

A Case Study On How HBCUs Use Social Media To Reduce Uncertainty Of COVID-19

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UNCERTAINTY OF COVID-19**

by

Kelsey Anne-Gabrielle Armstrong

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

School of Communication and the Arts

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## ABSTRACT

This case study aims to understand how HBCUs use social media to deliver crisis communication messages to students about COVID-19 and how the HBCU culture impacts student perspectives. The theory guiding this study is uncertainty reduction theory (Berger & Calabrese, 1974), as it explains the communication strategies used to reduce uncertainty during a crisis. Data collection was conducted using semi-structured interviews and content analysis. Data analysis strategies included deductive and inductive coding and directed content analysis. The study results provide insight into how the HBCU culture impacts the perspective of an HBCUs response to COVID-19 and overall crisis communication messaging from a university.

*Keywords:* crisis communication, COVID-19, social media, uncertainty reduction, HBCUs

**Copyright Page**

### **Dedication**

This dissertation is dedicated to my Grandma Beverly, Grandpa Kenneth, Granddad Earl, Grandma Lois, and loving husband Julian, who have provided encouragement and prayers as I pursue my doctoral degree. Because of your prayers and support, I did it!

I would also like to dedicate this to my niece, Aubrey, showing her that she can do anything she sets her mind to. The world is your canvas, Buttercup. TiTi will always be there, no matter the circumstances.

## **Acknowledgements**

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### **List of Abbreviations**

Crisis and Emergency Risk Communication (CERC)

Higher Education Institutions (HEIs)

Historically Black Colleges and Universities (HBCUs)

Institutional Review Board (IRB)

Network Crisis Communication Theory (NCCT)

North Carolina Agricultural and Technical State University (NCAT)

Predicted Outcome Value (POV)

Predominantly White Institutions (PWI)

Situational Crisis Communication Theory (SCCT)

Social-Mediated Crisis Communication Model (SMCC)

Uncertainty Reduction Theory (URT)

## **Chapter One: Introduction**

### **Overview**

Social media usage in crisis communication efforts involves strategic thinking to select the appropriate social media platform and disseminate information quickly to an organization's target audience. Crisis communication literature has established the many benefits of incorporating social media as a critical channel in crisis communication planning (Lin et al., 2016, Holmes, 2011; Veil et al., 2011). However, there is limited research that has sought to understand how Historically Black Colleges and Universities (HBCUs) use social media in their crisis communications messaging regarding COVID-19. Therefore, this study investigated crisis communication to understand how HBCUs use social media to deliver crisis communication messaging to students. The purpose of the research was to understand how social media usage in crisis communication effectively reduces uncertainty. This chapter introduces the use of social media in crisis communication at HBCUs by providing background information on the topic, followed by a discussion of the research problem, research questions, research purpose, study significance, and study limitations.

### **Background**

Coombs (2010) defined crisis communication as a "collection, processing, and dissemination of information required to address a crisis situation" (p. 20). A crisis is divided into three stages — pre-crisis, the crisis, and post-crisis. However, the crisis stage is the most researched among the three stages. Within the crisis stage, scholars have focused on examining and providing best practices of crisis response strategy for organizations and companies. Several theories have emerged within the crisis response strategy that offers guidance in crafting effective crisis messaging, such as Coomb's situational crisis communication theory (SCCT),

Benoit's image repair theory, and the social-mediated crisis communication (SMCC) model.

### ***Crisis Communication Theories***

One of the most popular crisis communication theories is Coomb's (2004) SCCT, which suggests "that an organization's past crises history affects the reputational threat posed by a current crisis when that crisis" (p. 265). The purpose of SCCT is to provide insight into how various crisis elements impact an individual's perception of a crisis and crisis communication efforts (Holladay et al., 2010). The SCCT identifies crisis response strategies according to what causes a crisis. In addition, the theory recommends crisis response strategies that will assist in reputation repair (Coombs et al., 2009). These crisis response strategies are categorized into four groups or postures. The first group is denial. Response strategies included in this posture include attacking the accuser, denying the crisis, and scapegoating (Coombs et al., 2009). The second response group is diminishing. Within the diminished posture, crisis response strategies include excusing or justification. Rebuild is the third posture, which includes the response strategies of apology or compensation. Lastly, the bolstering posture demonstrates crisis response strategies including reminders and ingratiation.

A second popular crisis communication theory is Benoit's image repair theory, which provides five broad categories of image repair strategies including denial, evasion of responsibility, reduction offensiveness, corrective action, and mortification. As society evolves, social media has become a key channel whose usage is considered by crisis communicators. Many stakeholders look to social media for crisis information. According to Coombs et al. (2009), two assumptions within image repair theory state that "corporate communication is conceptualized as a goal-directed activity" and "maintaining a positive reputation for the organization is one of the central goals of communication" (p. 109). The theory also suggests



that engaging in image restoration or repair requires knowledge of the accusations that are threatening an organization's image as well as which audience is top priority to address (Sellnow & Seeger, 2013). Crisis managers implement strategies of image repair theory across various industries, especially within sports and entertainment (Coombs et al., 2009). However, applications of image repair theory and other crisis communication theories have been limited in the context of effective social media usage, suggesting that social media applications of these theories are not as effective (Liu & Fraustino, 2014).

Social media-driven theories include the social-mediated crisis communication model (SMCC), which strives to explain and predict how target audiences convey information during a crisis (Liu & Fraustino, 2014). The theory states that crisis information is exchanged directly between traditional and social media. SMCC focuses on how the interaction between an organization and the stakeholders experiencing the crisis guides responses before, during, and after a crisis (Austin et al., 2012). The theory identifies three types of stakeholders or publics: (1) influential social media creators, (2) social media followers, and (3) inactive social media (Jin et al., 2014). Influential social media creators refer to individuals who create crisis messages for others. Social media followers are the individuals who consume the crisis messages of influential social media creators. Social media inactives are the individuals who indirectly consume crisis communication messages of influential social media creators (Jin et al., 2014).

A second social media-driven crisis communication theory is the networked crisis communication theory (NCC). According to Liu and Fraustino (2014), this theory considers the "effects of media type on crisis message effectiveness, indicating crisis messages distributed via social media can prompt different public responses than do the same messages distributed via traditional media" (p. 545). The NCCT refers to the network itself and provides a foundation to

examine how the medium impacts crisis communication messaging. Additionally, the theory highlights how an organization uses communication mediums to disseminate communication messages in order to mitigate a crisis and increase potential positive outcomes.

Social media has been proven to be a channel that can reach the masses, especially millennials and Gen Z. According to the Pew Research Center (2021), eighty-four percent of adults spanning 18 to 29 years old stated that they use some sort of social media site. Higher education institutions (HEIs) are havens for millennials and Gen Z. Though these generations use social media most often, other age demographics also use social media. There are several types of HEIs, from private to public, to predominantly white institutions (PWI) to HBCUs. HBCUs are HEIs founded to provide African American's with higher education when they were not allowed to attend institutions with Caucasians. These institutions are deeply rooted in their history and offer a warm and nurturing culture that goes beyond the classroom. Unfortunately, they experience challenges unique to them. These unique attributes and challenges call for research to be conducted to provide best practices that address these attributes. No matter the institution, social media can be an essential tool for crisis communication. Several studies have proven the value of social media in crisis communication (Coombs et al., 2017; Fraustino, 2017; Lin et al., 2016; Holmes, 2011; Veil et al., 2011).

COVID-19 created an avenue for increased social media usage because communicating digitally followed CDC guidelines for social distancing and provided rapid messaging. Many individuals were working remotely during the pandemic, and social media became a way to work and communicate with loved ones. Though the value of social media is being recognized and literature regarding its usage is emerging, it is still unused in crisis communication efforts (Kwok et al., 2021).

### ***The Black Community's Mistrust of the Health Care System***

Historically, the African American community, or Black community, has experienced trauma related to health care. Their traumas stem from mistreatment and institutionalized racism within the health care system of the United States (Bajaj & Stanford, 2021). Historical examples of medical abuse, discrimination, and racism towards the Black community include being displayed like animals, receiving unethical medical treatments, and serving as the subjects of medical experimentation. Society viewed African Americans as animals because of their unique features and dark skin. One example of this behavior was the 1900s when Africans were displayed during exhibits. In 1904, Samuel Phillips Verner brought African pygmies to America to display during the St. Louis World's Fair (Washington, 2006). A second illustration of this demeaning behavior was the display of nude Africans by Dr. Joseph T. Zealy in 1850, who wanted to emphasize that the features of Africans and Black Americans provided evidence that they were different from Caucasians. Dr. Benjamin Rush also believed that African Americans' features identified them as different from Caucasians (Washington, 2006). However, he believed that their dark-colored skin was due to a manifestation of a type of leprosy, which could be cured (Washington, 2006).

Mistrust of health care in the Black community also exists because of the history of medical experimentation that many African Americans endured. One of the most infamous examples was the Syphilis Study at the Tuskegee Institute. According to the CDC (2022), 600 Black males were involved in a study where 399 participants had syphilis, while 201 did not. Participants were asked to participate in exchange for free medical exams, meals, and burial insurance. However, informed consent was not collected. The participants were also purposely denied treatment in the form of receiving penicillin, which was a widely available treatment for

syphilis at the time (Kricorian & Turner, 2021). A second example of unethical treatment and medical experimentation is the testing of African American children. Mammoth Pharmaceutical and Columbia University Medical Center researchers conducted pharmaceutical trials on HIV-infected orphans (Washington, 2006). These are just a few examples that illustrate why the Black community does not trust the scientific and health care system.

Though several of these inhumane events occurred several decades ago, the cultural phenomenon of medical mistrust is still relevant in the Black community. This mistrust has been passed down generationally, where African Americans are prone to stay clear of the health care system. For example, they are less inclined to attend doctor visits, they mistrust non-Black doctors' diagnosis and treatment plans, they believe that the health care system is attempting to eradicate the Black race, and they have a mistrust of vaccines which are viewed as heavily pushed by the American government.

Research suggests that trust is one of the biggest factors of vaccine hesitancy, especially regarding the COVID-19 vaccine (Bagasra et al., 2021; Kricorian & Turner, 2021; Laurencin, 2021; Moore et al., 2021). The Black community does not trust the motivations of the United States government and pharmaceutical companies (Moore et al., 2021). This mistrust of the government is based on their past transgressions of racism and failure to protect African Americans from medical experimentation and unethical treatments. With a perception of pharmaceutical companies as being profit-driven with a disregard for the humans receiving the medications, African Americans do not want history to repeat itself. A key to rebuilding their trust is access to health information and education, which includes medical professionals who are available to answer questions that may arise due to misinformation to promote transparency and ultimately rebuild and maintain trust. This is essential because, throughout history, the Black

community was denied just treatment and information (Laurencin, 2021; Moore et al., 2021). That being said, although information would help decrease the uncertainty, mistrust, and hesitancy of the COVID-19 vaccine, it could also create further mistrust. There is a possibility that when seeking information, members of the Black community could encounter misinformation, disinformation, and conspiracies regarding the vaccine (Moore et al., 2021). This is why it is essential to educate the community with credible information from credible sources, allowing individuals to have accurate information to establish their own beliefs.

### **Problem Statement**

The problem is that there is a gap in the literature in understanding how HBCUs used social media in their crisis communication efforts regarding COVID-19 and how the dissemination of information impacted their internal audiences—students. Previous studies have focused on the student perspective of crisis communication messaging. Hocke-Mirzashvili et al. (2015) focused on the student’s view of the effective use of social media to provide crisis communication messaging at North Carolina Agricultural and Technical University during a campus shooter crisis. Other existing research has focused on natural disaster crises, such as the crisis response of Xavier University during Hurricane Katrina (Taylor, 2011). However, there is limited research on higher education responses to COVID-19, medical, and health crises.

Additionally, existing research on social media usage by HEIs is available. For example, Dabner (2012) examined the University of Canterbury’s use of Facebook to disseminate information during an earthquake. Thelen and Robinson (2019) analyzed the University of Florida’s President Kent Fuch's use of Facebook and Twitter to provide messaging that addressed white supremacist Richard Spencer being invited to speak at the university. However, much of the literature available has only focused on Facebook and Twitter. Researchers in

several studies have suggested that future research focus on other social media platforms in addition to Facebook and Twitter.

Furthermore, it is essential to provide insight into the use of social media in crisis communication specific to HBCUs because of their unique characteristics. HBCUs were created to provide higher education to African American students when they were not allowed to attend universities with White students. This has established an “HBCU experience”, where the universities create an environment for students that is a “home away from home” (Tyree & Cathcart, 2016). However, HBCUs experience challenges unique to them. These challenges include declining financial support, fighting to maintain prevalence, and retention rates (G. S. Johnson et al., 2017). Due to these unique characteristics, analyzing the current practices of an HBCU will allow researchers to craft best practices that are appropriate for the challenges and circumstances that only HBCUs experience.

### **Purpose Statement**

The purpose of this qualitative case study was to understand how social media usage in crisis communication can effectively reduce uncertainty. In order to achieve this, this research conducted a case study to understand how an HBCU used social media to deliver crisis communication messaging about COVID-19 to their students. The study examined the cultural phenomenon of how students view HBCU crisis communication efforts during COVID-19 between January 1, 2021, and December 31, 2021. This study used a qualitative research single instrumental case study methodology to examine crisis communication content and HBCU student perspectives. Through content analysis of the university’s messaging and semi-structured interviews among students, findings revealed best practices for crafting crisis communication messages during COVID-19 for HBCUs. Findings also provided insight into how the HBCU

culture impacts the perspective of an HBCU's response to COVID-19 and overall crisis communication messaging from a university.

### **Significance of the Study**

HBCUs are underrated and unresearched (Williams et al., 2018; Bracey, 2017; Taylor, 2011; Minor, 2008). There is a great need to examine the crisis communication efforts of an HBCU to understand how crisis communication affects initiation under the unique circumstances they carry. This study was significant for five reasons. First, it provided insight for crafting crisis communication messaging in health care contexts, specifically regarding COVID-19. Second, this research addressed HBCUs' unique characteristics and focused on suggestions for future research regarding social media, higher education, and crisis communication. Third, the study contributed to the literature on COVID-19, providing a deeper understanding of the role of social media in crisis communication during the pandemic. Next, this research added to the literature on uncertainty reduction theory (URT), providing best practices and explaining how the theory can be utilized. Finally, this study was significant because it provided insights into the cultural phenomenon of the HBCU culture and experience in crisis communication.

### **Research Questions**

The research objective was to find out how HBCUs use social media to deliver crisis communication messaging to students to understand how to use social media in crisis communication to reduce uncertainty effectively. This qualitative case study explored three research questions among HBCU crisis communication messaging and student perceptions:

RQ1: How do students evaluate if the university's messaging on social media platforms reduced their uncertainty regarding COVID-19?

RQ2: Which social media platforms tend to be used to reduce students' uncertainties

about COVID-19 the most?

RQ3: What are the common themes in HBCU messaging on social media regarding COVID-19?

### **Theoretical Framework**

This study applied the theoretical framework of URT to evaluate if the crisis communication efforts of the selected HBCU reduced the uncertainty and anxieties of its students. Originally created by Charles Berger and Richard Calabrese (1974) to fill a literature gap on interpersonal communication and explain the need for uncertainty reduction during initial interactions between strangers, the theory's guiding principles include motivation to reduce uncertainty, uncertainty with strangers, and uncertainty in ongoing relationships (Redmond, 2015).

Within the theory, seeking information and uncertainty are described as the process of seeking and discovering meaning in uncertain situations (Kramer, 2014). As crises create uncertainty for those who experience them, crisis communication scholars have used URT to understand why the uncertainty exists and use the stages within URT to guide how to reduce uncertainty. This study followed a similar outline and used URT to evaluate how crisis communication messages reduce the uncertainty of the sample population. URT identifies seven axioms and 21 theorems. These elements surround uncertainty and several other factors, including verbal communication, nonverbal affiliative expressiveness, the communication environment, the intimacy level of communication content, information seeking, reciprocity rate, similarity, and liking (Berger & Calabrese, 1974).

Most definitions within the literature regarding uncertainty and personal contacts have focused on the lack of information about the inability to predict one's behavior (Kramer, 2014).



URT focuses on three different types of uncertainty – (1) uncertainty created by the inability to predict the behavior of others, (2) uncertainty created by the inability to choose appropriate behaviors to respond to others, and (3) uncertainty created by the inability to explain one's behavior or the behavior of others (Berger & Calabrese, 1974; Kramer, 2014; Redmond, 2015). The theory also suggests that individuals can experience different degrees of uncertainty. Even if an individual is experiencing the same situation, the degree of uncertainty can still vary. Individuals can experience uncertainty about others and their relationships with others for themselves. In addition, several factors can cause uncertainty such as a lack of information due to questions about the quality of information, an inability to structure information in a meaningful way, or the complexity of information. However, in the personal context of URT, uncertainty is defined as a lack of specific information to make a prediction (Redmond, 2015).

For this study, URT was used as a framework and foundation in developing the instruments for the study and data analysis. The central assumption that this study implemented was URT's axiom three and theorem three, which state that individuals seek information to reduce uncertainty during an interaction with a stranger. This selection for the study was related to examining crisis communication messaging posted on the social media accounts of North Carolina Agricultural and Technical State University (NCAT) and in the coding of interviews of NCAT students.

### **Nature of the Study**

The nature of this study examined how HBCUs use social media to provide crisis communication regarding COVID-19 to reduce uncertainty. As there are over 101 HBCUs within North America, the scope of this study recruited participants from one university, NCAT. NCAT is located in the southeastern United States and met several research requirements of this

study, as it is considered a mid-size level HBCU and enrolls approximately 13,000 students. Additionally, this geographical location had high COVID-19 cases. Therefore, the crisis response efforts were numerous and accessible for the study. Though a HBCU has several key audiences, this study's scope only examined student perspectives. Instruments for data collection included video-recorded interviews using semi-structured questions. The content analysis consisted of the university's Facebook, Twitter, and Instagram posts. The researcher used inductive and deductive coding for data analysis to examine interview transcripts and conduct the content analysis. Furthermore, the researcher used URT, as well as the terms, beliefs, and behaviors that are unique to the HBCU culture for coding and creating interview questions. The insights from this study revealed crisis communication best practices for other HBCUs and provided a deeper understanding of the HBCU culture's impact on crisis communication efforts.

### **Limitations and Assumptions**

The researcher assumed that all students at the selected HBCU were aware of the university's social media accounts and looked to them for COVID-19 crisis messaging. One limitation of this study was that it only examined one HBCU. While there are over 100 HBCUs in the United States and U.S. Virgin Islands, this research only represents a small percentage of HBCUs. A second limitation was the geographical location. The selected HBCU of this study, NCAT, is located in North Carolina. There are 107 institutions in the United States and the U.S. Virgin Islands. As some states experienced more COVID-19 cases and a higher risk for exposure compared to others, this implemented a greater volume of crisis messaging at the institutions located within higher risk areas.

### **Definition of Key Terms**

*African American* or *Black*: Individuals within the black or African American racial group,

individuals who have African descent, and/or black racial groups in Africa (US Census Bureau, 2022).

*Caucasian* or *White*: Individuals that have origins in Europe, the Middle East, or North Africa (US Census Bureau, 2022).

*COVID-19* or *Coronavirus*: A respiratory disease caused by SARS-CoV-2, which is a new coronavirus discovered in 2019. The virus is thought to spread mainly from person to person through respiratory droplets produced when an infected person coughs, sneezes, or talks (Center for Disease Control and Prevention (CDC), n.d.).

*Crisis*: An unpredictable event or occurrence that can negatively impact an organization or a company (Fearn-Banks, 2016).

*Higher Education Institutions* (HEIs): Colleges and universities that provide secondary education for at least four years (Britannica, 2023).

*Historically Black Colleges and Universities* (HBCU): Universities and colleges founded to provide higher education to the African American population (U.S. Department of Education, n.d.).

*Infodemic*: “An excessive amount of information concerning a problem such that the solution is made more difficult” (Naeem & Bhatti, 2020, p. 233).

*Predominantly White Institutions* (PWIs): Universities and colleges that predominately serve the White student population. “Whites account for 50 percent or greater of student enrollment” (Lomotey, 2010).

*Social Media Platforms*: Media channels enabling users to create and share content or engage with others via social networking (Tuten & Solomon, 2018).

## Summary

Crisis communication, particularly crisis response strategy, is a widely researched topic. Studies have found that using social media to disseminate crisis communication messages is of value. However, it is still underused. Crisis communication is also used within HEIs. However, there is a lack of research regarding crisis communication practices within HBCUs. Using URT as the framework, this study examined if the COVID-19 crisis communications messaging on social media platforms from an HBCU's communications department aligns with student perceptions to reduce their uncertainties and anxieties effectively. Chapter Two reviews the relevant literature regarding HBCUs, crisis communication, social media, URT, and COVID-19. Following the review, a breakdown of the study's methodology is provided in Chapter Three. After data collection, the study discusses the analysis and findings in Chapters Four and Five.

## **Chapter Two: Literature Review**

### **Overview**

Crisis communication has been around just as long as the leadership of organizations and companies has been managing. The new crisis that the world recently addressed was COVID-19, or the coronavirus. Though the pandemic still has unfamiliar research territory, COVID-19, higher education, and crisis communication literature exist. This chapter provides a review of crisis communication, HBCUs, and social media by examining existing literature on these topics to better understand and identify relationships between the subjects. Understanding these areas is necessary and relevant to the research questions and scope of this research. From the review, gaps and opportunities for future research are identified.

### **Literature Search Strategy**

This review was conducted using thematic coding of white papers, books, and peer-reviewed articles. The original content of theories was also identified and added to the review. Key terms and phrases used to conduct the review of the literature included crisis communication, crisis communication and social media, crisis communication in HBCUs, crisis communication and COVID-19, best practices of social media in crisis communication, and crisis communication in higher education.

### **Crisis Communication**

Crisis communication encompasses the communication messaging that is disseminated during a crisis. To fully understand and define crisis communication, defining crises is essential. Throughout literature, the definition of a crisis has varied. However, a broad definition of a crisis is a breakdown within a system that creates shared stress (Coombs, 2018). Another definition of a crisis used by scholars is an occurrence that can negatively impact an organization or a

company (Fearn-Banks, 2016).

Coombs (2018) broke down crises into disaster and organizational crises. A disaster is defined as a sudden event that can also spawn an organizational crisis. An organizational crisis, on the other hand, is defined as perceptual. According to Coombs, so long as “stakeholders believe an organization is in crisis, a crisis does exist, and stakeholders will react to the organization as if it is in crisis” (p. 3). In this way, organizational crises are grounded in perception and they have the ability to violate salient stakeholders’ expectations for the actions of an organization. As a result, stakeholders can become upset and angry, which threatens the relationship between the organization and its stakeholders. In contrast, Ulmer et al. (2017) defined organizational crises as specific, unexpected, and nonroutine events or series of events that create high levels of uncertainty and simultaneously present organizations with both opportunities for and threats to their high-priority goals (p. 7).

Beyond the type of crisis, Coombs (2018) described three stages within a crisis which include the pre-crisis, crisis event, and post-crisis. Within each of these stages, there are substages. In the pre-crisis stage, an organization should be proactive in taking precautions to prevent a crisis. The three substages of the pre-crisis stage are signal detection, prevention, and crisis preparation (Coombs, 2018). A crisis event triggers the crisis stage. The three substages of this stage include crisis recognition and crisis containment. The post-crisis stage is the aftermath of the crisis event, once an organization has resolved the crisis. Within this stage, crisis communicators “(a) make the organization better prepared for the next crisis, (b) make sure stakeholders are left with a positive impression of the organization’s crisis management efforts, and (c) check to make sure that the crisis is truly over” (Coombs, 2018, p. 11).

Fearn-Banks (2016) broke down a crisis into five stages. These stages are detection,

prevention and preparation, containment, recovery, and learning. First, detection involves recognizing the warning signs of a potential crisis. Second, the prevention and/or preparation stage takes notice of the warning signs during the detection stage and takes the necessary actions to prevent a crisis. This stage also understands that all crises are not avoidable. Therefore, during this stage, an organization also conducts measures to prepare for a potential crisis (Fearn-Banks, 2016). Third, the containment stage occurs during a crisis event. Response behaviors during this stage include mitigating and limiting the spread of a crisis. Next, the recovery stage involves the organization attempting to regain normalcy after a crisis event has been resolved. Finally, the learning stage involves examining the crisis event and evaluating how the organization performed during the crisis (Fearn-Banks, 2016).

Crisis communication scholars have described types of crises in several different ways. Ulmer et al. (2017) placed crises into two categories — intentional and unintentional crises. Intentional crises are caused by deliberate actions, while unintentional crises are not (Ulmer et al., 2017). Examples of intentional crises include (1) terrorism, (2) sabotage, (3) workplace violence, (4) poor employee relationships, (5) poor risk management, (6) hostile takeovers, and (6) unethical leadership. In contrast, types of unintentional crises include (1) natural disasters, (2) disease outbreaks, (3) unforeseeable technical interactions, (4) product failure, and (5) downturns in the economy. In Coombs and Holladay's (2002) study, they divided crises into 13 types. These types included (1) rumor, (2) natural disaster, (3) malevolence/product tampering, (4) workplace violence, (5) challenge, (6) technical breakdown accident, (7) technical breakdown product recall, (8) mega damage, (9) human breakdown accident, (10) human breakdown product recall, (11) organization misdeed, (12) organizational misdeed management misconduct, and (13) organizational misdeeds with injuries (to external stakeholders). Overlapping crisis types

included natural disasters, workplace place violence, and product breakdown.

### ***Situational Crisis Communication Theory***

The leading theory contributing to crisis communication research is W. Timothy Coomb's (2018) SCCT. This theory uses an approach that synthesizes corporate apologia, impression management, and image repair theory (Ulmer et al., 2017). The theory has provided insights to help crisis managers understand how crisis elements affect people's perceptions of the crisis and an organization's crisis communication efforts (Holladay et al., 2010). SCCT provides an understanding of perceptions regarding human error and technical error crises. The theory suggests that a crisis can threaten an organization's reputation when perceived as a human error crisis. The theory also emphasizes distinguishing between human and technical errors to improve the crisis communication process. Organizations can select the most appropriate and effective crisis communication strategies when understanding the difference between the two (Holladay et al., 2010).

SCCT provides four groups, or postures, of crisis response strategies: (1) deny, (2) diminish, (3) rebuilding, and (4) bolstering (Coombs et al., 2009). The deny posture includes response strategies such as attacking the accuser of the crisis, denying the crisis, and blaming someone outside of the organization (i.e. scapegoating). The diminished posture includes response strategies such as providing excuses for why the organization is experiencing the crisis or justifying why the crisis is happening. The third posture includes rebuilding response strategies, such as apologizing to stakeholders or providing compensation to stakeholders who are a part of the crisis. Finally, the bolstering posture includes response strategies such as reminding stakeholders of past good deeds that the organization has illustrated and ingratiation or praising stakeholders.



SCCT assumes that a crisis threatens the public's perspective of an organization (Coombs & Holladay, 2002). Recognizing the reputational threat to an organization is a major issue during a crisis. To address this, SCCT addresses three factors to assess a crisis's reputational threat including (1) crisis type or frame, (2) crisis history, and (3) prior reputation (Coombs et al., 2009). Depending on the reputational threat, there is an associated level of what the theory considers the crisis responsibility.

The factor of crisis type is a reference to how the crisis is defined, which may be as either victim, accidental, or intentional. Examples of victim crises include natural disasters, workplace violence, and product tampering. This crisis type is associated with minimal crisis responsibility for an organization. Accident crises have low crisis responsibility for an organization, such as technical error accidents and product harm. Preventable crises, on the other hand, indicate strong crisis responsibility for an organization, such as organizational misdeeds, human error accidents, and product harm. The second and third factors that assess reputational threat – crisis history and prior reputation – will alter the initial reputational threat. For example, when an organization has a prior history of going through crises or has a negative reputation, its stakeholders will treat victim crises as accidental crises and accidental crises as preventable ones, which ultimately increases the organization's reputational threat.

Based on these three factors, SCCT provides several crisis response recommendations. These recommendations include (1) providing all victims and potential victims instructing information, (2) providing adjusting information (e.g. expressing sympathy), (3) instructing and adjusting information sufficiently for crises with minimal attributions of crisis responsibility and/or for organizations with no crisis history or prior negative reputation, (4) adding diminishing strategies to instructing and adjusting information for crises with weak attributes of

crisis responsibility and/or for organizations with no crisis history or prior negative reputation, (5) adding rebuilding strategies to instructing and adjusting information for crises with weak attributions of crisis responsibility and/or for organizations with a crisis history or prior negative reputation, (6) adding rebuilding strategies to instructing and adjusting information for crises with strong attributions of crisis responsibility and/or for organizations with a crisis history or prior negative reputation, (7) reinforcing strategies that can supplement any crisis response, (8) denying response strategies that are only suited for rumor and challenge crises, and (9) maintaining consistency between post-crisis response strategies by avoiding the use of deny strategies with rebuilding or diminishing strategies. Coombs (2017) defined instructing information as information that informs stakeholders on how to protect themselves during a crisis and adjusting information as information to help stakeholders cope psychologically with the uncertainty of crises. However, within crisis communication, several theories outside of Coomb's SCCT have emerged.

### ***Image Restoration Theory***

Image restoration theory, also known as image repair theory, is another widely used theory within crisis communication. Developed by William L. Benoit, image restoration theory states that the image or reputation of an organization is important to individuals and the organization (Benoit, 2013). In theory, the image refers to the public's perspective of an organization or company (Ulmer et al., 2017). When a crisis threatens an image, an organization must implement image repair discourse to address, restore, or maintain its positive image (Fearn-Banks, 2016; Benoit, 2013).

This theory is founded on two assumptions. First, corporate communication is assumed as being a goal-directed activity. Second, an organization's central goal is the maintenance of a

positive reputation. During the process of implementing image restoration, it is critical to address the accusations and/or suspicions that are threatening the image as well as identify the most important audiences (Sellnow & Seeger, 2013). Benoit's theory has often been applied to various crisis cases among industries including airlines, chemical, sports, and entertainment (Coombs et al., 2009).

Image restoration theory identifies five strategies for image repair: denial, evading responsibility, reducing offensiveness, corrective action, and mortification (Sellnow & Seeger, 2013). First, a denial strategy involves simply denying an accusation or shifting blame by accusing someone or something else of the crisis. The second strategy of evading responsibility involves accepting some connection to the crisis while denying accountability for it. Third, when implementing the reduction of offensiveness as a crisis response strategy for image repair, crisis managers can select one of six options which include bolstering, differentiation, transcendence, minimization, attacking the accuser, or compensation. Bolstering, attacking the accuser, and compensation are similar to the strategies identified in SCCT, which use the same name. Transcendence refers to an organization's attempt to exhibit how other issues are more significant than the current crisis that an organization is experiencing (Zaremba, 2014). Minimization is when a crisis manager positions a crisis to be not as bad as it appears (Sellnow & Seeger, 2013). Differentiation is when a crisis manager explains that the crisis occurring in an organization is different than crises experienced by other organizations (Zaremba, 2014). Corrective action, the fifth strategy for image repair, refers to repairing the damage done by a crisis and working to ensure that a similar crisis does not occur in the future. Lastly, the repair strategy of mortification accepts the responsibility of a crisis and asks for forgiveness (Sellnow & Seeger, 2013)

### ***Corporate Apologia***

A third popular theory is the corporate apologia, which is also known as the apologia theory. As apologia is seen as a public address responding to the allegations of a crisis, the apologia theory similarly involves protecting the image of an organization and is primarily used when an organization's actions violate stakeholders' values (Sellnow & Seeger, 2013). The theory explicitly addresses whether an organization has been accused of a misdeed. Notably, an apology is not always the outcome (Fearn-Banks, 2016). Instead, an organization may put effort into denying or explaining the accused misdeed (Ulmer et al., 2017; Fearn-Banks, 2016).

Strategies within apologia include denial, differentiation, bolstering, and transcendence. These strategies are categorized as either reformatory or transformative. Reformatory strategies maintain or regain the speaker's credibility, while transformative strategies seek to alter stakeholders' perspectives of the meaning of a crisis. In addition, the strategies are placed into groupings, which combine two of the four strategies. For example, an absolute grouping is a combination of denial and differentiation strategies while a vindictive grouping is a combination of denial and transcendence strategies. Explanative groupings are a third example, which combine bolstering and differentiation strategies. Lastly, justificative groupings are a combination of bolstering and transcendence strategies.

### ***Crisis Communication and Trust***

Organizations and companies must secure credibility within crisis communication to effectively disseminate crisis communication messaging (Coombs, 2018; Kim & Park, 2017). Trust is essential for effective communication and is critical to predicting behaviors (Hirschfeld & Thielsch, 2021). Trustworthiness also conveys ethical narratives and determines whether an individual will identify with the organization or company that is distributing the information

(Clementson, 2020). Considering this, an audience will assume that the message disseminator upholds an ethical standard when trustworthiness is present.

Researchers break credibility down into expertise and trustworthiness. Expertise refers to the communicator's knowledge (Kim & Park, 2017). Trustworthiness refers to the goodwill of concern of the audience. When an organization displays compassion and sensitivity during a crisis, the organization's actions consist of trustworthiness. Individuals trust an organization or company that is concerned with and considers their best interest. When credibility exists, an individual most likely finds the information received to be trustworthy. Research also suggests that individuals are more trusting when information comes from others like themselves. Therefore, it is essential that organizations make a personable connection with their public audience so that during a crisis, the audience continues to feel that they share similarities with the organization and are able to interpersonally relate.

Trustworthiness as a form of credibility can also be divided into source credibility, message credibility, and medium credibility (Yang et al., 2010). Source credibility refers to the knowledge and trustworthiness of the communicator disseminating crisis information. Message credibility refers to the accuracy and quality of the message itself. Medium credibility refers to the trustworthiness of the specific medium through which information is communicated, such as the radio, newspapers, or the Internet.

### **Historically Black Colleges and Universities**

HBCUs are unique HEIs that focus on providing higher education experiences for African Americans. According to Lee (2009), "the universal mission of HBCUs is to provide quality educational environments for African Americans" (p. 9). HBCUs gained their name based on their historical origination and value. They were created to provide higher education

when African Americans were historically not offered the opportunity to receive higher education, especially among institutions with Caucasian students. To overcome this obstacle, African Americans and lawmakers established institutions solely for the benefit of African American students. The first HBCU, Cheney University, was founded in 1837 in Pennsylvania (Crewe, 2017; Davenport, 2017). Today, there are now over 101 HBCUs in the United States and U.S. territories.

HBCUs have various attributes, including private, public, and land-grant institutions. Land-grant institutions are funded by land-grants supported by the Morrill Land-Grant Act of 1890 (Harris, 2009). These institutions, established after the Civil War, educated freed slaves. Other historical triumphs of HBCUs have included gaining the support of the Southern Association of Colleges and Schools, an accreditation agency, in 1928. Additionally, the federal government began providing HBCUs with additional funding through the Higher Education Act in 1965.

The value and relevancy of HBCUs stem from how they provide opportunities for African Americans as well as the graduates they produce. One significant aspect of HBCUs is that they provide havens for disadvantaged African Americans (Bryan & Steward, 2016). Students from low-income families seek HBCUs because of the low tuition rates that make attending college financially attainable (Lee, 2009). A second appealing attribute of HBCUs is their small class sizes, which cultivate opportunities for faculty to better connect with students in the classroom. Third, HBCU graduates provide significant contributions to society and the economy. According to Harris (2009), “104 HBCUs pumped \$4 billion into the labor economy, creating 180,142 full- and part-time jobs” (p. 6). The ten largest public HBCUs that are having an economic impact in their community include Florida A&M, North Carolina A&T, Tennessee

State University, Southern University, Texas Southern, Morgan State University, Jackson State University, Prairie View A&M, Norfolk State University, and North Carolina Central (Harris, 2009). In addition, HBCUs produce the highest number of African American Ph.D. graduates. A sixth significant value of HBCUs is the opportunities that they provide. “According to the National Association of Equal Opportunities in Education, HBCUs are disproportionately educating students who come from families with low to moderate incomes” (Harris, 2009, p. 4).

While HBCUs offer these numerous benefits and value, they also experience various significant challenges such as accreditation and student retention (Harris, 2009). A considerable challenge for HBCUs is limited resources, especially funding. According to Johnson (2013), “State funding is only part of the disparity problem, as there are other socioeconomic factors that account for large wealth gaps between the alumni of Primarily White Institutions of the south” (p. 65). Research states that the limited resources of HBCUs impact the success of academic programming (M. N. Johnson, 2013). This ultimately affects graduation rates, which can also impact accreditation because the institutions cannot perform.

### ***The HBCU Experience***

The HBCU experience is a cultural phenomenon. A cultural phenomenon holds power (Blokke et al., 2021). There are two elements to consider when defining a cultural phenomenon — culture and phenomenon. Webster dictionary defines culture as “the customary beliefs, social forms, and material traits of a racial, religious, or social group” (n.d.). A phenomenon is defined as “an object or aspect known through the senses rather than by thought or intuition”, as well as “a rare or significant fact or event” (Webster, n.d.). Using these definitions as context, a cultural phenomenon is a significant fact or event known through the sense of customary beliefs, social forms, and material traits of a racial, religious, or social group.

When referring to the cultural phenomenon of the HBCU experience, it includes activities, events, atmosphere, bonds, friendships, sports, bands, Greek life, and, unfortunately, problems that are unique to students that attend an HBCU. The HBCU experience is also where the norm is Black culture and includes music, art, social issues, social values, dances, and fashions (Price, 2009). With each generation and cohort of HBCU students, traditions, beliefs, and values are passed down. HBCUs cultivate a sense of community where alumni are just as involved in some activities as current students. For example, homecoming is more of a family reunion than a football game with a week's worth of events. The HBCU experience creates and enables a steady mindset of shared opinions, values, likes, and dislikes among a single university's students, faculty, staff, and alumni. At times, these shared opinions and values are even shared across universities. These aspects drive thought processes and decision-making. This is specifically evident when students select colleges to attend after high school due to the nurturing environment built for African Americans to thrive academically (Tobolowsky et al., 2005).

Though an HBCU experience is present at all HBCUs, individuals can have a different HBCU experience according to their social group. For example, some students experience an HBCU experience encompassing Greek life, while others do not. The same is true for students who join the marching band compared to those who choose to be a part of the university choir or gospel choir. However, the common aspect of an HBCU experience is a sense of community and unity.

### **Social Media**

As technology continues to evolve, social media is incorporated more into daily life. Multiple definitions of social media exist. However, this study was framed by Tuten and



Solomon's (2018) definition of social media as a digital communication, conveyance, and collaboration of a community or network of individuals enhanced by technology mobility. Luttrell (2014) offered a second accepted definition of social media which refers to online activities, practices, and behaviors. Luttrell also stated that social media is about sharing information, opinions, and knowledge in an online community.

According to Tuten and Solomon (2018), there are four zones of social media — social community, social publishing, social entertainment, and social commerce. First, social communities are social media channels that focus on two-way or multi-way communication. Channels of the social community zone include social networks, message boards, and forums. Social media platforms that fall under this zone include Facebook, LinkedIn, Twitter, and Google Plus. Second, the social publishing zone focuses on disseminating and distributing content (Tuten & Solomon, 2018). Channels within this zone include blogs, media sharing sites, and microblogging sites. Media sharing sites encompass video, photo, music, and audio sharing social media platforms. Social media platforms under social publishing include Tumblr, WordPress, YouTube, Vimeo, Flickr, Snapchat, Instagram, and Slideshare.

Next, social entertainment is the third social media zone. Social entertainment provides enjoyment for users. Channels within social entertainment include social games. Social media platforms under this zone include Come2Play, Second Life, MySpace, and uGame (Tuten & Solomon, 2018). Finally, social commerce is the fourth social media zone. Social commerce includes online shopping, buying, and selling products and services via social media (Tuten & Solomon, 2018). Examples of social media platforms within this zone include Facebook, Groupon, and Etsy.

There are various capacities of social media. According to Valentini et al. (2017), one

significant role of social media is the sharing of information and news on critical situations. Examples of this role include breaking news, crisis updates, or entertainment information. A second role of social media is to seek connections through sharing experiences and getting emotional support (Valentini et al., 2017). These connections happen on support forums, pages, and social networking sites like Facebook. Social media is also a tool used in education. For example, teachers are starting to use social media for collaborative learning in higher education to engage with students and with one another (Aldahdouh et al., 2020; Sarwar et al., 2018). As technology and society continue to evolve, so will the functions and uses of social media.

### **Existing Literature**

Crisis communication, social media, and HBCUs are not new research topics. Reviewing existing literature provided scope for this study by identifying what has already been established regarding these three topics. The following section provides this scope and demonstrates how crisis communication, social media, and HBCUs interact.

#### ***Crisis Communication and Higher Education***

Just as other organizations implement crisis communication strategies, so too do HEIs. Existing research on crisis communication in higher education has covered various crises, examined multiple universities' crisis response strategies, and provided lessons learned. Varma (2011) studied the crisis response strategies of Louisiana State University when addressing the resignation of its women's head basketball coach after the coach was charged with inappropriate conduct with former basketball players. After conducting open-ended questions from students at the university, the researcher divided the response strategy into three phases — (Phase 1) denial, shifting of the blame, and evasion of responsibility, (Phase 2) bolstering and transcendence, and (Phase 3) negotiation. The study concluded that there was a lack of transparency in the beginning

stages. However, during the third stage, the value of negotiations in management during a crisis was illustrated (Varma, 2011).

Several studies have examined the crisis strategy response of Virginia Polytechnic Institution and State University (Virginia Tech) during the 2007 campus shooting crisis. Wang and Hutchins (2010) investigated the crisis experience and highlighted its implications for human resource development. Their study provided lessons that other HEIs can use during active shooter crises. First, they established an understandable university and state health care policy regarding privacy law, since there was a delay and inefficiency in disseminating the information about active shooter Cho's detention at the Counseling Center (Wang & Hutchins, 2010). Second, they suggested improving the emergency response plan execution. Third, their study recommended emergency training for all university personnel (Wang & Hutchins, 2010). Barker and Yoder's (2012) research also examined the 2007 campus shooting and identified a possible conflict between campus crisis communication messages and the general media messaging (Barker & Yoder, 2012). Interestingly, both studies concluded that Virginia Tech failed in crisis recognition and implemented inadequate crisis management and university leadership (Barker & Yoder, 2012; Wang & Hutchins, 2010).

### ***Crisis Communication and Social Media***

Crisis communicators use social media pre-crisis, during a crisis, and post-crisis. When used in different crisis stages, social media can foster collaboration and support for coordinated actions during each crisis stage (Valentini et al., 2017). This collaboration also encourages conversations between organizations and their stakeholders. Research suggests that social media conversation can affect stakeholder crisis awareness and interpretation.

Jahng and Hong (2017) examined the role of the human voice over a corporate voice in

tweets of crisis communication messaging. Their study concluded that stakeholders with a prior positive attitude towards an organization prefer a corporate voice or response when viewing crisis information on Twitter. Mirbabaie and Marx (2020) explored patterns of sense-breaking in the social media crisis communication of the 2017 Manchester bombing. Their study concluded that sense-breaking is a social media phenomenon in crisis communication and occurs early in a crisis. They also concluded that sense-giving occurs when uncertainty is highest (Mirbabaie & Marx, 2020). According to Stieglitz et al. (2017), “While sense-making is the process of social construction by information seeking, sense-giving is a process by which attempts are made to influence the meaning construction and sense-making of others towards a preferred interpretation of an occurrence” (p. 1333).

Numerous studies have examined the use of Facebook and Twitter in crisis communication. Findings suggest that Facebook and Twitter are essential tools for monitoring crisis communication (Eriksson & Olsson, 2016). However, scholars have also identified differences in using each platform in crisis communication. Facebook is considered an excellent crisis prevention channel that delivers messages to a specific audience (Eriksson & Olsson, 2016). In comparison, Twitter is perceived as the elite channel to use during a crisis and primarily serves as an early warning of crises, even though Facebook is used to a greater extent than Twitter (Eriksson & Olsson, 2016).

Coombs et al. (2017) studied the value of social media in a crisis. They found that the social media channel effect alters how people perceive and react to crisis messaging and how they react to crisis communication. However, it has been concluded that further research is required to determine if the effect of social media channels is a result of stealing thunder or precise circumstances.

Another value of social media in crisis communication is its many purposes and benefits. One use of social media during a crisis is for image and reputation repair. The findings of Coombs et al. (2017) suggested “a modification to the recommendations that social media channels will serve to protect organizational reputations and lessen secondary crisis reactions” (p. 166). Twitter is a platform that is considered effective in image repair. Research has found that image repair messaging on Twitter is communicated in three forms — tweets, retweets, and replies (Glantz & Benoit, 2017). Out of the three, retweets have been found to be the most successful in repairing an image (Glantz & Benoit, 2017).

Social media is also a key tool for disaster communication, as it is able to disseminate crisis messaging quickly (Lin et al., 2016; Holmes, 2011; Veil et al., 2011). However, in disaster crisis communication, stakeholders are critical players in messages. According to Fraustino (2017), stakeholders use social media during a disaster because of convenience, social norms, personal recommendations, information-seeking humor, and levity. Of these uses, stakeholders use social media during a crisis to seek information. During crises, stakeholders look to social media for instructional information that provides awareness of the crisis, warning of the crisis, and recommendations for how they should react. Social media also provides stakeholders with important updates regarding organizational decisions during a crisis, information about how to cope psychologically with a crisis, interpersonal communication (e.g. checking with family and friends, maintaining communication, offering support, ensuring safety), and internalizing information which can influence them in how they handle a crisis and form an opinion about an organization (O. Apuke & Tunca, 2019; Thelen & Robinson, 2019; Fraustino et al., 2017; Lim et al., 2017, Veil et al., 2011).

Organizations can also use social media to gain and seek information. For example, an

organization can use social to determine a disaster's magnitude by apprising the disaster's damage based on stakeholders' or other credible sources (Fraustino et al., 2017). Due to numerous benefits and positive outcomes, social media is recognized as an “important element of crisis management, especially in supporting the education of employees about social media” (Valentini et al., 2017, p. 60).

However, social media use does have potential challenges and disadvantages in crisis communication. Several reasons the public might not use social media during disasters include access issues, accuracy concerns, a lack of knowledge to properly use social media, and privacy and security fears (Fraustino et al., 2017). One of the most significant potential disadvantages is social media serving as a source of misinformation. According to Holmes (2011), misinformation is harmful or inaccurate information regarding a crisis. During a crisis, messages are sent out fast to ensure timeliness. However, this high speed can generate misinformation (Lin et al., 2016; Holmes, 2011). If crisis communicators send out messages too quickly and do not review the content, it can lead to mistakes and oversight, leading to errors. This oversight can ultimately create misinformation or inaccuracies, which negatively impact an organization's reputation.

According to the existing literature on the use of social media in crisis communication, there are five best practices for crisis communicators: (1) actively engaging in dialogue by providing information in real-time, (2) using credible sources, (3) being cautious of the speed of message updates, (4) creating an organizational hashtag to promote information, easy access to information, and the monitoring of the crisis conversation, and (5) cooperating with the public and similar organizations (O. Apuke & Tunca, 2019; Eriksson & Olsson, 2016; Lin et al., 2016; Veil et al., 2011).

### ***Higher Education, Crisis Communication and Social Media***

Universities also incorporate social media into their crisis communication strategies. A study conducted by Thelen and Robinson (2019) used SCCT as a guide to evaluate the crisis response strategies of the University of Florida's President Kent Fuchs in response to the university's decision to host Richard Spencer, a white supremacist, as a controversial speaker in the wake of the 2017 attack during a separatist demonstration near the University of Virginia in Charlottesville. The researchers conducted a content analysis to examine the statements and comments of Fuchs on Facebook and Twitter (Thelen & Robinson, 2019). They divided the responses into six stages, according to the dated statements and posted remarks. Their study found that President Fuchs used information-giving strategies, which aligned with the SCCT recommendation of helping the public to psychologically adjust to the crisis. The study also found that President Fuchs' comments used few reputation repair strategies but utilized traditional and emotional messages during the crisis. However, the Thelen and Robinson also identified that Fuchs' messaging used less instructing information than adjusting information.

Another study conducted by Dabner (2012) examined the University of Canterbury's use of social media during a 7.1 magnitude earthquake that struck the South Island of New Zealand. The study found that the university effectively used Facebook for information sharing. However, the study also suggested that universities should have a defined purpose for integrating social media into a university's communications strategy.

The research of Davis (2014) focused on examining the use of social media during campus crises among North Carolina colleges and universities. The study reported that 16 communication channels are commonly used during crises, including microblogging sites, YouTube, and other social media networking sites like Facebook (Davis, 2014). The study also

found that a small number of social media channels were widely used among North Carolina colleges and universities. Among the colleges and universities surveyed, 100 percent adopted Facebook, 95 percent adopted Twitter and YouTube, and about half used Flickr and LinkedIn (Davis, 2014). Best practices identified by Davis for using social media in crisis communication of HEIs included continually preparing for crises, integrating all relevant university communication channels into the institution's crisis communications plan, practice and drills, preparing pre-crisis messages in advance, monitoring student use of social media and other technology, monitoring legal matters related to university communication in crises, and teamwork.

Hong and Kim (2019) explored the effect of crisis messaging regarding media platforms and message attribution in using social media in crisis communication of HEIs. Their findings found that respondents have a tremendous attitudinal change toward a university after reading narrative statements on social media. Additionally, they were found to have more favorable attitudes toward the university when exposed to a university's statement on its social media pages (Hong & Kim, 2019).

### ***Crisis Communication and HBCUs***

Literature on crisis communication in HBCUs is not as robust as crisis communication and PWIs. However, the available studies provide guidance and best crisis communication practices that incorporate HBCUs' unique characteristics. One study examined the faculty perception of the communication efforts of an HBCU's leadership during a merger. Conducting focus group interviews, the study found that the administrators' communication was ineffective. Faculty emphasized that they needed ongoing, open, and honest communication with faculty concerning the merger for its leadership (M. S. Johnson & Thompson, 2021).



Hocke-Mirzashvili et al. (2015) investigated student evaluations of a gunman threat at North Carolina Agricultural and Technical State University. The study found that students were satisfied and had positive views of information received about the gunman from sources closely affiliated with the university. These sources included staff, university policy, and the Aggie Alert system. However, they were dissatisfied with information received through the media or a friend outside of the university. The study concluded that the crisis response strategy of North Carolina A&T did not align with crisis and emergency risk communication (CERC) principles which state that an organization should be first, right, and credible in a crisis communication situation. Student interviews indicated that students did not receive the information about the gunman from A&T first, nor was the information accurate. In addition, many students were unaware that the university had active Twitter and Facebook pages. In this example, the university missed the opportunity to use its social media channels to inform students about the crisis.

Taylor (2011) examined the crisis response strategies of three HBCUs. From the examination, the researcher was able to identify the following best practices for crisis communication at HBCUs that cater to the unique attributes of these institutions: (1) establish a functioning public relations unit before a crisis event, (2) generate a crisis communications plan that integrates up-to-date technology, (3) build a professional alliance by engaging in strategic partnerships before a crisis occurs to have a coordinated network and credible sources to receive information from, (4) accept uncertainty, (5) respond quickly, (6) proactively communicate by listening to public concerns and acting accordingly, (7) be transparent through openness and honesty, (8) be accessible to the media by engaging with media professionals and creating personalized relationships, (9) communicate with compassion by engaging and empathizing with affected audiences, (10) provide self-efficacy, and (11) respond provisionally to ensure the vision

and focus from university leadership during a crisis.

### ***COVID-19 and HBCUs***

Both HBCUs and PWIs had to cope with COVID-19. Much of the existing literature has focused on the strategies taken by HBCUs to continue learning and the critique of leadership behaviors. M. S. Johnson and Thompson (2021) examined the crisis response strategy of three HBCUs in response to COVID-19. The study found that the HBCUs had a lack of resources and an inability to recruit and maintain strong leadership. The study also found that the HBCUs' leadership and governance made effective crisis preparedness and prevention decisions but had room to improve crisis management and post-crisis management (M. S. Johnson & Thompson, 2021).

Murty and Payne (2021) similarly examined how HBCU leaders adopted strategies to respond to the pandemic. Their study found that HBCUs experienced moderately fewer COVID-19 causes than non-HBCUs because of effective strategies that were implemented. These strategies included (1) attaining higher student compliance regarding institutional guidelines on social distancing and mask-wearing, (2) applying practical return-to-campus strategies for employees, (3) effectively monitoring, tracking, and reporting COVID cases, (4) providing alternative academic instructional opportunities, and (5) educating students on the COVID risk (Murty & Payne, 2021).

Another study that examined the academic response to COVID-19 offered strategies and lessons for developing effective digital learning approaches in response to the pandemic. A study of the Department of Strategic Communication at Morgan State University identified challenges and lessons learned during its emergency transition to remote learning. Challenges included rapid changes to remote learning, different degrees of student accessibility, difficulties sustaining

student motivation, and hurdles associated with learning new technologies (Smith et al., 2020). From these challenges, Smith et al.'s (2020) research identified valuable lessons which included establishing community early, showing compassion, empowering learners, and growing digitally.

While COVID-19 presented many challenges to HEIs, HBCUs faced challenges that had already existed prior to the pandemic. One major challenge was financial resources. As COVID-19 caused fluctuations in enrollment and reduced occupancies, HBCUs have continued to lose money (Murty & Payne, 2021). Accreditation was a second challenge that HBCUs faced during the pandemic and continue to face. According to Murty and Payne (2021), "Some HBCUs are stalled in the middle of their preparation for accreditation affirmation" (p. 345). Mental health was the third major challenge HBCUs faced during COVID-19. Students at HBCUs reported experiencing widespread anxieties regarding the health of their loved ones and a lack of access to resources (e.g. Wi-Fi, laptops) (Murty & Payne, 2021). A study conducted by King-Berry and Charles (n.d.) confirmed this finding, identifying health/wellness and socio-emotional challenges among students who were attending HBCUs during COVID-19. To address these challenges, King-Berry and Charles provided several recommendations.

Recommendations for academic support included implementing a universal design for learning principles, having open-source resources, implementing learning communities, and offering time management strategies (King-Berry & Charles, n.d.). Recommendations for socio-emotional support included having a welcoming campus climate, providing mentoring, providing a high-quality faculty, and offering a culturally relevant and community-based curriculum. Recommendations for economic/financial and health/wellness support included providing clear health care options and strategies to sustain health and wellness. These recommendations were corroborated by M. S. Johnson and Thompson's (2020) research, which examined several of the

challenges that HBCUs experienced while trying to maintain campus operations during COVID-19. Their findings recommended that HBCUs provide effective leadership and governance, including transparency, effective communication, shared government, and crisis response planning implementation.

### ***COVID-19 and Crisis Communication***

COVID-19 caused many organizations to go into a crisis overdrive in order to provide rapid communications on how the leadership of organizations or companies would operationally move forward. A study conducted by Christensen and Lægreid (2020) focused on a government that effectively controlled COVID-19 messaging by using meaning-making, which is how “actors use certain arguments and symbols to support their crisis management measure, which is a central part of governance legitimacy” ( p. 714). Meaning-making also refers to reputation management. Christensen and Lægreid’s study demonstrated effective government control of the pandemic through suppression strategies, collaborative decision-making, communication with the public, and successful meaning-making.

Since the beginning of COVID-19, social media played an important role. Historically, social media has been used as a tool to provide health information to the masses quickly (Tsao et al., 2021; González-Padilla & Tortolero-Blanco, 2020). Many organizations, including HEIs, use social media and other digital communication platforms to provide crisis information. A study conducted by Ayman et al. (2020) on four universities in North Cyprus found that social media was vital for quickly disseminating valid and accurate information to stakeholders. However, their findings reported a lack of two-way communication between university officials and stakeholders via social media (Ayman et al., 2020). They concluded that HEIs must use social media to share effective information and provide emotional support to followers. “Online

communication via social media platforms not only contributes to physiological needs but, as Maslow's hierarchy of needs demonstrates, also contributes to the psychological concerns of social media users" (Ayman et al., 2020, p. 14).

Social media sites like YouTube have been an avenue for instant misinformation because polarized groups generate and share their own narrative (Cinelli et al., 2020; Naeem & Bhatti, 2020). Social media during COVID-19 similarly resulted in a communication crisis, considered by many as an infodemic. Naeem and Bhatti (2020) defined an infodemic as "an excessive amount of information concerning a problem such that the solution is made more difficult" (p. 233). Researchers have suggested that crisis communicators use the epidemic model to understand social dynamics between content consumption and social media platforms (Cinelli et al., 2020).

### **Theoretical Framework**

The theoretical framework is the perspective that the research questions address. The perspective provides a set of assumptions or guidelines about the reality of the study. For this qualitative case study, uncertainty reduction theory provided the theoretical framework. The following section explores URT's origins, development, and use in crisis communication literature.

#### ***Origination of Theory***

URT was initially created by Charles R. Berger and Richard J. Calabrese to explain interpersonal communication, specifically, the initial interaction between strangers. Before its development, scholars had focused on implementing social psychological theories and explaining interpersonal communication. URT was designed to remedy the lack of literature on communication constructs that are relevant to and focus on interpersonal communication (Berger

& Calabrese, 1974). The theory suggests that when information is received, it enables one to predict behavior so that they can decide how to behave in future interactions or how to respond to predicted behavior (Kramer, 2014).

Berger and Calabrese (1974) identified three phases within URT, based on the significant assumption that the communicative interactions addressed by the theory occur between strangers. The first phase of URT is the entry phase. By the end of this phase, an interaction becomes more confident and the individuals involved can decide if they want to develop a relationship more intimately. The personal phase of URT involves more engaging communication that is centered on attitudinal issues and fundamental values. The final phase of URT is the exit phase. During this phase, individuals involved in the interaction decide whether they would like to continue with future interactions.

Assumptions are central to URT, as individuals make assumptions regarding the behavior of those they interact with. As a result of these assumptions, uncertainties arise. The primary assumption during a first-time meeting of strangers is that both individuals will experience high levels of uncertainty about the other and will engage in information-seeking behaviors to reduce uncertainty. These behaviors are described as processes of seeking and discovering meaning in uncertain situations. Berger and Calabrese (1974) referred to uncertainties in two senses. The first sense predicts how one might behave in an interaction, while the second sense of uncertainty explains another's behavior. Uncertainty reduction combines these two senses and creates prediction and explanation components. In addition, there are seven variables within uncertainty reduction. According to Redmond (2015), these variables include the (1) amount of verbal communication, (2) nonverbal affiliative expressiveness, (3) information-seeking behavior, (4) the intimacy level of communication content, (5) reciprocity, (6) similarity, and (7) liking.

### ***Seven Axioms of Uncertainty Reduction Theory***

In addition to URT's seven variables, Berger and Calabrese (1974) also developed seven axioms. According to Kramer (2014), axiom three is the central scheme of URT. The following list outlines these axioms and their association to the variables (Kramer, 2014):

1. Given the high level of uncertainty that is present during the onset of the entry phase, the level of uncertainty for each interactant in the relationship will decrease as the amount of verbal communication between strangers increases. As uncertainty levels decrease, the amount of verbal communication will increase.
2. As nonverbal affiliative expressiveness increases, uncertainty levels will decrease in an initial interactive situation. In addition, decreases in uncertainty levels will cause increases in nonverbal affiliative expressiveness.
3. High levels of uncertainty cause an increase in information-seeking behaviors. As uncertainty levels decline, information-seeking behaviors decrease.
4. High levels of uncertainty in a relationship decrease the intimacy level of communication content, while low levels of uncertainty produce high levels of intimacy.
5. High levels of uncertainty produce high rates of reciprocity, while low levels of uncertainty produce low reciprocity rates.
6. Similarities between persons reduce uncertainty, while dissimilarities produce increases in uncertainty.
7. Increases in uncertainty levels produce decreases in liking, while decreases in uncertainty levels produce increases in liking.

### ***Evolution of Uncertainty Reduction Theory***

While URT began with a focus on initial interpersonal communication, "[it] has evolved

to include established interpersonal relationships that may also experience stressful periods of uncertainty” (Redmond, 2015, p. 2). Several crisis communications scholars have reviewed and analyzed the theory to provide their own perspective. Redmond (2015) identified four guiding principles of URT including motivation to reduce uncertainty, uncertainty with strangers, uncertainty in ongoing relationships, and uncertainty reduction. Pratami and Rusfian (2017) used the URT to examine interpersonal and leadership communication during an organizational crisis. The researchers identified how a shift in organizational structure and a lack of communication from higher management can create uncertainty among lower-level staff. Their findings recommended when and why communication should increase during different periods of an organization’s structural shift.

URT has also evolved to extend to different scenarios beyond initial interactions. These scenarios include social networks, intercultural interactions, health communication, and organizations (Redmond, 2015). A study conducted by Oldeweme et al. (2021) applied URT to investigate whether transparency, trust, and social influence impacted the initial reaction to the adoption of COVID-19 tracing apps and whether this impact could aid in reducing uncertainty about the pandemic. Their research found that initial trust in the COVID-19 tracing apps was positively influenced by transparency and disclosures about the apps (Oldeweme et al., 2021).

As URT has evolved, scholars have identified gaps and limitations within the theory. One major flaw is addressing increasing uncertainty (Kramer, 2014). URT states that as one receives information, their uncertainty will decrease. However, scholars have found that more information can sometimes increase uncertainty about someone due to deception. A second common flaw is the ability to predict outcome values. Sunnafrank (1990) emphasized that outcome maximization, not uncertainty reduction, is the central characteristic of a relationship. Instead,



predicted outcome value (POV) suggests that a social exchange approach drives relationship decisions by calculating cost-benefit. The third flaw scholars have identified in URT is regarding the tolerance of uncertainty. Kellermann and Reynolds (1990) tested models of uncertainty reduction and concluded that motivation is more important than uncertainty. Motivation refers to how much one wants to know, while uncertainty refers to how much an individual actually knows (Kramer, 2014).

An appeal of URT is that the theory is simple and can be easily examined and tested (Kramer, 2014). However, Berger also found a limitation within the theory. He reported that URT could not be implemented or applied to unusual or complex situations. Recognizing this limitation, he developed three additional aspects to be included within URT. The first aspect was regarding the different levels of certainty, which Berger defined as cognitive uncertainty and behavioral or linguistic uncertainty. Cognitive uncertainty relates to one's understanding and ability to predict others' motives and behavior. Behavioral uncertainty occurs when one is predicting behavior under specific circumstances. The second aspect that Berger added to URT was three different communication strategies to reduce uncertainty, which included passive, active, and interactive (Kramer, 2014). Passive strategies, also called reactive, involve making social comparisons with others or searching for disinhibited situations to better understand an individual's behavior. Active strategies involve requesting more information about the individual that one has uncertainty about from a third party. Interactive strategies usually involve direct questioning of an individual who one feels uncertain about. The third significant aspect that Berger added to URT was recognizing that all situations do not create the same concern for uncertainty reduction. This aspect addressed the criticisms of URT from other scholars.

Berger also addressed three levels of knowledge in his contributions to URT, which

included descriptive, predictive, and explanatory. Descriptive knowledge refers to the ability to identify a person. Predictive knowledge refers to the ability to predict another's behavior. Lastly, explanatory knowledge refers to the ability to explain the reasoning of actions.

### ***Uncertainty Reduction Theory in Crisis Communication***

As natural disasters and other crises have created uncertainty and urgency, URT has been a go-to for crisis management. Of the variables within URT, information-seeking and crisis communication are most closely related to crisis communication efforts. Crisis communicators reference URT theorems 16 and 17, while making note of theorem 18. According to Berger and Calabrese (1974), theorem 16 states that “information seeking and reciprocity rate are positively related”, theorem 17 states that “information seeking and liking are negatively related”, and theorem 18 states that “information seeking and similarity are negatively related” (p. 109). Lee and Yu (2020) examined the use of Twitter and the language expectancy perspectives of reducing uncertainty during natural disasters. They found that retweets of crisis messaging increased when crisis communicators included concrete language and interactive language in their tweets.

The theoretical framework of URT is often applied to crisis communication studies. Charoensukmongkol and Phungsoonthorn (2020) grounded their study in the uncertainty reduction theory to examine the role of crisis communication on the perceived uncertainties and emotional exhaustion of university employees during COVID-19 in Thailand. During the study, the researchers predicted that the quality of crisis communication at the university could reduce uncertainty about the consequences of COVID-19. Their findings implied a relationship between uncertainty reduction and high-quality crisis communication from the university, where “the employees who obtained high-quality crisis communication from the management of their

university tended to show less uncertainty regarding the impacts of COVID-19 and subsequently experienced low emotional exhaustion” (Charoensukmongkol & Phungsoonthorn, 2020, p. 12). Son et al. (2020) also utilized URT as a framework to examine crisis communication messaging. Their study proposed entropy as a measure of a tweet’s uncertainty. Their empirical findings supported the proposal of entropy as a valid measure of the uncertainty of tweets. Son et al. concluded that entropy played a critical role in comprehending URLs and emoticons as a means to convey information during a crisis. They concluded their research by suggesting a set of guidelines for effective crisis messaging on Twitter (Son et al., 2020).

Another study conducted by Grace and Tham (2021) illustrated the applicability of URT’s framework to the crisis communication messaging of Lubbock, Texas as the city addressed COVID-19 uncertainty. The researchers outlined their analysis using the three stages of URT and provided crisis communications guidelines for each stage. During the entry stage, Lubbock city officials declared a public health emergency and utilized best practices from the entry stage of URT by increasing the frequency of crisis communication (Grace & Tham, 2021). Lubbock’s crisis communication messaging decreased in frequency during the personal stage. However, city officials did add a Frequently Asked Questions section and a COVID-19 Dashboard to the city’s website to address citizens' information needs. In the exit stage of URT, Lubbock officials were forced to respond to uncertainty regarding the lift of COVID-19 restrictions and therefore had to increase the frequency of crisis communication messaging (Grace & Tham, 2021).

When applying URT to crisis communications, guidelines of best practices for the entry stage of URT include (1) increasing communication frequency to explain events of the crisis, (2) creating opportunities for audiences to seek information, and (3) responding to uncertainty at the

onset of a crisis by emphasizing familiar messaging or protocol (Grace & Tham, 2021). During the personal stage of URT, best practices from crisis communication include (1) creating an opportunity for the target audience to discuss their values, beliefs, and opinions regarding the crisis, (2) responding to uncertainty, and (3) anticipating a decrease in audience uncertainty and information-seeking behaviors. Grace and Tham (2021) noted that crisis communication best practices for the exit phase of URT include (1) increasing communication frequency to outline future and new protocols, or information related to the crisis, and (2) responding to uncertainty by outlining a long-term plan.

### ***Gaps and Opportunities for Future Research***

Throughout literature, scholars have given many ideas for future research to advance crisis communication, social media, higher education, and COVID-19 studies. Valentini et al. (2017) suggested in their study, “Handling Crises in Social Media”, that future research needs to provide insight to organizations in order to better understand how to effectively use social media during specific crises. Additionally, they suggested that future studies examine how social media impacts stakeholders’ perspectives of critical situations and how these situations can become crises through online sense-making (Valentini et al., 2017). Lim et al. (2017) suggested that future researchers evaluate URT’s effectiveness from the perspectives of users.

One gap identified in this review is the use of different social media types. As social media has evolved and videos have become popular on many social media sites, there is a gap in the crisis communication literature regarding videos or reels and the use of other social media platforms, specifically media sharing sites such as Instagram (O. Apuke & Tunca, 2019; Fraustino et al., 2017). Throughout crisis communication literature, studies have primarily focused on Twitter and Facebook. To eliminate this gap, researchers have suggested that the

methods and content of their studies be duplicated by examining other social media platforms (Lee & Yu, 2020). There is an opportunity for future researchers to explore the uses of media sharing social media channels in their dissemination of crisis messaging. Additionally, future crisis communication research on Twitter could provide beneficial insights, as the character count on Twitter has increased from 140 to 280 characters.

There is also a gap in research regarding the type of crises studied that have utilized the URT framework. Many of the crises that have applied URT fell under the category of natural disasters. To further understand how URT can be used in crisis communication, additional studies of the theory used in various crisis contexts are needed to gauge its effectiveness. This is especially necessary in exploring crisis communication among HEIs. Future research should examine active shooters and health crises in HEIs using URT as a framework. There is also an opportunity to fill the gap in defining uncertainty and how the definition affects various crisis types (Liu et al., 2016).

Existing literature on COVID-19 and crisis communication is continuing to emerge as the world is still experiencing the COVID-19 pandemic. Considering this aspect, much of the existing literature on COVID-19 and crisis communication can be regarded as preliminary. However, this suggests a significant opportunity for future research on crisis communication, higher education, and the COVID-19 vaccine. This topic is also applicable to the study of crisis communication, HBCUs, and the COVID-19 vaccine. As there are existing health disparities that encompass African Americans, debates on receiving the COVID-19 vaccine have not been excluded. Studies have found that African Americans are less inclined to take the COVID-19 vaccine and have an overall mistrust of it compared to other racial and ethnic groups (Kricorian & Turner, 2021).

Future research might examine how HBCUs handle the vaccine's negative perspective among African Americans, and how this perspective impacts operations and crisis communication regarding the vaccine. The area of mistrust of the vaccine offers another opportunity. Future research should focus on reducing the uncertainty of the vaccine. For example, researchers could address effective crisis communication messaging that utilizes URT as a framework to evaluate messages when the vaccine was first created. Researchers could also analyze the timeline of when HEIs started in-person learning in the Fall of 2021 and how crisis communication messaging was used to reduce students' uncertainties about vaccine requirements and mandatory testing when returning to campus. Researchers could also evaluate the reasons for mistrust or fear of vaccine mandates within organizations and companies (Liu et al., 2016). These research recommendations could also be extended to the crisis messaging around the Delta variant.

Most studies on crisis communication and COVID-19 have focused on the response of the government or governing bodies, including the national and higher education governing bodies like leadership. Additionally, there appears to be a lack of literature on COVID-19 and how crisis managers have communicated with internal audiences in higher education. Future research could study how the intended messaging of crisis communicators compared to the perspectives of those who received the messaging. This could ultimately be used to measure and gauge effectiveness.

### **Summary**

This review examined existing literature on crisis communication, HEIs, HBCUs, social media, and COVID-19 to better understand and identify relationships between subjects. The review confirmed a positive relationship between the use of social media in crisis

communication and its benefits in general crisis communication and COVID-19. Several gaps and opportunities for future research were identified. Gaps in the research included a lack of research utilizing various social media platforms other than Facebook and Twitter. Another gap in research is the lack of literature on COVID-19 and how crisis managers have communicated with internal audiences in higher education. Future research has an opportunity to investigate crisis communication on media-sharing social media sites like Instagram. This review also suggested the need for an examination of how social media impacts stakeholders' perspectives of critical situations and how these situations can become crises through online sense-making. Lastly, future research has a major opportunity to further explore crisis communication around COVID-19, especially the COVID-19 vaccine.

## **Chapter Three: Method**

### **Overview**

This chapter introduces the research methodology for this qualitative single instrumental case approach. Semi-structured interviews and content analysis were the instruments used for data collection. Guided by the sociocultural tradition, URT provided a data collection and analysis framework. This section discusses research procedures and guidelines in the research process and provides detailed information for replicating the study. This section also outlines the reasoning for the selection of this specific methodology. In addition, this chapter reviews and explains the application of URT and the sociocultural tradition of communication. The research study population is identified, and the approach for sampling the population is discussed. Details of the study's theoretical framework, data collection, analysis, and ethical considerations are provided.

### **Research Method and Design**

The study used a qualitative methodology and a single instrumental case study reference approach, rooted in the sociocultural tradition. This methodology was best suited for this study because of the defining features of a single instrumental case study. A case study is an empirical method that conducts an in-depth investigation of a phenomenon, concern, or issue (i.e. the case) (Yin, 2017; Creswell & Poth, 2016). This study aimed to examine crisis communication messages in order to (1) find out how HBCUs use social media to deliver crisis communication messaging to students and (2) to understand how to effectively use social media in crisis communication to reduce the uncertainty of COVID-19. The specific case in this study was the crisis communication efforts of the HBCU, NCAT.

To understand and determine the selected HBCU's perspective, an in-depth investigation



was needed using multiple sources of information to collect data. This study collected data via interviews and documents. According to Creswell and Poth (2016), conducting in-depth data collection is a case study feature. A second beneficial case study feature applied to this study was the prior development of a theoretical proposition (Yin, 2017). The theoretical proposition guides data collection, analysis, and overall design. This study used a theory rooted within the sociocultural tradition to navigate data collection and data analysis. The research followed a single instrumental case study, as the researcher focused on reducing students' uncertainty in the bounds of one case (NCAT) that illustrated this concern (Creswell & Poth, 2016). Data analysis utilized approaches fundamental in case study data analysis, including identifying case themes and assertions.

### ***Sociocultural Tradition of Communication Theory***

This study fell within the sociocultural tradition of communication theory. Robert T. Craig (1999) created seven traditions that addressed communication's different beliefs and definitions. Each tradition theorizes communication differently according to the set beliefs about communication. According to Craig, the sociocultural tradition theorizes communication as the production or reproduction of social order or shared sociocultural patterns. Within this tradition, communication and interactions with others are influenced by “preexisting and shared cultural patterns and social structures” (Craig, 1999, p. 144). These interactions impact an individual’s perspective of their social role, meanings, and understandings. The tradition states that reality is socially constructed by micro-level interaction processes (O. D. Apuke, 2017). Ultimately, an individual’s understanding of reality is based on communication, as it produces reality (O. D. Apuke, 2017; Craig, 1999).

URT was the theoretical framework used in this study for data collection. While the

theory is not a part of the sociocultural tradition, it aided in the understanding of how the culture of HBCUs and the Black community creates the reality of uncertainty of COVID-19 and general health-related topics. The sociocultural tradition shaped the researcher's approach in this case study by providing a basis of beliefs that guided action (Creswell & Creswell, 2017). Utilizing the traditions allowed the researcher to investigate the sociocultural patterns that are produced and reproduced by HBCU students. The researcher used this principle when coding and analyzing students' interview responses to understand their perspectives of the university's crisis messaging on social media. The researcher also investigated the cultural patterns and social norms of HBCUs and the Black community to understand why students' perspectives exist. This method was extended to the study's content analysis and interpretation of messages.

The research objective was to examine the effectiveness of crisis communication messaging from students' perspectives. Many sociocultural theorists have stated that reality is the strongly shaped language used from birth (O. D. Apuke, 2017). Incorporating this ideology, the researcher identified the Black community's common language to better understand the language choices used in the crisis communication messaging of NCAT, the selected HBCU. The scope of language included common words and phrases often used in the Black community. Additionally, the assumptions and beliefs within the sociocultural tradition helped to explain and understand the perspective of the study's participants. Within this tradition, individuals construct reality based on communication with others as well as the patterns and norms of their culture. The sociocultural tradition heavily focuses on individuals' preexisting and shared cultural patterns. When applying the tradition to this study, the preexisting and shared cultural patterns referred to the Black community and the HBCU culture as a whole.

The researcher interpreted interview data to determine how students constructed their

uncertainties and anxieties based on the social norms, cultural patterns, and understandings of the selected HBCU (i.e. NCAT) and Black communities. The researcher also interpreted how students made sense of COVID-19 and NCAT's use of social media to communicate crisis communication messages based on the Black community's understanding and view of social media platforms.

### ***Population***

NCAT was the HBCU examined for this study. NCAT is a four-year public institution located in the southeastern United States and owns Facebook, Twitter, Instagram, and LinkedIn accounts. This study conducted semi-structured interviews with NCAT students. This study was prepared to consider two alternative universities if NCAT was not viable: Winston-Salem State University and Fayetteville State University. For the scope of this study, the parameters of an HBCU used the definition of the Higher Education Act of 1965, which states that an HBCU is:

...any historically black college or university that was established prior to 1964, whose principal mission was, and is, the education of black Americans, and that is accredited by a nationally recognized accrediting agency or association determined by the Secretary [of Education] to be a reliable authority as to the quality of training offered or is, according to such an agency or association, making reasonable progress toward accreditation. (U.S. Department of Education, n.d., para. 1)

The mission of an HBCU is to educate students who experience financial hardship and are less academically prepared than others (G. S. Johnson et al., 2017). According to Williams and Davis (2019), a public HBCU is defined as an institution that relies on government funding to maintain operations. Government funding includes federal, state, and local levels. In contrast, private HBCUs rely on endowments, private gifts, grants, and student tuition to maintain

operations. The institution examined in this research was a large and public HBCU that serves between 7,500 to 12,000 students. Participant eligibility criteria included full-time, active living in student housing (on or off-campus) and attending at least one in-person class during the spring semester of the 2020 to 2021 academic school year. The researcher gathered posts from NCAT's Facebook, Twitter, and Instagram pages for content analysis.

### **Sampling and Sample Selection**

Sampling of the population was conducted using purposive sampling. Students were recruited by reaching out to the researcher's point of contact from the university who helped to recruit students. Students were recruited via email and social media posts. Participants fit the following parameters to ensure validity: (a) 18 years or older, (b) a current student at NCAT or a 2022 graduate of the university, (c) lived in student housing (on or off-campus) during the spring semester of the 2020-2021 OR fall 2021-2022 academic school year, and (d) had at least one in-person class during the spring semester of 2020-2021 academic and during the fall semester of the 2021-2022 academic school year. A screening survey was given out to potential participants via Qualtrics before interviews were scheduled to ensure that participants met the criteria for the study (see Appendix A). Screening questions included the following:

1. Are you at least 18 years or older? (Y/N)
2. Are you a current student at or a 2022 graduate of North Carolina A&T State University (NCAT)? *\*Note: A current student is defined as an undergraduate or graduate.* (Y/N)
3. Did you attend NCAT during the spring 2020-2021 academic year (January 2021-May 2021)? (Y/N)
4. Did you attend NCAT during the fall 2021-2022 academic year (August 2021-December 2021)? (Y/N)

5. What school/college within the university does your major belong to?
6. Did you have on-campus during the spring 2020-2021 academic year (January 2021-May 2021) OR during the fall 2021-2022 academic year (August 2021-December 2021)?  
*\*Note: On-campus housing is defined as housing that is offered by North Carolina A&T State University's Housing and Residences life. Third-party housing or apartments, such as student living, is considered off-campus housing not owned by the university. (Y/N)*
7. Did you have at least ONE in-person class on-campus during the spring 2020-2021 academic year (January 2021-May 2021)? (Y/N)
8. Did you have at least ONE in-person class on-campus during the fall 2021-2022 academic year (August 2021-December 2021)? (Y/N)
9. Please provide your NCAT email address.

Literature states that data saturation in qualitative studies reaches around 25 to 30 participants (Dworkin, 2012). Following these recommendations, 34 participants were selected for this study. However, the researcher conducted 31 interviews, as three participants did not follow through with their scheduled interviews. Additionally, Interviewee X's interview was not used in data analysis due to the researcher discovering that the participant was not eligible for the study. Saturation and data patterns emerged with the 30 interviews conducted by the researcher.

### **Instruments**

The study conducted semi-structured interviews and content analysis. The key instrument within this study was the researcher, who collected data by interviewing participants and examining NCAT social media posts. During this process, the researcher abided by a protocol to record data. In addition to the researcher, the interview questions served as an instrument and incorporated aspects of URT. The study included one set of interview questions, which were

presented to 30 NCAT students and consisted of the following:

1. What is your current classification? (freshman, sophomore, junior, senior)
2. What was your classification during the spring semester of the 2020-2021 academic year?
3. How long have you attended the university?
4. What are your feelings towards COVID-19?
5. What are your biggest feelings/emotions towards COVID-19 and attending classes in person?
6. What are your feelings/emotions towards COVID-19 and living in campus housing?
7. Do you feel that the HBCU experience or culture has impacted your feelings/emotions of COVID-19? Why or why not?
8. What are your thoughts on using social media to receive news and information?
9. Have you looked to social media to receive information regarding COVID-19 from your university? If so, which channels?
10. How did the university's posts on social media make you feel about COVID-19 and living on-campus? Please state the social media platform that information was posted.
11. How did the university's posts on social media make you feel about COVID-19 and attending in-person classes? Please state the social media platform that information was posted.
12. In your opinion, did your university effectively communicate essential information during COVID-19 during the spring semester of the 2020-2021 academic year? If so, what aspects made the university's messaging effective? If not, what could the university have done to communicate better?
13. In your opinion, did your university effectively communicate essential information

during COVID-19 during the fall semester of the 2021-2022 academic year? If so, what aspects made the university's messaging effective? If not, what could the university have done to communicate better?

The study was approved by Liberty University's IRB in 2022. The researcher maintained objectivity while conducting the interviews and examining social media posts. All interviews were conducted and recorded virtually via Zoom to ensure the safety of participants and the researcher. During the interviewing process, the researcher adhered to the following CDC guidelines which were updated as of November 1, 2021:

- CDC recommends universal use of masks indoors in public in areas of substantial or high transmission, following CDC's Interim Public Health Recommendations for Fully Vaccinated People.
- Physical distancing is not necessary for fully vaccinated students on campus for IHEs where everyone is fully vaccinated except as indicated in CDC's Interim Public Health Recommendations for Fully Vaccinated People (CDC, 2021)

### **Validity Strategies**

The findings of this study were validated by the researcher. Validity in qualitative research is an assessment of the accuracy of research findings (Creswell & Poth, 2016). Literature states that researchers should implement at least two validation strategies. In this case study, the researcher corroborated evidence by triangulating multiple data sources and clarifying researcher bias to establish validity.

#### ***Data Source Triangulation***

Data source triangulation collects "data from different types of people, including individuals, groups, families, and communities, to gain multiple perspectives and validation of

data” (Carter et al., 2014, p. 545). This single case study interviewed students from different schools/colleges within the selected HBCU to gain multiple perspectives of different groups. The researcher was then able to interpret the data from these different sources.

### ***Disclosure of Researcher Bias***

While the researcher’s knowledge base of HBCUs helped to interpret the data from these different sources, it potentially served as a bias in this study. The researcher previously attended an HBCU as an undergrad student and was employed at an HBCU. Research bias can also arise if the researcher has existing relationships with potential participants. To minimize bias in this study, the researcher recruited students with little to no relation to the researcher. The researcher’s previous experience crafting and reading crisis communication messaging during COVID-19 also posed potential bias in this study. Using this knowledge, the researcher had experience identifying effective crisis communication practices. Additionally, the researcher’s passion and value of HBCUs posed potential bias. As an HBCU graduate, the researcher conducted this research with a recognition of her belief that the unique mission of HBCUs adds value to society by providing opportunities to the African American community to expand their knowledge and advance their career.

### ***Reliability***

When discussing reliability in qualitative research, the discussion of trustworthiness is essential (Morse et al., 2002). To guarantee trustworthiness, the researcher assured credibility, transferability, dependability, and confirmability. Credibility refers to having “confidence in the truth of the study and therefore the findings...” (Connelly, 2016, p. 435). Dependability is established by ensuring that the data and conditions of a study are stable over time (Connelly, 2016). In this study, the researcher ensured dependability through an audit trail. The audit trail



took the form of documentation and a running account of the data collection and analysis process (Guba, 1981). Documentation took the form of notes which were taken during student interviews and from the transcripts. Confirmability refers to the study's ability to be repeated and maintain consistent findings (Connelly, 2016). The researcher established confirmability through data source triangulation. The researcher ensured transferability by conducting purposive sampling.

### **Data Collection**

This study used interviews as a data collection instrument. Before interviews began, social media posts were gathered to be referenced during the interviews. Interviews with students were recruited by emailing the interviewer's university point of contact and other gatekeepers to the student body. These gatekeepers included the faculty, staff advisers, and student leaders. The recruitment email detailed the purpose of the study, outlining the eligibility guidelines and the incentive for participants. Recruitment emails, social media content, and flyers utilized the letter and follow-up letter templates, which were provided by Liberty University's IRB.

Interviews incorporated open-ended questions regarding student feelings about COVID-19. More intensive questions followed regarding student perspectives on the university's communication via social media and how the messages made students feel. The questions concluded by inquiring about student feelings regarding COVID-19 after viewing the social media posts from the university. Interviews were scheduled using Calendly and were conducted and recorded via Zoom. Once each interview was completed, the recorded Zoom video was downloaded to be uploaded to Rev, which is a transcription service.

Additionally, data collection included examining digital materials. The researcher reviewed social media posts originated by the university on Facebook, Twitter, and Instagram. Posts included in the study were comprised of content posted by the university's Facebook,

Twitter, and Instagram accounts. The content consisted of text, photos, infographics, flyers, graphics, and video content. Content posted between January 1, 2021, and December 31, 2021, were examined. This time frame ensured that there was adequate data still available for analysis, as there was a possibility that universities would delete or archive their social media posts.

### **Content Analysis**

Data analysis took place in steps depending on the data source. Once the interviews were completed on Zoom, the transcripts were downloaded and uploaded to transcribing software to prepare for analysis. Transcripts were given pseudonyms, such as Interviewee A and so forth. Once this was completed, the coding process began.

This study used both inductive and deductive coding, also known as blended coding. Inductive coding mirrors data and involves the researcher developing codes from participants' phrases and terms (Linneberg & Korsgaard, 2019). Using inductive coding, the researcher established clear links between the research data and the research questions (Thomas, 2003). Deductive coding is a pre-determined, or template, list of codes created before in-depth analysis begins (Linneberg & Korsgaard, 2019; Fereday & Muir-Cochrane, 2006). This study created one list of codes for its participant sample of 30 students. Next, the researcher developed a second list of codes for the university's social media posts. Deductive coding ensured that the coding stayed focused on elements identified in existing literature related to the URT framework. The list was created based on the suggestions of Crabtree and Miller (1992) to create a preliminary scan of the text. However, the review of the coding frame was adjusted when additional or different themes emerged outside of it. Utilizing these methods ensured the best of both inductive and deductive coding. Inductive coding provided closeness to the data, and deductive coding ensured that the research stayed structured and maintained theoretical

relevance (Linneberg & Korsgaard, 2019).

The researcher cycled through the transcripts during data analysis, repeatedly altering from inductive to deductive coding (Linneberg & Korsgaard, 2019). During the first cycle, descriptive codes were used. According to Linneberg and Korsgaard (2019), descriptive codes “are assigned to segments of data based on what the segment ‘is about’”(p. 16). This led to a categorized inventory of data. This was a significant aspect of coding emotional responses to COVID-19, as descriptive coding is used to analyze emotional responses to specific events. Attribute codes assign basic information to large data segments. Attribute coding was used to assign codes for age, gender, and experience relevant to the study. The second coding cycle involved classifying, prioritizing, and synthesizing codes, followed by condensing and combining them into centralized themes.

Data analysis of the NCAT’s social media accounts used a directed approach. Directed content analyses aim to validate or extend a theory or framework (Hsieh & Shannon, 2005). The researcher used URT as a theoretical framework to code the social media posts. The researcher identified key concepts within URT, which were then used to code the posts. The interviewer then reviewed the coding from the interviews. Other topics incorporated in the deductive coding list were the African American culture, HBCU experience, and African American history of mistrust and mistreatment within the medical industry.

### **Theoretical Construct**

URT was used as a theoretical framework during coding, specifically in deductive coding and the directed content analysis. Concepts within the theory were used as a coding structure. Berger and Calabrese (1974) stated in axiom three, “High levels of uncertainty cause increases in information-seeking behavior. As uncertainty levels decline, information-seeking behavior

decreases” (p. 103). The correlating theorem three of URT states, “the amount of communication and information-seeking behavior are inversely related” (Berger & Calabrese, 1974, p. 107).

Using these assumptions, the coding structure surrounded information-seeking behaviors and language that relate to emotions of uncertainty and anxieties about COVID-19.

Berger and Calabrese (1974) identified three stages of interaction — entry, personal, and exit. Though the URT framework includes these stages, various stages of uncertainty differed from student to student in this study, as participants viewed crisis messaging at different times. From this assumption, it was concluded that participants experienced different stages of uncertainty at different times. Therefore, the researcher did not identify nor verify the stage of interaction during interviews and content analysis. However, the guidelines outlined by Berger and Calabrese (1974) were still used to analyze data within the study. In addition, the researcher used other guidelines established throughout the crisis communication literature regarding uncertainty reduction to conduct the content analysis.

During the entry stage, literature states that crisis communicators should:

- increase communication frequency to outline the future new normal
- create sustainable infrastructures for user information-seeking and feedback
- respond to uncertainty by outlining long-term service modifications and protocols (Grace & Tham, 2021, p. 113).

Literature states that during the personal state, crisis communicators should:

- create interactive opportunities for users to discuss individual attitudes, values, and beliefs about the crisis;
- respond to uncertainty by recognizing and, when possible, modifying service protocols in response to user needs, experiences, and ethical beliefs; and

- anticipate decreased user uncertainty, information-seeking, and reciprocal communication but increased expectations for services that address diverse user needs, experiences, and ethical beliefs (Grace & Tham, 2021, p. 114).

Lastly, the literature states that during the exit stage, crisis communicators should:

- increase communication frequency to outline the future new normal
- create sustainable infrastructures for user information-seeking and feedback
- Respond to uncertainty by outlining long-term service modifications and protocols (Grace & Tham, 2021, p. 115).

The interview questions incorporated these guidelines and elements of URT, specifically the assumption that people seek to reduce uncertainty by seeking credible information. Concrete language was used to create pre-determined codes that incorporated language unique to the African American culture, including buzz terms or descriptions based on the phases of uncertainty which were used for the transcripts and content analysis. According to Lee and Yu (2019), the specific information provided by crisis communication reduces uncertainty.

### **Ethical Considerations**

To ensure that ethics remained a top priority during this study, the researcher obtained consent from all participants using an informed consent document. The researcher used the informed consent template provided by the Liberty University IRB. The informed consent document included information on how the research would be used and requested permission from participants to record the interviews via Zoom. Interviews did not begin until informed consent documents were signed and returned. All participants were required to be 18 years or over to ensure that the participants had the mental maturity and legal capability to consent to participate in the study and be recorded for educational research. Additionally, the researcher

abided by the Data Protection Act (1998) which states that data should not be stored for longer than the initial purpose (McCrae & Murray, 2008). Therefore, once the research committees approved the study, recorded materials were deleted to ensure confidentiality. To ensure confidentiality, interview participants were given identification that helped them to be non-identifiable. For example, participants were given coded names such as Interviewee A and so forth. Lastly, the social media handles and names of participants were removed to ensure their confidentiality.

### ***Steps for Research***

Step one of the research study involved obtaining approval from the IRB at Liberty University. Once approval was received, the researcher applied to the IRB at NCAT for permission to recruit students. Once approval was granted, the researcher was given a point of contact. The point of contact was a faculty researcher who was familiar with research regarding COVID-19 and social media. Recruitment items included emails, social media content, and a flyer.

Emails were sent to gatekeepers, including the researcher's point of contact, faculty within different departments, and staff members who advised student government and other student-run organizations. The recruitment email included information about the researcher, the research study, participant requests, and a screening survey link. Copies of the recruitment flyer were hung around the campus of NCAT. Using purposive sampling, the guidelines of the requested participants were given, and each interested participant was provided a screening survey which determined whether they met the criteria of participants within the study. Upon determining whether students met the study criteria, an invitational email was sent out to schedule the interview, along with information regarding informed consent. Following this

email, the informed consent document was sent to each participant via DocuSign and Adobe Sign. The posts from NCAT's social media accounts were screenshotted, saved, and later uploaded to a Microsoft Publisher document for content analysis.

During the interviews, the researcher took notes. Interview transcripts were downloaded from Zoom at the end of each interview day. The notes taken during the interviews were used during the coding and analyzing of interview transcripts. Interviews were labeled with pseudonyms and the Zoom recordings were uploaded to the transcription service of Rev for later transcription.

The interview transcripts were coded first using deductive coding, which used the first coding list. This coding list included attribute traits for demographic classification and themes related to emotion. The researcher coded the transcripts using different colors in the Dedoose Coding Software. Once one round of deductive coding was completed, the data underwent an additional round of analysis to condense and synthesize the data. After this round of analysis, the data underwent inductive coding. The researcher coded the transcript using a different color in the Dedoose Coding Software. After one round of inductive coding, the transcripts went through an additional round of analysis in order to further condense and synthesize data. Once completed, the data went through several cycles to condense and synthesize data incorporating both inductive and deductive codes. Following this step, a directed content analysis of the university's social media posts was conducted using the second coding list. Once the content analysis was completed, the data underwent several analysis cycles. Once coding was completed for all interview transcripts and the content analysis, the themes and patterns identified among the interview transcripts were examined and compared with the themes and patterns found in the content analysis. The researcher then reviewed the research questions and addressed how the

coding results answered them. The researcher also looked for relationships between the two data groups, specifically in regards to a relationship between the reduction of uncertainty and social media platforms and the type of information that reduced uncertainty and anxieties regarding COVID-19.

### **Summary**

This chapter detailed the design of this qualitative case study of COVID-19, social media, and crisis communication at North Carolina A&T State University. The study used semi-structured interviews and directed content analysis to collect data. The population was students at NCAT, and the researcher used purposive sampling. Interviews were conducted virtually to ensure the research followed CDC higher education COVID-19 guidelines. The content analysis included the university's social media posts on Facebook, Twitter, and Instagram regarding COVID-19. The research was rooted in the sociocultural tradition of communication theory. The study used URT as a data collection and analysis theoretical framework. The researcher used a blended coding scheme to code interview transcripts and the university's social media posts. Chapter Four and Five present the research findings and a discussion of their implications.



## **Chapter Four: Findings**

### **Overview**

This study investigated the crisis communication efforts of NCAT, an HBCU, to understand how the institution used social media to deliver crisis communication messages about COVID-19 to students. The findings provided insights into how HBCUs can effectively use social media in crisis communication efforts to reduce uncertainty. A qualitative methodology was adopted, and three research questions guided this study:

RQ1: How do students evaluate if the university's messaging on social media platforms reduced their uncertainty regarding COVID-19?

RQ2: Which social media platforms tend to be used to reduce students' uncertainties about COVID-19 the most?

RQ3: What are the common themes in HBCU messaging on social media regarding COVID-19?

Semi-structured interviews were conducted with NCAT students to gauge the effectiveness of the university's messaging. The content of social media posts collected from NCAT's Twitter, Instagram, and Facebook accounts were also examined. Through these methods, seven themes emerged from the semi-structured interviews and four themes were identified through the content analysis. This chapter reviews these findings of the data analysis, providing details on the interview participants, interviewing process, and content analysis.

### **Findings**

#### ***Semi-Structured Interviews***

This study's semi-structured interviews included 30 participants ( $n = 30$ ). The following section provides details of participant demographics and a review of the participant selection

process (see Table 1). Demographic data revealed important information about the participants in this study including their student classifications during the Spring semester of the 2020-2021 academic year, gender identity, race, and the academic school/college associated with their majors.

**Table 1**

*Participant Demographics*

<b>Interviewee</b>	<b>Classification</b>	<b>Gender</b>	<b>Race</b>	<b>College/School</b>
A	Junior	Female	African American (Black)	College of Science and Technology
B	Junior	Female	African American (Black)	College of Arts, Humanities and Social Sciences
C	Junior	Female	African American (Black)	John R. and Kathy R. Hairston College of Health and Human Sciences
D	Sophomore	Female	African American (Black)	College of Engineering
E	Junior	Female	African American (Black)	College of Arts, Humanities and Social Sciences
F	Incoming Freshman (High	Female	African American (Black)	College of Engineering

	School Senior)			
G	Incoming Freshman (High School Senior)	Male	African American (Black)	College of Agriculture and Environmental Sciences
H	Sophomore	Female	African American (Black)	College of Agriculture and Environmental Sciences
I	Freshman	Male	African American (Black)	College of Engineering
J	Sophomore	Female	African American (Black)	College of Engineering
K	Freshman	Female	African American (Black)	John R. and Kathy R. Hairston College of Health and Human Sciences
L	Sophomore	Female	African American (Black)	College of Engineering
M	Junior	Female	African American (Black)	Willie A. Deese College of Business and Economics
N	Incoming Freshman (High School Senior)	Male	African American (Black)	College of Engineering

O	Junior	Female	African American (Black)	College of Arts, Humanities and Social Sciences
P	Freshman	Female	African American (Black)	Willie A. Deese College of Business and Economics
Q	Freshman	Male	African American (Black)	College of Education
S	Incoming Freshman (High School Senior)	Female	African American (Black)	John R. and Kathy R. Hairston College of Health and Human Sciences
T	Incoming Freshman (High School Senior)	Female	African American (Black)	College of Arts, Humanities and Social Sciences
U	Junior	Female	African American (Black)	College of Engineering
W	Senior	Female	African American (Black)	College of Arts, Humanities and Social Sciences
Y	Freshman	Female	African American (Black)	College of Engineering
Z	Incoming	Female	African American	Willie A. Deese College

	Freshman (High School Senior)		(Black)	of Business and Economics
AA	Sophomore	Female	African American (Black)	John R. and Kathy R. Hairston College of Health and Human Sciences
AB	Sophomore	Female	African American (Black)	College of Engineering
AC	Freshman	Female	African American (Black)	John R. and Kathy R. Hairston College of Health and Human Sciences
AD	Freshman	Female	African American (Black)	John R. and Kathy R. Hairston College of Health and Human Sciences
AE	Sophomore	Male	African American (Black)	College of Engineering
AG	Junior	Female	African American (Black)	College of Science and Technology
AI	Freshman	Female	African American (Black)	College of Arts, Humanities and Social Sciences

**Participant Selection Process.** A sample of 30 students ( $n = 30$ ) was selected for semi-structured interviews. Participants were recruited in a two-step process. Step one involved the recruitment of students, while step two confirmed their eligibility. In step one, the initial recruitment process began by reaching out to gatekeepers of the student population at NCAT. Gatekeepers included faculty/staff advisors of student organizations, student leaders, and the researcher's point of contact, who was named by NCAT's IRB process for visiting researchers. Recruitment emails were sent to gatekeepers and interested students (see Appendix B). Students were also recruited through social media using a social media graphic (see Appendix F) and captions (see Appendix E), the latter of which were approved by Liberty University's IRB and varied depending on the social media platform. All recruitment materials included a link to the screening survey to confirm eligibility.

In step two, the eligibility of interested participants was confirmed using a screening survey using Qualtrics (see Appendix A). General eligibility criteria included (a) 18 years or older, (b) a current student at NCAT or a 2022 graduate of the university, (c) lived in student housing (on or off-campus) during the spring semester of the 2020-2021 OR fall 2021-2022 academic school year, and (d) had at least one in-person class during the spring semester of 2020-2021 academic and during the fall semester of the 2021-2022 academic school year. Once eligibility was confirmed, participants were sent a confirmation email (see Appendix H) in which they were provided a Calendly link to schedule their interviews with the researcher. Calendly is an online scheduling tool. Once participants scheduled an interview, an interview confirmation email (see Appendix I) was sent out, detailing information about informed consent. At this stage, participants were also assigned a pseudonym to protect their identities (e.g. Interviewee A, Interviewee B).

**Interview Analysis.** Semi-structured interviews included demographic and open-ended questions (see Appendix J). They began with demographic questions and continued with open-ended questions regarding participants' feelings about COVID-19. As the interviews progressed, the researcher asked more detailed questions regarding the relationship between students' feelings toward COVID-19, attending in-person classes, and living in on or off-campus housing. Interviews concluded with questions regarding participants' perspective on the university's social media posts and the effectiveness of NCAT's crisis communication regarding COVID-19 to the student population. In addition, follow-up questions were asked, when appropriate, to probe deeper into participants' perspectives throughout the interview.

**Interview Protocol and Structure.** Each interview was conducted and recorded via Zoom. Once each interview concluded, the researcher downloaded the interview video and transcript from Zoom. The transcripts and videos were then uploaded to Rev, a transcribing service, to ensure the accuracy of transcriptions. Before interviews began, participants were asked to complete the informed consent document. Details regarding consent were referenced during the interview confirmation email. The consent form (see Appendix K) was sent to participants via DocuSign and Adobe Sign. Participants were required to complete the form before the interview commenced.

***Deductive Codes.*** Interview transcripts were coded using a blended coding method. Blended coding is an approach that uses both inductive and deductive coding. Deductive coding was initially used, followed by coding using inductive codes. Deductive codes focused on elements related to the URT framework. From this focus, code list one was developed and included 15 codes (see Table 2).

**Table 2***Deductive Code List One***Anxiety and uncertainty****Classification – Incoming Freshman, Freshman, Sophomore, Junior, Senior, Reel****Guidelines****Information-seeking****Reassurance****Testing****Warning/Risk information****Instagram****Facebook****Twitter*****Emerged Themes***

After the initial analysis using code list one, inductive coding was initiated. This process used a descriptive coding structure, where the data underwent three rounds of synthesizing to merge and consolidate deductive and inductive codes. The researcher coded the interview transcripts using Dedoose, which is a cloud-based software for qualitative and quantitative research and analysis. Seven themes emerged from the semi-structured interviews including 1) *Transparency and Honesty in Communication*, 2) *Trust and Credibility*, 3) *HBCU Culture and COVID-19*, 4) *the Black Community and the Health Field*, 5) *Interpersonal Communication*, 6) *Uncertainty and Anxiety*, and 7) *Positive Emotions towards COVID-19*. The following sections review these themes within the interview data.



**Transparency and Honesty in Communication.** Throughout the interviews, several participants brought up the execution of transparency, while also discussing honesty.

Participants discussed the need for both transparency and honesty. Participants expressed the need for the university to communicate openly and provide accurate information regarding the number of COVID-19 cases.

While discussing their perspective on the university's transparency in communicating COVID-19 positive numbers to students, Interviewee D stated, "Being able to provide those types of statistics for us, I definitely think was helpful and, and provided the most transparent and up-to-date information that they possibly could". Similarly, Interviewee C felt that the university's transparency about positive COVID-19 cases demonstrated that the communication was effective. Although knowing the truth about the status of the campus made participants feel slightly scared, they claimed to appreciate the transparency of the university. Regarding this, Interviewee C made the following statement:

I would say seeing the numbers, it made me a little bit fearful, but I like the transparency. I like being aware. I feel like one thing that made me afraid was kind of being not [being] in the know, kind of being astray, but I think seeing the numbers. [It] kind of made me put things [into] perspective.

Participants also expressed a desire for the university to be transparent about the current status of the campus regarding whether students had broken mandates or mistakes had been made in providing information. Overall, there was an expectation of transparency, regardless of the information given. Interviewee Z stated that they felt they didn't truly know what was happening on campus when they moved in because the university didn't provide the information. Recalling their experience, they shared, "I don't fully think I knew how it was gonna be when I

got on campus”.

**Trust and Credibility.** Building upon the first theme of *Transparency and Honesty in Communication*, the second theme of *Trust and Credibility* was identified from the interviews. Participants often discussed how trust was built when the university was transparent with them. Previous studies have reported that ensuring honest and transparent communication is the key to building and maintaining trust-based relationships (Lee & Li, 2021). The interviews revealed that when the university did not show transparency with students, it caused student experiences of mistrust. Interviewee W made the following statement when discussing their experience of mistrust:

Students that were actually living on campus, they would go on social media and kind of complain about things [that] they weren't really showing. So, it did make me kind of skeptical about are they telling the truth about certain things with COVID.

Participants also mentioned trust and credibility during discussions of social media use for information dissemination. Participants had a mix of perspectives regarding their thoughts on using social media to receive news and information. Among the 30 participants interviewed in this study, 17 of them (56.6%) stated that they had mixed emotions about using social media to receive news and information. In contrast, 12 participants (40%) agreed that social media is a good tool for receiving news and information. The remaining one participant (3.3%) disagreed, expressing a view that social media was not good for receiving news and information. Participant Y shared this perspective in the following remark:

I definitely do not think it's the best way to get your news. Because we're taught in school to only rely on these sources for like facts and if you're submitting papers and stuff. So, we can't always believe everything that we see on social media to be true

because I could put something on social media that's completely false, but it could still be interpreted as true.

Many participants also referenced misinformation when getting information from social media. To avoid misinformation, individuals needed to ensure the information came from a credible source. Many participants stated that fact-checking was essential when getting information from social media. Interviewee A shared their thoughts:

I have mixed emotions when it comes to social media because you can't believe everything a person posts on social media because you do have to do your own digging because I learned about yellow journalism, when it gets your attention by headlines, but the headline doesn't match up what you actually read in an article... So it was kind of like a tug of war in a sense. You can see it, but you still had to further research it to make sure it was factual.

Interviewee AB also had mixed information regarding the use of social media to receive news and information. They commented:

I think that social media is a very powerful tool, so I think that it's definitely good for disseminating information, but at the same time, sometimes there's a lot of false information or things that aren't necessarily rooted in fact, and I can kind of get muddled in with things that really do need to get communicated with the public. But overall, I think that social media is a really good tool to reach people.

Interviewee C also mentioned the risk of misinformation when discussing the use of social media to receive information, stating:

I feel you got to be really careful about this cause I know especially during the last election we saw there was a lot of misinformation. So, I take what I see on social media

with a grain of salt, I'll see it and I'll do my own personal research to make sure the facts are facts.

Interviewee T shared this perspective about misinformation, commenting, “It’s very easy to be misinformed through social media, especially if you're not looking for other sources on the similar topic, especially when it comes to facts”. These discussions about misinformation and the strategies to avoid it revealed how credibility was viewed as critical. This was especially evident when it came to information regarding COVID-19. If participants didn’t feel that the source was credible, they did not trust the information. Interviewee G divulged,

If I do watch news or hear something about COVID, I'd rather it be kind of communicated through like maybe a journal article or maybe on an actual, credible news network if you will. Not necessarily on a device. Now if I'm scrolling and I possibly see something from a credible source, maybe I will listen in. But sometimes I feel like a lot of media can be very opinionated as well to push across a certain narrative. So, I'm a bit, skeptical towards that.

**HBCU Culture and COVID-19.** The third theme that emerged during the semi-structured interviews was *HBCU Culture and COVID-19*. Participants had diverse perspectives on whether the HBCU culture impacted their feelings toward COVID-19. However, when participants did express that they felt COVID-19 had influenced their negative feelings towards the pandemic, it was because they had missed out on the HBCU experience. When discussing whether the HBCU culture had impacted their feelings towards COVID-19, Interviewee T stated,

I would say yes, because I guess growing up, being around HBCU culture, you have a little bit of expectation of what it is and then getting there in the midst of COVID, it changes your perspective on a lot of things. Even simple stuff that, HBCUs, they're

deemed as party schools a lot. And even without the partying or without the homecoming festivities, a lot of stuff we couldn't do because of COVID. We couldn't visit friends; we couldn't be out in groups.

In contrast to Interviewee T, Interviewee AE had a different perspective on how the HBCU impacted their feelings on COVID-19, stating that the HBCU experience and culture positively impacted their feeling. During their interview, they shared:

I don't think if I went to any kind of PWI personally as an African American, I feel like there's already a degree of isolation going to a school where you are the minority. I think a big part of what got me through COVID was it was a lot of good times had and there's a lot of strangers that became like friends and family. And I think it's like that overarching sense of family that we kind of have at a HBCU. For me personally, that's really what helped me mentally during those times. Cause it's kind of like, yeah these things are going on in the world, but it felt like, like they said with the bubble, it felt like we were in our own bubble on that campus and everybody was just getting along. Everybody was just bobbing out having a good time and I think that's really what got me through. I couldn't picture being at any other school or just not at an HBCU during that time.

Participants reported that the core values of the HBCU experience are what motivated them to get through COVID-19. When discussing the HBCU, many participants also discussed what defined the HBCU experience. Participants defined the HBCU experience as being a community and fostering a family atmosphere. Participants stated that the HBCU experience was about connections and experiencing things with people who looked like them. In addition, the HBCU experience was about having diverse experiences. In their description of the HBCU experience, Interview Z stated:

I would describe the HBCU experience as immersive, lively, fun. I feel like [the] HBCU experience is just an immersive fun experience. You get to experience just being around, mainly just like your own people and people that have an understanding of you. It's just, it's fun.

Several participants, including Interviewee AD and AI used the term, family, to describe the HBCU experience. Interviewee AD shared, “I feel like a big part of the HBCU experience for me personally was that feeling of family and being together”. Interviewee AI similarly remarked:

In general, I think it's comforting because it's a lot of people around that look like you that are also trying to be better. I think it's having a big family and a big support system because eventually when we leave we are gonna have to deal with people that don't look like us in a majority space.

When discussing the HBCU experience, notable events hosted by universities were also discussed by the student participants. A notable event rooted in the HBCU experience and one that is special to NCAT students is homecoming, which also goes by the names GHOE, the Greatest Homecoming on Earth, and Aggie Fest. Interviewee AE made the following remark about Aggie Fest during their interview:

It's heavily rooted not only in just the family but just the traditions. I mean we did miss out on a lot of those traditions that COVID year as far as like, the homecomings and, the Aggie Fest and things like that. I think it's definitely rooted in tradition.

Since participants missed events rooted in the HBCU experience and culture, it influenced them to have negative emotions towards COVID-19. Interviewee AI explained:

Imagine knowing that you can't go to GHOE or there won't be a GHOE, which is like one of the, pretty much the biggest event of the school year. So that definitely negatively

impacted my feelings about freshman year and going to school.

Interviewee AA, on the other hand, felt that the HBCU experience and culture did not completely influence their feelings towards COVID-19:

I don't think A&T's HBCU culture has made me feel any different about it. There were some people that were going about it, like it didn't exist. There were some people that were so on edge about it, they couldn't even leave their room much less their house. And so I feel like, I was very firm in where I stood with COVID, just not wanting to get sick, not wanting to be around anybody who thought they were sick or around too many people. That's been around too many people. So I don't think it changed my initial thoughts or feelings on the matter. If anything, it just kind of strengthened what I already believed and how I already felt about it.

**The Black Community and the Health Field.** Along with the HBCU culture influencing participants' feelings toward COVID-19, participants described the Black community as an influencer. This was the fourth theme identified in this study. During their interview, Interviewee AA discussed how the Black community and their background influenced their feelings and reactions towards COVID-19, rather than the HBCU experience and culture:

I feel like, my background has kind of instilled in me to think on my own and formulate my own decisions and make up my mind for myself. And so for that, when I came to A&T I was surrounded by a lot of people who haven't experienced that, who hasn't had the opportunity to have that freedom to think for themselves.

Similar to Interviewee AA, Interviewee D also discussed the influence of the Black community:

I think the African American community as a whole tends to try to make light of

hardships, in the pandemic. And the changes that it brought to us as a university was definitely one of the hardships that we tried to make light of.

Additionally, due to the history of the African American community with the health field, this study's interviews demonstrated that the community is still hesitant to trust research and claims from health organizations. Unethical occurrences, such as the Tuskegee Syphilis Study, were referenced by participants, who stated how it was hard to trust preventative measures such as the COVID-19 vaccine. Interviewee W mentioned the history of mistrust in their interview:

I do know the history as far as with African Americans and doctors and things like that. So that does play a role, especially like the Tuskegee experiment and then even my own experience with doctors, even been campus, with the health center I've had very bad experiences with certain doctors that aren't black.

Some participants also mentioned that the negative history and background between the Black community and the health field were significant reasons why they and their peers were hesitant to get the COVID-19 vaccine. Interviewee W stated, "I know a lot of people were anti-vaccine. Actually, I was for a while as well. I was scared to get it". Similarly, Interviewee O discussed how the negative relationship between the Black community and the health field was a reason for the mistrust of the vaccine:

I believe that it is perceived negatively. I think that people are skeptical of it. I mean, as they should be considering previous historical events when it comes to healthcare in the Black community, the disparities, and things like that. So, this really isn't anything new. It's new for me because I'm only 22. So, I haven't lived through an event where it's like, oh, this vaccine, this and this and that. I think that the vaccine has been viewed negatively and continues to be viewed negatively.



However, participants also stated that this was when the influence of NCAT would have been beneficial. The greater community trusts NCAT and the information that it provides. Receiving information regarding the vaccine from the university would have helped to persuade community members who were skeptical of it. However, several participants stated that NCAT did not provide a significant amount of information about the COVID-19 vaccine, nor did they offer a neutral perspective. An unbiased view would have given the community negative and positive facts about the vaccine, such as side effects and benefits. Providing this neutral perspective would have allowed community members to make their own decisions about the vaccine using the facts given by a source they deemed credible and trustworthy. Since the university did not do either, many participants stated that the university was not effective in crisis communication messaging about the vaccine. When discussing the university's efforts to communicate about the COVID-19 vaccine, Interviewee Y made the following statement:

I don't think they did enough. Black people, they might tend to mistrust medicine. So knowing that you, serve a predominantly black population, that's something that you can maybe host more forums, events, [and] virtual events where if somebody was on the edge of should I get this vaccine? Should I not, they can attend this and maybe a professor or a scientist or somebody can be speaking about it just in answering any questions that they may have, for the students.

Interviewee A also discussed how misinformation and miscommunication are major players in the reasoning for why the Black community has mistrust in the health field, especially regarding COVID-19:

It was just miscommunication of people saying, they were... Of course, the medical industry is biased towards Black people and it didn't help. Hold on, let me figure out what

I'm trying to say. I'm really trying to figure out what it was called. Anyway, but I feel like, okay, it was the miscommunication about the vaccines when the vaccines came out and people were like, 'Wow, they having a vaccine so fast, they're trying to kill us, all this other stuff and blah, blah, blah.' And it was split in half where people could understand the medical side, but people were just bringing up the history and things like that.

**Interpersonal Communication.** The fifth theme that emerged in this study was *Interpersonal Communication*. Participants found that when student leaders provided information related to COVID-19, such as preventative measures, they were more encouraged to follow the mandates and implement the preventative measures being shared. Participants also stated that they looked to student leaders to share information from the university regarding COVID-19. Interviewee U discussed the use of student leaders to communicate university messaging related to COVID-19:

[Getting] student leaders to push out information and organizations to encourage students to do the right thing was also very helpful because you would get on social media and see like Miss A&T and Mister A&T encouraging students to wear masks and stuff like that. And I know that helps to influence people.

Interviewee K and P also discussed the use of student leaders to communicate information regarding COVID-19. Interviewee K mentioned how the SGA (Student Government Association), SUAB (Student Union Activities Board) and RHA (Residence Hall Association) provided information. Interviewee P also made mention of SGA, stating:

Students that are involved in SGA, the Student Government Association, just because normally they get word out first on what's going on and so it's just, I would say that it

just gets transitioned in a more efficient way, than a staff member that would, run the page. But normally I would say normally that it's probably mainly students that run the student health center page or the SGA page and other pages like that, to let students know what's going on, around the situation.

Participants also stated that when information came from the university's Chancellor, they felt it was important and more urgent. Additionally, they shared how they would seek out information about COVID-19 from him. Interviewee AE discussed the role of the Chancellor's email communications:

I think for me personally, I was definitely waiting for the Chancellor's emails because I knew his emails had to be legit. I didn't have to worry about, 'oh is this gonna happen? Is it not gonna happen?' I really waited for Chancellor Martin's emails cause if he sent it out then that's what was gonna happen.

Furthermore, participants discussed receiving information in person. Whether from their professors, student leaders, or university officials, they sought out information or wanted to receive information regarding COVID-19 in person. Several participants shared how they felt this information served to reinforce the communication they had seen on social media and via email. Interviewee AA expressed, "I feel like it's easier to have people listen in person, say for instance how we're on this zoom with the cameras off but we're still listening to each other".

**Uncertainty and Anxiety.** Many participants discussed the sixth theme of this study, which was students' feelings of *Uncertainty and Anxiety*. Participants stated that the general nature of the COVID-19 disease and aspects of the pandemic created uncertainty for them and caused anxiety. Reflecting on their experience with these feelings, Interviewee AE recalled:

Personally, I think it's the closest thing that I've ever experienced to kind of like a world

shifting event. Previous generations had 9/11, they had other diseases, they had the world wars. I feel like for me personally, this was the closest thing because I don't really know much turmoil on a global scale, thankfully until COVID-19. And it was just, a lot of fear. It was a time of fear and a time of uncertainty.

Participants also discussed the anxiety that was caused by attending in-person classes and sharing spaces with roommates. The fear of the unknown was key to feelings of uncertainty and anxiety, especially when discussing their safety and not knowing the actions of their peers that could potentially impact their health safety. Interviewee B stated:

I was nervous about if my roommates were going to get something or if I was going to get something and give it to my roommate. So, it was nerve-wracking in that aspect, but it also made us realize how important of course hygiene is and wiping down everything, making sure nothing is easily spread to each other.

**Positive Emotions Toward COVID-19.** While many participants communicated their negative emotions towards COVID-19, such as anxiety, anger, and loneliness, participants also reported *Positive Emotions towards COVID-19*. This was the final theme that emerged through this study's semi-structured interviews. When discussing these positive emotions towards the pandemic, participants stated how the health crisis caused the world to press pause on activities and other distractions. As a result, participants recalled how this pause allowed them to reflect on themselves and grow as individuals. Interviewee A described this season as a time of reflection:

It made you slow down, stop and reflect because of the stay at home, or stay in place orders, or you couldn't... All businesses and stuff like that were closed or it was limited... but it made life slow down a little bit in a sense.

Interviewee D described their appreciation for COVID-19 in the context of personal

development:

It caused me to grow up in certain ways that I don't think I would have to [if] we [were] not been in the pandemic. I think that it also forced everyone to get comfortable with being uncomfortable, as an entire society. So, it wasn't what we were used to.

Interviewee Y similarly discussed the growth that they experienced because of COVID-19, stating, “I definitely think it allowed me, me to understand how much accountability people take for their actions”. Interviewee AB made mention of personal growth fueled by COVID-19 in the context of learning adaptability and resilience:

Initially everybody just thought it was gonna be something temporary. But then as COVID spread, we kind of recognized how serious it was. But I think COVID-19, like I said, has allowed us to adapt and kind of recognize that we're very diligent and resilient to challenges and we can adapt.

### ***Content Analysis***

The content analysis was conducted to examine the types of messages, content, and platforms that NCAT used to provide COVID-19-related information to students. The analysis encompassed 96 social media posts from NCAT’s Twitter, Instagram, and Facebook pages. This section provides details on the data collection process, coding scheme, coding process, and themes and patterns that emerged from the analysis.

### ***Data Collection Process***

The researcher collected 44 Twitter posts, 14 Instagram posts, and 28 Facebook posts, that were posted between January 1, 2021, and December 31, 2021. Posts were collected by the researcher taking screenshots of social media posts from NCAT’s Twitter (@ncatsuaggies), Instagram (@ncatsuaggies), and Facebook (North Carolina A&T State University) pages. Social

media posts considered for the study included words, terms, photos and graphic elements related to masks, mandates, COVID-19, and vaccines or vaccination. Content that included the following hashtags was also included and selected for the content analysis: #MaskUp, #SociallyDistance, #AggieCare, #CrushCOVID, #GetVaccinated, and #TestTested.

The researcher assigned each post a descriptive identifier based on the post's content type. Table 3 illustrates the descriptors by platform, while definitions for each content type are listed in Table 4 to provide clarification of the content analysis descriptors by platform.

**Table 3**

*Content Analysis Descriptors by Platform*

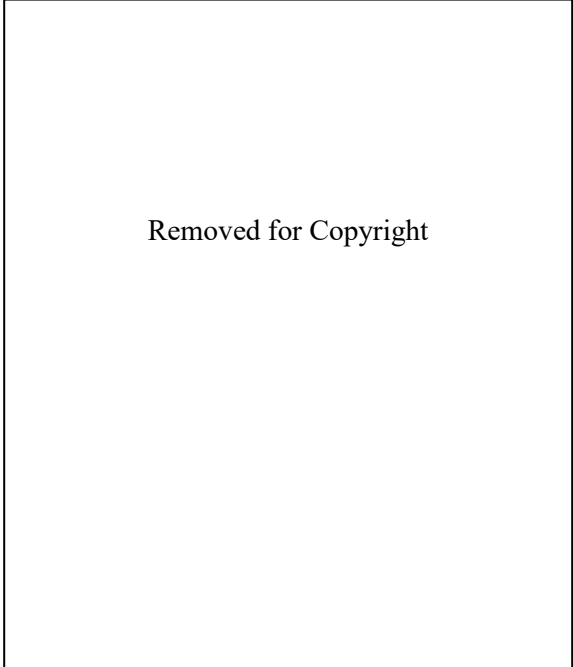
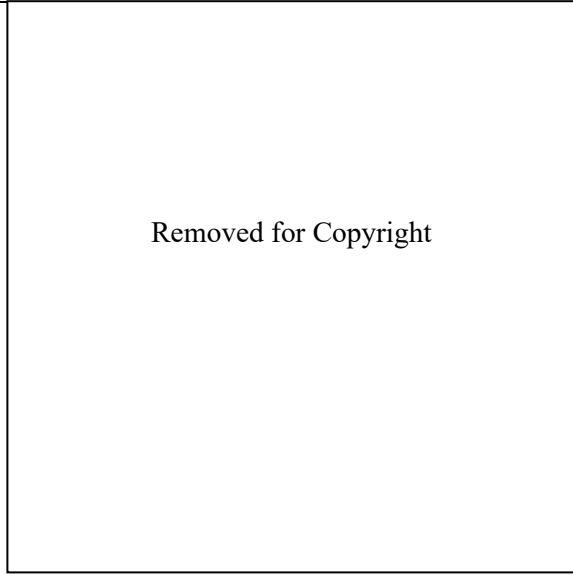
Content Type	Facebook	Instagram	Twitter
Carousel*	-	4	-
Flyer/Graphic	13	6	24
Infographic	3	0	5
Link	16	2	20
Photo	9	6	10
Reel	0	2	-
Video	4	1	1

\*Note: Carousels were not found on Facebook and Twitter because carousels are specific to Instagram. Twitter did not include reels because the platform does not support them.

**Table 4**

*Social Media Content Type Definitions and Representative Image*

Content Type	Definition	Example
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Carousel	<p>A post that contains more than one photo or video, which users can view by swiping left. Carousels are specific to Instagram.</p>	
Flyer/Graphic	<p>A post that includes a combination of photographs, text and illustrations.</p>	

Infographic	An image that includes graphic elements representing information or data to tell a story.	Removed for Copyright
Link	A hyperlink to a website or document.	Removed for Copyright
Photo	A post that contains a single photograph.	Removed for Copyright



Reel	A short-form video on Instagram and Facebook. Reels are between 15 to 90 seconds and are posted in an aspect ratio between 1.91:1 and 9:16.	Removed for Copyright
Video	A short or long-form video posted on any social media platform. Videos are posted on Instagram in a 9:16 or 4:5 aspect ratio and a 16:9 to 9:16 aspect ratio on Facebook and Twitter.	Removed for Copyright

### ***Coding Process***

A direct content analysis approach was adopted for this study. Post captions and associated images were examined. Each element within a post was examined individually and then assigned a code. This included post captions, hashtags and visuals. The content analysis also used a blended coding method. The researcher first used deductive coding and then followed

with inductive coding. The content analysis deductive codes were used to develop code list two, which focused on elements related to the URT framework. The researcher also incorporated concepts related to the African American community culture, the HBCU experience, and the African American history of mistrust and mistreatment within the medical field. The data underwent three rounds of synthesizing. Codes that were closely related or connected were consolidated. Coding was conducted using Dedoose.

### ***Coding Scheme***

The coding scheme is the final combined list of deductive and inductive coding codes developed after three rounds of synthesizing. Within Dedoose, the content was placed under root and sub-codes. The root code served as the content group's main theme, or parent code, for the sub-codes and encompassed the overall theme for the dataset. The root codes also served as the overarching theme of the dataset. Sub-codes were used to provide codes for detailed or niche topics within the content analysis. Nine root codes and five sub-codes created the coding scheme in this study (see Table 5).

**Table 5**

### ***Coding Scheme***

Code	Description
COVID-19 Vaccine	This code referred to posts and images that mentioned or referred to the COVID-19 vaccine, which included but was not limited to general information about vaccines, education forums promoting and encouraging vaccines, the Crush COVID competition campaign, and the promotion of vaccine clinics.

Crisis Updates and Information	<p>This code referred to posts or images related to COVID-19 updates regarding the university's student infection rate, general COVID-19 information regarding the disease itself, and external news related to COVID-19 that impacts the student body.</p> <p>Sub-codes within this root code included News.</p> <p>The News sub-code included posts and images that provided general information about COVID-19, which included community partnerships to provide vaccine access, grant opportunities, and advancements to prevent the spread of COVID-19.</p>
Events and Campaigns	<p>This code referred to posts and images promoting events and campaigns related to the awareness, prevention, or treatment of COVID-19. This rooted code's sub-codes included Clinics and Testing, Crush COVID-19, and University Events.</p> <p>The Clinics and Testing sub-code was comprised of posts and images promoting the vaccine clinics and COVID-19.</p> <p>The Crush COVID-19 sub-code included posts and images related to the campaign and competition between NCAT and North Carolina Central University that encouraged students, faculty, and staff vaccination. The campaign called for the campus community to become vaccinated</p>

	<p>and upload their vaccination card to a campaign portal. The university with the most campus members to upload vaccination cards would be deemed the winner.</p> <p>The University Event sub-code was related to posts and images about events hosted by the university related to COVID-19. This included forums, the Chancellor's forum, and mask distributions.</p>
Guidelines, Policy and Procedures	<p>This code included posts and images related to guidelines, recommendations, policies, and procedures implemented by the university to ensure campus health and safety.</p> <p>Within this root code were two sub-codes: Event Requirements and Policy and Mandates. The Event Requirements sub-code included posts and images that referred to requirements for attendees to attend or participate in campus activities or events. These requirements included PCR testing, vaccination, etc. The Policy and Mandates sub-code included posts and images that referred to university mandates and policies regarding COVID-19 for students to adhere to.</p>
Incentives	<p>This code included posts and images that referred to prizes that were used to motivate and encourage students to take preventive measures against the spread of COVID-19.</p>
Preventative Measures	<p>This code included posts and images that referred to</p>

	preventive measures to help prevent the spread of COVID-19 to the community, family, and peers. Preventative measures included encouraging testing, social distancing, and wearing a mask.
Student Involvement and Feedback	This code referred to posts and images encouraging student participation, gathering feedback, and incorporating student perspectives to gauge students' thoughts and feelings toward COVID-19-related topics.
Support and Resources	This code included posts and images that referred to assistance and resources available to individuals impacted by COVID-19. Support included both financial and non-financial resources.
Violations and Consequences	This code referred to posts and images that included updates to the student body regarding violations of the university's COVID-19 policies or mandates, as well as consequences if violations of policies continued.

### ***Key Themes***

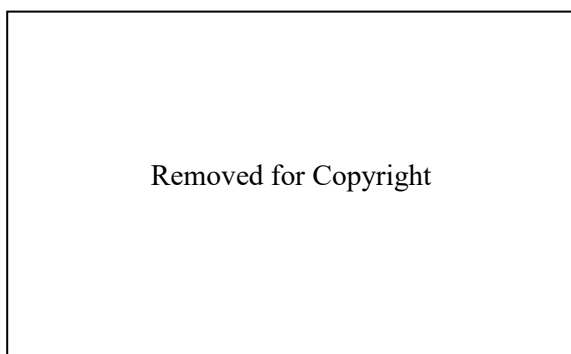
Through the coding process, four themes emerged from the content analysis including 1) *Community Responsibility*, 2) *Education and Awareness*, 3) *Policy and Advocacy*, and 4) *Reassurance*. This section delves into these themes and the associated patterns that were identified with them.

**Community Responsibility.** One prominent theme identified during the content analysis was *Community Responsibility*. NCAT stressed the significance of fostering a sense of

responsibility in mitigating the spread of COVID-19 (see Figure 1). The university employed the students to take accountability for their actions to ensure the health and safety of the greater community, which included family and peers. The university encouraged the students to develop a collective commitment to protect the community and prioritize public health. Content encompassing the theme of *Community Responsibility* emphasized the importance of adhering to safety protocols, such as wearing masks, practicing social distancing, and getting vaccinated.

### Figure 1

*X (formerly Twitter) (@ncatsuaggies) post from February 27, 2021*



Root codes and sub-codes of this theme included Preventative Measures, Violations and Consequences, and the COVID-19 Vaccine (see Table 5). Content within codes related to *Community Responsibility* encouraged students to take preventative measures to mitigate the spread of COVID-19. Examples included mentions of the hashtags, #MaskUp, #SociallyDistance, and #GetTested. Other preventive measures that were discussed included getting vaccinated. Within the Violations and Consequences code, content urged students to take responsibility for their actions and adhere to the policy and mandates implemented by the university that ensured safety. The code included warnings of impending consequences if the policy and mandates were not adhered to. However, content demonstrated that the university or Chancellor guided students on avoiding the consequences and emphasized the power of

community mitigation. The COVID-19 vaccine was another code included within *Community Responsibility*. The university used this code in its social media content to provide information regarding the need for the vaccine and how it could help mitigate COVID-19.

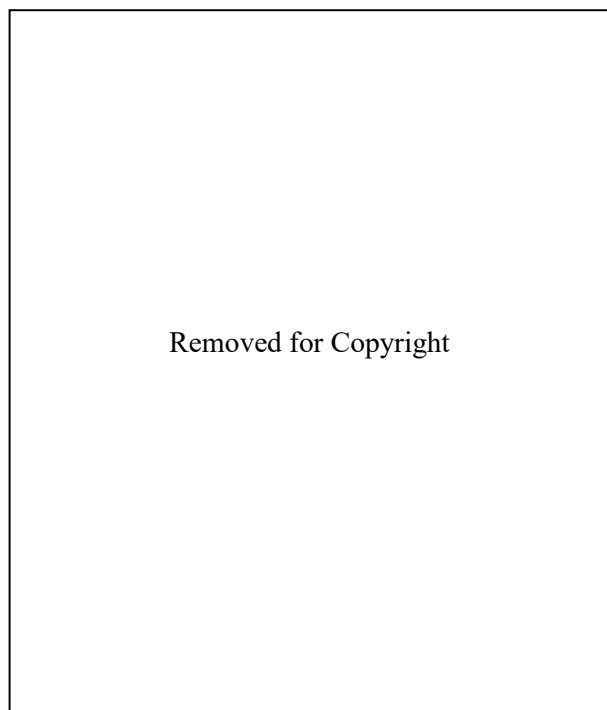
**Education and Awareness.** Another central theme that emerged from the content analysis was *Education and Awareness*, which illustrated how NCAT provided up-to-date information regarding COVID-19. The university used social media to educate and inform students about the risk of COVID-19 and methods for mitigating the spread of the disease. Education and awareness ensured students were able to adhere to the safety guidelines implemented by the university. Understanding and knowledge helped students to be more equipped to make better decisions regarding preventative measures against COVID-19. According to Mukhlis et al. (2022), the “basic understanding of a pandemic is linked to a willingness to comply with self-quarantine, avoid public activities, and delay social gatherings. Awareness is a significant factor increasing the level of compliance” (p. 1566). Codes within this theme included Events and Campaigns, Preventative Measures, COVID-19 Vaccine, and Incentives.

The university hosted events and forums to educate students on the COVID-19 vaccine and general tips for mitigation. One event that was promoted was “Race to Vaccinate”. This event aimed to educate students, faculty and staff about the vaccine and debunk misinformation. The event was also made available to the public to attend. Additionally, the university provided awareness of COVID-19 preventative measures through the Aggies vs. Eagles: Crush COVID campaign that encouraged vaccination (see Figure 2). Additionally, posts included content that promoted incentives that would be given if students completed specific actions, such as getting vaccinated and uploading their vaccination card. This tactic encouraged learning more about

COVID-19 and implemented mitigation efforts.

## Figure 2

*Instagram (@ncatsuaggies) post from July 2, 2021*



**Policy and Advocacy.** *Policy and Advocacy* formed an integral, third theme within this content analysis. The university shared updates on local, state, and national policies related to COVID-19 in which students were kept informed. The university demonstrated its commitment to health and safety by adopting policies and advocating for mandates that used evidence-based strategies and resources to combat the challenges posed by the pandemic. Evidence-based strategies to mitigate COVID-19 that were communicated through the content included mask mandates and social distancing requirements (Huang et al., 2022; Adjodah et al., 2021). The root codes within this theme included Crisis Updates and Information, and Guidelines, Policy and Mandates (see Table 5).

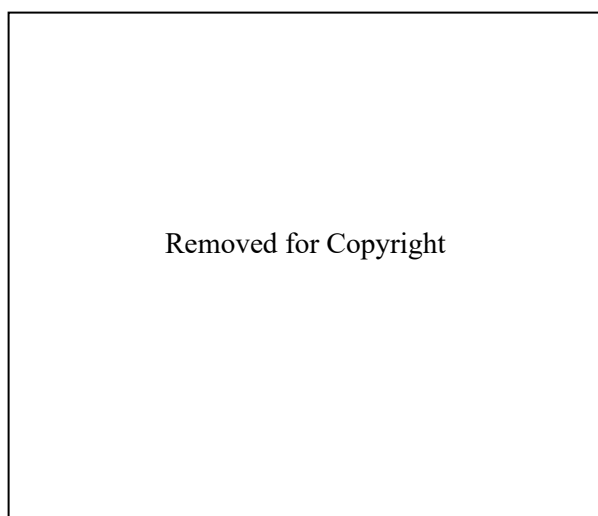
Content that used the Crisis Updates and Information code included advocacy for the COVID-19 vaccine and local updates about partnerships between the university and community



organizations within the Triad, such as providing vaccine clinics to the greater Greensboro community. The Guidelines, Policy and Mandates code was evident in content that included event requirements for attending university's homecoming festivities and the Chancellor's Speaker Series. Other content included the university requirement for students, faculty, and staff to get vaccinated or be tested for COVID-19 weekly (see Figure 3).

**Figure 3**

*Twitter (@ncatsuaggies) post from August 23, 2021*

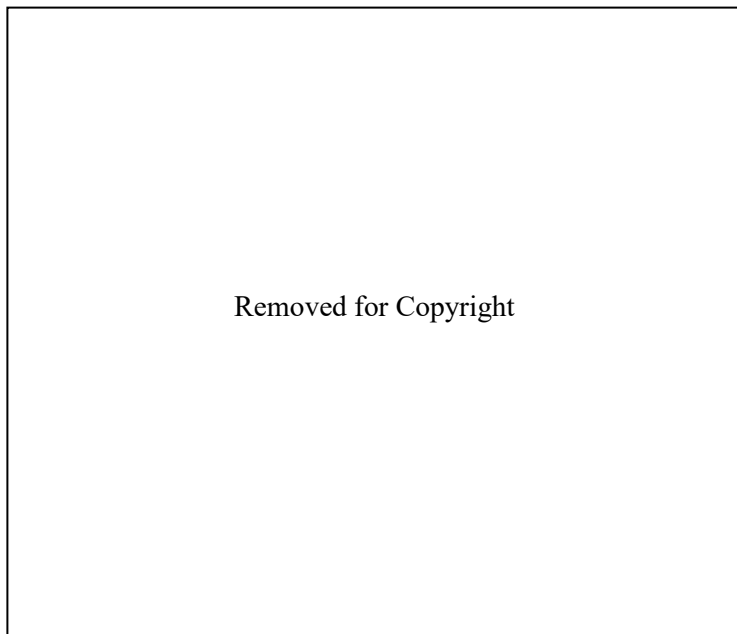


**Reassurance.** The fourth theme of *Reassurance* was prevalent among the content that was analyzed. Through this theme, the university recognized students' feelings of anxiety and uncertainty regarding COVID-19. Acknowledging these feelings, the university posted content that strived to ensure that students' health and safety were at the forefront of the university's emergency response efforts. The university illustrated their commitment by posting content that showcased proactive measures, provided mitigation strategies, and promoted resources available for those directly impacted by COVID-19. Through these posts, the university created an atmosphere of resilience and positivity despite the undergoing effects of COVID-19 (see Figure 4). Chancellor Martin provided these reassuring messages by communicating through the

university about taking the health and safety of the student body seriously.

#### **Figure 4**

*Facebook (North Carolina A&T State University) post from July 9, 2021*



The root codes of Student Involvement and Feedback, Support and Resources, and Preventative Measures were included in this theme (see Table 5). The Student Involvement and Feedback code included content that promoted a survey which was conducted by the university to learn students' thoughts and feelings regarding COVID-19-related topics. The Support and Resources code included content that promoted financial and non-financial resources. Lastly, the Preventive Measures code illustrated the university's methods to ensure the student body's safety. Other language and content included in the *Reassurance* theme emphasized the charge to keep students safe and acknowledged their mental health. Figure 4 illustrates an example of the Reassurance theme.

#### ***Patterns***

Patterns found within the content analysis included a relationship between NCAT's use of flyers/graphics paired with links in its messaging. This overlap occurred within content coded

as Events and Campaigns. Another pattern found was the use of infographics to communicate mandates and preventative measures. The university used infographics to communicate the vaccine and testing requirements for students, faculty, and staff. The university also used infographics to illustrate preventative measures such as vaccination, social distancing, and mask mandates. Links were also included in two additional patterns. All content that was categorized under the codes of Support and Resources and Student Involvement and Feedback incorporated links.

Two overlapping themes between the semi-structured interviews and content analysis were *Trust and Credibility*, and *Reassurance*. Participants reported that receiving information from a credible source made information related to COVID-19 more trustworthy, which reassured them that the information they received was accurate. Within the theme of *Reassurance*, the university understood the uncertainty of COVID-19. Therefore, they wanted to assure the student body that they implemented the best mitigation practices by providing evidence-based strategies. *Reassurance* was also found to overlap with the theme of *Interpersonal Communication*. Within the theme of *Interpersonal Communication*, participants stated that they had looked for communication from Chancellor Martin. They had felt that when information came from him, it was credible and they were assured that the information would convey urgent information. Within the content analysis, evidence of *Reassurance* was also demonstrated through Chancellor Martin's messages. Posts emphasized the importance of the health and safety of the campus.

### Summary

This chapter discussed the study's details on the interview participant selection process, consisting of a two-step process—recruitment and confirmation of eligibility. The chapter also

provided details on the demographics of interview participants. The researcher referenced the interview protocol and structure. The researcher asked open-ended interview questions and required participants to complete an informed consent form before the interviews began.

Interviews were recorded via Zoom, and transcripts were transcribed for better accuracy via Rev.com. The chapter also discussed the data analysis plan for the interviews. The researcher used a blended coding method to analyze the interviews, using deductive codes that focused on elements within the URT framework and descriptive inductive codes. Interview coding underwent three rounds of synthesizing. From the coding process, seven themes emerged: *Transparency and Honesty in Communication, Trust and Credibility, HBCU Culture and COVID-19, The Black Community and the Health Field, Interpersonal Communication, Uncertainty and Anxiety, and Positive Emotions Towards COVID-19.*

This chapter also explored the data collection process, coding process, and content analysis coding schemes. The data collection process included the researcher taking screenshots from NCAT's Facebook, Instagram, and Twitter pages. The researcher examined content from 96 social media posts. The coding process for the content analysis used a blended coding method, where deductive codes focused on the URT framework, the HBCU experience, and topics specific to the African American community. The final coding scheme included nine root codes and five sub-codes. Using this coding scheme, four themes emerged: *Community Responsibility, Education and Awareness, Policy and Advocacy, and Reassurance.* Patterns identified within the content analysis included a relationship between using flyers/graphics paired with links in crisis communication. Other patterns found included using infographics to communicate mandates and preventative measures, and all content coded Support and Resources and Student Involvement and Feedback incorporating links.

Both the semi-structured interviews and content analysis used Dedoose for coding. Additionally, the researcher discovered two overlapping themes from the coding process, which included *Trust and Credibility* from the interview analysis and *Reassurance* from the content analysis. Additional overlapping themes identified were *Interpersonal Communication* from the interview analysis and *Reassurance* from the content analysis. Chapter Five discusses the implications of these findings.

## **Chapter Five: Conclusion**

### **Overview**

This study explored how an HBCU effectively used social media to reduce the uncertainty and anxieties of COVID-19. This chapter provides a discussion of the research findings that emerged from the semi-structured interviews and content analysis. Using a theoretical framework and empirical perspective, themes are discussed. Next the implications, delimitations and limitations are addressed. The chapter concludes with recommendations for future research.

### **Summary of Findings**

This study's objective was to examine how HBCUs effectively use social media to deliver crisis communication messaging to students to understand how social media use in crisis communication can reduce uncertainty. To achieve this aim, the researcher conducted 30 semi-structured interviews with NCAT students and analyzed 96 social media posts from NCAT's Facebook, Instagram, and Twitter pages. This process revealed a total of 11 themes, where seven emerged from the interview analysis and four were identified through the content analysis.

### ***Research Questions***

Three research questions were formulated to address students' evaluation of the university's messaging, trends among social media platforms that often reduced students' uncertainties about COVID-19, and common themes in HBCU messaging on social media content regarding COVID-19. The URT theoretical framework guided their application to this exploratory research. This following sections discuss what the study revealed through each question and address other general findings from the study.

#### **RQ1: How do students evaluate if the university's messaging on social media**

**platforms reduced their uncertainty regarding COVID-19?** This research question sought to identify how students evaluated whether NCAT's messaging on social media successfully reduced their uncertainties and anxieties about COVID-19. Many participants, regardless of whether they stated the university was effective or ineffective in their crisis communication efforts about COVID-19, stated that the reasoning behind their perspective was due to NCAT's standards for content which addressed its clarity, consistency, frequency, and quantity.

***Clear and Concise Content.*** Participants measured effectiveness of NCAT's crisis communication messaging according to how clear and concise it was. Participants reported that they wanted content that didn't leave them confused. They also claimed a preference for concise content, as they did not want to read long social media posts or emails. When discussing the effectiveness of the university's communication for Spring 2021, Interviewee Q referenced the effectiveness of clear and concise messaging, stating, "I like it because they put like the news in concise and short bites. Very digestive". Similarly, Interviewee O mentioned the effectiveness of clear and concise messaging:

It was very clear and concise. It wasn't really confusing as to where the resources are available, what we needed to, what we needed to do to access those resources. So it was just very clear. It was straight to the point.

***Consistent Content.*** Participants reported that effective messages from the university required consistency. According to their experiences, either the university was effective because messages were sent out consistently or it was ineffective because messages were not sent out consistently. Reviewing this quality of effective messaging at NCAT, Interviewee AC stated, "They were pretty consistent throughout the whole year... they were more consistent in the spring". Interviewee T similarly recalled:

Just constant updates. They never waited too long in between to update. So, it was never a period where it went too long and you would sit here and be like, be like, oh lord, we haven't heard anything from them [in a] minute. They would always constantly update and let you know what was going on and what was their plan for it.

In addition, participants recalled moments where the university's actions did not always match the standard or advice within their messaging and how this counteracted the value of consistency. Interviewee U discussed this dilemma of consistency between messaging and behavior, stating:

If you're gonna say you should be doing this, that, and the third, then have it, actually be. Don't say we want you social distancing, you can't have a GBM and then turn around and let SGA do all this stuff and you got us in class sitting on each other's laps. It was just a bit contradictory.

***Frequent Content.*** Participants discussed frequency as a measure to gauge effectiveness in crisis communication messaging. Participants stated that they preferred content to be sent out by the university in specific frequencies. They often felt that if the university did not send out COVID-19-related messages on a consistent basis, then they deemed the information being communicated as ineffective. Interview P discussed how the frequency of university messaging on its social media pages was effective in decreasing their feelings of anxiety:

It definitely did reduce my anxiety because, when I first came, I didn't really know what the precautions were gonna be. I know I did have to have a COVID test before moving in, but then it became a regular thing where they would post, on social media on certain accounts, or send out a mass email [to] make sure you had a mandatory COVID test or it was mandatory for you to even move back into the rooms, each semester and things like



that.

Interviewee M similarly referenced the value of frequent messaging as they discussed the difference in communication efforts between Spring 2021 and Fall 2021, where they felt that Fall 2021 was more effective than Spring:

I didn't see communications as frequent as they were during the Fall of 21, opposed to the spring. Yeah, I mean I think with Fall of 2021 it was kind of the same deal when we first came to campus, they communicated, continuing to keep students safe. But, I don't think they were as pushy about.

***Quantity of Content.*** Participants also discussed effectiveness of content in the context of information quantity. When they perceived that the university had sent enough information to students, they felt secure and aware. However, when they perceived that the university did not send out enough information, communication was deemed as ineffective. From these interview discussions with participants, the researcher recognized that emails were being discussed in conjunction with social media posts. Interviewee Y identified quantity as a gauge of effectiveness as they discussed the difference in communication from Spring 2021 to Fall 2021:

I felt like in Spring of 2021 it was more information. Like pretty much every email we got from the university was information on COVID, COVID, COVID, COVID and then Fall of 2021 it was still information about COVID but it was definitely at a way, way less than usual.

**RQ2: Which social media platforms tend to be used to reduce students' uncertainties about COVID-19 the most?** Building upon RQ1, RQ2 provided an additional layer of investigation of perceived effectiveness. The question aimed to identify the social media platforms that are most successful in reducing students' uncertainties and anxieties about

COVID-19. In addition, the researcher was able to explore social media platforms that the university often uses to provide crisis communication messaging.

Participants discussed social media platforms they used to seek information that would reduce their uncertainties. Specifically, participants discussed the primary mediums they used when searching for information regarding COVID-19 from the university. Overall, participants stated that Instagram was their primary or secondary communication medium when seeking information about COVID-19 from the university. Thirteen participants (43.3%) stated that Instagram was the primary source they used to look for COVID-19-related information, which reduced their anxiety. Nine participants (30%) identified Twitter as their primary communication medium of choice to reduce uncertainties. Interviewee E shared, “I would go to the official @ncatsuggies Instagram page because they always post, of course, obviously official information, with them being the official public relations account for the university”. Interviewee J stated that while they used both Instagram and Twitter, Instagram was their primary and most frequent choice to get information that help reduced their uncertainties:

Instagram and Twitter. But Instagram mostly from the school. When they would talk about the campus rec center, when they would be open and closed and stuff like that. Instagram definitely. Instagram was definitely a tool they used to have the holiday break information.

Furthermore, many participants, like Interviewee J, also discussed how they used both Instagram and Twitter. Interviewee T shared, “I looked on Twitter and Instagram a lot of times. Those were where the statements I found were made”. Interviewee N stated:

They post updates daily on what happens on campus and events [that] are gonna happen on campus. And since COVID was happening, usually Instagram and Twitter were the

first things they used to push-out news and then also Aggie alert as well.

In addition to Instagram and Twitter, two other communication mediums mentioned during these discussions regarding information distribution included emails and the university website. Like Interviewee N, participants also looked for information from Aggie Alert, the university's text message emergency response platform, to help them reduce their uncertainties. Eleven participants (36.6%) stated that emails were a primary or secondary medium they used to receive information. Interviewee B recalled:

They were sending the emails, but I also thought about it, on their website they would post the amount of cases we had on campus. It was something like that. It was a graph, and they showed the amount of students that had it, so you could keep tabs on it.

Interviewee E shared how they had turned to email or university leadership to help reduce uncertainty because they wanted to ensure that the information they received was accurate:

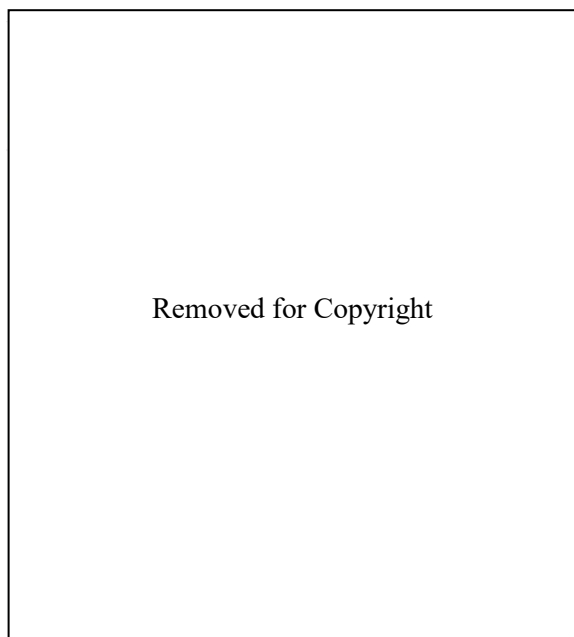
I would try to check my email first and then if not, I'm queen of I'm going to the source. So, I would go to the student center myself and ask them directly or I was in SGA so I would ask our SGA advisor with her being a higher up, 'do you know anything about this?' Because I don't need nobody telling me nothing incorrect at all.

**RQ3: What are the common themes in HBCU messaging on social media regarding COVID-19?** This research question aimed to identify the themes of crisis messaging that the university most often used when communicating about COVID-19. To address this question, the researcher primarily looked to the content analysis. However, patterns were also discovered from the interview data analysis regarding this research question. Three common themes were identified in NCAT's social media messaging regarding COVID-19, including 1) *Building Community*, 2) *Education and Awareness*, and 3) *Mitigation Strategies*.

***Building Community.*** Regardless of the social media platform being used, NCAT’s messaging regarding COVID-19 emphasized the greater community. The university recognized the importance of fostering unity and support within the community, which included the campus and external community. NCAT used social media posts to encourage community engagement, support, and responsibility. Codes within the content analysis that exhibited the theme of *Building Community* included Events and Campaigns, Preventative Measures, and Support and Resources (see Table 5).

### Figure 5

*Facebook (North Carolina A&T State University) post from July 2, 2021*



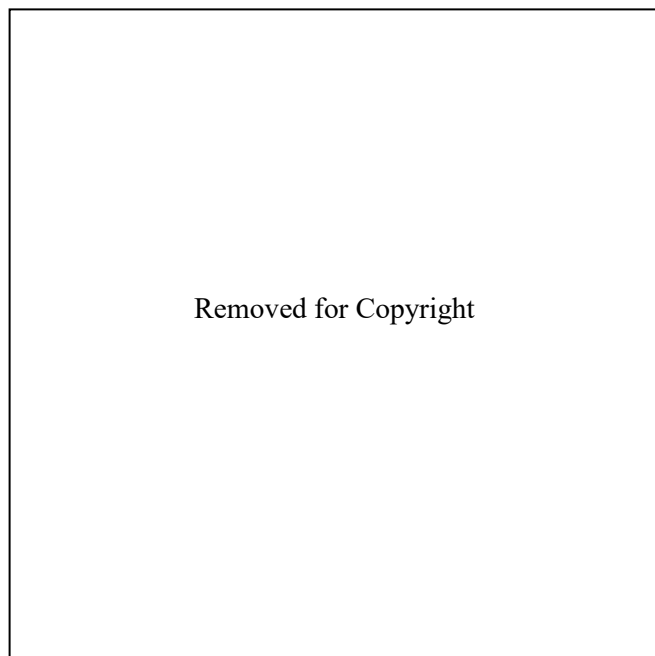
Through events such as Crush COVID, the university fostered togetherness through healthy competition between North Carolina Central University. Students, faculty, and staff came together to “crush” COVID and ensure the community's safety by getting vaccinated (see Figure 5). This event also allowed the community to unite over a university rivalry, all in the name of fun. Additionally, unity was demonstrated between two HBCUs who charged their campus communities to consider the greater community by participating in the preventative

measures encouraged through the event. In this way, Preventative Measures was a second code that exhibited the theme of *Building Community* and connected to the theme of *Community Responsibility* identified in Chapter Four.

The university valued and emphasized that the health and safety of the campus body was the responsibility of all campus members. Students, faculty, and staff could ensure a safer community by taking accountability for one's actions and implementing preventative measures such as wearing masks, social distancing, and getting tested (see Figure 6). Additionally, the code of Support and Resources also represented *Building Community* because it demonstrated the supportive environment that the university was creating.

#### **Figure 6**

*Facebook (North Carolina A&T State University) post from March 26, 2021*

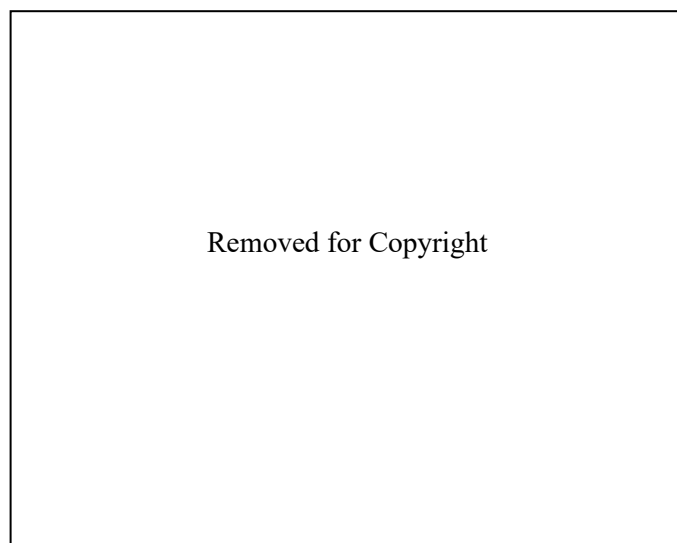


***Education and Awareness.*** Another theme discovered in the university's social media posts was *Education and Awareness*. NCAT ensured that the campus community was updated on the latest COVID-19-related news, available support and resources, and health guidelines. Posts

that included this type of content were coded under Crisis Updates and Information and Support and Resources (see Table 5). Additionally, the university made the campus community aware of the number of positive COVID-19 cases. Though the researcher did not find information in the content analysis related to numerical data, qualitative data collected from student participants during the semi-structured interviews revealed references to social media posts that discussed the number of positive COVID-19 cases that students remembered seeing. The divergence in data regarding this topic is discussed later on in the delimitations and limitations section of this chapter.

### **Figure 7**

*Twitter (@ncatsuaggies) post from February 3, 2021*



Lastly, the university's posts also provided educational opportunities regarding the COVID-19 vaccine through forums and events promoted on social media. These forums included the Chancellor's Forum and "Race to Vaccine". Figures 7 and 8 illustrate the theme of *Education and Awareness*. These posts were coded under COVID-19 Vaccine and Event Campaigns (see Table 5).

### **Figure 8**

*Instagram (@ncatsugaggies) post from February 16, 2021*



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***Mitigation Strategies.*** *Mitigation Strategies* were the final theme that was prevalent among the messaging of NCAT's social media posts. The university's posts promoted and encouraged strategies to help mitigate the spread of COVID-19. Within this theme, content was coded under COVID-19 Vaccine, Events and Campaigns, Guidelines, Policies and Procedures, and Preventative Measures (see Table 5). Within the COVID-19 Vaccine code, the university posted content that encouraged vaccination as a way to prevent the spread of COVID-19. Within the Guidelines, Policy and Procedures codes, the sub-code of Policy and Mandates included content surrounding mitigation through the university's mandates, such as mask mandates. In addition, the sub-code of Event Requirements included content illustrating how the university prioritized the health and safety of attendees of university-hosted events (see Figure 9).

## **Figure 9**

*Instagram (@ncatsugaggies) post from September 6, 2021*



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The codes of Events and Campaigns and Preventative Measures included strategies to prevent the spread of COVID-19 by encouraging the use of masks, social distancing, frequent testing, and vaccination (see Figure 10). The university demonstrated its commitment to students, faculty, and staff health and safety by encouraging and implementing strategies to mitigate COVID-19.

**Figure 10**

*Twitter (@ncatsuaggies) post from August 31, 2021*



Removed for Copyright



During the semi-structured interviews, participants discussed the content of the social media posts. From these discussions, the researcher identified a mitigation pattern among the verbiage and messaging used to reduce negative feelings towards COVID-19, such as preventive measures. Participants discussed how receiving information about ways to mitigate the spread of COVID-19 and policies implementing preventative measures helped them to decrease their anxieties. They reflected how this information made them feel comfortable because it illustrated the university's care for students and its commitment to the campus community's health and safety. For example, Interviewee Z reflected, "Honestly the mask mandates made me more comfortable cause I knew like everybody had to wear their mask and you could hold people accountable for wearing their mask because of the mask mandate."

### **Discussion**

This study aimed to examine how an HBCU can utilize social media effectively to reduce the uncertainties of COVID-19. Previous crisis communication research has focused on integrating HBCU leadership in crisis communication efforts. Regarding uncertainty reduction in crisis communication, literature has focused on information-seeking and crisis communication efforts. URT was used as a framework in this study, focusing specifically on theorems 16, 17 and 18. This study extended the concepts of existing research and the URT framework to further explore the use of crisis communication messaging at HBCUs and gauge its role in successfully reducing individuals' uncertainties during a crisis. The following section explores the theoretical and empirical applications of this research.

#### ***Theoretical Framework***

This study corroborated the findings of previous research regarding the overall premise of URT, which states that individuals seek information to reduce uncertainty about a crisis (Tandoc

& Lee, 2022; Berger & Calabrese, 1974). This study provided evidence that individuals do conduct information-seeking behaviors to reduce uncertainty. Participants stated during semi-structured interviews that they sought information about COVID-19 through social media posts and emails from the university to reduce their uncertainties. For example, Interviewee AE reflected on their information-seeking behavior:

I think for me personally, I was definitely waiting for the Chancellor's emails because I knew his emails had to be legit. I didn't have to worry about, oh is this gonna happen? Is it not gonna happen? I really waited for Chancellor Martin's emails cause if he sent it out then that's what was gonna happen.

Additionally, the effectiveness of the university's messaging in reducing uncertainty and anxiety among students was based on the clarity, consistency, frequency, and quantity of the information.

The findings of this study also corroborate Lee and Yu's (2020) research about concrete and interactive language on Twitter. Lee and Yu found an increase in retweets of crisis messaging that used concrete and interactive language, which was connected to an effective reduction in uncertainty. Concrete language "refers to linguistic features that represent detailed representations of objects (West & Holcomb, 2000)," (Lee & Yu, 2019, p. 1506). Concrete persuasive arguments offer more specific information for situation assessments and, in doing so, are able to more effectively reduce uncertainty (Lee & Yu, 2020).

Packard and Berger (2021) similarly discussed concrete language, describing it as language that illustrates tangibility, specificity, or imaginability among its words. The findings of this study affirmed this description, as student participants reported experiencing a reduction in uncertainty through information that was clear, concise, and specific about COVID-19 cases.

This clear and concise language allowed NCAT to provide timely information that answered questions and left no room for vagueness. For example, Interviewee O stated, “It was very clear and concise. It wasn't really confusing as to where the resources are available, what we needed to, what we needed to do to access those resources.” Similarly, Interviewee Q remarked, “Yeah, I like it cause they put the news in concise and short bites. Very digestive.” From these participant perceptions, this study was able to confirm that using concrete language on Twitter can reduce uncertainty. This finding was demonstrated by the fact that many of NCAT’s posts analyzed in this study had been uploaded to Twitter. This research also adds to the field of communication by providing findings on using concrete language on Instagram and Facebook.

This study also built upon Shannon and Weave’s (1974) research. They found that when noise is present in a message, there is a higher level of uncertainty and this could lead to a message being lost or distorted. Shannon and Weave quantified the concept of noise in messages to entropy (Son et al., 2020). Son et al. (2020) also found that when a tweet’s entropy is high, its disaster information is less clear, accurate, and sufficient. This study built upon these previous findings by adding content on perceived effectiveness. Through the semi-structured interviews, participants expressed that they wanted clear and concise information, which could imply that the entropy level of the social media posts analyzed in this study was low and, therefore, more effective because there was no noise in the messaging.

This study also shed new light on the URT framework by addressing several gaps in research. Many studies regarding URT and crisis communication have focused on disaster crisis communication, such as earthquakes, floods, and hurricanes. This study focused on a health crisis, which added a new research perspective on how the URT framework can be applied to communication research. In addition to providing research on a different type of crisis, this study

also extended URT's application to COVID-19. As previous COVID-19 research findings are still considered preliminary, the findings from this study add to existing research to create further concrete implications and findings.

Furthermore, this study sheds new light on URT and provides insight into the African American community and the COVID-19 vaccine. This study provides evidence of the reasoning behind the hesitation of getting the COVID-19 vaccine, with contextual consideration of the history of mistrust between the African American community and the medical field. The research also addresses how an organization can reduce uncertainty and hesitation about COVID-19 by increasing information, transparency, and agency for community members as they decide whether or not they would like to receive the vaccine.

### ***Empirical Findings***

Previous literature examined why stakeholders look to social media during a crisis. This study confirmed several of the suggested reasons as to why stakeholders look to social media. Fraustino et al. (2017) suggested that the public uses social media during disasters for information-seeking, timely, and unique information. This study confirmed this finding through the semi-structured interviews. Participants reported looking to the university's social media for crisis updates regarding positive COVID-19 numbers and mandates, preventative measures, and event information unique to the university (e.g. homecoming, Aggie Fest). Regarding this behavior, Interviewee AG stated:

I'll check Twitter to see if there were any updates. But A&T has multiple Instagram accounts, with the different campus I guess communities, like different campus organizations and stuff that make students aware of things that are [happening] on campus and COVID. So of course, they kept notifying us [about] how bad it was getting,

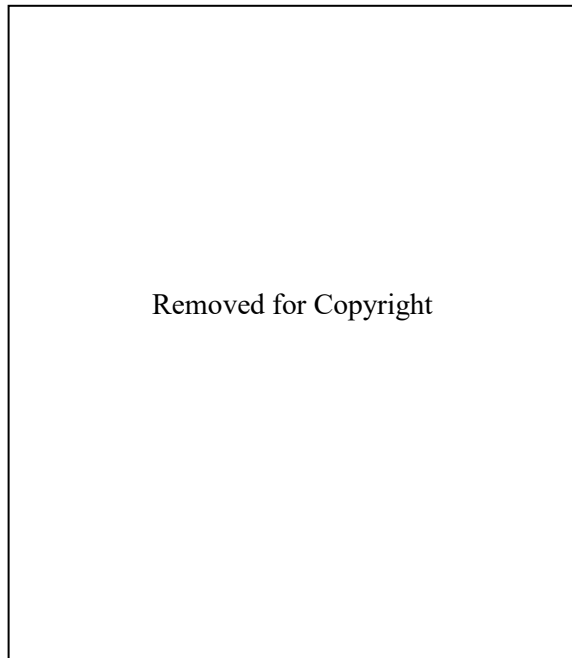
who got COVID on campus that week, different things like that.

This study also corroborated existing research on social media usage and misinformation. Misinformation directly connects to inaccuracy. Fraustino et al. (2017) stated that the public may not use social media during a disaster because of inaccurate information. Holmes (2011) provided an in-depth discussion about social media functioning as a source of misinformation, referencing how it can cause inaccurate information to spread rapidly and how its use during a crisis can cause an organization to lose control of its narrative. Participants in this study affirmed Holmes' (2011) perspective, where they discussed misinformation and how it is a disadvantage of using social media to disseminate information. One participant discussed how misinformation was one of the reasons why they did not look to NCAT's social media pages to receive COVID-19-related information. Sharing their belief that social media was not an effective tool to provide and receive information, Interviewee Y stated, "We can't always believe everything that we see on social media to be true because I could put something on social media that's completely false".

This finding not only corroborated existing research but also added an additional layer of research by providing evidence for why the public looks to social media during health crises. However, this study diverged from previous research regarding the use of social media for information-seeking in the context of psychological support during a crisis. Fraustino et al. (2017) stated that the public goes to social media to seek emotional support and healing. Their content analysis examined one post that promoted a mental health day for students from the university (see Figure 11). However, participants in this study did not mention emotional support as being a primary reason for why they looked to the university's social media.

## **Figure 11**

*Twitter (@ncatsuaggies) post from February 25, 2021*



The study also extended previous crisis communication research by focusing specifically on NCAT. Hocke-Mirzashvili et al. (2015) explored students' perspectives on the effective use of social media to provide crisis communication messaging from NCAT during an active campus shooter crisis. Their study revealed that students were satisfied and had positive views of information received about the gunman. However, students reported that they were unaware that the university had active Facebook and Twitter pages (Hocke-Mirzashvili et al., 2015). The findings of this study slightly diverged, where student participants were not only aware of NCAT's Twitter and Instagram pages, but they also made regular use of them. Overall, this study extended the findings of Hocke-Mirzashvili et al.'s research by providing an analysis of on students' perspective on NCAT's use of social media for crisis communication messaging.

This study contributed to the field of communication by addressing research gaps that were identified by previous researchers. Many previous studies regarding crisis communication in HEI have focused on external communication. There has been a lack of research regarding the

internal audience's perceived effectiveness on an HEI's crisis communication effort. This study filled this gap by providing research from the students' perspectives. In addition, this study added to the field by providing research on the use of different social media content types, such as reels on Instagram. This study examined NCAT's Instagram reels, providing evidence on the type of content reels are used to convey.

Furthermore, this study added to the field of communication by providing additional research on COVID-19 and crisis messaging. As of 2023, the World Health Organization stated that the national declaration for emergency had ended. However, as the pandemic evolved from 2019 to 2023, numerous opportunities to assess the crisis communication messaging related to COVID-19 remain. This study provided another layer of information regarding COVID-19, crisis communication, and the role of social media usage.

## **Implications**

### ***Theoretical***

One implication from the study suggests that different crisis communication behaviors for uncertainty reduction can occur in different stages that have not necessarily been outlined by previous studies. This implication also suggests that uncertainty reduction can be applied without identifying specific stages of interaction. This does not establish or discuss content in the context of the three stages of interaction (i.e. entry, personal, and exit) that were established by Berger and Calabrese (1974) and further explored by Grace & Tham (2021). While this study provides context for messaging examination, its findings do not establish at what point each stage begins. The study identified the use of Grace and Tham's recommendations for implementing the URT framework in crisis communication, however, these elements were established in unidentified stages. For example, Grace and Tham's entry stage guideline of "increasing communication

frequency to outline the future new normal” (p. 115), as well as the exit stage guideline of “responding to uncertainty by outlining long-term service modifications and protocols” (p. 115), could be identified as occurring within the same month on social media. From Spring 2021 to Fall 2021, students’ “new normal” consistently changed. Therefore, NCAT outlined the future new normal and long-term modifications to address uncertainty within the same time frames and even the same posts. This implies a diverging of the guideline that these aspects had to occur in different stages to be effective. While stages were not established effectively in this study, the research still identified how principles of the study could be used to decrease uncertainty.

### ***Practical***

In Hocke-Mirzashvili et al.’s (2015) study, it was concluded that students were unaware of the university’s Twitter and Facebook accounts, which were updated regularly. As a result, findings revealed that the students did not look to the university’s social media pages to receive crisis updates. For this study, the research implied that student participants were aware of all of NCAT’s social media platforms providing information regarding COVID-19, even if students did not look to a specific social media platform themselves. This research also suggests that from Hock-Mirzashvili et al.’s study in 2015 to the conclusion of this study in 2023, students’ use of social media has changed and universities are promoting their social media pages to students.

Another practical implication of this study suggests that HBCUs are seen as credible and trustworthy sources within the Black community. This is due to the commonality that the Black community identifies between themselves and the purpose and values of an HBCU. Previous research has demonstrated that individuals and communities seek information from credible sources to reduce uncertainty during a crisis (Grace & Tham, 2021). This study suggests that HBCUs can leverage their credible position to reduce the uncertainty of the COVID-19 vaccine



in the Black community. Several participants discussed how NCAT could have leveraged its credible position. For example, Interviewee Y stated:

Black people, they might tend to mistrust medicine. So, knowing that you serve a predominantly Black population, that's something that you can maybe host more forums, events, [and] virtual events where if somebody was on the edge of should I get this vaccine?

Furthermore, the study suggests that if an organization provides more information and tips about its crisis response to its audience, this will reduce their uncertainty. During the semi-structured interviews in this study, participants stated that they gauged the effectiveness of the university's messaging by its quantity, consistency, and frequency. These characteristics can be included to increase information, which can result in a further decrease in uncertainty.

### **Delimitations and Limitations**

The study included three delimitations. The first delimitation regarded participant eligibility, where students who lived off-campus in any student housing were eligible for the study. This decision was made because, in 2021, only a limited number of students were allowed back to campus. For this reason, many students had to live in off-campus housing. Considering this factor, the researcher expanded eligibility requirements to ensure an adequate number of participants would be eligible for the study. A second delimitation related to participant eligibility was that freshmen students were not eligible for the study as of Spring 2023. This decision was made because freshman, as of Spring 2023, would have been in high school entirely throughout 2021 and, therefore, would not have had any knowledge of the crisis communication efforts of NCAT.

The second delimitation in this study regarded content examined during the content

analysis. This study only examined visuals and posts captions. Social media analytics were not examined (e.g. the number of retweets), nor were the comments. This decision was made because the researcher could not view the whole picture of analytics unless the university itself provided the researcher with the data. As a result, this made it hard to find value in reviewing the vanity metrics of likes, shares, etc. Another delimitation regarding content examined during the content analysis was that comments were not examined. This decision was made because the study focused on the student perspective only. As the researcher would not have been able to determine who commented on the university's post or identify if they were a student or another stakeholder, the decision to exclude comments was deemed as necessary.

The one significant limitation of this study was the timeframe during which the data was collected compared to the timeframe during which the data was analyzed. The researcher received their first approval from Liberty University's IRB in April 2022. The selected university at the time was North Carolina Central University. However, the researcher had to change the university in late 2022 due to unforeseen circumstances. The research scope examined social media posts from January 1, 2021, to December 31, 2021. This meant that the researcher pulled social media posts from NCAT that were over a year old. Several social media platforms, such as LinkedIn, do not display content past 12 months. For this reason, the researcher removed LinkedIn from the dataset.

Additionally, the university could have archived posts from the public's view within the data collection time frame and this would have contributed to the number of posts that were examined for each social media platform. This aspect would have also contributed to the divergence of data between the participants and content analysis in this study. For example, participants discussed COVID-19 numbers that were shared on social media. However, the

researcher was not able to find this information during the content analysis. Furthermore, the timeframe of this study caused participants to have a hard time remembering specific information due to the time-lapse.

### **Recommendations for Future Research**

This study aimed to identify how HBCUs can effectively use social media to reduce students' uncertainty about COVID-19. During data collection, the COVID-19 vaccine was mentioned by participants during interviews and referenced were among the content of NCAT's social media posts. However, the COVID-19 vaccine itself was the main focus of this study. From this study, the uncertainty of the COVID-19 vaccine was established. Future research has the opportunity to focus on how an HBCU can effectively reduce its internal audiences' uncertainties about the COVID-19 vaccine using social media messaging. Future research can also focus on how an HBCU uses any communication medium to effectively reduce the uncertainty of the COVID-19 vaccine among its internal and external audiences.

This study used the qualitative method of a single instrumental case study to conduct semi-structured interviews and content analysis. Future research could use this same research framework while changing the single case study design to a collective or multiple design approach. This change would allow researchers to compare and contrast the crisis communication practices of different HBCUs regarding COVID-19. Additionally, this study only focused on the student perspective. Future research could explore the effectiveness of social media usage by HBCUs to reduce the uncertainty of COVID-19 for their faculty and staff.

Additionally, this study examined content from the social media platforms of Facebook, Instagram, and Twitter. Due to a limitation regarding the data collection timeframe, LinkedIn was not included in the study. Another social media platform that is still emerging and whose

usage is increasing is TikTok. Future research could explore how HBCUs use LinkedIn and TikTok to reduce students' uncertainty about COVID-19. Future research could also examine how HBCUs use LinkedIn and TikTok to reduce students' uncertainty about general crises outside of COVID-19.

Furthermore, many participants mentioned email communications, stating how they looked to NCAT's emails for urgent information. This study investigated social media in uncertainty reduction. Future research could therefore look at how emails are used to reduce uncertainty during a crisis. Email communication was referenced by several student participants as a modality of communication that they used to receive information regarding COVID-19 from the university. In terms of social media marketing and email marketing, many practitioners have stated that the latter has a higher ROI and is more effective overall (Kindness, 2023; DeveloperMedia, 2023).

Email marketing has been studied as a tool for strategic persuasion (Thomas et al., 2022). Existing literature has also analyzed email communication in crisis responses. Research conducted by Macnamara (2021) and Adrot and Figueiredo (2013) examined email communication that was used during a crisis through a contextual lens. Macnamara examined email listservs and communication in the crisis communication efforts of one organization. In comparison, Adrot and Figueiredo analyzed the language and messaging that were used. However, these studies did not explore whether email effectively reduced uncertainty.

Research is currently limited when it comes to studying email usage in uncertainty reduction. Rhodes (2008) explored how employees used electronic communication, especially email, to express uncertainty and enact uncertainty reduction techniques. Additionally, Rhodes' study supported the third axiom of URT, which states that "high levels of uncertainty cause an

increase in information-seeking behaviors” (Berger & Calabrese, 1974). However, this was one of only a few studies that have examined emails in uncertainty reduction during a crisis.

Therefore, future research has the opportunity to combine aspects from this study and Rhodes’ research to examine how email communication is used in crisis communication efforts in a university setting to reduce uncertainty as well as to examine how students use email to express uncertainty and enact uncertainty reduction techniques.

### **Conclusion**

This study aimed to provide insights to HBCUs on the effective use of social media to reduce uncertainty about COVID-19 among students. Using a qualitative research design, the researcher conducted 30 interviews with NCAT students and analyzed the content of 96 social media posts from NCAT’s Facebook, Instagram, and Twitter accounts. The study revealed that the perceived effectiveness of the university’s crisis messaging in reducing uncertainties about COVID-19 among students was due to the quality of the information that was communicated, which was characterized as being clear, concise, frequent, and abundant. Findings also affirmed the evidence of previous studies about crisis messaging using concrete and interactive language in tweets. This study also identified that the university’s Twitter, Instagram, and email communications were often used by students to find out information about COVID-19. By analyzing this content, the researcher discovered three themes among NCAT’s social media messaging including *Building Community*, *Education and Awareness*, and *Mitigation Strategies*.

This study adds to the field of crisis communication by providing findings that exclusively focus on HBCUs, as there has been limited research about crisis communication and HBCUs. Insights into how HBCUs can use their credible position with the Black community to provide health updates and information were also established by this study. Though this study

did not solely focus on the COVID-19 vaccine, aspects about how vaccination information was distributed were discussed. From these discussions, the implication that HBCUs are seen as credible and trustworthy sources within the Black community surfaced. Furthermore, the study's findings add to the sociocultural tradition, as they provide evidence of preexisting and shared cultural patterns and social structures created by the Black community, and how the HBCU experience impacted their perspective of COVID-19 and reduced their uncertainty regarding COVID-19-related topics (Craig, 1999).

Additionally, this qualitative case study provided evidence that crisis communication and elements of uncertainty reduction can be executed during different stages of interaction and still successfully reduce uncertainty. This implication surfaced from the findings of this study, illustrating how uncertainty was reduced but did not establish or abide by the different stages of URT outlined by previous studies. Lastly, this study provided HBCUs with insights on specific social media platforms that can be used to provide crisis messaging and effectively reduce uncertainty about a crisis. Instagram and Twitter were established as major platforms that can be used to reduce uncertainty during a crisis. Furthermore, the study demonstrated how students define effective crisis communication messaging in the context of uncertainty reduction during a health crisis. With these insights, HBCUs will be able to enhance their best practices for effective crisis communication efforts and reduce uncertainty among their students during future crises.

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## Appendix

### Appendix A: Screening Survey Questions

1. Are you at least 18 years or older? (Y/N)
2. Are you a current student at or a 2022 graduate of North Carolina A&T State University (NCAT)? *\*Note: A current student is defined as an undergraduate or graduate (Y/N)*
3. Did you attend at least one in-person class at NCAT **OR** commit to attending the university during the spring 2020-2021 academic year (January 2021-May 2021)? (Y/N)  
*\*Note: Committing to the university means sending formal notification to NCAT of your attendance via Aggie Access.*
4. Did you attend NCAT during the fall 2021-2022 academic year (August 2021-December 2021)? (Y/N)
5. What school/college within the university does your major belong to?
6. Did you live in some type of student housing (on or off-campus) spring 2020-2021 academic year (January 2021-May 2021) **OR** during the fall 2021-2022 academic year (August 2021-December 2021)? *\*Note: On-campus housing is defined as housing that is offered by North Carolina A&T State University's Housing and Residences life. Third-party housing or apartments, such as student living, is considered off-campus housing not owned by the university.*  
  
*Off-campus student housing or a student apartment is a form of off-campus housing for college students. Student apartments typically are not owned by the college or university but are available to those who are enrolled in college classes and are generally priced for a per-bed lease (Source: Apartment Guide)*  
  
(Y/N)

7. Please provide your NCAT email address.

## Appendix B: Recruitment Email

Dear NCAT Student:

As a graduate student in the School of Communication and the Arts at Liberty University, I am conducting research as part of a doctoral degree requirement. The purpose of my research is to evaluate if the North Carolina A&T State University's messaging on social media platforms reduced students' uncertainty regarding COVID-19 and to understand which social media platforms tend to be better at reducing students' COVID-19 uncertainties.

I am writing to invite eligible participants to join my study.

Participants must be:

- Be at least 18 years old
- A current student or recent Spring 2022 graduate of North Carolina A&T State University
- Lived in student housing (on or off-campus) during the spring semester of the 2020-2021 academic year **OR** the fall semester of the 2021-2022 academic year
- Attend at least one in-person class at NCAT **OR** commit to attending the university during the spring 2020-2021 academic year (*Note: Committing to the university means sending formal notification to NCAT of your attendance via Aggie Access.*)
- Attended at least one in-person class at NCAT during the fall 2021-2022 academic year

If willing, participants will be asked to take part in an audio- and video-recorded virtual interview. It should take approximately 30-45 minutes to complete the procedure listed. Names and other identifying information, such as an email address, will be requested as part of this study, but the information will remain confidential.

To participate, please click the following link to complete a screening survey and receive further information regarding scheduling an interview:

[https://liberty.co1.qualtrics.com/jfe/form/SV\\_e4Yo0aS2cLtLnue](https://liberty.co1.qualtrics.com/jfe/form/SV_e4Yo0aS2cLtLnue)

A consent document is attached to this email. The consent document contains additional information about my research. If eligible, a second email will be sent with information about scheduling an interview. Once the interview is scheduled, the consent form will also be sent via DocuSign.

The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card.

Sincerely,

Kelsey Armstrong  
Doctoral Candidate

## Appendix C: Recruitment Email Follow-up

Dear NCAT Student:

As a graduate student in the School of Communication and the Arts at Liberty University, I am conducting research as part of a doctoral degree requirement. The purpose of my research is to evaluate if North Carolina A&T State University's messaging on social media platforms reduced students' uncertainty regarding COVID-19 and to understand which social media platforms tend to be better at reducing students' COVID-19 uncertainties. Two weeks ago, you were sent an email inviting you to participate in a research study.

This follow-up email is being sent to remind you to respond by completing the screening survey if you would like to participate and have not already done so.

Participants must be:

- Be at least 18 years old
- A current student or recent Spring 2022 graduate of North Carolina A&T State University
- Lived in student housing (on or off-campus) during the spring semester of the 2020-2021 academic year **OR** the fall semester of the 2021-2022 academic year
- Attend at least one in-person class at NCAT **OR** commit to attending the university during the spring 2020-2021 academic year (*Note: Committing to the university means sending formal notification to NCAT of your attendance via Aggie Access.*)
- Attended at least one in-person class at NCAT during the fall 2021-2022 academic year

Participants, if willing, will be asked to take part in an audio- and video-recorded interview via Zoom (30-45 minutes).

To participate, please click the following link to complete a screening survey and if you are eligible, receive further information regarding scheduling an interview:

[https://liberty.co1.qualtrics.com/jfe/form/SV\\_e4Yo0aS2cLtLnue](https://liberty.co1.qualtrics.com/jfe/form/SV_e4Yo0aS2cLtLnue)

A consent document is attached to this email. Once the interview is scheduled, the consent form will be emailed via DocuSign. The consent document contains additional information about my research. If you are eligible and choose to participate, you must sign the consent document before the interview is able to begin.

The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card.

Sincerely,

Kelsey Armstrong



Doctoral Candidate

## Appendix D: Recruitment Flyer

# HBCUs, COVID-19 and Social Media Study

## Research Participants Needed

The purpose of the research study is to evaluate if HBCU messaging on social media platforms reduced students' uncertainty regarding COVID-19 and to understand which social media platforms tend to be better at reducing students' COVID-19 uncertainties.

Participants will be asked to participate in an audio- and video-recorded interview via Zoom (30-45 minutes).

## Participant eligibility

- 18 years of age or older
- A current student at or 2022 graduate from NCAT
- Lived in student housing Jan. 2021-May 2021 **OR** campus Aug. 2021-December 2021
- Attended at least **ONE** in-person class OR committed to attending NCAT in Jan. 2021- May 2021
- Attended at least **ONE** in-person class Aug. 2021- Dec. 2021

*Undergraduate and Graduate students welcomed are to participate*

## Participant compensation

The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card.



To participate, use the QR code to complete a screening survey

## Appendix E: Recruitment Social Media Captions

### Facebook

**Post 1: ATTENTION Facebook Friends:** I am conducting research as part of the requirements for a doctoral degree at Liberty University. My research aims to evaluate if HBCU messaging on social media platforms reduced students' uncertainty regarding COVID-19 and to understand which social media platforms and messaging tend to be better at reducing students' COVID-19 uncertainties.

To participate, you must meet the following criteria:

- Be at least 18 years old
- A current student or recent Spring 2022 graduate of North Carolina A&T State University
- Lived in student housing (on or off-campus) during the spring semester of the 2020-2021 academic year **OR** the fall semester of the 2021-2022 academic year
- Attend at least one in-person class at NCAT **OR** commit to attending the university during the spring 2020-2021 academic year (*Note: Committing to the university means sending formal notification to NCAT of your attendance via Aggie Access.*)
- Attended at least one in-person class at NCAT during the fall 2021-2022 academic year

Participants, if willing, will be asked to take part in an audio- and video-recorded interview via Zoom (30-45 minutes).

A consent document will be emailed to eligible participants via DocuSign. The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card.

If you would like to participate and meet the study criteria, please click the link below to complete a screening survey.

[https://liberty.co1.qualtrics.com/jfe/form/SV\\_e4Yo0aS2cLtLnue](https://liberty.co1.qualtrics.com/jfe/form/SV_e4Yo0aS2cLtLnue)

If you know anyone who might like to participate and meets the criteria, please share this post with him/her.

If you have any questions, please



#NCAT #researchparticipants #HBCUs

**Post 2:** ATTENTION #NCAT23 #NCAT24 #NCAT22! Did you live in student housing (on- or off-campus) in the spring semester of the 2020-2021 academic year OR the fall semester of the 2021-2022 academic year and had at least one in-person class in 2021? You may be eligible to participate in a research study on how HBCUs use social media to reduce uncertainties of COVID-19.

To confirm eligibility, click here: <https://bit.ly/3sqFPzw>

The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card!  
#NCAT #researchparticipants #HBCUs

### Facebook Groups

Hello, my name is Kelsey Armstrong, and I am conducting research as part of the requirements for a doctoral degree at Liberty University. My research aims to evaluate if HBCU messaging on social media platforms reduced students' uncertainty regarding COVID-19 and to understand which social media platforms and messaging tend to be better at reducing students' COVID-19 uncertainties.

To participate, students must meet the following criteria:

- Be at least 18 years old
- A current student or recent Spring 2022 graduate of North Carolina A&T State University
- Lived in student housing (on or off-campus) during the spring semester of the 2020-2021 academic year **OR** the fall semester of the 2021-2022 academic year
- Attend at least one in-person class at NCAT **OR** commit to attending the university during the spring 2020-2021 academic year (*Note: Committing to the university means sending formal notification to NCAT of your attendance via Aggie Access.*)
- Attended at least one in-person class at NCAT during the fall 2021-2022 academic year

Participants, if willing, will be asked to take part in an audio- and video-recorded interview via Zoom (30-45 minutes).

A consent document will be emailed to eligible participants via DocuSign. The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card.

If you or anyone you know would like to participate and meet the study criteria, please click the link below to complete a screening survey.

[https://liberty.co1.qualtrics.com/jfe/form/SV\\_e4Yo0aS2cLtLnue](https://liberty.co1.qualtrics.com/jfe/form/SV_e4Yo0aS2cLtLnue)

If you have any questions, please

### Direct Message Facebook/Instagram/LinkedIn

Hello, my name is Kelsey Armstrong, and I am conducting research as part of the requirements for a doctoral degree at Liberty University. My research aims to evaluate if HBCU messaging on social media platforms reduced students' uncertainty regarding COVID-19 and to understand which social media platforms and messaging tend to be better at reducing students' COVID-19 uncertainties.

To participate, you must meet the following criteria:

- Be at least 18 years old
- A current student or recent Spring 2022 graduate of North Carolina A&T State University
- Lived in student housing (on or off-campus) during the spring semester of the 2020-2021 academic year **OR** the fall semester of the 2021-2022 academic year
- Attend at least one in-person class at NCAT **OR** commit to attending the university during the spring 2020-2021 academic year (*Note: Committing to the university means sending formal notification to NCAT of your attendance via Aggie Access.*)
- Attended at least one in-person class at NCAT during the fall 2021-2022 academic year

Participants, if willing, will be asked to take part in an audio- and video-recorded interview via Zoom (30-45 minutes).

A consent document will be emailed to eligible participants via DocuSign. The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card.

If you or anyone you know would like to participate and meet the study criteria, please click the link below to complete a screening survey.

[https://liberty.col.qualtrics.com/jfe/form/SV\\_e4Yo0aS2cLtLnue](https://liberty.col.qualtrics.com/jfe/form/SV_e4Yo0aS2cLtLnue)

If you have any questions,



### ***LinkedIn***

**ATTENTION LinkedIn Network:** I am conducting research as part of the requirements for a doctoral degree at Liberty University. My research aims to evaluate if HBCU messaging on social media platforms reduced students' uncertainty regarding COVID-19 and to understand which social media platforms and messaging tend to be better at reducing students' COVID-19 uncertainties.

To participate, you must meet the following criteria:

- Be at least 18 years old
- A current student or recent Spring 2022 graduate of North Carolina A&T State University
- Lived in student housing (on or off-campus) during the spring semester of the 2020-2021 academic year **OR** the fall semester of the 2021-2022 academic year
- Attend at least one in-person class at NCAT **OR** commit to attending the university during the spring 2020-2021 academic year (*Note: Committing to the university means sending formal notification to NCAT of your attendance via Aggie Access.*)
- Attended at least one in-person class at NCAT during the fall 2021-2022 academic year

Participants, if willing, will be asked to take part in an audio and video-recorded interview via


Zoom (30-45 minutes).

A consent document will be emailed to eligible participants via DocuSign. The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card.

If you would like to participate and meet the study criteria, please click the link below to participate in a screening survey.

[https://liberty.co1.qualtrics.com/jfe/form/SV\\_e4Yo0aS2cLtLnue](https://liberty.co1.qualtrics.com/jfe/form/SV_e4Yo0aS2cLtLnue)

Please share my study information if you know anyone who would like to participate and meets the criteria.


If you have any questions, 

### *Twitter*



**POST 1:** Did you attend #NCAT, live in student housing and attended at least one in-person class in 2021? I am conducting a research study on how HBCUs use social media to reduce uncertainties of COVID-19. To confirm eligibility, click here: <https://bit.ly/3sqFPzw>. DM me for more info!

**POST 2:** Are you a student at #NCAT who lived in student housing and had at least one in-person class in 2021? You may be eligible to participate in a study on HBCUs' use of social media to reduce uncertainties of COVID-19. To confirm eligibility, use the link here: <https://bit.ly/3sqFPzw>

### *Instagram*


**POST 1:** Are you a student at #NCAT who lived in student housing (on- or off-campus) in the spring semester of the 2020-2021 academic year **OR** the fall semester of the 2021-2022 academic year and had at least one in-person class in 2021? You may be eligible to participate in a research study on how HBCUs use social media to reduce uncertainties of COVID-19. Hit the link in my bio to complete a screening survey to confirm eligibility. If you have any questions, please contact me via 

The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card!  
#research #researchparticipant #researchparticipants #HBCUs #socialmedia #socialmediastudy

**POST 2:** Are you or your friend a student at #NCAT? Did you all live in student housing (on- or off-campus) in the spring semester of the 2020-2021 academic year **OR** the fall semester of the 2021-2022 academic year and had at least one in-person class in 2021, you may be eligible to participate in a research study on how HB  certainties of COVID-19. Hit the link in my bio to complete a screening survey to confirm eligibility. If you have any questions, please contact me via email at .

The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card!

#research #researchparticipant #researchparticipants #HBCUs #socialmedia #socialmediastudy

**POST 3:** ATTN #NCAT23 #NCAT24 #NCAT22! Did you live in student housing (on- or off-campus) in the spring semester of the 2020-2021 academic year OR the fall semester of the 2021-2022 academic year and had at least one in-person class in 2021? You may be eligible to participate in a research study on how HBCUs use social media to reduce uncertainties of COVID-19. Hit the link in my bio to complete a screening survey to confirm eligibility. If you have any questions, please contact me via 

The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card!

#research #researchparticipant #researchparticipants #HBCUs #socialmedia #socialmediastudy

### Instagram Story

Image: Instagram Story Graphic

Copy: Use the link to complete the screening survey. DM me for more information!

## Appendix F: Recruitment Social Media Graphics

### *Social Media Graphic (Facebook, Instagram, LinkedIn)*



**RESEARCH PARTICIPANTS NEEDED**

**Research study purpose:** To evaluate if HBCU messaging on social media reduced students' uncertainty regarding COVID-19 and to understand which social media platforms tend to be better at reducing students' COVID-19 uncertainties.

**Participant eligibility**

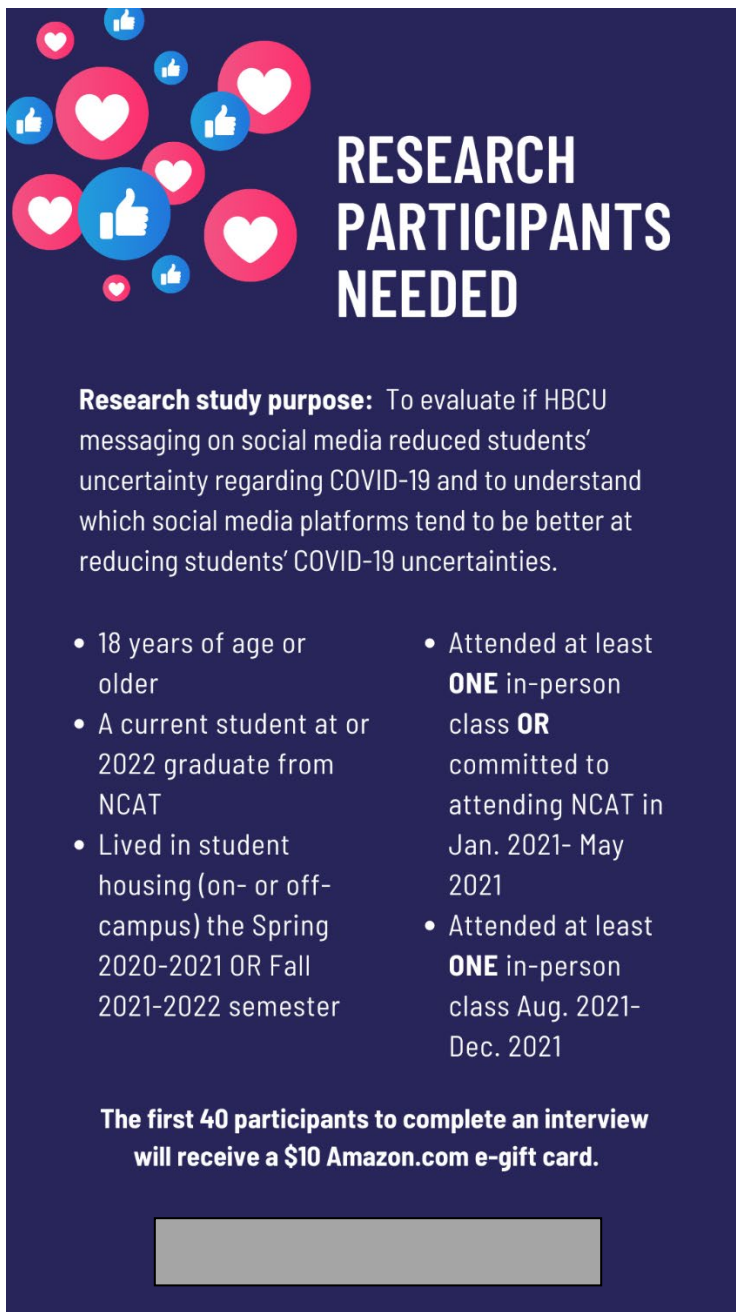
- 18 years of age or older
- A current student at or 2022 graduate from NCAT
- Lived in student housing (on- or off-campus) the Spring 2020-2021 OR Fall 2021-2022 semester
- Attended at least **ONE** in-person class Jan. 2021- May 2021
- Attended at least **ONE** in-person class Aug. 2021-Dec. 2021

*Undergraduate and Graduate students welcomed are to participate*

**The first 35 participants to complete an interview will receive a \$10 Amazon.com e-gift card.**



### *Instagram Story Graphic*




**RESEARCH PARTICIPANTS NEEDED**

**Research study purpose:** To evaluate if HBCU messaging on social media reduced students' uncertainty regarding COVID-19 and to understand which social media platforms tend to be better at reducing students' COVID-19 uncertainties.

- 18 years of age or older
- A current student at or 2022 graduate from NCAT
- Lived in student housing (on- or off-campus) the Spring 2020-2021 OR Fall 2021-2022 semester
- Attended at least **ONE** in-person class **OR** committed to attending NCAT in Jan. 2021- May 2021
- Attended at least **ONE** in-person class Aug. 2021- Dec. 2021

**The first 40 participants to complete an interview will receive a \$10 Amazon.com e-gift card.**





## Appendix G: Visiting Research Application & Flyer



### North Carolina A&T State University Institutional Review Board



### Visiting Researcher Application for Permission to Conduct Human Subjects Research

*Attachments Required: IRB approval, project description or final approved protocol*

#### 1. Principal Investigator (PI) Information

PI Name:	Kelsey Armstrong	Date:	1/5/2023
Project Title:	A Case Study on How HBCUs Use Social Media to Reduce The Uncertainty of COVID-19		
PI Department:	Strategic & Personal Communication	PI Phone:	
PI E-Mail:	A Case Study on How HBCUs Use Social Media to Reduce The Uncertainty of COVID-19		
CO-PI Name:			

#### 2. Person Preparing This Document (If Not the PI)

Name:		Phone:	
E-Mail:			

#### 3. Project Description

Describe the purpose of the study, method for gathering data, and study population you are interested in recruiting at NC A&T State University

The purpose of this study is to analyze crisis communication efforts to understand how HBCUs use social media to deliver crisis communication messaging to students to know how to use social media in crisis communication to reduce uncertainty effectively.

The study is a qualitative study, conducting ssemi-structured interviews and a content analysis. The study population are North Carolina A&T State University students that lived on-campus during the Spring 2020-2021 OR Fall 2021-2022 semester and attend at least one in-person class during the spring semester of the 2020-2021 academic school year and the fall semester of the 2021-2022 academic school year. Participants will be provided a consent form and a \$10 Amazon egift card upon completing the interview.

The researcher will also review the university's social media posts from January 1, 2021, to December 31, 2021, to provide further details into common messages in the universitys posts



**North Carolina A&T State University  
Institutional Review Board**



**Visiting Researcher  
Application for Permission to Conduct Human Subjects Research**

Role of NC A&T State University	
Human subjects	
<input type="checkbox"/> Enrolling <input type="checkbox"/> Participating as Human subjects <input checked="" type="checkbox"/> Consenting Human subjects <input type="checkbox"/> Providing PI contact information <input checked="" type="checkbox"/> Providing human subjects with study information <input type="checkbox"/> Providing PI with contact information	
Private identifiable records, data or specimens	Study Procedures
<input type="checkbox"/> Analyzing <input type="checkbox"/> Obtaining <input checked="" type="checkbox"/> Providing	<input type="checkbox"/> Administering/ Overseeing study procedures <input type="checkbox"/> Participating in study procedures
Contact at NC A&T State University	
<b>Name</b>	
<b>Phone</b>	
<b>Email</b>	
<b>Department</b>	Journalism and Mass Communications
<b>Title</b>	Associate Professor
<b>Project Beginning Date</b>	Associate Professor
<b>Project Ending Date</b>	May 10, 2023
<b>Date Your Institution's IRB Approval Granted</b>	September 21, 2022
<b>Project is funded?</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No
<b>If the project is funded, provide the funding source(s)</b>	
<b>If funded, is NC A&amp;T State University receiving any funding for this project?</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No

**Click here to submit the form**

Revised: 03/09/2020



NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY

Approved  
 Start date  
**IRB Validation Stamp**  
 Area Do not remove.  
 13-Apr-2022  
 End date  
 12-Apr-2023

# HBCUs, COVID-19 and Social Media Study

## Research Participants Needed

The purpose of the research study is to evaluate if HBCU messaging on social media platforms reduced students' uncertainty regarding COVID-19 and to understand which social media platforms tend to be better at reducing students' COVID-19 uncertainties.

Participants will be asked to participate in an audio- and video-recorded interview via Zoom (30-45 minutes).

## Participant eligibility

- 18 years of age or older
- A current student at or 2022 graduate from NCAT Lived on the campus Jan. 2021-May 2021 **OR** campus Aug. 2021-December 2021
- Attended at least **ONE** in-person class Jan. 2021- May 2021
- Attended at least **ONE** in-person class Aug. 2021- Dec. 2021

*Undergraduates and Graduates welcomed are to participate*

## Participant compensation

The first 35 participants to complete an interview will receive a \$10 Amazon.com e-gift card.



To participate, use the QR code to complete a screening survey

### Appendix H: Interview Scheduling Email

Good Morning/Afternoon/Evening,

Thank you for your interest in participating in the HBCU COVID-19 and Social Media study. Please use the link to schedule your interview: <https://calendly.com/hbcus-covid-19-and-social-media-study/researchstudy>.

A consent document will also be sent via DocuSign. The consent document contains additional information about my research. If you are eligible and choose to participate, you will need to sign the consent document and return it to me by the start of the interview.

The first 35 participants to complete an interview will receive a \$10 Amazon.com e-gift card that will be sent upon the participant's completion of an interview.

If you have any further questions, please do not hesitate to contact me via phone at [REDACTED].

Sincerely,  
Kelsey Armstrong  
Doctoral Candidate

### Appendix I: Interview Confirmation Email

Good Morning/Afternoon/Evening:

Thank you again for your interest in the HBCU, COVID-19, & Social Media research study. Your interview time is: [DATE & TIME]

Your meeting information is below:  
[ENTER]

A DocuSign version of the consent form has been sent to you to complete. Please complete the consent form by your interview date and time. Please note that your interview cannot be conducted until the consent form is completed. If you have not received the DocuSign document, please let me know.

The first 35 participants to complete an interview will receive a \$10 Amazon.com e-gift card that will be sent upon the participant's completion of an interview.

If you have any questions, please do not hesitate to contact me via email at [REDACTED].

Sincerely,  
Kelsey Armstrong

Doctoral Candidate

### **Appendix J: Interview Questions**

1. What is your current classification? (freshman, sophomore, junior, senior, graduate student)
2. What was your classification during the spring semester of the 2020-2021 academic year?
3. What school/college does your major belong to within the university?
4. What is your ethnicity?
5. What is your gender identity?
6. How long have you attended the university?
7. What type of housing did you live in?
8. What are your feelings toward COVID-19?
9. What are your biggest feelings/emotions towards COVID-19 and attending classes in-person?
10. What are your biggest feelings/emotions towards COVID-19 and living in student housing (on- or off-campus)?
11. Do you feel that the HBCU experience or culture has impacted your feeling/emotions of COVID-19? Why or Why not?
12. What are your thoughts on using social media to receive news and information?
13. Have you looked to social media to receive information regarding COVID-19 from your university? If so, which channels?

14. How did the university's posts on social media make you feel about COVID-19 and student housing (on- or off-campus)? Please state the social media platform the information was posted.
15. How did the university's posts on social media make you feel about COVID-19 and attending in-person classes? Please state the social media platform that information was posted.
16. In your opinion, did your university effectively communicate essential information about COVID-19 during the spring semester of the 2020-2021 academic year? If so, what aspects made the university's messaging effective? If not, what could the university have done to communicate better?
17. In your opinion, did your university effectively communicate essential information about COVID-19 during the fall semester of the 2021-2022 academic year? If so, what aspects made the university's messaging effective? If not, what could the university have done to communicate better?

## Appendix K: Consent Form

### Consent

**Title of the Project:** A Case Study on How HBCUs use Social Media to Reduce the Uncertainty of COVID-19

**Principal Investigator:** Kelsey Armstrong, Doctoral Candidate, Liberty University

#### Invitation to be part of a research study

You are invited to participate in a research study. To participate, you must be at least 18 years old; a current student at North Carolina A&T State University (NCAT) OR a 2022 graduate from NCAT; lived in student housing (on- or off-campus), during the spring semester of the 2020-2021 academic year OR the fall semester of the 2021-2022 academic year; attended at least one in-person class OR committed to attending the university during the spring semester of the 2020-2021 academic year; and attended at least one in-person class during the fall semester of the 2021-2022 academic year.

Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

#### What is the study about and why is it being done?

The purpose of the study is to study crisis communication messaging to understand how Historically Black Colleges and Universities (HBCUs) use social media to provide information to students to know how to use social media during a crisis to reduce feelings of uncertainty and anxiety effectively.

#### What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following things:

1. Participate in an audio- and video-recorded, one-on-one interview (30-45 minutes). The session will be recorded using Zoom.

#### How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include (1) increasing public knowledge on the topic of the student perspective on an HBCU's use of social media in crisis communication; (2) increased knowledge on how social media can be used to reduce the uncertainty of students during a crisis; and (3) increased knowledge on the student perspective of how social media can be used to provide information regarding COVID-19.

#### What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would

encounter in everyday life.

#### **How will personal information be protected?**

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records. Published reports will not include any information that will make it possible to identify a subject.

- Participant responses will be kept confidential by using pseudonyms. Interviews will be conducted online. The interviews will be conducted in a location where others will not easily overhear the conversation and will wear headphones.
- Data will be stored on a password-locked computer and external hard drive that will be locked in a document case. After three years, all electronic records will be deleted, and printed transcripts will be shredded.
- Interviews will be recorded and transcribed. Recordings will be stored on a password-locked computer for three years and then erased. Only the researcher will have access to these recordings.

#### **How will you be compensated for being part of the study?**

The first 40 participants who complete the student will receive a \$10 Amazon.com electronic gift card (e-gift card). Participants will not be required to send a separate email to receive compensation. The first 40 participants to complete an interview will be sent a gift card through the Amazon website upon completion of their interview. Participants will be asked to confirm that they have received the gift card. Once the prize is sent, and confirmation is received that the participant has received the gift card, the emails will be cleared and deleted.

#### **Is study participation voluntary?**

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

#### **What should you do if you decide to withdraw from the study?**

If you choose to withdraw from the study, please contact the researcher at the email address included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

#### **Whom do you contact if you have questions or concerns about the study?**

The researcher conducting this study is [REDACTED]. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [REDACTED]. You may also contact the researcher's faculty sponsor, [REDACTED] at [REDACTED].

#### **Whom do you contact if you have questions about your rights as a research participant?**

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the [REDACTED].



\_\_\_\_\_ or email at \_\_\_\_\_

*Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.*

### **Your Consent**

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

*I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.*

☐ The researcher has my permission to audio- and video-record me as part of my participation in this study.

\_\_\_\_\_  
Printed Subject Name

\_\_\_\_\_  
Signature & Date