reporting a Crisis?

The communicative roles of citizen journalists differed from mainstream media organizations on TikTok when reporting a crisis in many ways. Citizen journalists were observed serving four distinct and mutually exclusive communicative roles during Hurricane Ian. First, citizen journalists were observed behaving as comedians during Hurricane Ian. This comedy included using TikTok to both satirize governmental evacuation orders and make fun of the crisis entirely. Second, citizen journalists were observed acting as concerned citizens during Hurricane Ian. Specifically, citizen journalists were observed expressing concern for animals more so than their peers. This included expressing concern for dogs, cats, and other wildlife in the immediate area. Third, citizen journalists were also observed expressing gratitude during Hurricane Ian. In fact, citizen journalists used their TikTok posts to express thankfulness to God for their safety. Lastly, citizen journalists were observed as reporters of damage caused by the storm. This included citing damage to their personal property, such as flooding in their home that could not be avoided.

Mainstream news organizations, however, were only observed serving two roles, one of which overlapped with citizen journalists. Unlike citizen journalists, mainstream media organizations were observed as being communicators of survival methods. For example, the mainstream media were observed as distributing evacuation orders and shelter in place orders and showing safe places for the public to come. Like citizen journalists, the mainstream media were also observed reporting damage. However, the mainstream media were less concerned with property damage and more concerned with how the storm would create ongoing damage to the immediate area, including the environment.

The differences between citizen journalists' communicative roles and the mainstream media's on TikTok during a crisis are best explained by the public's differing expectations of amateur versus professional journalists. Since there are fewer expectations of how citizen journalists should communicate, they have more latitude on how they can communicate. For this reason, citizen journalists can operate as comedians or crisis deniers during an event such as Hurricane Ian without severe consequences. This is evidenced by the diverse approach to crisis communication offered by citizen journalists, which in some cases even satirized governmental evacuation orders. Citizen journalists also do not have a long and storied history of organizational branding, such as CNN or Fox News, that their actions and crisis communications must align with. Although citizen journalists do have stakeholders (e.g., followers) that they should be mindful not to alienate, the results from this study showed there was little connection between video effectiveness and number of followers (Table 7).

The limited and proven approach to crisis communications deployed by the mainstream media protects its organization's reputation. By delivering to the public what is expected of them, mainstream media organizations ensure their communications are aligned with their organization's branding, values, and mission statement. However, since the mainstream media serve this very specific purpose, they limit their ability to creatively approach crisis communication. It is precisely this creative approach to crisis communication that is responsible for the quantitative performance of citizen journalists' TikTok effectiveness. Despite this, it is important to note that citizen journalism is both necessary and satisfies various needs of the public that the mainstream media cannot satiate.

The problem with citizen journalism and *exclusively* depending on it for news updates during a crisis such as Hurricane Ian, however, is that people leave themselves vulnerable to misinformation and disinformation. This is not to say that one is not vulnerable to the spread of misinformation and disinformation when interacting with the mainstream media. However, the consequences of spreading such falsities are much higher, more costly, and severe when committed by the mainstream news media. It is therefore important that TikTok users understand the limitations of citizen journalism and increase their own information literacy to protect themselves from misinformation or disinformation. Although the aesthetic of the citizen journalist TikTok might suggest trustworthiness and authenticity, it should be approached with the same skeptical attitude that compels viewers to analyze political and social events for inaccuracies (Lenard, 2008). The problem with relying on citizen journalism for news updates during a crisis such as Hurricane Ian is that their content is unregulated and oftentimes influenced by factors such as their personal biases and yearning for clout.

RQ2: How Effective Are the Communications of Citizen Journalists When Compared to Mainstream Media Organizations on TikTok During a Crisis?

The communications of citizen journalists were significantly more effective than those produced by the mainstream media on TikTok during a crisis. This study drew from Pieter et al. (2021) and defined effectiveness as the coexistence of both high engagement and audience reach. A video's level of effectiveness was therefore based on quantitative factors such as the number of likes, saves, shares, comments, followers, plays and more. It is important to note that citizen journalists significantly outperformed their mainstream media counterparts in nearly every category. Specifically, citizen journalists collected more likes, saves, shares, comments, hashtags, and plays. However, mainstream media organizations consistently had more followers and total profile likes. Results from this study, however, indicated that the quantitative factors that suggest high reach and engagement (e.g., comments, plays, shares, likes, etc.) have little if anything to do with followers or total profile likes. In some cases, the videos produced by citizen journalists were more than 10 times more effective than those produced by the mainstream media.

This study also sought to determine why the communications from citizen journalists were more effective than their mainstream counterparts. To accomplish that, I conducted a summative content analysis, which consisted of a manifest and latent content analysis, that investigated the explicit and implicit meaning of the text. Results from the manifest content analysis revealed that citizen journalists more frequently deployed text that described the storm, and the mainstream media more frequently deployed text that was concerned with storm updates. These results suggested that frequently deploying text purposed toward describing the storm increases a video's overall potential for success. Thus, video producers should be mindful to include keywords that explicitly emphasize description of the crisis.

A latent content analysis, which is purposed toward revealing the implicit meaning (e.g., themes) of text using prior scholarship, was also conducted to determine additional explanations for why citizen journalist videos were more effective than their mainstream counterparts. Results showed that citizen journalists took a much more diverse approach to crisis response than their mainstream counterparts. Importantly, these results were also consistent with the crisis-response strategies offered by Coombs' (2007) situational crisis communication theory. While the mainstream media only deployed bolstering strategies, citizen journalists deployed a range of strategies that included diminishing the crisis, denying it, and bolstering themselves. This diverse approach to crisis-response is in part reliable for the effectiveness of citizen journalists' crisis communications. The problem with citizen journalism is that it can flexibly approach crisis communications, going even as far to deny a crisis during a major natural disaster, and still produce highly effective content that attracts TikTok users. For this reason, the mainstream media should actively develop new ways to meet the evolving needs of the public to distribute more effective news updates during crises such as Hurricane Ian.

RQ3: What Are the Motivational Factors Behind User Comments During a Crisis?

Although there were slight differences in motivations between each participant group, it was clear that users largely commented on citizen journalist and mainstream media TikTok posts because they were motivated by social play. These results indicated that comments are often inspired by an urge to ask questions, direct a conversation, or take part in an exchange. These findings imply that TikTok users were not using crisis communications for their intended purpose. Rather, TikTok users are instead using crisis communications as an opportunity to recreationally interact with one another. Since people are motivated to use crisis communications produced by citizen journalists and the mainstream media for recreation, one cannot be sure of how accurate the information posted in these interactive spaces is. For that reason, the problem with exclusively depending on citizen journalism for news updates during crisis, and their mainstream media counterparts, is that one is susceptible to misinformation in both the video and the comments section. It is therefore recommended that TikTok users approach content and comments with a skeptical attitude that compels them to review content for inaccuracy (Lenard, 2008).

Trends towards play dependency also indicated that audiences have the capacity to use interactive spaces for agenda-setting purposes. Although it is unclear if the videos posted by citizen journalists and mainstream news organizations influenced commentors, the interactive spaces provided by TikTok no doubt empowered its users to set their own agendas. While the agendas were not entirely the same from comment to comment, the design of the comment section on TikTok permits commentors to express their agenda. Though agenda-setting is a consequence of increased media dependency and to be expected during a crisis such as Hurricane Ian, the uniform behavior of commentors from both participant groups was surprising. Even though media dependency theory predates the emergence of social media, the dependency types or motivations outlined by its creators and some of its consequences (e.g., agenda-setting) are still widely applicable (Ball-Rokeach et al., 1984).

Implications

This section overviews the theoretical, methodological, and practical implications for the findings of this study. First, this section overviews the theoretical implications of this study as they relate to media dependency theory, agenda-setting theory, framing theory, and situational crisis communication theory. Second, this section overviews the methodological implications of this study and specifically explains how TikTok methodologically impacted this study and future content analysis on citizen journalism. Lastly, this section offers an overview of the practical implications for this study, which include recommendations intended to improve crisis communications distributed by governmental agencies (e.g., FEMA) and mainstream media news agencies such as CNN or Fox News.

Theoretical

The findings from this study have a variety of theoretical implications. First, these findings corroborated the present-day applicability of media dependency theory. Comments posted to both citizen journalist and mainstream media TikToks revealed motivations consistent with media dependency theory. These motivations or dependency types included understanding, orientation, and play. More so than other types of motivations, however, users expressed play dependencies. This dissertation also demonstrated that the cognitive consequences of prolonged media dependency proposed by Ball-Rokeach and DeFleur (1975) are still applicable despite evolving technological landscapes. One cognitive consequence of media dependency observed during data analysis was ambiguity, which occurs when individuals migrate to alternative news sources because they did not receive adequate information from the mainstream media (Ball-Rokeach & DeFleur, 1975). Ambiguity is particularly prominent during times of social instability (e.g., natural disaster) and serves as one possible explanation for why users migrated towards citizen journalists more frequently during Hurricane Ian than mainstream media organizations.

The findings from this study were also consistent with agenda-setting theory and more specifically agenda melding. In comment sections of the sampled videos, individuals expressed their own personal agendas or subscribed to the agendas of their peers. While agenda-setting theory broadly focuses on the issue of transfer salience from one entity to another, agenda melding is instead concerned with how individuals join groups of people with similar perspectives and consciously or unconsciously express their agendas (Matthews, 2009; Shaw et al., 1999). This is not the first time that agenda melding has been observed in the comment sections of social media platforms. Exemplifying this, YouTube audiences used uploaded footage of the 2009 Oscar Grant shooting and more specifically the comment sections of these videos to critique the video, praise the cameraperson, and call for a response (Antony & Tomas, 2010). The advent of social media empowered individuals during Hurricane Ian to express themselves, source information from one another, and create or meld their personal agendas.

The findings from this study were also consistent with framing theory. In this case, framing refers to a process wherein individuals construct their viewpoints on specific issues in response to messages (Chong & Druckman, 2007). Since individuals frame their perspectives on topics using their own individual experiences, framing is closely related to individual attitude and belief systems. TikTok has empowered citizen journalists to involve themselves in the news making process and generate stories influenced by their individual attitude and belief systems.

Framing theory is therefore predicated on the idea that all issues can be "viewed from a variety of perspectives and be construed as having implications for multiple values or considerations" (Chong & Druckman, 2007, p. 104). In this study, citizen journalists were observed denying Hurricane Ian and downplaying its seriousness in several instances. In doing so, citizen journalists attempted to frame the crisis in a way that contradicts the mainstream media's overarching narrative. Although the comments on these citizen journalists' TikToks suggested that their attempted reframes were unsuccessful, TikTok was no doubt used to frame issues from their individual perspective (Chong & Druckman, 2007).

The findings from this study were also consistent with situational crisis communication theory, which offers an evidence-driven framework for protecting reputational assets through crisis communication (Coombs, 2007). Crisis-response strategies consistent with Coombs' (2007) theory were observed in TikToks posted by the mainstream media and citizen journalists. Although findings from this study revealed that the mainstream media deploys fewer crisisresponse strategies than their citizen journalist counterparts, Coombs' (2007) recommended strategies were observed in both participant groups. The findings from this study also advanced situational crisis communication theory as it was the first of its kind to apply Coombs' (2007) approach to posts made by citizen journalists during Hurricane Ian on TikTok.

Methodological

TikTok had a variety of methodological implications for this study and will for future qualitative studies conducted on the platform as well. It is important to note that these methodological implications are not unique to studies conducted on TikTok citizen journalists. Rather, they are relevant to all qualitative content analyses conducted on TikTok in the future. First, when a TikTok account is created, the user is forced to pick a minimum number of topics that interest them. TikTok then uses these choices to organize information and curate a feed for the new user. Further, TikTok uses additional information such as birth date, location, country of origin, and gender to more accurately curate information for the user as well. Once the TikTok user begins navigating through their content, they are also subject to paid advertisements from popular brands and organizations. The amount of time a TikTok user spends watching these advertisements, liking videos, and sharing them also impacts how information is curated for the TikTok user. The platform also asks its users if they would like to sync their phone's contacts with the app to ensure that they can connect with their friends. Should one sync their contacts with TikTok, the platform will use data curated by their friend group to in turn inform what is shown to them. Since TikTok forces users to include personal information (e.g., age or country of origin) and articulate what interests them (e.g., cooking or weightlifting), there is currently no way to determine if a qualitative content analysis conducted on the platform is entirely representative of the phenomena in question.

This study made every effort to ensure that personal biases minimally impacted how information on TikTok was organized and presented to the viewer. Exemplifying that, I did not interact (e.g., like, share, repost, etc.) with any video—besides watching them—on the platform after creating a new account for this study. I also did not sync my personal contacts with the newly created social media profile to ensure that my friends had no influence on how the information was organized. Lastly, I made every effort to minimize the amount of time I spent watching advertisements by skipping through them or navigating away from them as soon as they appeared. Despite these efforts, there is ultimately no way to fully know if the videos presented to me were organized according to the information I was forced to provide at the beginning of the account's creation. Such methodological implications will impact all future qualitative content analysis on TikTok.

Practical

This study generated a variety of practical implications that can be used to improve crisis communications distributed by the mainstream media and governmental agencies (e.g., FEMA). First, it is recommended that "proactive frames" be distributed prior to a disaster arriving to inform the public about how they can reduce disaster risk (Ganiyu et al., 2017, p. 151). While these proactive frames should no doubt include updates on how to survive the storm, where it is headed, and how to behave during it, they should also provide viewers with resources on how they can improve their own information literacy and emphasize the importance of doing so. Ideally, these proactive frames would imbue viewers with the skills to identify misinformation, disinformation and disinformation are absent from the mainstream media. In fact, inaccurate reporting has a long history in the mainstream media. For that reason, proactive frames could be a solution to improving organizational accountability, information quality, and the information literacy of audiences.

Mainstream news organizations should also work alongside citizen journalists to distribute accurate news updates more frequently. Although these organizations already rely on citizen journalists for news updates, results from this dissertation indicate that users yearn for an increased reliance on them. Since mainstream news organizations can vet citizen journalist content for accuracy at the highest level, it stands to reason that increased reliance on citizen journalists can both increase the reach of the mainstream media's messages and ensure that audiences are provided high quality information. Obviously, such an approach would still empower the mainstream media to set agendas for the public and decide what citizen journalist content can reach the public's view. To reconcile this, it is recommended that mainstream news organizations create a publicly accessible system with a checks and balances process that outlines why specific content is shown or not shown to the public. Such transparency would no doubt be an effective first step to repairing trust lost during the COVID-19 infodemic.

Results from this study also showed that the crisis-response strategies deployed by mainstream news organizations were designed to first and foremost protect their reputational assets rather than attract the most viewers using accurate news updates. For this reason, it is recommended that mainstream news organizations shift their strategic goal during crises to increase their reach. In this spirit, mainstream news organizations would benefit from ensuring that they have official social media profiles on all major and minor social media platforms. As it stands, Fox News has put very little effort into building a community of online TikTok users. By increasing their presence across the internet and ensuring that their priority is attracting viewers with accurate news updates, mainstream news organizations can begin to regain trust loss during the COVID-19 infodemic.

Delimitations and Limitations

Delimitations are defined as "those characteristics that limit the scope and define the boundaries of your study" (Simon, 2011, p. 82). It is worth noting that delimitations are within the control of the researcher (Simon, 2011). Delimitations are those boundaries the researcher purposefully sets. Oftentimes, delimitations provide advantages to the researcher and their investigation (Simon, 2011). Considering that, the first delimitation of this study was the social media platform chosen for investigation. TikTok is a highly controversial social media platform that is both under investigated by scholars and increasing in popularity. However, the size of the

platform and number of users made finding enough participants who had posted videos or comments during Hurricane Ian simple. The ease of access to this social media platform made the acquisition of public data very effective. The layout of information, including pictures and videos, also made it possible to acquire participants who broadly reflected the racial and gender demographics of TikTok.

The second delimitation of this study was choosing qualitative content analysis as the methodology for this study. Since content analysis is used to determine the existence of themes in qualitative data, this research design allowed me to determine the communicative roles of both participant groups, how effective their crisis communications are, and what motivates commentors to be dependent on them. Most importantly, this approach allowed for data to be collected in a natural environment that went undisturbed throughout the entire investigation. For this reason, content analysis allows reliable themes to organically emerge from an unbiased perspective. Choosing a research method that includes barriers intended to protect analysis from bias are important given the researcher's personal investment could negatively impact interpretation of results.

The third and final delimitation of this study was the participant criteria, which differed for each participant group. First, each citizen journalist and TikTok commentor was chosen to reflect the gender and racial demographics of TikTok users at large. For this reason, 60% of all citizen journalists and commentors chosen were female and 40% were male (Ceci, 2023). Additional efforts were also made to ensure that citizen journalists and commentors were 20% White, 30% Black, 30% Hispanic, and 20% Asian (Pew Research Center, 2021). These criteria made it possible to acquire a small sample of participants that reflected the race and gender of TikTok users at large. Comparatively, the mainstream news organizations chosen for this study were also delimiting. Only five mainstream news organizations, which broadly represented the entire mainstream media, were chosen for this study.

The fourth delimitation of this study was that Hurricane Ian was the only natural disaster chosen for this study. I chose Hurricane Ian for many reasons, including but not limited to its recency and lack of scholarly investigation in the context of citizen journalism. The results of this study are therefore specific to the sample surrounding Hurricane Ian and not necessarily applicable to all crisis situations or all types of natural disasters. That said, they do provide some insights into how citizen journalists and mainstream news organizations behaved during this specific natural disaster.

Limitations are defined as "potential weaknesses in your study and [that] are out of your control" (Simon, 2011, p. 69). The first limitation of this study was that videos and comments were collected from an ordinary TikTok account specifically created for this study. While this research study made every effort to collect purposive samples that broadly reflected the race and gender demographics of TikTok, the order in which data were presented to me was organized by TikTok's algorithm. The presence of the algorithm makes it difficult to fully understand how the presentation and selection of videos or comments may have been influenced by the social media platform's inner workings. For example, videos and comments could have been ordered to cater to the age demographic entered during the account creation process. The influence and presence of the algorithm are unavoidable and should therefore be considered a limitation that was uncontrollable.

The second limitation of this study is that the data collected in this study may no longer be reflective of each video's or comment's performance. Since data were collected in the past, it is worth noting that the quantitative and qualitative elements of each video may have changed. Although efforts were made to prevent this from occurring, such as collecting data at two different points in time, videos may have more likes, comments, or plays that could influence the interpretation of the results. The data presented in this investigation are therefore representative of one point in time and should be understood as such. TikTok's algorithm, consistently changing features, and constant uploads make it nearly impossible to create a permanent and unchanging snapshot of all online happenings.

The third limitation of this study was the inability to observe comments being expressed in person. Although data collected in a natural setting are beneficial to the researcher in many ways, the construct of the research project made observation and interpretation of emotions and body language of each commentor impossible. Moreover, these limitations also made it impossible to understand how culture influences the expression of their comments. Although I incorporated and deployed protocols intended to ensure accurate interpretation of the data, it is worth noting that the analysis of emotions and body language may have impacted the coding of results. That said, collecting data without these components ensured that the sample was natural and allowed findings to organically emerge from it.

Future Research

The delimitations and limitations of this study suggest the need for further scholarly research on the topics presented in this dissertation. First, since this study only investigated the problem with depending on citizen journalists in the context of Hurricane Ian, future studies would benefit from exploring several types of natural disasters in a longitudinal study. Future studies would also benefit from exploring alternative crisis types beyond natural disasters, such as terrorism or financial crisis, to determine if citizen journalists behave similarly or differently. By exploring alternative types of crises, especially those that are human-made, researchers can develop a more well-rounded understanding of how depending on citizen journalists behave in other crisis situations. In short, researchers would benefit from exploring the behavior of citizen journalists in the context of other crisis types.

Second, since this study only examined crisis communications of citizen journalists and mainstream news organizations on TikTok, future studies would also benefit from analyzing other social media platforms. Although TikTok is an emerging social media platform that is increasing in popularity, other social media platforms such as Twitter, Facebook, and YouTube are also used to acquire news updates during a crisis. For this reason, future researchers would benefit from incorporating other social media platforms into their studies. For example, researchers might conduct a longitudinal study of crisis communications across many different types of social media platforms and crisis types to determine how the communicative roles of citizen journalists and mainstream media compare in these different situations.

Third, since this study only investigated five separate news organizations that represented the mainstream media, future researchers would benefit from exploring how other less reputable news sources communicate crisis. Scholars may investigate lesser-known local news channels, radio stations, and even certain podcasts to determine differences in the communicative roles of these participant groups. In doing so, future scholars could further distinguish citizen journalists from their mainstream and alternative counterparts. Such investigations might also provide insights into how governmental crisis communications attract viewers and encourage them to visit reliable sources during large-scale emergencies.

Fourth, future studies may also benefit by developing a reliable and widely applicable quantitative threshold that defines a social media post as effective. As it stands, this study did not aim to outline the quantitative threshold for effectiveness. Rather, it instead defined effectiveness in terms of a TikTok's large-scale reach and saturation. By creating this threshold, future researchers could identify effective posts across several different social media platforms and determine what qualities were involved in making their posts highly potent. Such an approach could be used to determine what qualities make crisis communications ineffective and ensure that they are avoided.

Lastly, future studies might also benefit from exploring specific cultures in the context of crisis. Since this study only collected participants according to their race and ethnicity, expanding the scope of the demographics to include culture (e.g., values, religions, traditions, mores, etc.) would provide insights on how crisis communications can tailor their messaging to specific populations and regions. Future researchers may also be interested in adding additional demographics such as age, occupation, income, education, geographic location, marital status, and more. Such insights are important to determining how social media users access news updates. This information would also be helpful to determine if the motivations that underlie user behavior differ across various demographics.

Summary

This dissertation examined the communicative roles of citizen journalists, the effectiveness of their crisis communications, and the motivational factors that underlie user comments on TikTok during Hurricane Ian. Results showed that citizen journalists' approach to crisis communication is much more flexible than their mainstream media counterparts. This is perhaps best explained by the fact that citizen journalists have fewer stakeholders, less severe consequences for reporting inaccurate news, and therefore, fewer behavioral expectations from the public. This flexible approach to crisis communication is one possible explanation for why citizen journalists' TikToks were significantly more effective than their counterparts. Citizen

journalists were observed serving a variety of communicative roles such as comedians and even crisis-deniers. Such behavior from citizen journalism no doubt catered to the public's mistrust in the mainstream media and attracted viewers that have been disenchanted by the COVID-19 infodemic. This dissertation also found that TikTok users were dependent on the interactive spaces (e.g., comment sections) provided by both citizen journalists and mainstream news organizations for recreational play.

The problem with citizen journalism is that it can flexibly approach crisis communications, even going as far as lampooning or denying a natural disaster, and still produce highly effective content. Results from this dissertation suggest that TikTok users may have migrated away from mainstream news organizations in the wake of the COVID-19 infodemic to avoid organizations' branding, missions, and values. Citizen journalists' content, however, is not devoid of these elements. In fact, TikToks posted by citizen journalists are equally as problematic as their counterparts, if not more. Although the unprofessional aesthetic of citizen journalist content may suggest that it is a trustworthy first-person account, such content is often underwritten by both a yearning for clout and personal biases that influence how their reality is constructed. For that reason, it is recommended that the mainstream media develop new strategies intended towards repairing the public's trust in a posttruth era.

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Appendices

Table 1

Step	Analysis Process	Example		
1	Meaning unit (TikTok comment)	These hurricanes are so scary. I hope everyone is okay. This video helped me learn more about my own limitations.		
2	Condensation	This video helped me learn more about my own limitations.		
3	Theme	Understanding		
4	Sub-theme	Self-understanding		
5	Definition	Self-understanding occurs when media is used to learn more about oneself.		

Steps to Qualitative Content Analysis

Table 2

Example of Directed and Conventional Content Analysis Coding Process

Meaning Units (Examples)	Condensation	Theme	Sub-Theme	Definitions
These hurricanes are so scary. I hope everyone is okay. This video helped me learn more about my own limitations.	This video helped me learn more about my own limitations.		Self- Understanding	When media is used to learn more about oneself.
Obesity is a real problem in the United States. This video has helped me understand more about others' behaviors.	This video has helped me understand more about others' behaviors.	Understanding	Social Understanding	When media is used to obtain a better understanding of the world around them.
I didn't know you couldn't approach the judge in a courtroom. Now I know how to interact with the judge and bailiff.	Now I know how to interact with the judge and bailiff.		Interaction Orientation	When media is used to learn how to interact with others.
I love how this guy explains food rationing and food preservation like jamming. This video is great. Now I know how to act in future crisis situations.	This video is great. Now I know how to act in future crisis situations!	Orientation	Action Orientation	When media is used to learn how to orient themselves to action.

LinkedIn is so great. I don't understand why everyone doesn't use it. This app helped me meet so many people.	This app helped me meet so many people.	Play	Social Play	When media is used to facilitate social exchanges.
There is something so satisfying about watching island waves. Wow, this video is so relaxing.	Wow, this video is so relaxing!		Solitary Play	When media is used to obtain pleasure or relaxation.

Descriptive Data – Mainstream Media

	Organizations	Video Likes	Plays	Comments	Saves	Shares	Hashtage
N	CNN	2	2	2	2	2	2
	Fox News	2	2	2	2	2	2
	NBC	2	2	2	2	2	2
	CBS	2	2	2	2	2	2
	ABC	2	2	2	2	2	2
Mean	CNN	1374	70700	27.0	57.5	169	4.00
	Fox News	4487	309454	99.5	212	388	2.00
	NBC	10741	110150	84.5	393	257	3.50
	CBS	42550	759750	255	1051	329	4.00
	ABC	2062	75000	70.5	72.5	408	3.00
Median	CNN	1374	70700	27.0	57.5	169	4.00
	Fox News	4487	309454	99.5	212	388	2.00
	NBC	10741	110150	84.5	393	257	3.50
	CBS	42550	759750	255	1051	329	4.00
	ABC	2062	75000	70.5	72.5	408	3.00
Standard deviation	CNN	190	2828	2.83	16.3	170	0.00
	Fox News	6293	426168	141	299	548	2.83
	NBC	10691	60882	50.2	415	198	0.707
	CBS	26092	212344	87.0	339	139	0.00
	ABC	18.4	3960	46.0	19.1	327	1.41

Video Plays Gender Race Comments Saves Shares Hashtags Likes Ν White Male Female Hispanic Male Female Black Male Female Asian Male Female Mean White Male 6.00e+6 8.00 Female Hispanic Male 1.30e+6 4.00 Female 66.5 3.00 Black Male 12.0 5.50 Female 4.15e+6 Asian Male Female 3.50 Median White Male 6.00e+6 8.00 Female Hispanic Male Female 66.5 3.00 Black Male 5.50 Female 4.15e+6 Asian Male 3.50 Female Standard White Male 1.26e+6 3.39e+6 1.41 deviation Female Hispanic Male Female 1.05e+6 62.9 1.41 Black Male Female 1.34e+6 2.12 Asian Male Female 71.4 0.707

Descriptive Data - Citizen Journalists

Qualitative Data – Communicative Roles of Citizen Journalists

Meaning Units (Examples)	Condensation	Theme	Definitions	Sub-Theme	Definitions	
Hurricane Ian is causing major flooding, we need to evacuate immediately. Evacuate, I live in a penthouse on the 43 rd floor in Miami lol.	Evacuation is futile because of I live in a penthouse on the 43^{rd} floor.			Satire	When one uses comedy to ridicule institutions and society rather than specific individuals.	
He probably would've stayed out there watching it all go down if my mom hadn't yelled at him lol	Girl makes fun of dad for getting in trouble with mother after overpreparing for the storm.	Comedy	When one uses comedy to quell public fear and anxiety surrounding the storm.		When one's behavior is considered ridiculous or	
Yo this is mad. No this is relaxing you should try it. Nah no way dude. You got a speaker? I'm telling you it's nice. This is the most Florida thing I've ever seen with my own two eyes!	Man believes that floating down Florida floodwaters in a pool toy with a speaker is enjoyable.				Farce	unsafe but entertains others.
Kitten stuck in Hurricane Ian. Worst is yet to come.	Animals are being hurt and it will only get worse.	Concern	When one uses TikTok as a device to express anxiety, worry or apprehensiveness.	Concern for Animals.	Using TikTok to express anxiety about the well- being of other people or animals.	
Thanks to God, I made it out alive.	Thank you, God, for keeping me safe.	Gratitude	When TikTok is used to express thankfulness.	Religious Gratitude	When TikTok is used to express thankfulness directly to God.	
Hurricane Ian has us bucketing out some of this water	The flooding from Hurricane Ian caused a pool to overflow.	Damaga	When TikTok is used to archive all	Property Damage	When destruction from Hurricane Ian, such as flooding or heavy winds, results in property damage.	
Dolphin washed up after 20- foot storm surge! Insane experience for all the haters there was no cell service to reach out to any wildlife control.	Dolphin washes ashore following 20-ft storm surge.	Damage	types of damage from Hurricane Ian.	Environmental Damage	When destruction from hurricane Ian, such as flooding or heavy winds, results in environmental damage.	

Qualitative Data – Communicative Roles of the Mainstream Media on TikTok

Meaning Units (Examples)	Condensation	Theme	Definitions	Sub-Theme	Definitions
Water has been sucked out of the Manatee River at the Bradenton Harbor in Bradenton, Florida ahead of Hurricane Ian's landfall.	The storm surge blew water out of the Manatee River.			Environmental Damage	When destruction from Hurricane Ian, such as flooding or heavy winds, results in property damage.
Yea the wind makes for some traumatic pictures. But it's the blowing water that will make the most dramatic difference for these peoples' lives for the next foreseeable future. When this wind dies and the sun comes out, the nightmare is just beginning for these folks. Then comes the flooding water and the mold problems, oh, and the lost days of work. This storm is going to hurt John. All you can do is hope for minimum blood sweat and tears.	While the Hurricane presents imminent danger, its aftereffects should be most concerning to individuals.	Damage	When TikTok is used to archive all types of damage from Hurricane Ian.	Future Damage	When destruction from Hurricane Ian, such as flooding or heavy winds, results in property damage.
The governor is saying today if you haven't evacuated it is too late.	The time for evacuation has passed.		When TikTok is used to	Shelter in Place	When mainstream news organizations encourage viewers to shelter in place.
If you are located along the path to the Hurricane. Now is the time to prepare.	Now is the time to prepare for Hurricane Ian.	Survival		Disaster Preparation	When mainstream news organizations encourage viewers to prepare for the pending storm.

Metrics	Citizen Journalists	Mainstream Media
Likes	296,325	12,243
Saves	1,152	357
Shares	4,214	310
Comments	1,985	107
Followers	9,627	2,623,900
Hashtags	5.6	3.1
Plays	2,459,066	265,011
Total Profile Likes	52,464,083	499,880

Quantitative Data – Partial Effectiveness Comparison

Categories	Words	Length	Frequency
	High	4	8
	Back	4	5
Storm Descriptors	Low	3	5
	Full	4	3
	Rising	6	3
	Hurricane Ian	12	21
	Storm	5	8
	Florida	8	5
Storm Updates	Winds	5	5
	Flooding	8	5
	Visibility	10	4
	Barricaded	10	3
Descendent Hard (Candles	7	3
Personal Updates	See	3	4
	Watching	8	3

Quantitative Data – Citizen Journalists' Word Frequency

Categories	Words	Length	Frequency
	Now	3	9
Storm Descriptors	Going	5	6
	High	4	4
	Hurricane Ian	11	47
	Winds	5	20
	Florida	7	17
	Water	5	12
Ctown Undeter	Coast	5	6
Storm Updates	Storm	5	5
	Tampa	5	4
	Rain	4	4
	Landfall	8	3
	Families	8	4
Personal Updates	Home	4	4
	Man	3	4

Quantitative Data – Mainstream Media Word Frequency

Qualitative Data – Latent	Content Analysis	Results of Citizen	Journalist TikToks

Meaning Unit	Themes	Definition	Sub- Themes	Definitions
My family prepares like it's the end of the world lol.	Diminish Crisis Response Strategies	When crisis managers argue that a crisis is "not as bad as people think," they attempt to diminish threat perception" (p.171, Coombs, 2007).	Justification	Justification occurs when, "Crisis mangers minimize the perceived damage of the crisis" (p.170, Coombs, 2007).
Hurricane Ian is causing major flooding, we need to evacuate immediately. Evacuate, I live in a penthouse 43 rd floor Miami lol.	Deny Crisis	When an organization denies the truth and attempts to frame the	Denial	Denial occurs when "crisis managers assert that there is no crisis" (p.170, Coombs, 2007).
My dad during Hurricane Ian. Reporting on Facebook Live. Watching the storm roll in. Switching between Univision and Telemundo News. Trying to see the neighbor's yard.	Response Strategies	situation in a way that alleviates the probability of reputational harm (Coombs, 2007)	Mockery	Mockery occurs when crisis managers make fun of individuals who are prepping for the storm to minimize perceived fear of the pending disaster.
I'm underwater. I'm outside. I'm worried about my dogs. I'm okay. This is how high the water is now.		Bolstering occurs when organizations "protect the organizational reputation, praise stakeholders for their efforts during the	Victimage	Victimage occurs when crisis managers, "remind stakeholders that the organization is a victim of the crisis too" and when victims are of the storm are highlighted (p.170, Coombs, 2007).
The poor dolphin was so dry. He washed up, on shore and we must get him help. The dolphin knew we were there to help. Try after try I finally was able to get her back home.	Bolstering Crisis Response Strategies	crisis" and evoke sympathy from viewers since they are a victim of the crisis (p.172, Coombs, 2007).	Ingratiation	Ingratiation occurs when crisis managers, "praise stakeholders and remind them of good works by the organization" (p.170, Coombs, 2007).

Meaning Unit	Themes	Definition	Sub-Themes	Definitions
Hello. This is Vanessa Romo. I am usually a sports reporter, but I am on vacation in Tampa Florida. But that vacation was cut short. Hurricane Ian was supposed to make its way directly to Tampa but just today or yesterday it went East and hit directly under Tampa. But we are still getting the effects of it now. They say that we will get heavy wind, a lot of rain. We are going to get the worst of it by 2AM eastern time. Fortunately, I am not in an evacuation zone.		Bolstering occurs when organizations "protect the organizational reputation, praise stakeholders for	Victimage	Victimage occurs when crisis managers, "remind stakeholders that the organization is a victim of the crisis too" and when victims are of the storm are highlighted (p.170, Coombs, 2007).
Yea the wind makes for some traumatic pictures. But it's the blowing water that will make the most dramatic difference for these peoples' lives for the next foreseeable future.	Bolstering Crisis Response Strategies	their efforts during the crisis" and evoke sympathy from viewers since they are a victim of the crisis (p.172, Coombs, 2007).	Exacerbation	Exacerbation occurs when crisis managers create crisis frames intended to imbue fear into the viewer.
So, some would say why should I not do what Kerry is doing and go out and walk around in the hurricane? We do our very best to try to try to use the protection of buildings, to get into a parking garage, to use these just moments where we're out there to demonstrate.			Ingratiation	When crisis managers tell stakeholders about "past good works done by the organization" (p.170, Coombs, 2007).

Qualitative Data – Latent Content Analysis Results of Mainstream Media TikToks

	Race	Gender	Ν	Mean	Median	SD	Minimum	Maximum
Replies	White	Male	4	15.250	0.000	30.500	0	61
		Female	16	8.063	2.500	12.788	0	51
	Black	Male	9	21.000	2	26.889	0	65
		Female	21	8.286	2	15.399	0	56
	Hispanic	Male	16	7.688	1.000	18.113	0	73
		Female	14	18.357	0.000	64.971	0	244
	Asian	Male	10	0.100	0.000	0.316	0	1
		Female	10	4.400	0.500	8.501	0	27
Likes	White	Male	4	15575.000	0.000	31150.000	0.00	62300.0
		Female	16	872.063	288.500	1113.943	0.00	3270.0
	Black	Male	9	1054.444	32.000	1795.470	0.00	5417.0
		Female	21	365.667	73.000	504.389	0.00	1417.0
	Hispanic	Male	16	648.688	25.000	1689.705	0.00	6013.0
		Female	14	517.214	9.500	1446.328	0.00	5485.0
	Asian	Male	10	8.100	0.000	24.569	0.00	78.0
		Female	10	675.300	34.500	1975.949	0.00	6296.0

Descriptive Data – Citizen Journalist Commentors

Descriptive Data – Mainstream Media Commentors

	Race	Gender	Ν	Mean	Median	SD	Minimum	Maximun
Replies	White	Female	14	1.5000	0.00	2.624	0.00	8.00
		Male	6	6.3333	2.00	8.406	0.00	17.00
	Black	Female	11	0.3636	0.00	0.924	0.00	3.00
		Male	19	0.6842	0.00	2.982	0.00	13.00
	Hispanic	Female	18	0.3889	0.00	1.420	0.00	6.00
		Male	12	0.0833	0.00	0.289	0.00	1.00
	Asian	Female	17	0.1176	0.00	0.332	0.00	1.00
		Male	3	0.0000	0.00	0.000	0.00	0.00
Likes	White	Female	14	172.4286	3.50	381.516	0.00	1190.00
		Male	6	327.3333	1.50	677.525	0.00	1693.00
	Black	Female	11	6.0909	1.00	13.561	0.00	46.00
		Male	19	3.9474	0.00	11.043	0.00	45.00
	Hispanic	Female	18	2.8333	0.00	7.358	0.00	27.00
		Male	12	2.3333	0.00	4.619	0.00	15.00
	Asian	Female	17	0.1765	0.00	0.393	0.00	1.00
		Male	3	0.0000	0.00	0.000	0.00	0.00

Meaning Units (Examples)	Condensation	Theme	Sub-Theme	Frequency	Definitions
Omg I just couldn't even IMAGINE being in that position, especially with my 3 dogs. I am so sorry you went through that but am so happy you're ok.	I could never imagine being a situation like that.	Understanding	Self- Understanding	5	When media is used to learn more about oneself.
Sorry for asking. How does it feel when the hurricane coming? How does it sound?	How does a hurricane feel and sound?		Social Understanding	11	When media is used to obtain a better understanding of the world around them.
Why would you fill up the tub? sorry I don't understand.	Why fill the tub when a hurricane is coming?	Orientation	Action Orientation	2	When media is used to learn how to orient themselves to action.
But are we going to talk about the lady driving through that in her vehicle?	Let's talk about the lady driving.	Play	Social Play	78	When media is used to facilitate social exchanges.
This is hilarious lol	lol		Solitary Play	4	When media is used to obtain pleasure or relaxation.

Directed Content Analysis Results – Comments on Citizen Journalist TikToks

Meaning Units (Examples)	Condensation	Theme	Sub-Theme	Frequency	Definitions
Is Savannah Georgia in the safe zone?	Where is the safe zone?	Understanding	Social Understanding	18	When media is used to obtain a better understanding of the world around them.
Is no one going to comment on the baseball helmet?	Let's talk about the baseball helmet.	Play	Social Play	80	When media is used to facilitate social exchanges.
This is so sweet I love it.	I love it.		Solitary Play	2	When media is used to obtain pleasure or relaxation.

Directed Content Analysis Results – Comments on Mainstream Media TikToks

Figure 1

Audit Trail – Conventional Content Analysis

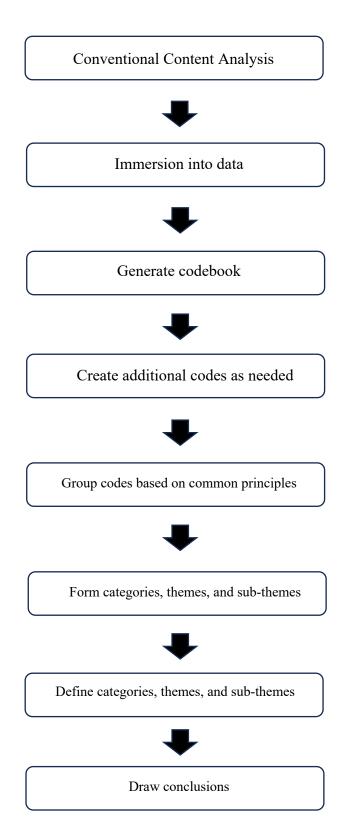


Figure 2

Audit Trail – Summative Content Analysis

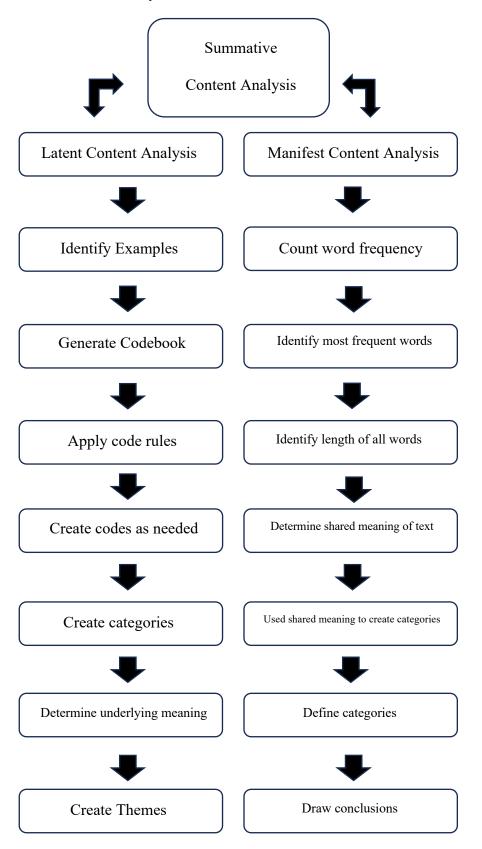


Figure 3

Audit Trail – Directed Content Analysis

