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Collaborative Leadership Skills and Competencies in Emergency Management and Resilience: Lessons and Implications from the Response to the Covid-19 Pandemic

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COLLABORATIVE LEADERSHIP SKILLS AND COMPETENCIES IN EMERGENCY
MANAGEMENT AND RESILIENCE: LESSONS AND IMPLICATIONS FROM THE
RESPONSE TO THE COVID-19 PANDEMIC

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ABSTRACT

COLLABORATIVE LEADERSHIP SKILLS AND COMPETENCIES IN EMERGENCY MANAGEMENT AND RESILIENCE: LESSONS AND IMPLICATIONS FROM THE RESPONSE TO THE COVID-19 PANDEMIC

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Old Dominion University, 2023
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Collaborative leadership is a critical component in emergency management and resilience. Although cross-sector leadership is considered compulsory in the management of many disasters, the skills and competencies for successful execution of collaborative leadership approaches in emergency management and resilience are still largely unknown, especially as it pertains to the COVID-19 pandemic response. The perspectives of emergency management and resilience leaders may fill in this research gap.

This qualitative study relies on semi-structured interviews to explore the needed skills and competencies for collaborative leadership in emergency management and resilience during the response to the COVID-19 pandemic in the South-Atlantic states. The study relies on Transformational Leadership and Integrative Public Leadership theories to answer the research questions. This study employs qualitative methodology to gain in-depth information of emergency management and resilience leaders' stories. The researcher used a thematic analysis approach to categorize the identified skills and competencies from the literature and the generated themes from the qualitative data from interview participants.

These findings contribute to public administration by broadening the leadership concept through the exploration of collaborative leadership skills and competencies in emergency management and resilience. State-level emergency management and resilience leaders are stewards of our health and safety, tax dollars, and trust, putting them at the center of scholarly

conversations about the COVID-19 pandemic and building effective collaborative teams. The study has implications for practitioners and theorists alike.

Keywords: Collaborative Leadership, Emergency Management, Resilience, the COVID-19 Pandemic, Transformational Leadership, and Integrative Public Leadership.

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This dissertation is dedicated to the strongest person I know: Me. Special dedication to my parents who have been my constant source of inspiration.

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COLLABORATIVE LEADERSHIP SKILLS AND COMPETENCIES IN EMERGENCY MANAGEMENT AND RESILIENCE: LESSONS AND IMPLICATIONS FROM THE RESPONSE TO THE COVID-19 PANDEMIC

CHAPTER I INTRODUCTION

Collaborative leaders in emergency management and resilience must overcome inter-organizational barriers and intra-organizational silos (VanVactor, 2012). This inquiry examines emergency management and resilience leaders' perspectives during the response phase of the COVID-19 pandemic. Exploring collaborative leadership skills and competencies in emergency management and resilience will help leaders be more effective in their emergency management and resilience roles during the response phase of emergency management.¹

A brief overview of the emergency management phases provides context for the response phase.² Prevention includes proactive efforts such as community restoration and rehabilitation after a previous emergency; mitigation entails long-term plans to prevent or lessen the impact of future disasters; the response phase allows for visionary and decisive leaders to mobilize scarce resources in mitigation efforts; the recovery phase is marked by adjustments to unforeseen change and adaptation to withstand and lead the change such as in post-disaster environments. Although there are distinct phases in an emergency management cycle, success or failure in one can impact subsequent phases. Not all phases appear in all disasters (such as the failure of mitigation strategy during Hurricane Katrina).

¹ Emergency management occurs in five phases as described by FEMA: prevention, mitigation, preparedness, response, and recovery .

² This research considers emergency management and resilience as one domain in dealing with emergencies and crises.

Resilience approaches have been raised within the response phase of emergency management. During the COVID-19 pandemic, resilience is a vital way to assess the response system (Rai et al., 2021). Emergency managers aim for resilience, which is the ability to preserve the welfare of a community by making tradeoffs during rapidly changing circumstances (Yusuf et al., 2018). Because there are many stakeholders within a community, they will naturally have to work together to respond to and recover from the shock of an emergency or crisis. State and local governments, acknowledging this need, have established resilience positions and hired Chief Resilience Officers, resilience strategists, resilience planners, and resilience analysts. In fact, emergency management and resilience are combined as one holistic approach in leading during different types of emergencies.

Ross (2013) defined adaptive capacities as “the strengths a community has for disaster response” (p. 3). Adaptive processes that engage communities make for a resilient response (Ross, 2013). The adaptive response is characterized by four attributes: improvisation, coordination, engagement of the community, and endurance. Within the focus of this study context – the state-level response phase of the COVID-19 pandemic– the resilience functions were led collaboratively by members of state agencies such as departments of health, emergency management, social services, and resilience and sustainability.

However, despite the government’s acknowledgment of the necessity of being collaborative in leading emergencies and disasters, collaborative leadership remains ambiguous. It is the goal of this study to determine effective actions of the collaborative leaders in the response phase of future disasters after reflecting on their past emergency responses in order to extrapolate what may or may not work within the response phase of future disasters, and to develop a conceptual framework of collaborative leadership within emergency management and

resilience. Of special interest are the useful skills and competencies in the contexts mentioned earlier.

Van Wart (2017) differentiates leadership from management. Leadership is “learned characteristics of leader performance” (p. 374) such as analytical skills. Leadership, as opposed to management, demonstrates competencies or “discrete abilities to accomplish a job, regardless of traits, skills, or behaviors” (p. 324). Problem-solving is one example of leadership competency. Management is “discrete abilities...for accomplish[ing] a job” (Van Wart, 2017). Some of these abilities are intuitive skills such as how to deal with difficult employees. In addition to the contrast between learned and intuitive abilities, management is differentiated from leadership as the latter focuses on competent individuals rather than broad oversight of systems.

Because emergency management functions are separated into phases, each collaborative leadership remains ambiguous phase requires a unique blend of both leadership and managerial competence. Currently, there are deficiencies in the literature regarding collaborative leadership skills and competencies in emergency management and resilience for leading during disasters such as the COVID-19 pandemic. Koliba et al. (2011), in their study of Hurricane Katrina, note “a pervasive confusion over trade-offs between accountability types emerging from crises.” (p. 210). Multiple failures of accountability in markets, government, and administrative matters compromised the response phase during Hurricane Katrina.

The Katrina disaster was not an isolated failure of collaborative management. During the COVID-19 pandemic, conflicting statements about personal protective equipment (PPE) showed gaps in emergency management and resilience domains. Each disaster tells a different story and can improve emergency management and resilience strategies going forward. The COVID-19

pandemic has made it clear that even when the entire world finds itself confronted with a disaster, this does not lessen the difficulty of effective leadership. Emergency management and resilience leaders play a pivotal role in maintaining public trust during the response to the COVID-19 pandemic. For example, they order an evacuation, conduct outreach activities to inform the public, and coordinate with other cities'/states' departments to locate and share resources and equipment in responding to the COVID-19 pandemic (McEntire, 2018). According to Uhl-Bien (2021), "Leadership can be, literally, the difference between life and death" (p. 1). Disasters and the COVID-19 pandemic require collaborative approaches to ensure significant results for the public. Collaborative work enhances emergency management's effective response and disaster recovery (Chen et al., 2013; Lai et al., 2017; Turrini et al., 2020).

The rest of this research is organized as follows. First, a review of the leadership literature in emergency management and resilience while looking at collaborative leadership in different contexts is provided. Secondly, a discussion of a conceptual framework for answering the research questions follows. Thirdly, the discussion includes an identification of the research design, data collection, and the analysis process. Finally, an explanation of the study's findings, observations, significance, limitations, and conclusion are expressed.

RESEARCH PROBLEM

Emergency management and resilience leaders need to be able to delegate, adapt, and practice short-term mitigation strategies collaboratively. The research problem is concerned with understanding the perspective of these resilience and emergency management professionals on the execution of the aforementioned leadership tasks in a collaborative setting. By exploring the

skills and competencies that make leaders effective, their recommendations and private opinions will improve the general condition of emergency management and resilience leadership.

Emergency management and resilience leaders have learned many lessons from their response to the pandemic that will have implications for post-COVID-19 environments and other future pandemics. The problem is translating this situational knowledge into the knowledge of leadership itself in order to improve future outcomes. The researcher approach highlights what leaders' responses worked, what did not, and why. Understanding the perspectives of the emergency management and resilience leaders during their response to the COVID-19 pandemic will support the exploration of the needed collaborative leadership skills and competencies.

Scholars of collaborative research cannot take progress for granted. Hurricane Katrina and the COVID-19 pandemic were both characterized by political confusion and a lack of response in place at their onset. The chain of command and distribution of responsibility for Hurricane Katrina was much clearer. The response to the COVID-19 pandemic brought in multiple agency heads and Secretaries, whereas in Katrina federal response was on FEMA. Additionally, Katrina's impact was limited to a couple of states, where COVID-19 had a nationwide and global impact in addition to the state-level.

The leaders of both disasters – Michael Brown in 2005 and Anthony Fauci in 2019 – were existing agency professionals. Although Anthony Fauci had been with the National Institute of Health (NIH) during H.I.V., SARS, avian influenza, swine flu, Zika, and Ebola, it rapidly became clear that his contentious relationship with the President made his tenure as the nation's chief doctor very problematic (Godlee and Silberner, 2020). How could collaborative leadership be assured if the president and the nation's chief doctor were always amending one another's statements and talking at cross-purposes? Even an appointment to a high-level

leadership emergency management and resilience position does not necessarily mean being *able to lead*.

RESEARCH PURPOSE

The COVID-19 pandemic has revealed the significant challenges facing public leaders in working collaboratively. The ability to lead collaboratively during emergencies is becoming a fundamental aspect of emergency management and resilience leadership. However, we do not know the leadership skills and competencies for successful collaborative emergency management for responses to the COVID-19 pandemic. Areas of interest include the leaders' lessons learned and challenges from the response phase as well as their implications for collaborative leadership in emergency management and resilience. The researcher seeks a clear understanding of collaborative leadership skills and competencies, collaboration practices during emergencies, and the functional planning and strategies for emergency management and resilience, as experienced during the COVID-19 pandemic. Important questions remain such as what makes an effective collaborative leadership style for the COVID-19 pandemic and what leaders should learn regarding the response phase. The implications of their perspectives will result in changes to how emergency management and resilience leaders perceive and execute their roles.

The study aims to explore the needed collaborative leadership skills and competencies for emergency management and resilience leaders in leading during an incident such as during the response to the COVID-19 pandemic to fill the research gap. Emergency management and resilience leaders assess disasters, write disaster mitigation and response plans, coordinate for assistance and supplies to the community, and lead the response to the disasters (McEntire,

2018). Collaborative leadership in emergency management and resilience effectively plans, coordinates, and leads during the response to the COVID-19 pandemic. The collaborative leadership approach to the COVID-19 pandemic response by emergency management and resilience professionals will be the focus of this study. To aid practitioners in emergency management and resilience, this research further seeks to identify the lessons from emergency management and resilience leaders in responding to the COVID-19 pandemic and the implications for leading in a future pandemic environment. By relying on interviews, this study records the practical judgments of emergency management and resilience leaders in order to improve their work. As a secondary consequence, this exploratory study allows leaders to benefit from each other's perspectives as ideas emerge from the interviews.

RESEARCH QUESTION

In order to enable leaders to adapt and cope more quickly in the face of crises, one imperative that exists is a clear understanding of collaborative leadership skills and competencies needed in emergency management and resilience domain such as during the response to an unprecedented pandemic. The research seeks to explore what the collaborative leadership skills and competencies of emergency management and resilience leaders look like in the COVID-19 pandemic context. In doing so, the researcher answers the research question: *What were the collaborative leadership skills and competencies used by emergency management and resilience professionals during the COVID-19 pandemic response?* To specifically hone in on the COVID-19 pandemic context, additional questions posed are: (1) *How have these leadership skills and competencies changed as a result of the COVID-19 pandemic?* (2) *What are the implications and*

the lessons learned from experiences with the COVID-19 pandemic for collaborative leadership in emergency management and resilience?

This study explores the lived experience of collaborative leaders during the response phase of the COVID-19 pandemic. The findings will improve understanding of the essential collaborative leadership skills and competencies necessary to effectively lead through future pandemics. The research begins by reviewing the current literature and delineating the identified leadership competencies and skills for emergency management and resilience leaders in the literature. However, there is a deficiency in the literature of collaborative leadership in emergency management and resilience during the COVID-19 pandemic. The research questions above will answer public administration's call for more research attention on broader leadership fields (Van Wart and Kapucu, 2011; Crosby and Bryson, 2018; Smith et al., 2018).

RATIONALE

The rationale behind this exploration is to improve the understanding of scholars and practitioners in emergency management and resilience about the best practices and associated skills and competencies for collaborative leaders. The COVID-19 pandemic became a stress test for effective leadership strategies and a Waterloo for those leaders who could not adapt or innovate. Collaborative leaders have been paid minimal attention in the literature, and the current study builds a dialogue about the nature of successful collaborative leadership within the major crisis of our age. These senior leaders, some of whom brought thirty years of emergency management and resilience experience, were willing to pass their stories, mistakes, and lessons on to future leaders. Their story is one of rapid change. In order to protect their communities, the state leaders in this study adapted their leadership styles, work habits, and tactical objectives as

they overcame their constraints. Their soft skills, including effective communication, listening, and problem-solving, enabled them to thrive in an unfamiliar landscape, and this has implications for the larger corpus of public administration.

SOUTH-ATLANTIC STATES AND CONTEXTS

This study also considers how the state-level political context affected emergency management and resilience professionals. The South-Atlantic region comprises nine distinct political regions: The District of Columbia [D.C.], Virginia, West Virginia, Florida, Georgia, Maryland, Delaware, North Carolina, and South Carolina. Each has its own complex political environment, some of which were quite polarized. In March 2020, governors led the COVID-19 response in the eight states, while D.C. was led by Muriel Bowser, its mayor, who acted in the same executive capacity. These governors aligned with their constituents' political priorities vis a vis the pandemic response. Some emergency management and resilience leaders found challenges at the state level while others, who felt indifferent to politics or were otherwise insulated, could ignore state political priorities and concentrate on deploying their own technical skill. In order to contextualize the interviews, the states' political context during the early response to the COVID-19 pandemic in 2020, including the party affiliation of the governor and information about the lifting of restrictions.

Three states had divided legislatures (Virginia, Maryland, and North Carolina), three were under GOP control (West Virginia, Georgia, and South Carolina), and two were democrat-led (Delaware, Florida). D.C. was unaffiliated. State governors represented both major parties. Although the scope of the study does not fully map the influence of state politics on the COVID-19 pandemic response, the push and pull between emergency management and resilience leaders

who need resources, and the state governments charged with granting or withholding said resources, is likely to influence outcomes – politics is sometimes the art of the possible. Data from this study shows each South-Atlantic state’s emergency management and resilience organizational life and context during the response phase. The background in this section helped to determine the activities and responses available to leaders.

OVERVIEW OF THE STUDY

Chapter one introduces the study, explaining the research problem, purpose, questions, and rationale. Chapter two is the literature review and conceptual framework, which summarizes the leadership skills and competencies from the literature. Chapter three discusses methodology. It expresses the data collection and analysis processes. Chapter four presents the findings and answers the three research questions. Chapter five summarizes the key observations of findings, the research recommendations, and limitations.

CHAPTER II

LITERATURE REVIEW

THE TIMELINE OF PREVIOUS EMERGENCIES AND THE IMPORTANCE OF COLLABORATION

The response to the COVID-19 pandemic was informed by the disasters that came before. The integrative framework that emergency management and resilience leaders found in 2020 was more a product of previous threats – terror attacks, hurricanes, and fires – than it was informed by any pandemic (Comfort and Kapucu, 2006). Not only was the integrative framework built on terror responses, so were the experiences of the cross-sector partners. The novelty of the COVID-19 pandemic necessitated changes in understanding. Each of the century's disasters had a role to play in the formation of the transformational and integrative public leadership style of pandemic managers.

The response to 9/11 involved multiple levels of government, sectors, and institutions in new relationships and interdependencies (Comfort and Kapucu, 2006). A major criticism of the local response was directed toward the City of New York Mayor's Office of Emergency Management. The site was located in the attack zone despite having been attacked in 1993. The criticism has implications for continuity of operations. Physical sites need to be chosen carefully during a disaster, and disruptions to logistics slow down recovery. There was no collaborative framework in place to align the police and firefighters' roles. Perhaps the most enduring tragedy of the response is the lack of attention to the physical safety and mental hygiene of disaster workers. The setbacks during the 9/11 response happened during the tenure of senior state leaders, some of whom had thirty years of experience in emergency management and resilience. Emergency management leaders relearned the importance of imagination and initiative. FEMA

was also reminded about bad faith actors in the recovery process, which highlighted and underappreciated aspect of partnership: vetting private groups. For instance, a World Trade Center Survivors' Network member, Alicia Esteve Head, was found to be perpetrating a hoax to play on others' sympathies. Her hoax became the subject of a book entitled *The Woman who Was not There*.

The response to Hurricane Katrina was widely criticized for dysfunctional or non-existent collaboration at the national, regional, and local levels. A report by the 109th Congress cited four main factors: despite long-term warnings, government officials did not follow resilience practices; officials rushed decision making once landfall was made; coordination systems failed to support a robust response; a lack of effective leadership (Committee on Homeland Security and Governmental Affairs, 2006, p. 585). Wasting of resources was also a concern. The 2006 Post-Katrina Emergency Management Reform Act, changed the qualifications for senior FEMA leadership positions, requiring knowledge of both emergency management and homeland security. Senior leaders were to have not less than five years of executive leadership and management experience in the public or private sector (Bea et al., 2003). Some of the provisions from this Act support the emergency response planning efforts as well as making sure to meet the needs of individuals with disabilities. COVID-19 absolutely improved upon the Hurricane Katrina response. Capable and experienced emergency management professionals were in place before the crisis and in many cases, their strategic partnerships were already formed. A robust technological framework supported the integration of partners.

Disasters cannot usually be prevented in their entirety, modeled completely, or managed perfectly. However, skilled and competent emergency management and resilience leaders seek to improve incrementally. In a report by the National Institute of Standards and Technology (NIST,

2022) on 2018's Camp Fire, California Fire Chief Steven Hawks admitted that his goal was not to prevent wildfires but to "live with and work together to mitigate them." In 2018, the state of California failed to successfully surveil Pacific Electric – the proximate cause of the fire – and the company was eventually implicated in nearly one hundred deaths. All mentioned emergencies – the 9/11 Attack, Hurricane Katrina, and Camp Fire– showed that the lack of collaborative effort plays a critical role in an emergency response.

The brief review of failures in crisis management makes clear that a lack of leadership, an emergency management system, or a system of communication and collaboration invites institutional failure. The public administration literature tends to discuss the collaborative emergency response and how effectiveness is aided by the right skills and competencies of collaborative leadership. Fortunately, emergency management and resilience leaders largely succeeded during the COVID-19 pandemic. The following sections review the literature on emergency management and resilience, leadership, and practices during previous emergency responses.

LEADERSHIP SKILLS AND COMPETENCIES

A review of the literature indicates numerous leadership skills and competencies that benefit emergency management managers and leaders. Leadership roles are crucial not only within routine operations but also during emergencies. Scholars find broad agreement on certain important leadership skills and competencies likely to positively influence outcomes, although there is not complete consensus.

Demiroz and Kapucu (2012) identified different leadership competencies for catastrophic disasters and extreme events. Foremost are cooperation with other stakeholders, flexibility in

decision-making and operations, adaptability to the environment, and effective communication with other stakeholders and the public are the most necessary leadership competencies (Demiroz and Kapucu, 2012). Van Wart and Kapucu (2012) highlighted some of the same competencies as Demiroz and Kapucu (e.g., flexibility, adaptability, and communication). However, Van Wart and Kapucu provided a less rigid framework for leadership qualities that depend upon situational demands. Their results showed a number of competencies based on three crisis demands: “calm but strong,” “pragmatic,” and “coordination and reorganization.” Each of these categories requires different attitudes in leadership ranging from decisiveness to accountability, to networking. The emphasis on different attitudes changes according to the constraints.

Kapucu (2011), is principally concerned with education in the emergency management field. The interdisciplinary approach of this study does not make a clear separation between leadership and managerial techniques; “a strong orientation towards collaboration and networking” is facilitated by technical expertise (Kapucu, 2011, p. 501). The core competencies in emergency management are goals clarity, technology; communication and analytical skills; effective networking, coordination, partnerships, and collaboration; environmental and community-sensitive practices; all-hazards, a holistic, proactive approach to emergency situations; knowledge, training, and experience-based critical decision making; horizontal, egalitarian, and trustful relationships; and role-oriented through flexible structures, operations, and thinking (Kapucu, 2011). Those competencies are helpful for emergency managers in better tackling emergencies.

If the preceding authors emphasize leadership as a product of virtue and personal ability, Ross (2013) placed leadership outside of the individual and into the networks they inhabit. These relational aspects include various forms of analysis, coordination, and persuasion. Caro (2016)

expanded Ross' vision of community to a multinational level that matches the scale of the COVID-19 pandemic. Caro (2016) suggested that the twelve major leadership capacities transcend cultures. Leadership qualities like transformational skills, relational capital, compassion, strategic foresight, and authenticity earn respect for a collaborative leader where otherwise the partners would not otherwise agree on much. A good leader is a master of cultural rhetoric.

One study targeted senior executive service members to understand the link between collaboration and leadership performance, and found that interpersonal skills and strategic leadership are essential skills in leaders' collaboration due to their diversity (O'Leary et al., 2012). Strategic leadership entails leadership empowerment, critical thinking, creating approaches to problem-solving and facilitative leadership that will assist individuals in adapting in any emergencies (O'Leary et al., 2012). Some of the identified skills that will promote collaborative leadership approach in emergency management and resilience include reliability, open-mindedness, tolerance, professional ethics, and flexibility.

COLLABORATIVE LEADERSHIP IN SUCCESSFUL AND UNSUCCESSFUL EMERGENCY MANAGEMENT AND RESILIENCE

Emergency management and resilience professionals are a class of professionals who are tasked with the responsibility of planning and leading the response to manmade and natural disasters. Successful emergency management and resilience depend on an appropriate vision of leadership. For Moe (2012), successful implementation of the managing process of resiliency depends on the effectiveness of leaders which relies on vision. In his study of the Arizona Division of Emergency Management (ADEM)'s emergency management plan, Moe showed that

an inclusive plan may still fail due to a lack of direction. Moe further recommended a framework of environmental and emergency leadership for building resilience that looked at leaders' activities alongside the activities of the resilience framework itself (Moe, 2012).

Successful collaborative leadership entails the ability of bringing together diverse stakeholders to ensure effective and collaborative emergency management and resilience. However, bringing diverse stakeholders and motivating them into a shared vision is a critical role of the Chief Resilience Officers (CROs) (Michell, 2016). Michell considered that innovation and relationship building of CROs to be "vital". Through effective communication, the CRO ensures efficiency by reducing duplication and promoting synergy (Berkowitz, 2014; Michell, 2016).

Moreover, Khunwishit et al. (2018) measured disaster resilience leadership at the local government level using seven abilities. Four of these abilities were relevant to collaborative leadership in emergency management and resilience, including inspiring, influencing, and enlisting stakeholders; working and coordinating with multiple sectors and disciplines; being willing to experiment, pursue new ideas, and take risks; and communicating effectively and engaging stakeholders. The skills, abilities, and competence described in the literature would apply to a range of professionals functioning in emergency management and resilience such as in environmental management, human services, and public health who were collaborators with the emergency management professional during the COVID-19 pandemic.

Decision-making is the logical endpoint of the deliberative process for emergency management and resilience leaders. Mahmud et al. (2020) examined the leadership failures during the Aceh Tsunami Disaster (Indonesia). Although the disaster response seemed robust, all was not well. The Indonesia Country Report on the Aceh Tsunami reported leadership incompetence, especially poor coordination of tasks and resource inefficiency. The national

government could not flexibly address the immediate relief needs in Aceh due to the region's remoteness. Two major mismatches between leadership theory and reality were noted: lack of effective communication and inability to coordinate resources at all levels. Leadership in disaster management demands top-notch preparedness, mitigation measures, and skills in crisis communication. Disruptions in communication must be overcome as soon as possible; and all entities involved in disaster management must know their roles. Comfort (2007) argued that failure of the hurricane Katrina was not a lack of communication but rather an underappreciation of the risk proposed by the storm.

Lack of communication during a response to an emergency – such as the 9/11 World Trade Center attacks in New York – hinders effective decision making (Kapucu, 2006). During an emergency, collaborators must receive timely information in order to complete their tasks (Kapucu et al., 2010). Decision-making derived from horizontal relationships between leaders ensures that this is a robust decision rather than one (flawed) point of view. To ensure a whole-of-community approach, collaborative leaders in emergency management and resilience must communicate vertically across levels of government and horizontally across agencies and across sectors such as business, nonprofit, and civil society. Effective communication supports prudent community-centered decision-making (Eller et al., 2018; Kapucu, 2011; Sobelson et al., 2015; Yusuf et al., 2020).

Waugh and Streib (2006) studied incompetent leadership in the response phase of an emergency. These include, but are not limited to, an inflexible leadership style, lack of preparation, not being savvy about important communication networks, and poor or indifferent approaches to interpersonal skills. Waugh and Streib revealed how the impact of Hurricane Katrina was worsened by incompetent leadership.

Timothy (2015) focused on the characteristics of successful collaborative leaders who are able to communicate, negotiate, direct, analyze risks, think strategically, and build relationships. Another study by Chang and Wang (2021) derived four collaborative competencies from a Taiwanese emergency management context: emergency management knowledge brokerage (an intermediary between leaders and their constituents, especially one who acts in an information-building capacity), leadership and decision making, resource management, and team building and management (Chang and Wang, 2021).

Both natural and manmade disasters can be mitigated if leaders are willing to abandon approaches that do not work. Tyler and Sadiq (2019) focused on the contrast between what leaders *should* do and their actual course of action. Oftentimes there is no trace of agile decision-making from leaders. It is as if that appropriate shared vision mentioned above (Moe, 2012; Michell, 2016), becomes a fixation that prevents them from addressing necessary changes. Leaders need to flexibly mobilize resources, formulate policies and related procedures, scale programs, and be able to develop collaborative networks (Tyler and Sadiq, 2019).

The elements of collaborative leadership require education and training. Longenecker and Insch (2018) further argued that organizations should have formal leadership training and educational opportunities to fast-track leadership effectiveness. Longenecker and Insch find a relationship between the level of education and subsequent performance on the local emergency managers' scores on the Watson-Glaser Critical Thinking Appraisal (WGCTA) (Peerbolte and Collins, 2013). As a result, education and practice-based experience helped the local emergency managers to strengthen their critical thinking skills with potentially life-saving results.

COLLABORATIVE LEADERSHIP

When peers interact as a result of inter-agency collaboration, they will manage natural and manmade disasters using the skills, competencies, and experiences they bring. Effective leadership contributes to collaborative contexts in generating effective outcomes (Huxham and Vangen, 2000). The collaborative relationship, if staged correctly, and with proper attention to channels of communication, will help leaders thrive. Collaborative leaders must be good listeners, excellent communicators, and capable of working well with people (O’Leary et al., 2012). Significantly, effective collaboration entails the understanding of how leaders from different systems work together towards a common goal. Leaders in a collaborative context motivate and energize stakeholders to foster creative solutions, whether the event is terrorism, natural disaster, or technological failure such as a blackout (Waugh and Streib, 2006).

One example of a policy framework improved by attentive listening was the African American Men Project in Minneapolis-St. Paul (Crosby and Bryson, 2005a). The project began from an informal dialogue between two Minnesota bureaucrats. They launched an inquiry into the conditions holding back populations from sharing in the prosperity around them. Attentive listening asks *why* patterns prevail in data, which has definite implications for emergency management and resilience. Crosby and Bryson’s study focused on leadership for a common good framework, which entails the relationship between leadership capabilities and policy change cycles. This framework supports collaborative leadership and the importance of stakeholders’ involvement in collaborative endeavors. The African American Men Project was a public works partnership between the county planning director and the elected commissioners in the Minneapolis-St. Paul metropolitan area. This partnership improved responsiveness to the life-threatening problems facing African American men.

The African-American Men Project gathered data and impressions through the use of forums. Crosby and Bryson (2005) define forums as a place where “stakeholders consider differing interpretations of public problems and evaluate potential solutions” (p.184). These in-person fora include diverse stakeholders that range from neighbors of the population to specialized task forces. Wisely designing forums, successfully navigating the policy cycle, and exercising leadership capabilities are the major elements of collaborative leadership (Crosby and Bryson, 2005). The interactions through forums could be developed through emergency management networks and relationships whereby leaders and workers from different emergency agencies can share strategies and knowledge as seen in the African American Project.

Plaček et al. (2020), in a study from the Czech Republic, identified differences in interaction behavior among municipal leaders that contributed to passivism and activism during the COVID-19 pandemic. Non-adaptive – passive – strategies were exhibited by leaders who are waiting for the central government to assist, whereas other managers displayed proactive adaptive behavior. In the case of passive leadership, municipalities could not overcome managerial conflict, imbalances in the budget, and other legal and administrative challenges. This was a function of shifting responsibility to the central government rather than dealing with issues directly. Interactions throughout a collaborative approach can minimize challenges during an emergency. This includes supporting active processes through relationship building and sharing of knowledge and resources. During the response to the COVID-19 pandemic, as in other disasters, emergency management and resilience leadership must be an active process.

Poor communication is a common failure of collaborative leadership interactions in both manmade and natural disasters (Waugh and Streib, 2006; Simo and Bies, 2007; Koliba et al., 2011; Mahmud et al., 2020). Likewise, Mahmud et al. (2020) found that insufficient execution of

crisis communication was caused by incompetent leaders. The study identified that cooperation with other stakeholders, flexibility in decision-making and operations, adaptability to disaster conditions, and effective communication with other stakeholders and the public are the most necessary leadership competencies in disaster contexts. Incompetent leadership creates redundancies; subordinates, not knowing what their peers are doing, may waste time duplicating tasks. By enhancing information transfer, mutual understanding will emerge among collaborative partners – or at least make them more efficient. Discussing their intentions, commitments, and ideas helps to arrive at the desired outcome.

Cosby and Bryson (2010) offered a framework of Integrative Public Leadership for the creation of public value. Integrative Public Leadership solves wicked problems by “bringing diverse groups and organizations together in semi-permanent ways” (Crosby and Bryson, 2010, p. 211). This competency of interacting and bringing-together is critical since, despite the presence of a “shared-power, no one-wholly-in-charge world” (Crosby and Bryson, 2010, p. 211), citizens still consider disaster response to be a governmental responsibility. Therefore, collaboration is made difficult, and leadership is needed to overcome initial resistance to new arrangements. In Cosby and Bryson (2005b) these arrangements are called a “regime of mutual gain” (p. 182).

Cosby and Bryson’s (2005b) regime of mutual gain is a “policy regime that achieves widespread lasting benefits at a reasonable cost and that taps and serves people’s deepest interests in and desires for a better world for themselves and those they care about.” This framework is necessarily collaborative. The present research focuses on collaborative leadership during the COVID-19 pandemic, so Cosby and Bryson’s (2005) call for research on “how best to pursue [emergency management and resilience] leadership” in collaborative settings will be a

useful heuristic for examining multi-sector collaboration from advocates of the environment, public health, and society at large.

COLLABORATIVE CONTEXTS FOR EMERGENCY MANAGEMENT AND RESILIENCE

Systems of collaboration became instrumental to disaster management after the attacks of September 11th, 2001. Governments must now coordinate at federal, state, and local levels (Connelly et al., 2014). Understanding these collaborative contexts depends upon knowing their structure. Emergency management tends to occur in distinct phases, each of which demands particular collaborative methods. Different emergency settings may need different leadership skills and competencies (Kapucu, 2011; Van Wart and Kapucu, 2011; Demiroz and Kapucu, 2012). Catastrophic disasters and routine emergencies should have different leadership competencies (Demiroz and Kapucu, 2012). In the collaborative environment, actors and organizations form networks to overcome constraints and increase the resource base.

Emergency management in the U.S. involves not only the intra-governmental relationships described above (Drabek, 2007; Petak, 1985), but also many different stakeholders including nonprofit organizations, private businesses, community, religious leaders, and academia (Field et al., 2012; Kapucu, 2006; Kapucu, 2011). Research by Van Wart and Kapucu (2011) clarified the competencies needed in the response phase of a true crisis by using the case of public sector emergency management and FEMA officials. Their results showed number of competencies categorized based on three crisis demands: the need for a calm but strong

leadership category, the need for pragmatic decision making under severe time and resource constraints, and the need for coordination and re-organization³.

Collaborative capacity can be developed through the collaborative process and structure, while collaborative capabilities can be learned by collaborative leaders (McGuire, 2000). Each level of government will doubtless play its own role in the response to a disaster. The United Nations International Strategy for Disaster Reduction (2012) identified ten essential tasks for disaster resilience leadership at the local government level to reduce risk and enhance adaptive capacity. Of these essential tasks, several are relevant for resilience leadership in a collaborative setting, including organizing and coordinating for resilience, and incorporating the needs and participation of stakeholders. The UNISDR's list of tasks supports this research by identifying important collaborative leadership skills for resilience at a municipal level.

COLLABORATIVE LEADERSHIP NETWORKS FOR EMERGENCY MANAGEMENT AND RESILIENCE

Emergency management and resilience leaders do not operate inside a vacuum. Understanding them and their activities – such as their interactions – as elements in collaborative networks reveal the full story of their emergency management and resilience work. Collaborative leadership networks enhance emergency management and resilience effectiveness. They are regarded as responsive during emergencies (Kapucu, 2006). According to Kapucu et al. (2010),

³The calm-but-strong leadership category involves self-confidence, willingness to assume responsibility, motivating, articulating vision and mission, resilience and communication skills. Pragmatic/resource constrained decision-making involves analytical skills, decisiveness, flexibility, and delegation were under the need for pragmatic decision-making. Coordination and reorganization involve competencies in operations planning, team building, networking and partnering, and social skills. Different situations need different competencies so future research to identify specific contexts by environmental demands will advance the leadership science (Van Wart and Kapucu, 2011).

crisis leaders should implement collaborative emergency management networks that will facilitate and motivate information sharing among departments. The vertical and horizontal structures of emergency management networks enable communication among departments. Organizational objectives, cultures, and structures may vary based on the organization. Consequently, flexibility in private and public emergency management systems is paramount to ensure that leaders can adjust in emergencies (Kapucu et al., 2010).

Building legitimacy in collaboration develops more robust collaborative leadership networks for effectively tackling emergencies (Bryson et al., 2006). The form of the network builds internal and external support while the entity aspect of the network builds recognition from the insiders and outsiders. The interaction entrenches trust, which then builds a free communication process. For instance, Hurricane Katrina exposed the limitations of collaborative leadership in the private and public sectors and federal and local systems (Kapucu et al., 2010). Some of the setbacks are associated with emergency management networks whereby communication affects the interdependence process through hierarchical requirements. Such principles – be first, be right, be credible, express empathy, promote action, and show respect – of Crisis and Emergency Risk Communication (CERC) (Centers for Disease Control and Prevention, 2018), are worth implementing in emergency management and resilience during the response to the COVID-19 pandemic.

Kapucu et al. (2010) recommended a national emergency management network to facilitate collaboration. The integration of technology in emergency networks will present a basis for information sharing in the case of an emergency. Consequently, efficient application of resources in emergency management and resilience should be directed towards technology and training. As can be applied to the COVID-19 pandemic, Kapucu et al. (2010) have presented

knowledge on the implementation of technology in emergency management networks. To this end, a clear understanding of the essential collaborative leadership competencies and skills for leading during the COVID-19 pandemic will add to the emergency management and resilience literature.

COLLABORATIVE TEAMS AND PERFORMANCE

Although the preceding studies have focused on the leadership *of* collaborative teams, it is necessary to focus on the composition of those teams. Collaborative arrangements go beyond the collaborative contexts mentioned above to get into the details of the teams they lead. Bryson et al. (2006) offered propositions to guide designing and implementing cross-sector collaborations. Not having a guide for cross-sector collaboration may result in flawed execution that wastes resources in redundant tasks and costs lives. While collaboration often leads to excellent performance and the use of resources (Mitchell et al., 2015), there are still many traps lying in wait for the unwary leader. One of these is insufficient attention to the structure of his or her team.

Hill and Bartol (2016) studied teams that are geographically disparate and necessarily diverse. These teams have unique needs. Particularly important is empowering these diverse teams for their tasks, rather than centralizing the task and rendering workers passive. Developing one's team members should be part of enhancing the acquisition of skills at an individual and organizational level. This is empowering leadership, which is defined as engaging in leader behaviors that involve increasing team motivation, building, flat management structures, and rewarding and supporting the use of given authority (Arnold et al., 2000; Srivastava et al., 2006; Zhang and Bartol, 2010).

The empowered workforce mentioned above is brought about through transformational leadership in which the nature of the team is reshaped. According to Burns (2003), transforming leadership is a process in which leaders and followers help each other in a reciprocal way: “Times of revolutionary change create cultures of creativity, where leaders become followers of the turning tide, and followers become leaders” (p. 166). It is easy to see the impact of such a culture on intrinsic motivation. Teams need not only to have authority vested in them but to be sufficiently encouraged to surrender their passive dependence on hierarchy or ranks (Waugh and Streib, 2006).

Caro (2016), in a grounded theory study of emergency management in Canada, found that transformational leadership has discernible qualities (e.g., relational capital). Relational capital is the common language of successful team-based interaction since it emphasizes trust and the ability to facilitate horizontal and vertical integration (p. 122). Caro concluded their grounded theory study with the necessary ingredients for systemic transformation, which, in the view of this author, are vital for the motivation and empowerment of teams (Arnold et al., 2000; Srivastava et al., 2006; Zhang and Bartol, 2010). For Caro (2016), transformational emergency systems leadership promises renewed understanding of team-oriented leadership across contexts as diverse as field hospitals and coroner services (Caro 2016).

Collaborative teams, no matter where they are located or what disaster they face, should agree on the reason for implementing the collaboration. In other words, divergent visions of how to proceed in the emergency context need to be resolved. A successful collaboration comes when each partner knows their role and has sufficient motivation to perform it. They are empowered to use the authority that is delegated to them in service of a unified vision of resilience. This approach supports collaborative leadership in delivering successful outcomes.

EMERGENCY MANAGEMENT AND RESILIENCE DURING EMERGENCIES

Collaboration between emergency management and resilience leaders can accelerate adaptation and recovery from the COVID-19 pandemic. Comfort (2007) calls adaptation an ability to maintain effective performance in a changing environment. For instance, in countries such as New Zealand, which attempted to eliminate COVID-19 rather than mitigate it, adaptation became the norm at multiple response levels. In their study of New Zealand's pandemic response, Baker et al. (2020) found that "Elimination requires an array of control measures tailored to local needs and to the transmission characteristics of the organism concerned" (p. 199).

Even though collaborative approaches are complex and uncertain, they tend to converge in terms of their timelines: prevention, mitigation, preparedness, responding, and recovery. In an extreme event, collaborative response and resilience strategies from emergency management and resilience leaders are a requirement to effectively face emergencies (Simo and Bies, 2007; Comfort and Kapucu, 2006; Waugh and Streib, 2006).

In some emergency contexts, leaders cannot treat a specific threat in isolation. For example, Yusuf et al. (2020) examined the compound hurricane-pandemic threat to coastal communities in the U.S. The coordination in the response phase involved stakeholders who would not be found working together if either crisis had occurred singly (e.g., meteorologists working with engineers working alongside leaders in public health). Yusuf et al. noted that non-profit, faith-based, and humanitarian aid organizations should also be included, further complicating the mix. Each has distinct knowledge and capabilities to bring to bear. Knowing whom to include in the response phase and how to envision their collaborative roles is itself an act of vision.

In order to collaboratively lead during the response phase to the disaster's challenges and recover quickly, attaining information related to similar disasters through the use of a collaborative approach between different entities is a workable solution. Waugh and Streib (2006) explained the evolution of emergency management by confirming the need for collaboration in managing the consequences of terrorism, technological failures, and natural disasters. These are not always unrelated. For example, a technological failure such as an overheated power grid may result in a high-energy arcing phenomenon, creating a catalyst for wildfires. Emergency management and resilience leaders must adapt, innovate, and improvise to match each situation, including the downstream consequences of the initial disaster.

There are many unknowns and undeveloped ideas in emergency management and resilience. Unresolved topics include leadership skills and competencies, the process of effective leadership, leadership in a collaborative context, collaborative leadership networks, and teams and performance. This in-depth interview research will contribute to the public administration field by supporting knowledge of public leadership in collaborative contexts. Using interviewees' perspectives to build leadership knowledge will support practitioners whose role in emergency management and resilience, involves leading during future emergencies, especially pandemics.

Table 1. Summary of Leadership Skills and Competencies for Collaboration.

Leadership Skills & Competencies	Authors	Context
Decision Making	Waugh and Streib, 2006; Demiroz and Kapucu, 2012; Van Wart and Kapucu, 2011	Emergencies & Disasters

Strategic Thinking	Caro, 2016; Ross, 2013; Waugh and Streib, 2006	Resilience/ Emergencies & Disasters
Vision	Moe, 2012; Michell, 2016	Resilience
Articulating mission and vision	Caro, 2016; Karaca et al., 2012; Lester and Krejci, 2007; Van Wart and Kapucu, 2011	Emergencies & Disasters
Building and Developing Relationships	Michell, 2016	Resilience
Networking and Partnering	Van Wart and Kapucu, 2011	Emergencies & Disasters
Flexibility and Adaptability	Demiroz and Kapucu, 2012; Ross, 2013; Kapucu et al., 2010; Van Wart and Kapucu, 2011; Ansell et al., 2020, Mahmud et al., 2020	Emergencies & Disasters/ Resilience/COVID-19 Pandemic
Communication	Demiroz and Kapucu, 2012; Kapucu, 2011; Kapucu et al., 2010; Van Wart and Kapucu, 2011; Ansell et al., 2020; Khunwishit, Choosuk, and Webb, 2018; Michell, 2016; Ross, 2013; Mahmud et al., 2020	Emergencies & Disasters/ Emergency Management Education/ COVID-19 Pandemic/ Resilience
Coordination	Demiroz and Kapucu, 2012; Kapucu, 2011; UNISDR, 2012; Khunwishit et al., 2018	Emergencies & Disasters/ Resilience
Cooperation	Demiroz and Kapucu, 2012; Mahmud et al., 2020	Emergencies & Disasters
Collaboration	Waugh and Streib, 2006; Kapucu, 2011	Emergencies & Disasters/ Emergency Management Education
Transformational skills	Waugh and Streib, 2006; Caro, 2016	Emergencies & Disasters
Judgmental and analytical skills	Kapucu, 2011; Van Wart and Kapucu, 2011	Emergencies & Disasters
Team Building	Van Wart and Kapucu, 2011	Emergencies & Disasters

Interpersonal skills	O’Leary et al., 2012	Public Policy
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LEADERSHIP AND THE COVID-19 PANDEMIC: INTRODUCING INTEGRATIVE PUBLIC LEADERSHIP AND TRANSFORMATIONAL LEADERSHIP

The COVID-19 pandemic is characterized as an uncertain, unpredictable, and inconsistent event (Ansell, Sørensen and Torfing, 2020). Researchers have rightly focused on the human toll of the pandemic (Assefa, Gillks, Reid, van de Pas, Gete, and Van Damme, 2022). However, this public health crisis has also challenged notions of resilience leadership in the public and private sectors, turning public administration research and practice into a life-or-death matter. The pandemic has turned former foes into allies for public health, but effective cross-sector collaboration nevertheless requires significant changes in the leadership culture (Ansell et al., 2020; Xu and Basu, 2020).

The updated literature provides a model of successful collaborative leadership in New Zealand, which countered the COVID-19 pandemic in a different way than other industrialized nations. The pandemic leadership strategy of Jacinda Ardern, New Zealand’s Prime Minister, was praised by the literature. It can be described as ‘elimination’ rather than mitigation (Baker et al., 2020). While the New Zealand government’s policy response to COVID-19 was both stringent and comprehensive, the government was able to secure popular support for these efforts through an effective and transparent effort to keep the public informed about the pandemic and the response. Prime Minister Ardern and her government used different communication styles to engage the public such as Facebook Live broadcasts and podcasts (McGuire et al., 2020; Haslam et al., 2021). Prime Minister Ardern is only one example of stellar public leadership.

Integrative Public Leadership is a strategy for cross-sector collaboration (Crosby and Bryson, 2010). Crosby and Bryson defined Integrative Public Leadership as, “bringing diverse groups and organizations together in semi-permanent ways, and typically across sector boundaries, to remedy complex public problems and achieve the common good” (p. 211). Integrative Public Leadership in collaborative contexts is the motive to enable different partners to work together as a whole and achieve desired outcomes (Morse, 2010; Luke, 1998). Huxham and Vangen (2000) argued that Integrative Public Leadership is incorporated through structures, processes, and people. Successful users of Integrative Public Leadership manage results, build trust, develop relationships, exploit strategic opportunities, manage conflicts flexibly, act with vision and deliberation, reflect on outcomes, and maintain interpersonal and social skills (Crosby and Bryson, 2014).

An example of Integrative Public Leadership in practice is found in Ansell et al. (2020). In their study of emergency management competencies, they identified the pervasive “zero-error culture” as a flawed principle (p. 955). In a “zero error culture,” leaders who make mistakes are seen as “incompetent or lack[ing] motivation” rather than as people who are experimenting with an eye to improvement (p. 955). Integrative Public Leadership can be used to change notions of the boundaries of good and bad “errors” in order to work toward the common good. In this case, Integrative Public Leadership concerns itself with implementing the leadership roles that will be most beneficial for the COVID-19 pandemic context. Integrative Public Leadership is a major part of the present study’s conceptual framework.

If Integrative Public Leadership can be considered a leadership approach oriented toward the common good, this common good is usually, if not always, a top-down product. However, Transformational Leadership seeks to go beyond this principle. Burns (1978) defined

Transformational Leadership as a heightened state of improved morale and motivation wherein leaders and followers help one another. Caro's (2016) extensive review of the literature offered a useful and varied definition of Transformational Leadership in emergency management contexts. Transformational emergency management leaders prioritize efficiency and effectiveness as they help their teams navigate complex social and political forms (p. 114-115). Through innovation and inspiration, these leaders may change the culture of work (p. 124).

Transformational Leadership responds to followers' needs and empowers them with consensus objectives and goals. Transformational Leaders pay attention to their followers' needs and personal development, empower them, inspire them to commit to a shared vision, challenge them to be effective problem solvers, and coach and mentor them for their leadership capacity (Bass and Riggio, 2005). Transformational Leadership is distinguished from transactional leadership, which is little more than tit-for-tat social exchange (Bass and Riggio, 2005).

Bass and Riggio (2005) discussed the four components of the Transformational Leadership approach. First, Idealized influence where leaders are admired, respected, and trusted. They are willing to take risks and demonstrating high standards of moral conduct as shown on emergency management and resilience leaders. Second, inspirational motivation where leaders motivate their teams by providing meaning and challenge to their work. Third, Intellectual stimulation where leaders create an environment of creativity and approach old situations in new ideas to solve problems. Fourth, Individualized consideration where leaders pay attention to their individual differences and pay attention to their needs for development. Leaders effectively listen to their individuals and act as coaches or mentors.

The combination of Transformational and Integrative Public Leadership supports emergency management and resilience collaborative leaders during an emergency. During the

COVID-19 pandemic, emergency management and resilience leaders need to perform transformational styles such as being trusted, inspiring others, and allowing innovation with their teams and individuals to effectively lead during uncertainty. On the other hand, emergency management and resilience leaders ensure an integrative approach through their performance of integrated supported partners, use of integrative resources, and integrative behaviors. The combined frameworks accumulate an effective leadership performance to respond to an emergency while maintaining transformative and collaborative approaches.

Waugh and Streib (2006) highlighted the Transformational Leadership of James Lee Witt, the highly regarded director of FEMA. He is credited with bringing FEMA back from the brink in 1993. The agency had failed to respond well to Hurricanes Andrew, Hugo, and Iniki, and its disbandment was in the offing. However, James Lee could be seen at the front door of headquarters shaking hands to boost morale. He continued being a superior transformational leader during the Northridge Earthquake and 9/11. James Lee Witt has changed ideas about the limits of leadership. Excellent leadership skills and credibility through empowerment, communication, and vision development were exhibited by James Lee Witt.

Leadership during the response to the COVID-19 pandemic should minimize avenues that increase disruptions and limit adaptation to the changes brought by the global health crisis. Identifying the learning lessons from the response to the COVID-19 pandemic will enrich emergency management and resilience leadership in future emergencies. Some scholars focused on the COVID-19 pandemic and collaboration amongst different contexts such as the examination of South Korea's COVID-19 pandemic response (Yeo and Lee, 2020), exploration of the collaborative emergency network that emerged in COVID-19 response in China (Liu et al., 2020), an examination of collaborative leadership in Wali Nagari-Indonesia in COVID-19

mitigation (Rizaldi et al., 2021), and identification of the leadership roles during COVID-19 in the United States (Sadiq et al., 2020).

Leaders and collaboration during a new crisis such as the COVID-19 pandemic support a robust decision and effective adaptation. According to Ansell et al. (2020), leaders in the COVID-19 period require “decentralized flexibility, innovation, and adaptation” (p.954) to eliminate the control-fixated administration approach. The skill can create trust-based systems, which then prepare public organizations to deal with any form of turbulence. The decentralization builds trust and the subsequent communication between leaders and followers across professional and organizational barriers. Leaders responding to the COVID-19 pandemic have prepared public organizations and their followers to use flexibility or innovation to learn and collaborate to withstand unforeseen developments. The adaptation involves a relationship with different actors and citizenry to enhance compliance with COVID-19 rules and regulations.

Benlahcene and Abdullah (2020) proposed a different set of leadership competencies for COVID-19 pandemic response based on the developments in Malaysia. The skills are different from the findings of Ansell et al. (2020) on the capacity of public leaders in responding to uncertainty and stressful environments. Malaysian public leaders prioritized critical decision-making skills to handle the COVID-19 crisis. The competency builds the assertiveness to take decisive actions to limit organizational failures during a public health crisis. Crisis leadership in Malaysia relied on their effective decision-making to safeguard the communities from the social, health, and economic disruption of the global pandemic.

Early recognition and sense-making skills⁴ are inevitable for collaborative leadership to increase survival chances during crises (Boin et al., 2019), such as during the COVID-19 pandemic. Benlahcene and Abdullah (2020) considered the early recognition of the COVID-19 pandemic following the World Health Organization (WHO) announcement to assist Malaysian leaders to enforce shutdowns, restrict travels, and quarantine confirmed positive cases. Thus, early recognition inspired public leaders to take decisive actions for sustainable crisis management. However, the Malaysian context of crisis leadership necessitate sense-making skills to establish conditions as well as consider effective means of handling an emerging crisis. Consequently, the COVID-19 pandemic demanded leaders outline ramifications and consequences before making decisions on funding or public health response at the local and state levels.

Collaborative leadership approaches should leverage Transformational Leadership and Integrative Public Leadership prior to crises. Crisis plans are created when collaboration is being formed to ensure the organizations or communities are capable of withstanding significant risks along the way (Hu and Liu, 2022). A collaborative leader should assess this document and relate it to the current situation based on their knowledge and expertise. Having a disaster preparedness plan helps the team members understand their roles regarding the current situation that is deemed as an emergency (Nohrstedt, 2018). During COVID-19, a pandemic plan helped decision makers understand the roles they were required to play to improve the emergency response and ensure it was proportional to the risk of danger (as emergency managers learned from Hurricane Katrina). In future pandemics, the supply chain for personal protective equipment ought to be protected.

⁴ Early recognition occurred when collaborative leaders rapidly assess their environments during the COVID-19 pandemic to mitigate its ramifications. Sense-making is where collaborative leaders integrate partners in a conversation to discuss the uncertainty such as COVID-19 pandemic environments to effectively act on it.

Non-essential workers will already be prepared to work from home when possible (Owoye and Onafowora, 2021).

Readiness plans need to be built in concert with strategic partners. Integrative public leaders provide accurate situational updates while attempting to shield the team from the dangers of the pandemic (Zhong et al., 2022). Nevertheless, some leaders lack resources through no fault of their own. They need to be honest with their workers about external factors that inhibit their work. Having a team that understands and agrees with organization plans is vital in creating a congenial work environment at a turbulent time.

A review of studies related to collaborative leadership, emergency management, and resilience was discussed above. The literature encompasses articles from peer-review journals, books, magazines, and FEMA reports. To this end, there is limited knowledge in the literature about the skills and competencies of collaborative leadership in emergency management and resilience during the COVID-19 pandemic.

CONCEPTUAL FRAMEWORK

As the previous sections indicate, leading during emergencies in turbulent environments needs to be done collaboratively between leaders with vision, ability, and knowledge of specific contexts. There are two relevant theories of leadership when it comes to collaborative structure and processes: Integrative Public Leadership and Transformational Leadership (Avolio and Bass, 1988; Crosby and Bryson, 2010; Sun and Anderson, 2012). Figure 1, designed by the researcher with insights from Sun and Anderson (2012) (below), lists the elements of both Integrative Public Leadership and Transformational Leadership.

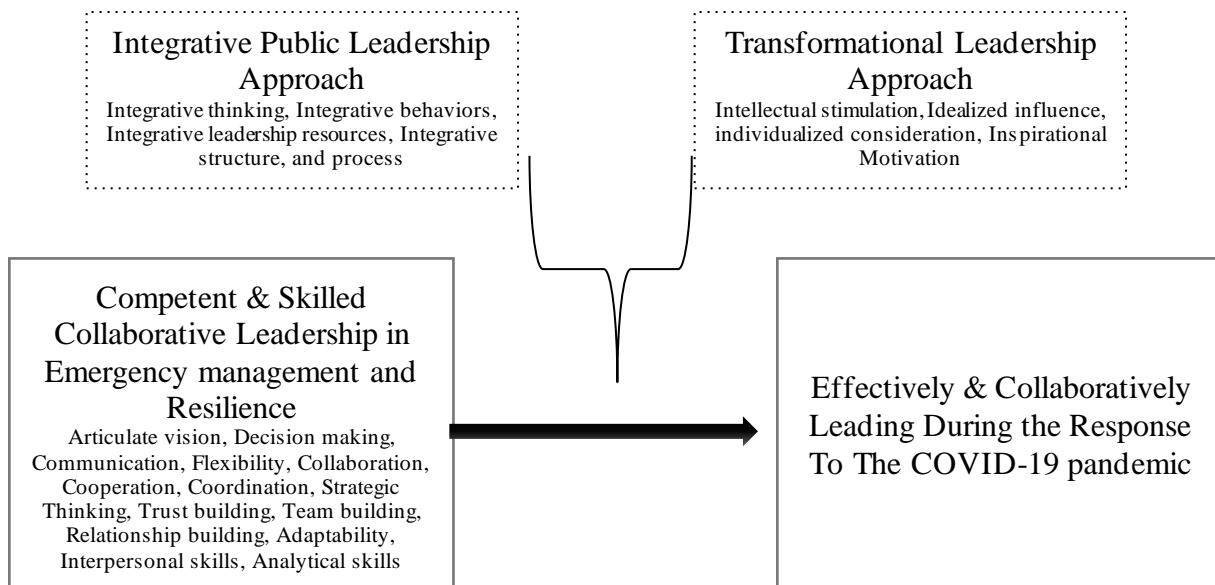


Figure 1. Collaborative Leadership Capacities in Emergency Management and Resilience During The COVID-19 Pandemic Response.

Figure 1 illustrates how competent leadership created effective collaborative responses to the COVID-19 pandemic, specifically a combination of Integrative Public Leadership and Transformational Leadership styles. Emergency management and resilience leaders needed to perform transformative and integrative styles to solve novel problems within the collaborative context. Both leadership approaches resulted in more powerful administrative relationships. For instance, skills in integrative thinking – i.e., the unity of intuition, imagination, and the rational mind – and intellectual stimulation are distinct management practices that resolve into similar measurable items – e.g., analytical skills. (See arrows). The diagram explains the way that both leadership styles differ and converge.

The two leadership theories suggest the totality of essential collaborative leadership skills and competencies for emergency management and resilience. Collaborative leadership during the

response to the COVID-19 pandemic should avoid administrative options that are easily disrupted and/or limit management flexibility. The emergency management and resilience domain requires visionary leaders who are able to integrate and motivate important partners, welcome new ideas, build trust, have good relationships, and communicate effectively. Both Integrative Public Leadership and Transformational Leadership support trust-building for successful collaboration (Sun and Anderson, 2012; Karaca et al., 2012; Crosby and Bryson, 2014; Caro 2016). Collaborative leadership during the response phase to the COVID-19 pandemic requires clear and effective communication (Dzigbede et al., 2020). The data from this study affirmed and identified the needed skills and competencies of emergency management and resilience leaders during the COVID-19 pandemic. The conceptual framework sought effective collaborative efforts from skilled and competent leaders performing both styles. Most of the interviewees exhibited effective communication and listening skills as well a high level of understanding despite the novelty of the management context.

The proposed framework – including both Integrative Public Leadership and Transformational Leadership styles – explains that skilled and competent leadership can effectively respond to the COVID-19 pandemic. Integrative Public Leadership encompasses four important components (Sun and Anderson, 2012). Integrative thinking explains the ability to think about the history of the problem, the current situation, and the future of its implication. Integrative behaviors refer to the ability to integrate the related and supported partners to achieve the desired goal of the collaboration. Integrative leadership resources explain “a [*leader's*] moral desire to serve the community” (p. 315) by integrating useful knowledge and expertise in the collaboration (Sun and Anderson, 2012). Lastly, integrative structure and process explain the

leadership role in “recognizing affordances and limitations of collaboration structures” (p. 315) and the ability to promote the collaboration structure and process.

Waugh and Streib (2006) suggested a Transformational Leadership framework for Hurricane Katrina that may be useful during the COVID-19 pandemic. The authors emphasize motivation, planning, and elimination of unhelpful hierarchies. Karaca et al. (2012) agreed that Transformational Leadership can be superior to the transactional type. Three important elements of Transformational Leadership apply to collaborative emergency management: (1) idealized influence, where the leader communicates the vision in ways that encourages commitment and passion through follower trust; (2) intellectual stimulation through generating an environment that allows for new ideas and new vision, (3) inspirational motivation that supports commitment in followers and builds a sense of teamwork and cohesion (Karaca et al., 2012), and (4) individualized consideration where the leader performs as a mentor and understands the individuals’ needs of achievement (Sun and Anderson, 2012).

A combined framework of Integrated Public Leadership and Transformational Leadership was one choice among many options. After all, Caro (2016) reviews leadership options, including adaptive models, authentic models, and integral models. However, the non-transformational models are less appropriate for leading during the COVID-19 pandemic since they underestimate how social change may be required to achieve resilience during the pandemic, the scale of which has no modern parallel. Non-transformational leadership models fail to grapple with how necessary a shared vision is for connecting stakeholders across the globe, not all of which find themselves in democratic states. Transformational Leadership is necessary for extremely heterogeneous collaborations. A shared vision of collaborative leaders should be discussed with all stakeholders and partners (e.g., emergency management and

resilience teams, responding agencies, international partners, research collaborations, and government officials). The impetus for coordination resides in leaders themselves since only they can cultivate the culture of trust necessary to create and maintain heterogeneous partnerships.

The current theoretical framework emphasizes the transformational vision of leaders during the COVID-19 pandemic, inspiring their teams to develop intrinsic motivation as problem solvers. Integrative Public Leadership makes clear how motivation and shared vision actually matter in collaborative contexts. What is being built is a decentralized human relations approach of the type suggested by Lester and Krejci (2007). Their human relations approach fosters stakeholder engagement and leadership empowerment for “greater societal good” (p. 88, 91). This transformative approach improves the COVID-19 pandemic response while maintaining effective relationships in emergency management and resilience.

Research by Caro (2016) of emergency management leaders in Canada identified two primary Transformational Leadership attributes. The first is strategic potentiation wherein leaders build synergistic collaborative networks through positive dialogue, understanding, and trust that motivates and coalesces various stakeholders. Second, transformational leaders engage individuals, organizations, and communities in service to others as a social value and responsibility. In this context, emergency management leaders articulate this social mission and inspire and engage others in its pursuit. Notably, Transformational Leadership deals with inspiration, motivation, encouragement, and collaboration between leaders and followers. Caro (2016) suggested that Transformational Leadership in emergency management systems seeks the harmonization, actualization, and engagement of strategies and policies that are for the common good of the communities – local, regional, national, and even global. Boyer et al. (2019) seem to concur. In a study of NGOs, the authors found that leaders in collaborative contexts emphasize

motivational leadership and relationship management concepts while leaders who are not in collaborative contexts are more task-oriented.

There are still unknowns concerning collaborative leadership in emergency management and resilience approaches to the COVID-19 pandemic. Taking a cue from Sun and Anderson (2012), the proposed conceptual framework unites the components of the two frameworks to support the exploration of the needed leadership skills and competencies in collaborative and transformative settings. Sun and Anderson (2012) argued that a community orientation component was missing in the Transformational Leadership to successfully explain Integrative Public Leadership (p. 313). To address this gap, the two approached to leadership will be incorporated into one comprehensive framework that explains how collaborative leadership results from a reliance on both Integrative Public Leadership and Transformational Leadership skills and associated competencies.

Despite the argument by Van Wart and Kapucu (2011) that strong incisive leadership is the dominant mode in crisis management rather than the consultative, iterative, and process-oriented Transformational Leadership approach, both Transformational Leadership and Integrative Public Leadership are important concepts that support performing effective collaborative leadership in leading during the response to the COVID-19 pandemic. In summary, this conceptual framework aims to study leaders' perspectives on competencies (e.g., networking ability, sensitivity to community needs) and how they were able to improve outcomes during the collaborative resilience work necessitated by the response phase of the COVID-19 pandemic.

The present study explores the perspectives of emergency management and resilience leaders in South-Atlantic states during the collaborative response to the COVID-19 pandemic. Besides looking for core skills and competencies for emergency management during the

COVID-19 pandemic, secondary foci include the changes in leadership skills and competencies while collaborating during the COVID-19 pandemic as well as the implications of those changes. Specifically, this intended study will be looking for the needed core skills and competencies for collaborative emergency management and resilience leadership to effectively lead during the response phase to the COVID-19 pandemic, and make connections between emergency management and resilience leaders that are, in the words of Crosby and Bryson (2010), “semi-permanent” (p. 211) and will therefore mitigate public health disasters. The comprehensive conceptual framework presented in Figure 1 and described in this section provides the structure of this study and for answering the research questions.

CHAPTER III

METHODOLOGY

This research employs a qualitative methodology to answer three research questions:

- 1) What were the necessary skills and competencies for emergency management and resilience leaders during the pandemic?
- 2) What were the changes in skills and competencies throughout the COVID-19 pandemic?
- 3) What were the lessons learned and implications from the collaborative leaders?

This chapter describes the study design, sampling strategy, source of data, interview process, data analysis, and ethical considerations and trustworthiness. The researcher's goal was to gain information about the experiences of emergency management and resilience leaders during the COVID-19 response phase. One-on-one interviews with emergency management and resilience leaders revealed their stories and experiences.

STUDY DESIGN

The study design answered the “what” and “how” of pandemic leadership. The semi-structured interviews featured eight open-ended questions – based on the research questions – that allow the researcher free exploration of new ideas and themes (see Appendix A for the interview protocol). This exploratory study is designed to gain meaningful insights from emergency management and resilience during the COVID-19 pandemic. An exploratory study can meet the deficit in collaborative leadership literature. As yet there are few studies about the collaborative leadership skills and competencies needed during the COVID-19 pandemic.

The study employed a qualitative methodology. Qualitative approaches are particularly appropriate in the type of descriptive, exploratory study described here. Other approaches such

as surveys, would not have encouraged (or allowed) the sharing of lessons learned from leading during the COVID-19 pandemic in a way that offers richness and depth information.

Quantitative measures and statistical analyses do not fit the research problem or grant deep understanding of lived experiences. The researcher considered leaders' perspectives from the first year of the COVID-19 pandemic (December 2019 to December 2020) and the second year (December 2021 to December 2022). Most of the interviewees led pandemic response activities during both the first and second years of the study. The researcher made the decision to exclude the data in the pilot study. Since the same emergency management and resilience leaders were employed in the same positions in both years, the researcher had an opportunity to study the leaders over multiple years as they adapted to the challenges facing them. The pilot study data was excluded. The pilot study succeeded in testing the methodology and confirming the interview protocol. However, the researcher needed to add two interview questions beyond those included in the pilot study to expand the scope of the research.

Interviews followed an interpretivist philosophy in which the interviewees granted the researcher access to reality through shared meaning (Creswell and Poth, 2018). Interviewees' views of the event under study are paramount with the interpretivist paradigms. Meanings, context, and cultural norms generate relevant knowledge for review (Creswell and Poth, 2018). An interpretivist philosophy supports disclosures of emergency management and resilience leaders (Riccucci, 2010) in order to gain understanding from their version of the truth (Hays and Singh, 2012; Van Thiel, 2014). Data collected from interviews were compared with the information identified in the literature. Within the interpretivist paradigm, the researcher focuses on meaning-making with an overarching goal of exploration (Schwartz-Shea and Yanow, 2011).

Interview Questions

The interview questions were developed based on the results of pilot study, concepts from the literature, and aspects of both Integrative Public Leadership and Transformational Leadership theories. The researcher developed some broad interview questions to avoid limiting the interviewees' responses (Hays and Singh, 2012). Each of the three research questions were approached using two interview questions, and the interview protocol had an additional two questions related to collaboration itself (see Table 2). All eight interview questions captured in-depth information about the emergency management and resilience professionals' skills and competencies, challenges, perspectives, and lessons learned during the COVID-19 pandemic. The following table introduces the interview questions and their associated identified themes for the analysis based on the research questions, theoretical framework, and literature review. There were four categories of questions: leadership competencies and styles, challenges faced, lessons learned, and factors supporting collaboration.

The key skills and competencies category asked leaders what they considered to be valuable skills from their perspectives. Information related to Transformational Leadership and Integrative Public Leadership were included in this category. The challenges category was essentially comparative. The researcher asked interviewees to consider if and how the COVID-19 pandemic may have differed from other crises. The lessons learned category sought the leadership expertise that leaders might want to pass on to their successors. This is an extension of the challenges category in that it seeks the way that emergency management and resilience leaders see continuity between crises. The factors supporting the collaboration category sought information on the leaders' behavior and performance during their collaborative response to the COVID-19 pandemic. The researcher was able to gather the leaders' stories as well as the education and training that supported them in the response phase.

Table 2. Interview Questions, Research Focus and Key Concepts.

Research Focus and Key Concepts	Interview Questions
Leadership Skills and Competencies, Transformational Leadership Theory, and Integrative Public Leadership	What do you see as the most important core skills and competencies for collaborative leadership in emergency management or resilience during the COVID-19 pandemic? Why and how are they important?
	In terms of communication during a crisis, such as the current COVID-19 pandemic, how do you communicate a shared vision, integrate supported partners, motivate them, and understand an individual's need for achievements? What factors contribute to the effectiveness of this communication?
Differences, Challenges, and Changes Due to the COVID-19 Pandemic	How have collaboration, interactions, and coordination during the COVID-19 pandemic been different, if at all, compared to previous or other crises?
	How has COVID-19 changed how you lead and collaborate with others? Are there

	specific skills or competencies that could have helped you be more effective?
Implications and Lessons Learned	<p>What has helped you be successful in collaborating with other people and organizations during previous emergencies and/or the current COVID-19 pandemic?</p> <p>What challenges have you faced in these collaborations? And what was/were the lesson/s learned to overcome future challenges?</p>
	<p>What internal (to your organization or to state government) factors have played an important role in how you have collaborated with others during the COVID-19 pandemic response?</p> <p>What external factors have played a role?</p> <p>How about the role of political context at the state level?</p>
Factors Supporting Collaboration	How have you collaborated with others representing public health officials in responding to the COVID-19 pandemic? Can

	you share an example of this collaboration and your leadership role in it?
	In terms of collaboration during the COVID-19 pandemic, how have your experience, education, and training helped you in your leadership position? What education or training do you need more of?

Pilot Test

Ahead of this dissertation, the researcher conducted a pilot test to assess the validity of the design methodology and the research instrument. The pilot study had twelve participants from two states: six emergency management leaders and six resilience professionals. Results of the pilot test showed that interviewing was an appropriate methodology; two new questions about collaborative leadership were added to the interviews, lengthening the interviews by five to seven minutes. Data from the pilot test were excluded from this dissertation. The pilot study results also informed the need for a larger sample size from the other South-Atlantic states to better represent the population. The protocol documentation, recruitment, and consent procedures remained the same as in the pilot study.

PARTICIPANTS AND SAMPLING STRATEGY

The researcher interviewed eighteen state leaders from emergency management and resilience contexts for this study. Leaders had roles and backgrounds as diverse as emergency management, health, social services, environmental services, community services, public safety, resilience, and sustainability (see Table 3). They represented nine South-Atlantic states to exemplify a cross-section of leadership contexts. Some interviewee roles include director, deputy director, executive director, and associate director. The researcher excluded non-senior levels of leadership and employees in levels below director or assistant director positions. The South-Atlantic states include Delaware, the District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia (Region 3-Division 5, U.S. Census Bureau).

A minimum of fifteen interviews is necessary to ensure enough data (Bertaux, 1981). In determining the numbers of interviews to conduct, equal weight was given to each state, with more representation from some states. This decision led to the choice of 18 interviews. Data saturation, in which the researcher ends the interviews when there is no new information (Guest et al., 2006, p. 59), supported stopping the interviews at eighteen as well. Data saturation is the prevailing strategy for qualitative data research (Creswell and Creswell, 2017).

Sampling and Recruitment

The study employed a purposeful sampling approach that targeted between fifteen to twenty emergency management and resilience leaders. Purposeful sampling, also known as expert sampling, is sometimes used to recruit emergency management and resilience leaders (Patton, 2002; Van Wart and Kapucu, 2011), and it is suitable to get rich information from knowledgeable individuals related to a specific phenomenon (Creswell and Plano Clark, 2011).

Referral sampling was employed where one interviewee may suggest another candidate for the process. This was found suitable given Caro's (2016) application of it in an investigation of emergency management systems in Canada. Indeed, after soliciting emails, some of the leaders did respond with a referral name and contact information for other potential participants. Three participants identified through referral sampling made the final study.

After obtaining IRB approval to conduct human subjects research, the researcher sent a solicitation email to the potential participants to request their participation. The research protocol started with the participant's recruitment email. Recruitment was done via email to more than sixty pre-qualified emergency management and resilience professionals. Twenty-one of the pre-qualified participants agreed to participate. Two of the potential participants responded 'yes' but did not follow through to interview scheduling. The researcher vetted participants' background information including their agencies, positions, and leadership experience. Agency websites and LinkedIn pages ensured that interviewees were actually involved during the pandemic's response phase. Three participants, one each from Georgia, Virginia, and South Carolina were eliminated by this process.

The researcher sent direct emails asking for an interview participation while providing information about the study. The email included information about the study and the research objectives. The email introduced the researcher, the topic of the research, and the relevance of the participation to the field. The researcher provided the risks associated with participation in this research prior to the participant's agreement. When participants agreed to move forward, they received a follow-up email with a web call link. The email contained the interview questions and a consent form.

INTERVIEW PROCESS

All interviews took place via Zoom. As such, there were some limitations where body language was missing (Ardoin et al., 2015). All but one participant had their camera on. Most interviewees positioned their camera on a side, perhaps obscuring some of their body languages. The researcher allowed participants to answer the interview questions with no influence from the researcher.

Some of the leaders responded with no availability for participation, indicating they were not a fit for the research, or stated their inability to participate because of their department's confidential policies. The researcher interviewed all of the leaders who responded yes for participation and responded to the follow-up email. Given the time constraints of the participants' schedule, the researcher conducted the interviews over a five-month period from April through August 2022. The interviews took between 45 to 60 minutes each. The interviews were conducted and recorded via Zoom, and then transcribed. The researcher utilized Otter.ai software for data recording and transcription of the Zoom meetings. The recorded data was stored and password-secured immediately on a hard drive after each interview.

The following table describes the study participants' positions, departments, and responsibilities during the COVID-19 pandemic response. Responsibilities are described by government websites and/or the participants themselves. The researcher interviewed three leaders from State 1 who were the secretary of public safety, the hazard mitigation officer, and the director of social services. Data from State 2 were gathered from three participants: the all hazards manager, the plans chief, and the state hazard mitigation officer. State 3 participants were the emergency management chief of staff. The researcher interviewed two participants from State 4 who were the state public health preparedness and response director and the

statewide interoperability director. Interviewed participants from State 5 were the emergency program manager and the deputy director of prevention and community support section. The participant from State 6 was the emergency response associate director. The participants from State 7 were the executive director and the incident management state coordinator. Interviewed participants from State 8 were the deputy director of homeland security and emergency management and the chief of preparedness. Data from State 9 was collected from interviews with the director of transportation and the natural hazards mitigation officer.

Table 3. Interview participants' positions and departments' responsibilities.⁵

	Position	Department	Responsibility
State 1	Secretary of Public Safety	State Department of Emergency Management and The Homeland Security Division	Enhancing the quality of the state's citizens, visitors, and businesses through (e.g., public awareness, emergency response, disaster preparedness, prevention, policy development, enforcement, response, and recovery)
State 1	Hazard Mitigation Officer	State Department of Emergency Management	Managing disaster grants
State 1	Director	State Department of Social Services	Fostering collaboration with state-level stakeholders to coordinate trauma and resilience efforts and initiatives
State 2	All Hazards Manager	All Hazard-Division of Emergency Management	Dealing with hazards such as Managed hurricanes, wildfires, and flooding

⁵ Citations pulled from the state websites cannot be properly attributed without undermining the anonymity of the participants. Therefore these sources are withheld.

State 2	The Plans Chief	State Emergency Operations Center	Planning for all disaster-related information, infrastructure, and operational supports
State 2	The State Hazard Mitigation Officer and the Bureau Chief of Mitigation	Division of Emergency Management	Lessening the impact of disasters and assisting the community in mitigation
State 3	Chief of Staff	Emergency Management Division	Managing all the emergency management functions
State 4	State Public Health Preparedness and Response Director	Department of Health and Human Services	Mentoring communication for detecting public health such as a 24/7 phone number for any issues
State 4	Statewide Interoperability Coordinator	Department of Public Safety	Disaster planning, mitigation, emergency response, school safety, anti-terrorism and cyber security
State 5	Emergency Program Manager	Environmental Protection Division	Responding to oil spills and/or hazardous material emergencies, implementing provisions of the Emergency Planning and Community Right to Know Act
State 5	Deputy Section Director	State Division of Family and Children Services- Prevention and Community Support Section	Providing funds to state level or community-based organizations that are implementing "Child Abuse and Neglect prevention"
State 6	Associate Director	Rail Safety and Emergency Response Division	Ensuring safety through proactive assessments of potential risks before they create dangerous conditions
State 7	Executive Director	Environmental Service	Promoting the health and welfare of the citizens of the state

State 7	State Coordinator	Incident Management Team	Responsible for all-hazards management, emergency operations, and public safety
State 8	Deputy Director	Department of Homeland Security and Emergency Management Division	To provide a safe and secure state by ensuring the proper response to all levels, manners, and phases of emergencies, disasters, and crimes.
State 8	Chief of Preparedness	Emergency Management Division	Manages disaster preparedness, mitigation, response, and recovery efforts
State 9	Natural Hazards Mitigation Officer	Emergency Management Division	Planning function of mitigation and disaster recovery, identifying hazards and vulnerabilities. Responsible for command and control such as logistics
State 9	Director of Transportation	Resilience and Sustainability	“[Responsibility] in materials and construction and then sometime in administrative, human resources and budgeting.”

DATA ANALYSIS

Otter.ai voice transcription was used to make the initial transcripts. The researcher read the transcribed interview data several times to make sure that the data was transcribed verbatim and ready for analysis (see Hays and Singh, 2012). NVivo software highlighted and categorized the data into different themes. Identified themes were used based on the leadership skills and competencies identified in the literature and the generated ones. NVivo enabled the researcher to observe the repetition of key concepts and the overlap between patterns. Consequently, the

researcher generated the relationship between research concepts and theory (Alcock et al., 2016). More precisely, the researcher used this analysis approach to possess generalizations or theories derived from participants' experiences and literature (Creswell and Poth, 2018). Further, the researcher generated additional themes and categories into broad patterns while analyzing.

The researcher coded the NVivo data using two approaches: theory-driven and data-driven (Braun and Clarke, 2006). The theory-driven approach employed deductive analysis of codes based on existing knowledge from the literature and the theoretical frameworks. In the data-driven approach, the researcher utilized the inductive analysis approach in coding the raw data without trying to fit the data into preexisting themes (Braun and Clarke, 2006). The researcher often coded data that did not fit into existing themes in case they would end up being useful during data analysis or in some unanticipated way further on (Braun and Clarke, 2006). A rigorous reading and coding of the data allowed significant themes to emerge. The transcripts of the interviews were initially reviewed to find themes consistent with identified themes from the literature. All of the information from the leaders was categorized to answer the research questions. Information was reviewed in-depth three times prior to importing the analysis stage.

This qualitative research utilized a thematic analysis approach to establish a clear understanding between the research objectives and findings (Thomas, 2006). According to Braun and Clarke (2006), "Thematic analysis can be an essentialist or realist method, which reports experiences, meanings and the reality of participants" (p. 81). The analysis allowed the research findings to emerge through a thematic analysis to combine the identified themes from the literature with the newly generated themes found through analysis. The researcher compared and contrasted the perspectives from different participants views (Nowell et al., 2017) to assist in answering the research questions. The thematic analysis followed Nowell et al., 2017 guidance to

establish the trustworthiness of the research data analysis. This guideline includes: familiarizing the researcher with their data, generating preliminary codes, searching for themes, reviewing themes, defining and naming themes, and generating the report (Nowell et al., 2017).

Data Analysis Process

The researcher's six-stage research analysis follows the methodology proposed by Nowell et al. (2017), as discussed next.

Phase One: Familiarizing Yourself with Your Data

In the first stage of the analysis process, the researcher spent more time familiarizing herself with the data set, checking the transcripts and comparing it with the recorded audio for accuracy (Braun and Clarke, 2006). The researcher arrived at the data analysis stage with prior knowledge and some initial thoughts. Successful thematic analysis requires knowledge of one's data set (Nowell et al., 2017). The researcher read all transcriptions three times in an active way to search for patterns before the coding process. Possible patterns and themes were shaped once the researcher familiarized herself with the data (Braun and Clarke, 2006). Repeated reading established the ability of the researcher to detect themes during phase two.

Phase Two: Generating Initial Codes

After initial data familiarization, the researcher produced initial codes while continuing to revisit the data (Nowell et al., 2017). Current literature and theoretical frameworks influenced initial codes. Both data-driven and theory-driven approaches were utilized to code the entire data set (Braun and Clarke, 2006). Data-driven approach helped in coding to specific themes based on the three research questions. The theory-driven coding supported the coding process and guided it based on the concepts of both Integrative Public Leadership and Transformational Leadership.

The researcher began reflexive journaling to document her changing ideas during the research process (see also Phase Four).

Phase Three: Searching For Themes

The researcher collected and coded the data. Data for each research question was given its own part in a larger table to better recognize potential themes. Some themes already existed in the literature and the researcher's own research questions; in that case, she sought to discover any resemblances or differences between these and the participants' accounts (Braun and Clarke, 2006). Codes combined to form overarching themes. As stated before, coding moved deductively and inductively.

Phase Four: Reviewing Themes

After a review of the data, new codes had to be created when existing information could not be categorized. The researcher identified the most significant themes and eliminated the irrelevant ones. Braun and Clarke (2006) suggested that at the end of this stage, the researcher should be able to understand the distinction between the themes and how they fit together in answering the research questions. The researcher kept returning to the raw data to compare it with the developed themes, and ensuring that information was grounded in the data and reflected its complexity (Lincoln and Guba, 1985). The researcher finalized the list of themes discussed in the next chapter.

Phase Five: Defining and Naming Themes

In this stage, the researcher named the themes and made sure they aptly described what the whole section was about (Braun and Clarke, 2006). The researcher categorized themes under the headings of research questions to gain improved understanding of how findings matched and answered the questions. The researcher reconsidered the final themes after coding the data twice

and revisiting the raw data several times (King, 2004). The length of this stage promoted the probability of a credible finding.

Phase Six: Producing The Report

An important milestone in Phase Six is to assure the analytical credibility of the data by writing coherent arguments. Thus, the study involved a search of the literature to see how it illuminated the data of the participants. Then the findings from the raw data were organized to find additional patterns, especially with an eye to the literature and the significance of the present study (Braun and Clarke, 2006). Direct quotes from participants were included in the analysis to enhance the understanding of the researcher's interpretation (King, 2004). A discussion of unexpected results was included to enhance the credibility of the analysis (Nowell et al., 2017).

The researcher saw advantages in thematic analysis throughout the study. Thematic data analysis easily distinguishes similarities and differences between data as it is portioned off into sets. The researcher generated unanticipated themes from different new insights of the data raised from the leaders' stories. The thematic analysis approach considered each theme as an important category to capture the relationship between data and research questions (Braun and Clarke, 2006). Braun and Clarke (2006) noted that thematic analysis is flexible enough to sustain the researcher as she makes changes according to an improved understanding of the shape of the data.

ETHICAL CONSIDERATION AND TRUSTWORTHINESS

The researcher obtained the Institutional Review Board (IRB) approval for human subjects exempt research by the College of Business Human Subjects Research Committee at Old Dominion University (see Appendix B). The research protocol was used for a pilot study

data collection that began in October 2020. The researcher sought an amendment/modification to the Institutional Review Board (IRB) Human Subjects Research requesting changes to the number of participants as well as the geography of the sample. The researcher made some changes to the interview questions of the pilot study while the inclusion and exclusion criteria of the research subjects remained the same. Two interview questions were added to get more information about the important factors that played a role during the collaborative response to the COVID-19 pandemic.

Ethical protections were in place for the study. A consent form was signed by interview participants and returned to the researcher prior to starting the interview discussion. The researcher maintained the respondent's confidentiality by storing all interview voice records on a secure hard drive. To avoid researcher bias that may occur through data recording and transcribing processes, the researcher employed member checking with the participants to ensure data validity (Creswell and Poth, 2018; Hays and Singh, 2012; Creswell and Creswell, 2017). The researcher did not use triangulation in this qualitative study due to the distinctness of each participant's experiences and stories.

Potential Researcher Bias

The researcher approached the interviews with little to no identifiable notions about emergency management and resilience (except perhaps identification with the fashions of the public administration literature). The researcher was an outsider to the field and was not influenced by praxis. The researcher did not have prior or ongoing relationships with the subject participants. Most importantly, the study design employed member-checking to enhance the credibility and trustworthiness of the analysis and confirm a neutral performance on the part of the researcher (Morse, 2015).

Member Checking

Member checking is a method to reduce researcher bias and build research credibility (Lincoln and Guba, 1985a). Member checking or member validation (e.g., Seale, 1999) means returning the analyzed data to the interviewees so they can change or confirm its validity (Birt et al., 2016). This study extended member checking to the individual participant and the analysis of all participants (Koelsch, 2013). All of the participants' input was anonymously shared with them through Google Drive where they were made editors on the document. They had the ability to add, confirm, and deny any interpretation they saw fit (Creswell and Miller, 2000; Lincoln and Guba, 1986; Stake, 1995). According to Birt et al. (2016), member checking ensures "accuracy and resonance with their [interviewees'] experiences."

This study followed the five steps of Birt et al. (2016) synthesized member checking (SMC) strategy: readiness, anonymization, invitation, collection, and integration. The first step ensured that the data analysis of all emerged themes was ready for member checking. All interpretations were organized under themes. After all the data from the whole sample was collected, coded, and analyzed, the researcher shared each analysis individually, highlighting the specific participant's quotes and associated interpretations. The second step is anonymizing quotes from different interviewees in order to protect all of the participants. The third step was to invite each participant with the attached document of the analysis to make any corrections, comments, and confirm the analysis (through Google Docs or Microsoft Word in two cases). The fourth step was to collect the responses from the involved participants and add it to the data material. The last step was to integrate any new data into both the coding and analyzing processes. This strategy may add value to the study by finding new ideas.

None of the respondents denied the researcher's interpretation, six confirmed with no edits, seven suggested minimal edits, three indicated they would soon respond, and two appeared uninterested in member checking. The general agreement indicated that the participants saw their personal experiences and stories reflected in the study findings. Member checking ensures not only accuracy of data but checks for omissions of critical data as well. This improves data reliability (Birt et al., 2016). Birt's five-part strategy achieved a high level of accuracy and consensus between the researcher's interpretation of the findings and the participants' approvals of the analysis.

POTENTIAL ERRORS

Errors arise even in the most solid of research methodologies (Creswell, 2014). The researcher anticipated several errors and successfully minimized them.

Coverage Error

The researcher strived to recruit participants from all South-Atlantic states to widen the research perspective. The researcher ensured that all participants had equal opportunity to participate in the study by soliciting recruiting emails to all senior leaders at each state such as director, deputy director, executive director, associate director, deputy section director, assistant director, coordinator, or chief officer levels, and all genders. Therefore, the coverage error was minimized.

Nonresponse Error

Participants were recruited during a time of professional challenges unlike any before. Not all possible participants could be expected to share their experiences, enriching as they would no doubt have been. Lack of response may have been due to time constraints, mistrust of

research by social scientists, and fear of not being able to protect the anonymity of themselves or their departments (O'Sullivan et al., 2007; Remler and Van Ryzin, 2011). Two potential participants were forbidden to participate and speak about the research topic because of departmental policies. Two states went unrepresented initially, which necessitated sending emails to the general department for support. Out of concern for nonresponse error, the researcher extended the window of time for interviews from three months to five.

The following chapter presents and discusses the data, the implications and lessons learned from different points of view of collaborative leaders in emergency management and resilience during the COVID-19 pandemic. A summary of the main themes and subthemes is shown in the next chapter.

CHAPTER IV.

FINDINGS AND IMPLICATIONS

This chapter presents the data analysis to answer the three research questions (skills and competencies for emergency management and resilience leaders, changes of the skills and challenges faced by emergency management and resilience leaders, lessons learned and implications from collaborative leaders for future emergencies) and is guided by the comprehensive conceptual framework utilizing Integrative Public Leadership and Transformational Leadership. To better answer the research questions, the researcher categorized the themes into three sections based on the research questions. Each theme contained number of codes. Initially, the researcher organized the identified themes from the literature review and the research questions. After that, the researcher generated some sub-themes from the data during the coding and analyzing process.

The first research question concerns recurring sub-themes in discussions of collaborative leadership skills. The answer to the second research question included three themes related to pandemic management by state-level leaders: leadership challenges, type of skills and competencies developed in crisis, and skills and competencies that, had they existed, might have improved disaster response. The third research question included the internal, external, and political factors that played a role in the response process, the collaborative leadership lessons learned, and the collaborative leadership implications for practice and theory. Additional discussion includes emergency management and resilience in the specific COVID-19 pandemic context.

THEMES AND SUB-THEMES

The study presents the findings from the data in several themes that align with the research questions and the conceptual framework.

1. Collaborative Leaders in support of Transformational Leadership and Integrative Public Leadership Theories

- ❖ Integrative Public Leadership - use of integrative resources, integrative thinking, integrative behaviors, and integrative structures and processes
- ❖ Transformational Leadership - idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration

2. Collaborative Leadership Skills and Competencies

- ❖ Collaboration and Partnership
- ❖ Effective Communication
- ❖ Effective Listening
- ❖ Building Relationships and Networking
- ❖ Building-Trust
- ❖ Dealing With Stressful Situations
- ❖ Understanding
- ❖ Flexibility
- ❖ Problem Solving
- ❖ Knowledge and Information-Sharing
- ❖ Open-Mindedness
- ❖ Risk Management

- ❖ Visionary
- ❖ Decision Making
- ❖ Coordination
- ❖ Innovative Thinking
- ❖ Teamwork

3. Collaborative Leadership Challenges During the COVID-19 Pandemic Response
4. Changes in Collaborative Leadership Skills and Competencies as a Result of the COVID-19 Pandemic
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COLLABORATIVE LEADERS IN SUPPORT OF TRANSFORMATIONAL AND INTEGRATIVE PUBLIC LEADERSHIP

The interview data show a strong consistency with both Transformational Leadership and Integrative Public Leadership theories. The study explored the collaborative leadership skills and competencies of emergency management and resilience leaders during the challenge of the pandemic. This study shows what skills and competencies collaborative leaders practiced as well as how their behaviors resemble transformative and integrative leadership approaches in emergency responses. The two theoretical paradigms— Transformational Leadership and Integrative Public Leadership – explain how emergency management and resilience professionals responded to the COVID-19 pandemic. The following paragraphs present data from the participants and discuss each construct of the theories. Integrative Public Leadership includes use of integrative resources, integrative thinking, integrative behaviors, and integrative structures and processes. Transformational Leadership involves idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

Integrative Public Leadership

All of the participants were state-level leaders who collaborated during the response phase of the COVID-19 pandemic. They employed aspects of Integrative Public Leadership on a daily basis. Integrative Public Leadership is the work of “integrating people, resources, and organizations across various boundaries to tackle complex public problems and achieve the common good” (Crosby and Bryson, 2014, p. 1). The four practices or constructs of Integrative Public Leadership are: allowance and use of integrative resources, integrative thinking, integrative behaviors, and integrative structures and processes. The definition of Integrative Public Leadership as found in the literature mirrors the performance and behaviors of successful

collaborative leaders during the COVID-19 pandemic response. For example, interviewee #14 indicated that *“it brings an interesting mindset and perspective...all disciplines just working together, doing what you can to be successful and getting to the task at hand. What are we trying to solve? And then, how do we wrap this up so we can all be successful and go home and get on with our lives?”* Interviewee #14 indicated that Integrative Public Leadership is a diagnostic mindset that is collaboratively goal-driven. During the response to the COVID-19 pandemic, Interviewee #4 indicated the need to integrate key executives from emergency management with their counterparts in the medical and environmental fields. They referred to this hybrid as *“a very collaborative organization [of the COVID-19 pandemic response] that brought together heads of key state agencies.”*

The Use of Integrative Resources

Bringing collaborative groups together requires leaders to offer integrative resources, such as through a framework for social entrepreneurship that creates collaborative value out of existing opportunities (Denhardt and Campbell, 2006; Morse, 2010). However, integrative resources are not purely material considerations. Motivation, for instance, is integrative. Sun and Anderson (2012) identified integrative leadership in part as a “moral desire to serve the community” (p. 315), and motivation is both the source of this desire and the only means of making engagement effective. Collaborative leaders find hidden sources of motivation, liberate their teams to act independently and confidently, and ensure that the competencies and skills of the organization are shared with new partners.

Interviewee #14 pointed to the importance of creating a welcoming environment at the emergency management agency. Office layouts should be useful to foster collaboration and breakout groups. *“At the state-level, public, private and non-governmental sectors come*

together. The format of our building is organized so it's easy to find someone if you know the layout. For example, when someone from the business industry such as Publix walks into the EOC there's a room for all the private sector coordination partners. I know where to go find them if I need something, they know where to find me." The interviewee indicated that the logic of the space lets new collaborative partners fit seamlessly into the flow of their emergency management work.

Building a welcoming environment means showing care for the needs of collaborators. Interviewee #3 indicated they provided food as a strategy to bring partners together. *"Food. If you want state workers and state employees to work together hand in hand, feed them....rarely do arguments happen on a full belly."* The emphasis is on a common meal as a way to build an emergency management response that is not driven by hierarchy and conflict. Interviewee #13 said that food boosts motivation in resource-poor environments. It is part of *"the human touch"* that flows downward through the organization where investment in emergency management is fostered at every level: management feeds its people, making them feel cared for, and employees are in turn motivated by seeing the consequences of their projects. Food is a cost effective and tangible way to demonstrate commitment. Food likewise motivates employees to share their ideas. *"[When you feed people], they start to talk off the cuff. They start talking in informal methods and manners. And so you're actually building relationships with your partners while sharing a meal with them."* Collaborative leaders should focus on key stakeholders who have resources for meeting communal needs (Crosby and Bryson, 2014, p. 184).

Building relationships with partners, whether it's in the office over a meal or touring an emergency site, requires emergency management and resilience leaders be trained to be vigilant for situational opportunities. This is necessary for intelligent and responsive crisis management.

Interviewee #13 reinforces situational opportunities to connect with their team in a morning debrief, *“touching all of those people and making sure that they understood every morning why, why they were there and what they were doing and again.”* They prime their team for what they will see that day and trains them in how it fits the emergency management mission.

Besides giving orientation to their employees, competent leaders also provide formal developmental opportunities, usually in the form of experience-based training. On-site classroom training exists but was fairly overlooked by the participants. Interviewee #17 considered experience-based instruction superior to classroom work, or at least a critical component to a full understanding of emergency preparedness. Interviewee #17 stated, *“the experiences of actually working through a major emergency situation is knowledge that you're not going to gain or receive in the classroom setting.”* In addition to experience-focused training, coaching and mentoring were two additional resources for team members during the COVID-19 pandemic.

Interviewee #9 suggested that the benefits of mentorship are reciprocal; they use the mentorship relation to test new approaches to leadership. Interviewee #7 indicated that salary considerations make mentorship a priority. It is not always possible to recruit for the wanted talent, so talent is developed internally, and mentorship ensures that critical skills remain in the emergency management ecology when senior leaders retire and their replacements cannot be hired externally.

An Integrative Public Leadership approach maximizes integrative resources. Intellectual capital is one such resource, but training and development of employees are required.

Interviewee #1 emphasized the importance of training as an integrative resource. Employees receive a certified emergency manager (CEM) credential within their first few years. This addresses any knowledge gaps that the organization feels would be troubling to their mission.

Interviewee #5 noted a lack of education in dealing with high-level officials in terms of direct conversation or how to brief them. Both verbal and written competencies were necessary for the COVID-19 pandemic. They saw the need for professional development, which they connected to education overall, to “*help us to be better in critical thinking and analysis.*” Critical thinking found its expression in both verbal and written forms. Without such skills, they note, talking effectively with a health department commissioner would be impossible. This aligned with Crosby and Bryson’s (2014) idea of leadership sense. Leaders must communicate in written and oral form in a direct way with an “awareness of one’s [the audience’s] preferred ways of learning and interacting with people” to achieve the common good (p. 189). Interviewee #5 noted a healthy respect for the pressures and the time constraints of state and federal officials, which is bound to be part of their audience-specific messaging. In order to successfully transform situations, collaborative leaders need to understand the context for effective collaborative outcomes (Crosby and Bryson, 2014). Interviewee #5 and interviewee #1 presented two ideas of integrative resources in terms of employee training: formal skill building and experiential training.

Sun and Anderson (2012) noted that Transformational Leadership styles become fully-realized integrative behaviors when they include civic capacity. They argue that civic capacity is an ability to build coalitions that can actually execute their democratic prerogatives. Civic capacity can be understood as a probabilistic measure of civic engagement. It includes civic motivation. Emergency management and resilience professionals showed civic capacity during their response to the COVID-19 pandemic. Their emphasis on collaborative leadership led them to an incipient understanding of civic capacity that transformed their soft skills into fully-realized integrative behaviors.

Integrative Thinking

Skilled and competent leaders employed integrative thinking within their response to the COVID-19 pandemic. Integrative thinking is where emergency management and resilience leaders think of previous disasters or similar health issues and situations to learn about an ongoing emergency management context. It is the careful use of historical examples. It has been called “systems thinking” (Alexander et al., 2001; Crosby and Bryson, 2010; Novelli and Taylor, 1993) or “integrative complexity” (Stabell, 1978; Tetlock, 1983; Wallace and Suedfeld, 1988). Building analogies to past problems is a way of learning proper behavior in a new context. This higher-order thinking is itself collaborative since the organization change it may drive will be important to all team members. Ideas about the nature of problems and of their responses – what can be called an orientation or a dominant logic – are sticky things; formalizing the process of understanding past experiences helps to ensure appropriate behaviors (Bettis and Prahalad, 1995).

Interviewee #3 indicated that emergency management thinking has suffered from an orientation to past disasters. This happened during the unprecedented COVID-19 pandemic, leaving policymakers and emergency managers unprepared. The COVID-19 pandemic was of a class of threats called “*the unthinkable*.” Hurricanes, tornadoes, even terrorism get attention while the unlikely is ignored because it cannot be captured by present orientations. Caro (2015) found that transformational leaders in emergency management need to be able to think of the unthinkable in order to be effective. Interviewee #4 indicated the need for integrative thinking as well. They indicated that leaders consider the history of the previous disasters and its plans. The data shows how integrative thinking skills support the integrative thinking behavior of emergency management and resilience leaders. Interviewee #20 considered that critical thinking

allows for a strategic plan that is informed by the process but not obsessed by it. Their approach embraces the fluidity of communication and allows a plan to emerge from the situation rather than from bureaucratic habit.

Integrative Behaviors

Integrative thinking is a means of using history to build a crisis response, but these connections would be idle without ‘integrative behavior’ by emergency management and resilience leaders. Integrative behaviors persuade partners and create temporary or permanent links between them in order to achieve a shared goal (Crosby and Bryson, 2010; Huxham and Vangen, 2000; McGuire and Silvia, 2010). Not all necessary subject matter expertise is located within a local context. A helpful heuristic for understanding integrative behaviors is that they are the acts of finding and persuading the subject matter experts needed to deploy the strategies detailed in the last section.

Interviewee #9 was candid about needing to connect to a larger team during the COVID-19 pandemic response. After an assessment, the leader called an ad hoc meeting, attended by some ninety people, in which there was not only an opportunity to share information, but to observe collaborative possibilities based on attendees’ workflows. Interviewee #18 indicated that a strategy of situational assessment governs which choices they make about how to assemble a team. This is another example of how integrative behavior follows integrative thinking. Leaders need rhetorical skills to persuade members of the team they want to build. Interviewee #3 indicated that visuals play an important role in convincing pitches: *“If you want your message [to act] across, you have to show people how to visualize the benefit. Have your partners work on it with you. So there's a bit of a collaboration and everyone feels like they're a part of it.”*

Integrative Structures and Processes

Integrative structures and processes refer to the use and institutionalization of collaborative structures, systems, and processes. In addition, the integrative public leader knows the affordances and limitations of collaboration structures, and can involve others in the collaboration to co-evolve the appropriate processes and structures (Crosby and Bryson, 2010; Huxham and Vangen, 2000).

The National Incident Management System (NIMS), available through FEMA, is a well-known collaborative structure for emergency management and resilience leaders. Interviewee #1 was an advocate for the system. They indicated that the NIMS informed their planning, and during disasters, they could learn the command structure of collaborative organizations, saving precious time. NIMS allows leaders to know about where information lives in the command structure of other organizations. They go on to note that the NIMS was vital during the pandemic when it came to understanding who was responsible for a behavior at any given time, which allowed him to build a model of “span of control and unity of command.” Interviewee #1 placed importance on speaking a shared language when it came to managerial authority, saying, *“all of these buzzwords [tend to] really mean something when it comes down to developing a response to an incident.”*

Having an integrative structure that supports joint goals is essential to dealing with the complexity of emergencies (Huxham and Vangen, 2005; Crosby, and Bryson, 2010). Interviewee #10 considered the ideal integrative structure to be lean. They advised managers to embed a core group within the organization to determine when outside help is needed. This would be more efficient than building multiple teams ahead of time and having them on standby. This can be understood as a just-in-time approach to emergency management.

Interviewee #18 also expressed the need for lean practices. Their team has access to specialized units with niche expertise such as industrial hygiene and medical countermeasures (for chemical, radiological, and biological agents). Those units are ready to be assembled from individual teams across the state's public health workforce. They can combine for training and drill and then disperse as they return to their ordinary activities. In this way, they serve the broader public health system while waiting to exercise their specialties in specific emergencies.

The culmination of integrative structures is the whole government approach. This holistic approach proved effective for emergency management and resilience leaders during the COVID-19 pandemic. Whole government approaches recognize that single-purpose departments can be unsuitable for wicked problems. Whole government is defined as an approach 'in which public service agencies work across portfolio boundaries' to develop integrated policies and programs towards the achievement of shared or complementary, interdependent goals." (Quoted. in Ortenzi et al, 2022, p. 1). The WHO concurs that whole-of-government and whole-of-society approaches support well-being in critical ways. Public health responders have a mandate not to get complacent when it comes to existing structures; some may need to be repurposed from time to time.

Interviewee #5 detailed the process of integrating new management structures. In February 2020 they led a strategic pivot as the virus became more of a threat. They staged a contentious meeting with their state's health commissioner, whose team had been working on the pandemic in relative isolation. Interviewee #5 was able to persuade the health commissioner - though not without difficulty - to integrate their team with that of the state coordinator. Of course, the health commissioner's team needed to be restructured if it was going to effectively integrate the state emergency management leader's team. Interviewee #5's job amounted to

convincing another public official, the health commissioner, of the superiority of a new integrative arrangement, with the implication that the latter's handpicked team needed help. Interviewee #5 had to adopt the role of an educator en route to making their case.

Whole government approaches come with certain limitations. There are always new relationships – not to mention potential power struggles – to manage when partners are brought together for the first time. Interviewee #5, again mentioning their meeting with the health commissioner, said that they were aware of the risk of appearing pushy. They had no shared trust. They noted that important relationships ought to be developed ahead of time. Furthermore, they reported that their collaborative arrangements met resistance. Fear of health risks from COVID-19 led the health commissioner's team to work from their own offices.

Interviewee #16 felt the need to align with Department of Health officials, especially epidemiologists, to get key data. This was the only way to understand if current approaches were slowing the spread. As they oversaw the protocols for testing centers and tried to involve the public sector in vaccine distribution, it was clear that the state leader was in new territory and that experience was lacking. *“Normally the Department of Health would handle this,”* or *“this would be sort of their bailiwick, and we probably wouldn't really get that involved with what happened for COVID except [for] the magnitude of COVID really...certainly from an operational standpoint, and had very little experience with and, and so, it was different from that respect, and that we really didn't have any studies to go by.”* In this telling, the whole government approach put stress on organizations that would have preferred to delegate authority in the crisis to some other agency. The pandemic response, by necessity, however, strained their competence and forced them into new roles.

Interviewees faced difficulties building structures, since it was unclear how the buildout could support their priorities. Interviewee #16, for example, saw cruise ships full of the COVID-19 patients who needed to be evaluated before coming ashore. A structure needed to be devised to evaluate and separate the patients according to health risks. But there were many possible arrangements, and it became apparent that the decision-making burden on the state leader was unlike those of other disasters. Likewise, when interviewee #17 had to set up quarantine facilities for transient persons, they faced a potential political problem, possible issues relating to privacy, and the need to document the people who had passed through, some of whom had documentation-related problems.

Transformational Leadership Theory

Transformational Leadership theory explains the class of behaviors that leads collaborators to adapt and move toward a shared vision. Findings from this study show how emergency management and resilience professionals exhibited their transformative leaders' style during the COVID-19 pandemic (e.g., guiding employees through an anxiety-laden COVID-19 work environment). Interviewee #1 repeated the old adage that "*a good leader is a good follower*" and "*it's very difficult to separate leadership skills from followership skills.*" They suggested that transformative leaders delegate to subordinates to allow their creativity and innovation to grow. This perspective supports the literature by confirming that Transformational Leadership is a reciprocal process where leaders and followers help each other innovate and work effectively (Burns, 2003; Caro, 2016). The discussion below discusses the study findings in terms of the alignment of Transformational Leadership constructs: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

Idealized Influence

The first construct of a transformational leader is idealized influence. The construct is said to be in place when an emergency management and resilience leader has won trust from the government and the public (Sun and Anderson, 2012). This study finds that collaborative leaders showed idealized influence during their response to the pandemic. Interviewee #5 mentioned that the pandemic response walks a fine line. Failures undermine public trust. Misinformation and the lack of a plan could create a “public uproar.” *“So we had to have some resemblance of some leadership and hey, we got a plan. We have to maintain trust and confidence in government in order to keep the public at bay and keep their confidence up.”* Leaders, to the extent that they must take risks to succeed, must understand that their failures count against them and work against the construct of idealized influence.

Another aspect of idealized influence is found in the belief of those around the leader. They must come to know that the leader cares for them and can anticipate their needs. Collaborative leaders put others’ needs above their own (Sun and Anderson, 2012). Interviewee #18 showed how trust in government is built. During the pandemic, they kept a focus on the mental health of their team even as a less transformational leader might have been swept up in the crisis. They did not deplete their team during the pandemic, and they allowed them to have work-life balance and had mental health resources when needed. *“The importance of addressing and maintaining a conscious awareness of mental health during this process [the pandemic] is extremely important.”* Demonstrating care for one’s subordinate not only helps them directly but builds idealized influence upon a foundation of admiration and trust. The agency and its vision benefit from this ethic of care. Idealized influence is found in the reciprocal loyalty between emergency management and resilience leaders and the people around them. Collaborative leaders

during the COVID-19 pandemic confirmed Bass's argument (1999) that leaders serving their communities to the best of their abilities inspire motivators in their followers and partners.

Inspirational Motivation

Where extrinsic motivation and inspiration are needed, we have the second construct of Transformational Leadership: inspirational motivation. Sun and Anderson (2012), who generally acknowledge the related nature of idealized influence and inspirational motivation, write of the latter that "leaders motivate others by providing meaning and challenge to their work." They must "communicate emotionally appealing visions" (p. 311). Leaders motivate people to communicate for the achievement of shared goals. This aligned with what the interviewee #11 mentioned, during the COVID-19 pandemic response, their emergency management department leaders developed their own language of progress as well as let the teams have input in terms of stating their desires for the mission. This interviewee stated that they "*just done a really good job with that of communicating and motivating and really letting everyone know what, what needs to happen.*"

Interviewee #14 indicated that motivation must persist despite conflict, since it is inevitable during the darkest hours of emergency management and resilience. "*We may not always agree with each other,*" they say "*but we have to work together, and just find a way to make it work. I feel the higher up I go it's more motivating the folks below me the folks around me just helping them understand where they fit into this.*" Deliberation about their shared role – which sometimes changes during crisis - is vital to organizational change, but inspirational motivation leadership can prevent this conflict from seeming like additional turmoil.

Furthermore, interviewee #13, for example, acknowledged that both individuals and groups each have unique motivations. During morning debriefs, they remind their team at the

Department of Transportation that they are responsible for public safety. While that may seem obvious, the daily reminder helps employees stay motivated by seeing how they fit into the agency's shared purpose. Inspirational motivators understand that goals must be built and then reinforced.

Interviewee #3 indicated that human connection is a motivating factor within collaborative leadership in emergency management and resilience. Leaders should build strategies accordingly. The form of motivation, they said, was "*certainly not the money...you need to show them the great work that they're actually doing, like show them the results of the work.*" They recognized the importance of going beyond abstractions. When their agency secured 10,000 ventilators during the pandemic, they made sure to establish the machines' importance to real users. Here was lifesaving technology, but it was up to interviewee #11 to build the connections for their team so that they could feel good about their role in the procurement process. Emergency management was about touching other people's lives, and modeling that understanding was a key aspect of their leadership during the pandemic.

Interviewee #20 saw their team's motivation degrade over time. Keeping their employees on task became a challenge. They described them as "*sitting behind the computer, at [their] kitchen tables,*" where it was their job "*to get people motivated to react and respond.*" They had to go beyond routine status updates, to which their team would give little input. Virtual meetings broke this unhelpful pattern of passivity and became an environment of inspirational motivational leadership and inclusivity. They welcomed diverse stakeholders to lead the virtual meetings who might not have been able to participate were they meeting face-to-face. Their first step was to answer questions about how to change the work process to better support their people. In this case, they experimented with several options related to who would come into the

office and when. Leaders, for their part, were not able to have the full range of one-to-one interactions with their employees. By rotating into the office at different time intervals, employees could regain their connection to the workplace without making themselves vulnerable to infection in a crowded office setting. The COVID-19 pandemic was a sudden and sometimes unwelcome introduction to remote work, which seemed somehow to make tasks less authentic, valuable, and engaging. Inspirational collaborative leaders took up the challenge to respond to the COVID-19 pandemic in a collaborative setting within a virtual environment.

Intellectual Stimulation

Intellectual stimulation is a construct of Transformational Leadership where collaborative leaders' actions stimulate others to innovate and support one another in solving problems. Sun and Anderson (2012) define intellectual stimulation by leaders as "challenging others to question time-worn assumptions, reframe problems, and approach old situations in new and novel ways" (p. 311). Intellectual stimulation allows these actions, team members, and partners to be innovative and creative by redefining old situation in new ways (Karaca et al., 2012). They are actively involved in problem solving. Interviewee #20 gave a general sense of the construct by describing a hurricane: *"knowing that [individuals] have some type of input into the overall solution... if there's a problem, we have 34 representatives in the emergency support function to the team. We throw it on the table. And regardless of who the Subject Matter Expert (SME) is, if it's the right solution, we're going to go with that solution regardless of who recommends it."* Intellectual stimulation prioritizes good ideas regardless of their origin and is agnostic to power politics.

The response phase of the COVID-19 pandemic demonstrated how transformational leaders stimulated their employees intellectually. Interviewee #5 explained the unusual nature of

their approaches to the pandemic. *“I’d say creative thinking and problem solving are absolutely up there [to address the shortage of PPE]. And that the examples of our personal protective equipment program, we’re a totally outside the box and like here’s, innovative contracting, like prepayments, and we were doing all kinds of weird stuff. Again, just being innovative and I think those are all important.”* This was needed due to the potential for mass fatalities if the old approaches to PPE failed, not to mention a loss of public trust, according to the interviewee. Previously untried approaches, while risky, maintained the public hope that things would improve. They showed an active public sector that was not resting on its laurels or accepting of mass fatalities.

Interviewee #19 emphasized flexibility and learning as you go. They emphasized that everyone in the management hierarchy was caught without full knowledge of what to do. Setting up vaccination sites in a hurry, with the requirements needed by health professionals to ensure the safety and efficiency of the mission, required an eye to public space that may have been outside the initial competency of the teams. Nevertheless, empowering staffers to be creative about securing and retrofitting spaces proved essential to building and sharing collective knowledge.

During the COVID-19 pandemic, emergency management and resilience leaders struggled due to the novelty of the crisis. The resources they needed were not always available (e.g., public space). Leaders needed to support solutions that were achievable given their constraints, and inevitably these approaches were going to be the suggestion of other partners with different mixed of affordances and constraints. Transformation leaders are flexible and humble when dealing with their teams. Situational knowledge during the pandemic was often about activating parts of the public sector management structure that had gone underutilized

during other disasters or had not interacted previously. Interviewee #19 indicated that their state did make attempts before the pandemic to integrate the various mitigation leaders throughout the state. This practice is ongoing and is helpful to thinking through wicked problems before they emerge.

Individualized Consideration

The individualized consideration construct is where collaborative leaders pay attention to their partners' learning and growth, helping them, in Sun and Anderson's phrase, achieve "true potential" (2012, p. 311). Collaborative leadership in emergency management and resilience must take heed of the training and development of individuals, understanding both their aspirations and ability. Interviewee #1 mentioned that their state agency is liberal with training and development, with the caveat that employees be kept close by. *"We try not to send people across the country very often...but we have a pretty good training budget and the ability to be compensated for our time used during that training."* Their department's policy of subsidizing training is an admission of its importance to the emergency management and resilience mission.

The impact of training and development is stated succinctly by Interviewee #13. They place a premium on surrounding themselves with technical, competent people, and these considerations sometimes take priority over specific considerations of subject matter expertise. Echoing their cabinet secretary, no one can have the answer to every crisis, but a competent leader can get the information quickly. They trust the procedural know-how of lower-level managers even if they don't share their entire knowledge base. The example they provided was how to lay out traffic cones to coordinate traffic for emergency management purposes. They need not understand the layout strategy to understand how to select and empower those who do.

Through Integrative Public Leadership and Transformational Leadership theories, emergency management and resilience leaders mentored, incentivized, and intellectually stimulated their partners through inter-organization and intra-organization action to maintain a sustainable collaboration during the pandemic response phase. Data from this study answered all three questions with the support of Transformational Leadership and Integrative Public Leadership.

COLLABORATIVE LEADERSHIP SKILLS AND COMPETENCIES

The first research question asks: What were the collaborative leadership skills and competencies used by emergency management and resilience professionals during the COVID-19 pandemic response? The researcher extracted the leadership skills and competencies from participants' experiences during the response to the COVID-19 pandemic. Several themes emerged that were related to the elements of both Integrative Public Leadership and Transformational Leadership theories. The interviewees discussed their experiences as skills and competencies were built, deployed, and challenged. The skills and competencies are collaboration and partnership, effective communication, effective listening, building relationships and networking, building-trust, dealing with stressful situations, understanding, flexibility, problem-solving, knowledge and information-sharing, open-mindedness, risk management, visionary, decision making, coordination, innovative thinking, and teamwork.

Collaboration and Partnership

Most of the emergency management and resilience leaders asserted the necessity of collaboration and partnership skills during the COVID-19 pandemic. These skills are supported by Integrative Public Leadership theory, which emphasizes the willingness to partner, listen, and

work with others to achieve a desired goal. Interviewee #9 expressed the benefit of collaborative structures put in place pre-pandemic. Ideally, says interviewee #5, *“you [as a health commissioner] and I would develop a relationship before an emergency occurs.....I think the other thing is understanding how your organization works and how my organization works.”* Knowledge of skills and competencies of potential partnerships is an essential feature of a collaborative disaster management plan.

Mitchell et al. (2015) found that collaboration is the key strategy for leaders to improve their performance and have a successful performance outcome. Interviewee #18, a state health professional, indicated they were in a privileged position pre-pandemic due to an established information pipeline. A customer service line connected their office to the public at all hours. Although a phone line is not a place where new pathways are established, it does offer a means for keeping a leader’s finger on the pulse of the community. Interviewee #18’s agency also had the resources to perform needs assessments and/or bring in specialists for a communicable disease event. Interviewee #19 were similarly connected to their state’s healthcare preparedness program and emergency management functions. They demonstrated ongoing commitment to interacting with potential partners in other departments.

Interviewee #14 emphasized interdisciplinarity in collaborative contexts. Different disciplines, perspectives, and sectors contribute to the effectiveness of collaboration. Cognitive diversity predicates a *“certain mindset and perspective across all disciplines working together [to] make efforts successful.”* They described their approach as goal-oriented and holistic. A richer perspective on the problem emerges from a context of cognitive diversity. In order to enhance collaboration and partnership skills for emergency management leaders, there should be a common communication infrastructure and technology (Demiroze and Kapucu, 2012).

Effective Communication

Effective communication was one of the most important leadership skills to be able to partner with stakeholders, integrate them, and share vision and action with the public. Effective communication is a difficult concept to pin down because it is so contextual, but the interviewees contributed information about different dimensions of what that might mean. For instance, interviewee #16 stated the reliance on both verbal and written communication. Either writing or speaking may be more efficient at a given time for gathering knowledge. The interviewee emphasized trying to determine missing information as the primary function of their role as a leader.

This evidence aligned with how emergency management leaders are coordinators and facilitators of the operations center during the response phase (Waugh and Streib, 2006). Interviewee #15 emphasized communication as a routine: “*Communicate constantly, daily or twice daily, situation calls. That's the key to success is having everyone be on the same page, keeping on the same page going in the same direction. It's tough with a lot of people and a lot of moving parts, but that's the most efficient way to go about it.*” Communication strategies must also be an object of attention and improvement. It is wise to hone one’s skills and engage different audiences, since building those relationships, in the words of more than one interviewee, may provide unexpected benefits in unanticipated situations. Interviewee #1 concurred for the need for continuity, or a procedural approach to interacting with new groups. It is possible that this widens the circle of knowledge and resources available to the emergency and resilience leaders.

The ability to communicate shared vision with stakeholders and partners is one of the collaborative leadership skills during the response to the COVID-19 pandemic. Interviewee #20

used regular meetings to communicate and update his organization's shared vision. The meetings are brief and allow everyone to have a brief say. This response is aligned with the guidance of Ardoin et al. (2015) that collaborative leaders should express the attitude to work with others toward the shared vision and common goal instead of directing the tasks to followers.

Interviewee #21 concurred. During the COVID-19 pandemic, they took pains to include their collaborators in all aspects of their strategic vision. *"Be honest and transparent about the risks,"* they advised. They preferred to develop an initial action plan among their small staff and then allow other stakeholders to conduct a review. They encouraged their partners to make sure that they have a visible role in the planning work. Interviewee #21 understood that a truly shared vision will have buy-in from all participants and increase their motivation to accomplish the project, since it is of their own design.

Effective Listening

Effective listening plays a major part in the effectiveness of communication. Interviewee #10 distinguished listening as an active approach. They thought of it as a way to gain future sight: *"The ability to listen and not only see what the problem is today, but forecast that problem or challenge out for however long you suspect it would be."* They further warn that a leader that does not do this may fall so far behind that opportunities are lost forever.

Interviewee #18 added to this statement with their idea of listening as important for groups as well. They also have an identity. They emphasized shared understanding as a group, *"bringing together meetings in order to communicate and to listen and to understand critical issues and then be able in order to be able to address those in the immediate future."* Interviewee #10 thought listening to be a skill. *"I think good leaders have to be experienced, and they have to be good listeners."*

Relationship-Building

Many interviewees confirmed the importance of relationship-building and networking skills in effective emergency response. Effective communication enhances the level of trust and reciprocity among a broad network of emergency management and resilience leaders. Effective communication cannot be solid without the ability to *build-relationships*. Interviewee #6 emphasized that successful relationships contained prosocial behaviors such as willingness to share resources. Reciprocity in the relationship was defined by the willingness to exchange.

Interviewee #5, discussed trust in collaboration, shared a story of building confidence in other people. *“If you're the health commissioner,” they posed, “and I was in my role and I walk up to say, ‘Hey, this is my first time meeting you but I’m here to solve all your problems.’ You’re just going to say that’s ridiculous. So hopefully you and I would develop a relationship before an emergency occurs.”*

Interviewee #6 discussed the role of building trust in robust relationships. *“As trust, you can build trust early on [or] you can build it in the middle. You can spend months building it and a relationship down the road bends and it’s on the other end, but trust is key.”* Effective collaboration is dependent on trust (Crosby and Bryson, 2010; Huxham and Vangen, 2005; Ring and Van de Ven, 1994). Interviewee #5 stressed that their experience with pandemic management reinforced these principles. Within their first two weeks as state coordinator, they met with the leader of the state’s National Guard as well as the commissioners of health, transportation, and the police with the explicit intent of building trust.

Networking

Networking by emergency management and resilience leaders allows robust collaborative work. Interviewee #14 indicated, *“networking [and] building relationships with people is very*

helpful.” It was notable that these two terms were distinct from one another. Interviewee #3 preferred to share meals with partners, noting, *“when you provide food for people to eat, then they start to talk off the cuff. They start talking about informal methods and manners, and so you're building relationships with your partners.”* Dependable, established networks with a good history of trust supported the flow of resources between partners during the COVID-19 pandemic. Interviewee #1 indicated that their disaster response leadership hinged on this: *“There were a lot of steps made in communication and communicating with the public,”* they said. *“Moving resources around, [and] sourcing different resources.”*

Dealing With Stressful Situation

Emergency management during the COVID-19 pandemic stressed not only the public but the administrative teams themselves. For the sake of effective communication, effective listening, and the ability of gathering feedback, the capability to deal with stressful situations was paramount. Interviewee #8 understood that this management context required new communication skills and strategies. *“Because everybody's under such stress, I think that's one of the most important things is to pause and give everybody a chance to speak and speak from create an opportunity for everyone to speak from a place of vulnerability....”*. The best communicators during that time, they observe, *“were not just barking orders, they're listening to stakeholders, constituents, or partners, listening and gathering feedback there. They say they don't know when they don't know. They accept ideas that maybe aren't perfectly aligned with theirs and they're willing to listen.”*

Understanding

Effective collaborative leaders exhibited high levels of understanding during the response to the COVID-19 pandemic— especially their peers, work situation, and prospects for operational

success. Interviewee #3 expressed that effective collaborative partnerships sometimes required attention to one's own language as a tool that could be effective or a hindrance. They noted that communication fails during all disasters, and they seemed to imply that this awareness was critical to prevent a failure of crisis response. Their communication style stresses the maximum level of detail about what needs to be procured or achieved. Interviewee #4 explained that understanding as a skill exhibited by collaborative leaders resulted in effective problem solving and decision making. Understanding was built upon "*a deliberative decision making process*" that defined the problem, conducted research, and gathered data to solidify understanding. The team developed plans of action to bring to executive leadership as quickly as was feasible so that they could build consensus and mitigate the problem.

Flexibility and Adaptability

Participants considered flexibility and/or adaptability to be core skills for collaborative leaders in order to maintain the response to emergencies (Wise, 2006; Waugh and Strieb, 2006). During the COVID-19 pandemic, collaborative leaders changed plans as a result of internal, external, and political factors. Flexibility is associated with the Transformational Leadership theory, wherein managers act nimbly to transform situations and leave the imprint of their leadership upon a crisis. Interviewee #10 expressed that the unrelenting pressure of the pandemic did not have a fixed end, and the uncertain duration necessitated an understanding of not just the crisis of one moment but of what it might become. They compared the pandemic response to terrorism in that it altered behavior considerably, pulling all the actors away from normal roles, and subjecting them to constant redefinition.

Interviewee #1 stated, "*the thing that helped us most through this pandemic was the flexibility of our management,*" while Interviewee #12 called flexibility "*a core skill you have to*

have.” Interviewee #16 confirmed the importance of flexibility to their organization. “*We have a saying here, ‘Semper Gumby.’ It means ‘always flexible’ And “be flexible, Semper Gumby.”*”

They also added the word ‘adaptability,’ which wasn’t completely synonymous. The literature calls adaptation a capacity to navigate a “suddenly altered or rapidly changing environment” (Comfort, 2007, p. 193) or “the capacity of actors in a system to influence resilience” (Walker et al., 2004:5, p. 3). In any case, the literature confirmed that adaptability and flexibility are key constructs of effective leadership (Demiroz and Kapucu, 2012; Van Wart and Kapucu, 2012; Mahmud et al., 2020).

Problem Solving

Collaborative problem-solving in emergency management and resilience contexts is the ability to execute strategic and tactical aims together with team members. Interviewee #20 emphasized their devotion to subject-matter expertise as an element of problem-solving. The team endorses the best information they can find from the most credible source and abides by the consequences as a team, after careful deliberation. This is a process-oriented approach.

Decisiveness when solving problems was found to be a key skill of successful emergency management and resilience leaders during the COVID-19 pandemic. Interviewee #17 interpreted decisiveness as a group phenomenon, stressing openness to novel approaches, which in turn led to a greater range of inputs, and, in turn, the confidence that the best decisions had been considered. Leaders need to be decisive in order to maintain public trust.

Avolio and Bass (1988) argued that transformational leaders give their team members control in solving problems. Interviewee #4 indicated a preference for deliberative approaches to problem-solving. The process of researching and defining the problem can be known and evaluated. The ultimate deliberative goal is to offer a deliverable to the chief decision-makers,

and they should be able to follow the logic of the decision-making framework given to them so that they can trust that it has been well-considered.

Decision making

One of the core skills for collaborative leadership in emergency management and resilience mentioned in the literature are the decision making skills (Waugh and Streib, 2006; Demiroz and Kapucu, 2012; Van Wart and Kapucu, 2011). Collaborative leaders who make timely decisions may reduce the negative impact during the response to an emergency (Sadiq et al., 2021). If the test of problem-solving skills is whether an emergency management and resilience leader can make a problem disappear – or at least oversee the mitigation – there may still be situations where multiple problem-solving paths serve these goals. However, decision-making governs the ability to choose between competing paths when using problem-solving skills. In other words, decision-making is a type of prudence about which solutions to select. The Integrative Public Leadership theory promotes the integration of different partners within the collaboration in order to achieve the desired solutions (Cosby and Bryson, 2010; Sun and Anderson, 2012).

Interviewee #4 confirmed the importance of supportive partners in their decision making process. They described integrating a rather unusual stakeholder: their Department of Employment. When workforce interruptions from the pandemic were forecasted, they knew their idea of and approach to disaster management had to become more comprehensive. Decisions of whom to integrate had to be made in an environment where proper procedural information was not always available. Yet the decisiveness of the integration led to success for this state leader. Emergency contexts require swift decision making, as interviewee #15 attested. Practicality is everything. Skilled emergency management and resilience leaders should make “*the best*

decision you can make and have that decision be clearly understood and then have that direction followed.” Pivoting can take place later. Appearing to stand pat is a sacrifice few leaders can afford to make. Acting decisively but not rashly is a decision making skill.

Risk-Management

FEMA’s risk management website directs emergency management leaders to identify, assess and prioritize possible risks and minimize potential losses. Hazard resilience, mitigation (building safe spaces), and education are the three risk management pillars (FEMA, 2022). Together these concepts define risk management. Risk management skill arose several times in the interviews. Comfort (2007) discussed that clear recognition of emergency threats supports successful risk management. However, policymakers balanced competing priorities during the COVID-19 pandemic, which often led to tradeoffs. For instance, Interviewee #5 noted that risk-management decisions in their state balanced economic risks along with public health concerns. As a state emergency leader, they had to work within the policy framework given to them, even if this would not fully please neither epidemiologists nor economists. *“Risk management comes into play,”* they said. *“The science of the epidemiologists [and] their recommendations is to conduct a complete shutdown to save everybody, but in reality, that’ll never happen, because if we’re a zero risk environment, nobody would drive to work, right? It’s too dangerous. So you must have that willing leadership presence to make risk management decisions.”* Risk management decisions use probabilities to balance outcomes between stakeholders whose views may not be fully aligned.

Interviewee #1 emphasized iterative risk analysis. Even experienced leaders do not always understand the proper magnitude of what they face. Their risk management during the pandemic had to be re-engineered again and again. They showed a willingness to dial back the

severity of their approaches if their risk management strategy was wasting resources and to increase their risk management if they had underestimated the danger. This participant's perspective aligned with the Integrative Public Leadership constructs where collaborative leaders integrate partners and resources to handle risk management effectively.

Knowledge and Information-Sharing

Effectively sharing and using information supports effective responses to an emergency (Kapucu, 2006). Being a knowledgeable emergency management and resilience leader is bound up with the ability to share what you've learned. Interviewee #16 described pandemic communication as a "*wild card*." It was not always clear how the public would react to even the most careful messaging. So there were two overlapping efforts: being "*on the same situational awareness page*" and trying to get some ideas of how to gauge the public opinion when messages did reach them. A knowledgeable communicator would have some control - though by no means a perfect grasp - of the public's reception of a given message. Their response supports the argument that the lack of informed and knowledgeable leaders may be to blame for communication failure (Helsloot et al., 2012).

Interviewee #20 admitted they did not always know what types of knowledge their partners might need. Knowledge sharing was a sort of guessing game in which the recipients had to be given what might be relevant and interpret it for themselves. "*What you do with the information is up to you*," they said. State emergency leaders have audiences with wide-ranging expertise – the National Weather service and a wireless company in this case – who necessarily differ in terms of how they interpret information. "*When you're not scared to share information,.....I think everybody benefits from it. I think that's important. We definitely learned that during COVID-19.*"

Open-Mindedness

Open-mindedness differentiates two sets of collaborators: those who integrate partners simply as a rote process and those that approach sharing opportunities with sincerity. Open-minded leaders demonstrate success in both the literature on leadership and in the interviewees' responses. They form and interpolate new insights while adding cognitive diversity to their collaborations. Skilled collaborative leaders had to learn from previous disasters/public issues during their response to the COVID-19 pandemic. Interviewee #16 likened this historical research to homework. They attempted to gather enough information to begin a thoughtful analysis but not so much that they became dogmatic and unreceptive. They referred to the emergency management leader's role as "*not necessarily the subject matter expert*" but someone who was aware of "*what you do and do not know.*" The leader's research led them to ask the right questions when sitting with SMEs and to understand blind spots.

Interviewee #20 tied open-mindedness to risk management, citing the ability to get control of "*external factors about internal decisions.*" Open-mindedness was key to understanding the art of the possible. Interviewee #7 considered the psychological benefits of open-mindedness. When mistakes happened, they would not strain to return to the status quo. They needed to be able to incorporate the new reality in front of them. Embracing the change and adapting was key to their leadership style. Abandoning old approaches may yield surprising benefits. Open-mindedness is the mindset that keeps the leader mindful of new integrations and chances for transformation.

Visionary

Visionary skill is differentiated from garden variety communication through its ability to integrate partners. Visionary skill is rhetorical, sensitive to audience needs, and attempts to

harness the symbolic potential of communication. Rhetoric can drive an effective planning process by guiding team members to take away the precise positive feelings one wishes them to have. According to Selladurai (2006), visionary leaders can “see the big picture in their minds even before it unfolds” (p. 93).

Interviewee #9 discussed the role of visionary skill in forming a communication strategy. Working in a resilience context, they emphasized that a shared vision had to be built collaboratively, which was superior to building a vision by oneself and then getting others to adopt it. Their developmental approach integrates team members early on in their planning process. They showed a willingness to be informed by the responses to earlier crises, and these generated guiding documents that articulated their key principles and influenced their subsequent decision making.

Interviewee #13 stated that the best leaders appear to be willing to do the very things they task their subordinates to do. Leaders with visionary skill, “*literally roll up their sleeves and go out there and do the work. They don't have a mindset that I'm the boss, so I don't have to. You go do it.*” They have visionary skill, but this is not used as a way to avoid engaging with more routine managerial tasks.

Collaborative leaders should be able to share their vision during a crisis, but interviewee #16 noted that such vision could emerge from unlikely places. “*As I said, a lot of times, your other people will come up with better and more efficient solutions than what you had in mind. And so you have to be receptive to that.*” They considered that their well-trained staff sometimes had their own definition of a particular problem and/or solution. Being open to these ideas was a form of managerial motivation. They granted the integrated partners some authority over the details of the emergency management response.

Coordination

The data suggested the importance of coordination skills during the COVID-19 pandemic, especially when it came to horizontal forms of communication, though they proved capable of dealing with superiors or subordinates as well. The research also suggests the importance of horizontal acts between leaders. There can be a lack of collaboration across city departments, pointing to a lack of interaction and flow of information. This results in partial solutions and comprises strategic aims (Bhagavathula et al., 2021).

Interviewee #19, who prioritizes horizontal management, began coordinating crisis responders prior to the pandemic, hosting quarterly meetings about hazard mitigation. But their leadership was about more than just getting speakers in the same room; it suggested a structural function that could help the meetings be effective. This could be considered integrative behavior of the type seen in Sun and Anderson (2012). Interviewee #4 suggested that integrative behavior means understanding every group's role, preventing duplication of effort and setting the stage for positive collaborations. The concept of "*double emphasis*" was apt here: leaders committed to both action and discussion.

Coordination skills should be considered not only before an emergency, but also during the response and recovery phases all long. In December of 2019 before a state of emergency was declared, interviewee #13, a state leader of Department of Transportation, was already looking ahead to vaccine venues. Their managerial response anticipated the vaccine breakthroughs to come. This involved coordination with the Department of Motor Vehicles (DMV) and with a race track who lent its unused facility out as a vaccination site. The spaces they secured gave wide throughput for the vaccination process. They recount the vaccination efforts: "*we grew from a few 100 people a night to 1000s of people a day.*"

Innovative Thinking

Innovative thinking helped organizations collaborate to address material deficiencies during the COVID-19 pandemic response. Caro (2016) argued that transformational leaders must “lead transformative changes associated with innovative technology deployments” (p. 199). The data support this. Supply chain woes – primarily a lack of sanitizer, cleaning supplies, and PPE – required managers to rework existing processes. In the face of hoarding and lack of supply, Interviewee #5 partnered with distilleries and a brewer’s organization to have them produce sanitizer for the public. Even microbreweries were integrated into this response. In terms of masks, local cloth manufacturers repurposed their facilities to assist in making masks according to specific guidelines. They were given machines to help their efforts. Coordination on a wartime scale helped to turn tent manufacturers into makers of lifesaving masks with rapid speed.

In order to advance innovative thinking, collaborative leaders should enhance the innovative thinking of their partners. A study by Armistead et al. (2007) explained that transformational leaders in multi-sectoral partnership develop others by “showing genuine concern, enabling being accessible, and encouraging change” (p. 215). Within emergency management and resilience during the COVID-19 pandemic, Interviewee #16 welcomed their team’s innovations. They deliberately avoided constraining their creativity. They would define the problem and allow solutions to emerge organically. The structural influence of periodic meetings allowed him to assert their prerogatives, but within this overall framework they could afford to let unfettered ideas emerge. This struck a balance between activity and passivity. They were open to both tactical and strategic innovations.

Teamwork

The ability to assemble a team and work with them is one of the important skills for collaboration (Bhagavathula et al., 2021). Interviewee #4 explained how their state integrated communities into the emergency response creating what they described as an “*emergency response community to include its citizens and their participation in it.*” These partnerships proved critical in the successful response to the COVID-19 pandemic. Diversity among partners proved to be a strength. However, not all team building scenarios were ideal. Interviewee #5 warned stakeholders that the agency lacked the personnel to fight the pandemic. Delays in public service were likely since the agency’s makeup was ideal for dealing with chronic illnesses rather than the infection curve of the pandemic. Although their state had a pandemic plan in place, there was not enough buy-in, and the thrust of their pandemic leadership was getting their teams to understand the gravity of the situation early enough to respond effectively. Virtual modalities sometimes strained teamwork, but successful emergency management and resilience leaders had to adapt. Interviewee #7 discussed a negative aspect of virtual modalities: the COVID-19 pandemic led to a constant presence on the department’s main technological platforms. Team members could get fatigued from this virtual workplace. Interviewee #7 summed up the COVID-19 pandemic workflow thus: “*We're all on Adobe Connect. There's five different platforms and meetings today...but you still have business to conduct.*”

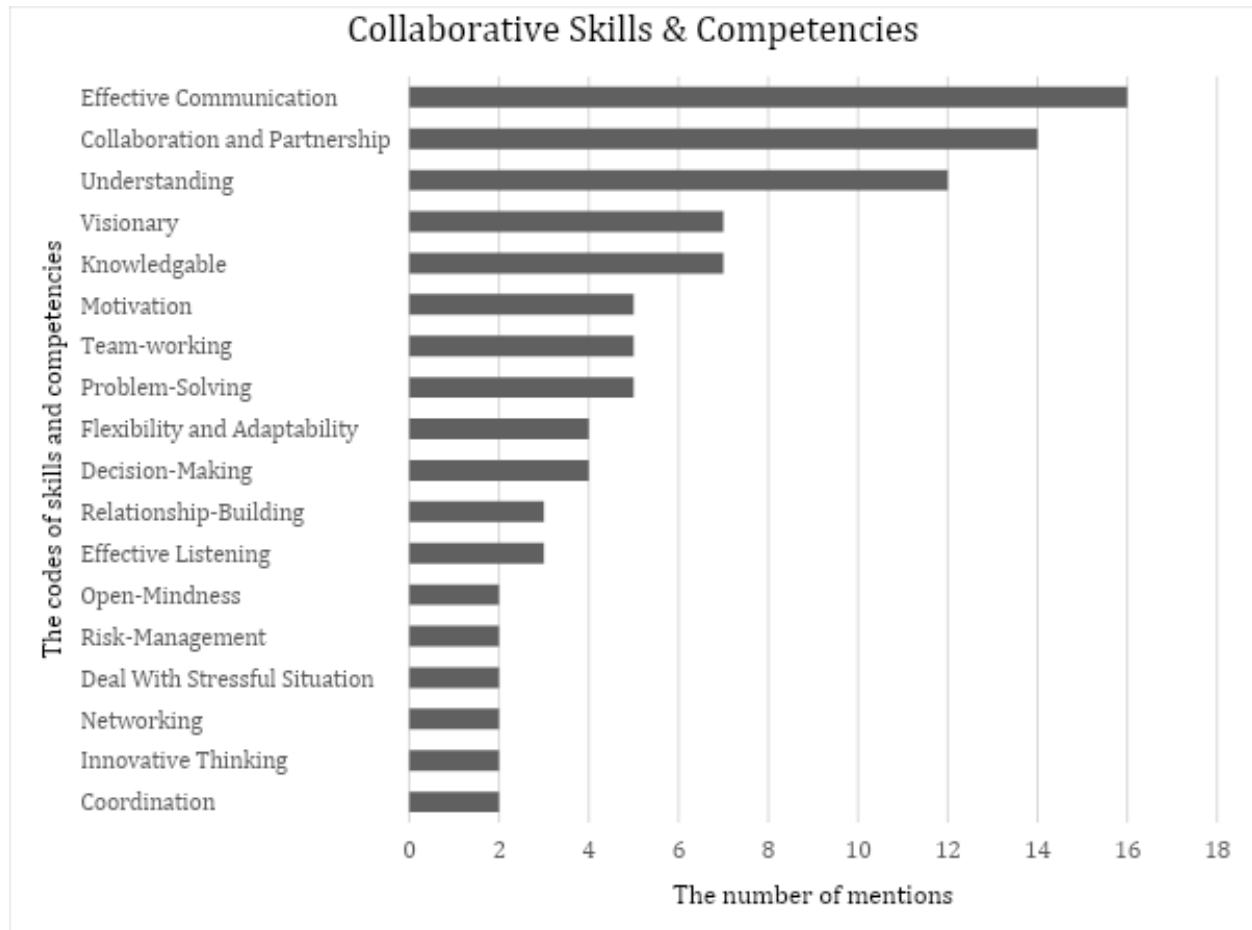


Figure 2. Frequency of Collaborative Leadership Skills and Competencies As Mentioned By Interviewees.

The skills and competencies in Figure 2 answer the first research question about the core skills and competencies for collaborative leadership during the response phase to the COVID-19 pandemic. Interviewees valued some skills and competencies over others in their response to the COVID-19 pandemic. Figure 2 (above) indicates these skills, with effective communication topping the list. The interviewees explained that an effective shared vision is a product of a “team’s decision,” which necessitates the communication skills required to engage one’s

partners. Emergency management and resilience leaders guide their teams to best practices.

Communication also supported one's inter-agency partners, particularly in public health matters.

Collaboration and partnership skills were nearly as highly-rated. Emergency management and resilience leaders *"have to be able to work hand in hand"* with public, private, and non-profit sectors and deploy skill sets and resources in a value-added fashion. Interviewees who had partnerships and infrastructure in place early before the pandemic were able to be more deliberate and collaborative during the response to the COVID-19 pandemic.

An ability to read situations, people, weaknesses, and strengths was also deemed important. This study found that effective emergency management and resilience leaders needed to be flexible and understand the situation that they were in, understand when they need help, and *"understand what needed to happen next"* in their response phase. Interviewees discussed the importance of understanding everyone's motivation for effective collaboration. Most of the interviewees discussed the importance of understanding the information related to the COVID-19 pandemic and being transparent with the public to present the right information. One of the interviewees prioritized *"the ability to rapidly understand information and what could be new information and then understand how that applies to the situation."*

Interviewees rated skills such as patience and focus somewhat lower, mentioning them only once or twice. Emergency management and resilience leaders must have patience during emergencies and *"have to be able to be willing to stop and explain your point of view in a way that focuses on collaboration."* People may lose their minds or panic, so emergency management and resilience leaders *"keep it calm, work through it.... And give clear direction to everybody."*

Collaborative skills and competencies mentioned three times or fewer (e.g., responsibility, accountability, and an even-tempered nature) do not feature in Figure 2. However,

it is possible that these traits were subsumed under different categories. For example, an even-tempered nature can fairly be placed in the category of skilled communication. The desired skills and competencies measured in this study may or may not have implications for COVID-19 beyond the response phase, future pandemics, or other disaster contexts. The following section discusses the specific challenges leaders faced during the COVID-19 pandemic as well as changes to their collaborative leadership skills and competencies.

CHANGES TO LEADERSHIP SKILLS AND COMPETENCIES RESULTING FROM THE COVID-19 PANDEMIC RESPONSE

The study revealed the challenges caused by the COVID-19 pandemic as well as the ways leaders confronted them. In response to the second research question of “How have these leadership skills and competencies changed as a result of the COVID-19 pandemic?” participant narratives contrast collaborative leadership approaches before and after the pandemic. The themes of the second research question are: collaborative leadership challenges during the response to the COVID-19 pandemic, changes in collaborative leadership skills and competencies as a result of the COVID-19 pandemic, and desired skills and competencies to better manage the emerging challenges from the COVID-19 pandemic.

COLLABORATIVE LEADERSHIP CHALLENGES DURING THE RESPONSE TO THE COVID-19 PANDEMIC

As with many crises, the COVID-19 pandemic produced uncertainty for emergency management and resilience leaders. However, their collaborative frameworks were challenged in a manner inconsistent with previous crises. For instance, some of the respondents encountered

challenges to switching to virtual work, a technological test that no natural disaster had demanded of them. Findings from this study highlighted different perspectives that have been challenging the leaders during their response to the COVID-19 pandemic.

While many crises challenge emergency leaders to master logistics, the COVID-19 pandemic proved to be a tougher test for interviewees. Resources could not necessarily be relocated from other states because they, too, were suffering the same shortages. Supply of disinfectants could not keep up with demand and shelves were bare of them. Interviewee #7 noted that their requests for supplies, especially masks, gloves, or gas had to compete with those of other state leaders. They called the competition “*a buyer’s market...prices go up, availabilities down.*” Interviewee #5 had particular trouble with PPE and sanitizer. In total, six interviewees indicated deficiencies of PPE.

The COVID-19 pandemic was a famously information-poor environment in which to lead. Scientific consensus had yet to be established during the response phase and disinformation flourished. Effective collaborative leaders, as in other crises, took steps to build confidence and trust. This process features in both the study and the literature. Interviewee #5 clarified the difficulty. An emergency management leader may have a difficult time courting a prospective partner during times of uncertainty. They managed their hesitation by creating shared interest between the organizations, indicating particular opportunities and capacities present in the collaboration. In order to integrate new partners (e.g., breweries), they had to build trust and confidence in the proposed approaches.

Another challenge mentioned by some leaders was employee turnover. Interviewee #18, one of the leaders who avoided this difficulty, did so by paying special attention to the work conditions of their team. They attributed this retention to the timely use of surge staffing. This

preserved a 40-hour workweek where possible. They said, “*an active awareness of work-life balance for the entire team is extremely important.*” Of course, this is the exception that seems to prove the rule since the ability to bring in new staff at key times is resource-sensitive.

Interviewee #16 emphasized the costs of employee turnover, calling it “*almost constant*” and “*rather dramatic.*” Their organization strived to improve its pandemic response, but losing key team members caused them to move backwards. The turnover was due to burnout more than managerial failure. Their people would “*get tired and fed up and say ‘forget it.’*” The intense workload of pandemic management proved too much for the organization’s staff.

Interviewee #3 managed their team’s burnout by creating important redundancies in the management structure. In the early stages of the COVID-19 pandemic, work was all hands on deck. The burden was psychologically and physically unsustainable. Interviewee #3 reported learning during a challenging time “*to become more compassionate and realize that, yes, we all have vacation time, we all have sick time.*” They pushed back against the stigma of using sick time and vacation time. Robust information pipelines situated in a compassionate atmosphere allowed employees to easily fill in for one another during an absence. The culture was described as one in which “*it’s okay to use that [sick time, vacation time], and not be judged.*”

Interviewee #15 stressed that the length of the COVID-19 pandemic exhausted their team. For a team accustomed to disasters such as snowstorms, the first six months of the COVID-19 pandemic brought unexpected workloads and fatigue, especially as the initial hope for a resolution faded. However, collaborations were increased, and key personnel from other agencies worked to fill in gaps for their partners. Interviewee #15 noted the relationship between infection rates and work cycles. In other words, increased spread would put increasing labor

pressure on a given state agency. This rhythm could be predicted to some degree of accuracy, leaving open the possibility of being proactive with staffing decisions.

The interviewees found that egos and self-interest challenged their collaborations. These foibles were usually regarded as “*human nature*” actuated by a tense environment. Interviewee #15 identified the personality traits that led to collaborative struggles. “*Some people tell stories,*” they said. “*Or you call it lying...they don’t want the best interest of the whole. They’re thinking of themselves.*” In other cases, the scope of a given job led to close-mindedness, of “*people get[ting] caught up in their purview*” and/or clinging to a sense of their importance derived from the assets or people under their care. A solution to ego and self-interest was the objectivity of a unified command. FEMA provided such a structure. This was an especially good corrective action since the office had not yet recovered from the scandal of a former leader. Interviewee #15 expressed that the environment was one of rapid change involving huge amounts of money. The stress of a fast-paced environment with a lot of scrutiny combined to make state officials combative. The interviewee found themselves among competent people who were not always disposed to be ethical or forthright. “*Human capital management*” was their term for analyzing others’ motivations to ensure collaborations in good faith.

CHANGES IN COLLABORATIVE LEADERSHIP SKILLS AND COMPETENCIES AS A RESULT OF The COVID-19 PANDEMIC

The COVID-19 pandemic left little unchanged, and the emergency management and resilience leaders were no exception to this rule. Their communication strategies became increasingly virtual, which forced them to build new skills. Interviewee #11 emphasized the

ability to collaborate and listen: *“you just need to be able to hear...in this virtual environment [which] has I think changed how I least interpret things, and collaborate with people.”*

Interviewee #18 paid increased attention to their employees whose work-life balance was constantly under siege by the pandemic. Mental health guidance was more important than ever, which involved identifying the staff needs and counseling them on where to get the help. Mental health became a sanctioned topic of discussion. To fulfill this mandate of increased attention to employees, the team met weekly rather than monthly. The cadence of meetings was comforting for their staff. No human resources problem would be allowed to linger for too long. They began to look at their team more holistically during the pandemic. In the same vein, interviewee #19 showed how the leader offers attention and empathy to their team. They understood how the pandemic challenged their partners. They stated, *“it's important to give others a little bit of I don't want to say leeway, or grace or allowing them to be human. The pandemic was really difficult.”*

Interviewee #19 grew more resilient and adaptive during the COVID-19 pandemic. They became aware of the strengths and weaknesses of their earlier approaches. They said their teams were *“very resilient as people, and our programs can reflect that if we design them properly.”* While leaders maintained their confidence in departmental tradition and the order it could instill in their people, they tried to extend as much *“grace”* as possible to their teams to do things in ways that eased their personal situations. For instance, the interviewer challenged their managerial preconceptions about the supremacy of in-person work to virtual work.

All of the interviewees had been collaborating to achieve their goals during decades of decision making. However, the pandemic showed that improvements in collaborative skills were still possible. Interviewee #3 understood that pandemic collaboration would involve

technological adaptation over traditional outreach (e.g., corporate seminars). Social media messaging became a main focus, driven by the vast amount of time people were spending at home near their phones. An opportunity was emerging “*so now we can collaborate more with the public.*” The difficulties of their isolation offer new ways to reach them with ways to protect their health.

Even within intra-office communication technological adaptation was widespread. Synchronous word processing became important. Team members could also edit videos together as well. But creating real-time content, possibly having to interpret live feedback, requires different competencies than producing that content by oneself. Group authorship creates an unusual power dynamic that fuses creativity and persuasion.

As mentioned previously, the COVID-19 pandemic responses proceeded rapidly in an information-poor environment. Interviewee #9 addressed this by integrating representatives of the public into the work of the response phase. The pandemic taught the participant to solicit feedback from the public to better their own policy implementation. The reasons for this were two-fold: to avoid duplication of efforts or to address gaps in care. A common mistake of emergency management and resilience leaders is to assume that someone else is addressing the unmet need. The improved information sharing during the response phase to the COVID-19 pandemic led to a better sense about what other team members were doing. Interviewee #9 indicated that this robust communication framework might be useful going forward.

Interviewee #4 addressed the challenge of handling responsibilities at scale, or what they called a “*ramp-up*” effort. Gathering the resources and capabilities to do so can prove difficult. They offered an anecdote from their state’s Department of Employment. Before the pandemic this agency dealt primarily with teen unemployment in the state. But the pandemic changed labor

conditions drastically. The agency's call volume jumped 10000% and they had to serve populations that were not usually part of their core competencies. Bringing new employees in to handle the call volume meant being able to train them quickly; under such pressure, the new team members learned the core aspects of the work. There was renewed clarity about the essence of their roles. Interviewee #4 suggested the difficulty of training new personnel during a ramp-up phase. The organization is re-learning its own purpose at scale while trainers are having to acclimate new staff to principles in flux.

Understanding skill helped leaders change their tactics when confronting skepticism of vaccination science. Interviewee #1 noted disappointment with the scientists in their agency about their pushback against the vaccine. They tied this attitude to an increase in "*sickness, illness, and suffering*." Their perspective as an emergency response leader left them with a different risk assessment of the vaccine than some specialists had. Working around these differences in attitude was a challenge. In addition, they had to move forward with the emergency plan when the people around them may have had significant criticism - as shown through their attitudes - of the approach. Although the strategic vision of the department needed to be whole in the public's eye, the inner circle of decision making was much more fragmented. The challenge of disunity can threaten the effectiveness of an emergency response when the collaborative leaders ought to be uniting beyond shared vision and desire.

Interviewee #21 closed the section on an optimistic beat. Although the COVID-19 pandemic disrupted their team at first, eventually it led to an overhaul of the training system. In turn, participation in these voluntary trainings actually rose when Zoom became the modality. Reducing the inertia of participation proved to be valuable across Departments of Social Services. Embracing change in labor practices was an adaptation that not only served practical

ends during the COVID-19 pandemic but led them to considerations about the nature of remote collaboration itself. The participant showed transformational behavior in how they accommodated the virtual coordination process.

DESIRED SKILLS AND COMPETENCIES TO BETTER MANAGE THE EMERGING CHALLENGES FROM THE COVID-19 PANDEMIC

In this section, the researcher considers the leadership skills and competencies that they wish they had during the pandemic response. Much as emergency management and resilience leaders let past crises shape the COVID-19 fight, future leaders can learn from those closest to the response phase.

Interviewee #10 felt their formal education in fire technology did not teach them all they needed to know about emergency management. They had spent many years as an emergency responder, but during the pandemic they had to manage a team whose purpose was unconnected to their subject matter expertise. In addition, they were managing the response phase of an emergency that was different from previous crises. However, this is not to say that they were unprepared. In fact, they suggested that the policies of the state's Department of Health might have benefited more from the flexibility of an emergency response approach (i.e., those with willingness to work around policy impasse). The Department of Health struggled with integrating its vast resources and with a policy framework at odds with an ever-evolving pandemic.

Interviewee #11 wished they kept better records of their commitments. They refer to another emergency manager that recorded their meetings to preserve institutional memory. This type of practice was called "*setting a standard.*" They admit they underestimated the length of

the pandemic. The need to set a standard, codify it in the institutional memory, and refine it, are their suggestions for future crisis leaders. They wished they had the specialized training to use technology to lead in a virtual environment.

They had a sense of the differences between virtual and in-person meetings without having the full grasp of how to fully leverage their new technology. Virtual meetings seemed to take their focus away from the speaker. Accustomed to working while at their computer, they felt compelled to multitask in a way that they would not have in in-person meetings. Their insight for future leaders is to understand their own work habits and whether they are helpful or destructive to the present task.

Interviewee #21 felt as though most of the changes they'd wished for have come to pass. Many changes were a result of the chance for remote collaboration. They noted an example from the state legislature. In the past, people who were not near the capital might have to stay overnight just to have their moment to participate in face-to-face discussions. This was a hardship after traveling for many hours. Now they can attend virtual meetings and make their voices heard. They put this same logic of convenience to work for their team. For instance, rather than making their team work every hour on Wednesday, they plan for them to have an hour of personal time to organize or handle a private matter.

Interviewee #20 wished they had been more aware of the needs of those around them. The COVID-19 pandemic distorted their sense of time: *"You find yourself sitting at a computer at seven o'clock in the morning and then next thing you've been clacking away at something."* This sense of disembodiment continued over time. They said, *"it took me a while to understand... We had [worked] for so long, it seemed like, eight months, nine months, then months... over and over, the same situation every day."* They wished they had been able to free

themselves from the loss of a sense of time to orient themselves toward other people's experiences. Some were suffering from private mental health crises that their inward focus did not allow them to see. *"It [the pandemic] showed us all that we need to look at the human side of people."*

Interviewee #3 maintained that they were not an expert in the technologies relevant to managing the pandemic. This would have increased their ability to manage personnel and accommodate their personal needs (sick time, ability to work-from-home, etc.). Interviewee #13 regretted not focusing on the mental health of those around them. They suggested that it was impossible to guess what obstacles their employees were facing during the pandemic. But the default choice should not be to assume that the lack of evidence of personal grief meant that it did not exist. *"People aren't robots, and we need to make sure that they're okay."* The assumption that all will be well if we don't ask was undone by the pandemic. On the same note, without knowing the well-being of personnel, capability-based planning increases in difficulty, which interviewee #4 listed as their number one regret during the COVID-19 pandemic. The capabilities of their team ebbed and flowed, affecting the execution of previous goals in subtle ways that might have profited from more attention.

IMPLICATIONS AND LESSONS LEARNED FOR COLLABORATIVE LEADERSHIP

The third research question is: What are the implications and the lessons learned from experiences with the COVID-19 pandemic for collaborative leadership in emergency management and resilience? Interviewees offered narrative data about their lived experiences during the response phase of the COVID-19 pandemic. Leaders' roles varied. The majority were involved directly in the response phase, but others contributed through their collaborative efforts

and volunteering. Experiences varied according to resource availability, effectiveness of collaborative partners, and previous planning and leadership experience. To better answer this research question, the researcher categorized the information on collaboration from the pandemic-era data into several themes: internal influences on collaborative leadership response, external influences on collaborative leadership response, lessons learned, and implications of the collaborative leaders' experiences.

INTERNAL FACTORS AFFECTING COLLABORATIVE LEADERSHIP RESPONSE TO THE COVID-19 PANDEMIC

It is important to understand what causes emergency management and resilience leaders to exhibit particular behaviors and make the decisions they do. This theme identifies how internal, external, and political factors influence emergency management and resilience professionals. The theme is concerned with not only the pandemic-era context – one they share with other leaders who make different decisions – but internal factors as well. Research on both Transformational Leadership and Integrative Public Leadership approaches greatly explain the participants' identification of relevant skills and competencies in emergency management and resilience.

Participants described various internal factors, defined as an influence within the participant's the organization or departmental limits. Interviewee #4 explained that their department was quick to embrace telework during the response phase. Their organization was prepared with not only the technology but the understanding of how this would change the working dynamics. This included not only software and hardware but the IT infrastructure to support telecommunication and share files. The load on the system was going to grow. Turnover

of personnel is another internal factor they had to manage. Just as their people became more proficient in the procedures of dealing with the new normal, some of them would leave, perhaps due to burnout.

Another internal or departmental factor was the availability of resources. Much has been made of flexibility and adaptability; indeed, resource constraints sometimes drove emergency management leaders to address resource deficiencies. Interviewee #11 emphasized that collaboration during the COVID-19 pandemic required specialized technology without which the team could not hope to complete their objectives. Interviewee #7 indicated that gathering scarce resources was like a competition. Although departments all had a stake in curbing COVID-19, egos and self-interest could come to the fore.

Another internal factor affecting the COVID-19 response was the level of information support. Researchers such as Comfort (2006) have known about the value of cognition in disaster management since Hurricane Katrina. However, there are sometimes barriers to information sharing within organizations. Interviewee #20 noted that their team was strategically at a loss and occasionally unmotivated. The velocity of information slowed down. A fog of war effect left it unclear what information actually constituted actionable intelligence. There was a problem of confidence in existing information. *“It's really difficult in a virtual environment,”* they said. *“Sitting behind the computer, at your kitchen table to get people motivated to react and respond.”*

EXTERNAL FACTORS AFFECTING COLLABORATIVE LEADERSHIP IN RESPONSE TO THE COVID-19 PANDEMIC

External factors also affected the success of emergency management and resilience leaders during the COVID-19 pandemic. Collaborative leaders think about external factors often, though these complications are only partially in their control. External factors occur outside of the participant's department, organization, or job responsibility. External support for the response to the COVID-19 pandemic is one such example. Interviewee #1 could rely on information sharing from the federal Environmental Protection Agency. The operational capabilities of the latter, bolstered by their enormous resources, positively impacted outcomes for Interviewee #1.

Not all external factors are predictable. Interviewee #4's pandemic response was troubled by tornadoes in their state. Tornadoes require people to seek shelter. However, sheltering in close quarters increases the COVID-19 infection rates. Another disaster, the Colonial Pipeline cyber-attack led to panic buying of fuel and increasing the cost of fuel. *"If it's hard to get gas to go places. It can slow things down or at least make the operation a little bit more costly."*

The vaccination mission also led to unforeseen consequences despite significant control over the internal factors of their location, timing, and personnel. For instance, interviewee #13, a manager with the state's Department of Transportation, notes the physical reactions to the vaccine such as people passing out afterwards or having accidents. However, they were empowered by the state's Cabinet Secretary to coordinate responses to unplanned events. Interviewee #13 had what the research refers to as idealized influence. The trust they enjoyed allowed them to leverage the competencies and resourcefulness of their team. Thus, external factors were sometimes made into internal factors through delegation.

If idealized influence is a critical dimension of Transformational leadership, then allowing for sufficient time for its development ought to be useful. Interviewee #18, a public health preparedness and response professional, says that pre-pandemic relationships improved the efficacy of their own COVID-19 response. They called these relationships with other emergency management leaders a “*major factor*.” Likewise, the emergency management team within his public health agency also had ties to public health departments. Interviewee #14 speaks in a similar vein. They perform constant contingency planning in order to show the public that they are active in their role. They seldom wait to be commanded. As in the example with interviewee #13, this “*get[ting] up and doing stuff*” approach means building relationships and integrating new response partners long before they become necessary. It is notable that Interviewee #14’s approach is bi-directional. They are not only looking to be proactive in what they can learn but to find other professionals to mentor whose work they can mold and improve.

Interviewee #15 mentioned that effective governmental communication was an external factor they had on their side. Their state’s governor issued many policy statements and press releases. They mentioned that “*I believe my governor did a very good job at making sure that there was regular communication, lots of policy statements, lots of press releases, keeping the entire state informed, as best as best as possible with different phases of the pandemic.*” Boin, Kuipers, and Overdijk (2013) found that competent crisis communication can avoid loss of lives and of the public trust. Communicators must move between organizations and out to the citizenry.

Political Factors

Political boundaries have been a challenge in the COVID-19 pandemic response. States can be politically divided, professional relationships among managers may not exist, and

bureaucratic infighting may paralyze collaboration. As this study focuses on the emergency management and resilience functions at the state-level, we must understand their political contexts during the response phase to the pandemic. Interviewees did not report these political realities as anything new.

Interviewee #2 suggested that politics was ever present. Professional managers, “*the people that know what they’re doing*,” are sometimes shunted aside to score political points. They noted a cynical strain within COVID-era politics: “*They [the politicians] may have more of a long-term picture as opposed to response and recovery*.” They say that political reasoning does disservice to disaster management. The matters at hand are complex technical matters that the enthusiasm of the politician does not appreciate. Rather than create integrative processes between agencies, political forces tend to inhibit innovative thinking of the collaborative leaders.

Interviewee #14 was a bit more stoic about political interference. “*You just do your best to help make everybody successful*.” Rather than resist political forces, they notice their direction and aligns their agency accordingly. Interviewee #20 aims to be professionally apolitical by prioritizing allegiance to the public. They acknowledge that accommodation to political forces is important, but they recognize that it is an instrument whose ultimate end is getting services in the hands of citizens. They gave an example of assembling a response team, some of which were not entirely comfortable using masks. They chose to respect their personal beliefs.

Interviewee #18, a collaborative leader in public health and a member of the executive branch, found that the COVID-19 pandemic responses were driven by science and data in ways that hurricane preparedness plans were not. This is not to say that the latter are unscientific, but the COVID-19 pandemic was unusual in that scientific developments were a key component of

the response. Using a liaison, their department integrated the legislature at the level of information support.

Interviewee #9 confessed that 2020, an election year, left their state in political flux. They found that the various departments had competing priorities. The federal government was at odds with their state's conservative Republican government. Their allegiance was complicated: "*As state agencies, we have to follow the mandates of our state government. As the recipients of federal funds, we have to follow the guidance of our federal government.*" Tensions came to a boil in the fight over state services. Disparities in state services were a social justice issue for the federal government, but the state's government had other policy priorities. The participant also noted that the antagonism between the state and federal government doubled the reporting that had to be done.

Interviewee #6, a state leader who retired after the response phase, indicated that the politicians involved in the COVID-19 response controlled the flow of the money from the CARES act. They used this as a lever to control program implementation. Prioritizing their own "*perception, perspective, and perceptive needs.*" Writing during the late stages of the COVID-19 pandemic, Interviewee #6 explained that they still did not know what channels the money would flow through, almost as if the process of patronage had a random element. From the point of view of a state manager, political unpredictability is a persistent unknown. They explained that political factors control who gets what but who works where: "*It [political factors] has made or broken careers of people I've seen around me, you've probably seen it as well.*" The non-strategic placement of emergency leaders into situations where they are unprepared strikes him as a byproduct of political decision making. They believe these new leaders are not guided by the history of other disasters.

LESSONS LEARNED FROM THE COVID-19 PANDEMIC RESPONSE

State leaders in emergency management and resilience reported learning and improvement during their response to the pandemic. A primary lesson was in innovative transformation, which Caro (2015) has identified as a practice of transformational leaders in emergency management. Interviewee #3 said that the pandemic led them to improve their use of mapping technology. They had to learn and implement ArcGIS, a geographic information system that aids disaster response and recovery. Emergency management leaders use GIS often, but the implementation and affordances would be different during the COVID-19 pandemic. Their response phase involved planning for what they called “*compound disasters*” and “*integrating hazards*.” For example, needing to evacuate those who are ill with the COVID-19 pandemic adds to the difficulty of a hurricane response. Their approach is not to take hazards in isolation but to build bridges between various types of disaster planning. They note that their state’s hazard mitigation plan tries to incorporate this approach. Thus, disaster management is increasingly centered around the use of GIS, especially the ways it supports integrative behaviors.

Interviewees reported changes in the nature of their planning. Interviewee #1 began to accept that pre-disaster planning did not do justice to the scale and risk of the actual pandemic. This may begin in the procedural nature of the planning – as opposed to creative. They summarized the planning procedure as, “*just all go in and try to make good plans and try to make those plans realistic and effective and review them and that's what they did with the COVID-19 pandemic.*” But preparing for what is realistic is actually a restraint on disaster planning. They admit that the COVID-19 pandemic caught emergency management leaders by surprise despite the detailed plans their state had outlined for pandemic preparedness and response. The plan was particularly deficient in how much it understated the resource

management aspects of the COVID-19 response. They mentioned hospital staff and equipment, first responders, and ambulances in particular.

Experienced collaborative leaders effectively handled the response to the COVID-19 pandemic due to their previous experiences. Interviewee #16 regarded their response as successful although they were not fully prepared for the collaborative context to come. They showed the competencies of an emergency management or resilience leader - careful study, diagnosis of the problem, organizing data, etc. but lacked answers to questions about the potential stakeholders. To paraphrase the participant, it is not enough to simply gather data but one must also ask who will want the information. Emergency management and resilience leaders can become better collaborators when they have the knowledge that future partners need, to the extent that one can forecast the nature of collaboration ahead of time.

Interviewee #17 emphasized intangible forms of knowledge and experience. Although their experience after 9/11 might not seem to relate to pandemic management, practice in high-pressure environments signals the skills to do so in the future – even if the nature of past and present disasters differs somewhat. This intangible quality of idealized influence – the knack of building admiration and buy-in among stakeholders – allowed the leader to “*exceed in our expectations in terms of continuing to provide the product, provide the services that we are normally providing the public.*”

Interviewee #5 explained that plans inherently come with gaps that need to be addressed. This comes from accepting the status quo assessment of a scenario. In other words, plans are rooted in institutional memory. They may unravel or get disrupted as the event proves to be different than the models. One must be clear-eyed about the decision to scrap an old plan when it becomes imperfect or try something new and untested. They have learned to seek out those areas

where failures of imagination lie. Emergency management and resilience leaders, like many other professionals, may seek the comfort of established methods even when those would compromise their mission.

Interviewee #16 took a long view of emergency management and resilience. Adaptation meant building community knowledge about disasters as such, *“documenting what went successfully and unsuccessfully,”* not just muddling through the current crisis. To be a successful collaborator meant expanding one’s knowledge base beyond what was merely necessary to function and to begin a narrative of progress in disaster management. Interviewee #16 sought to prevent the loss *“of that knowledge that you gained, especially given the lag times between disasters of the same type.”* Learning lessons could prevent future leaders from needing to *“climb up the learning curve.”*

The COVID-19 pandemic, like many wicked problems, involves tradeoffs between meeting objectives and keeping one’s principles. Interviewee #15 learned the difficulties of this during the pandemic. They said that one may have to quit the job if pressure is being put on them to act illegally or immorally. They mentioned that, *“I learned a lot through the COVID-19 pandemic, to have faith and do just do the right thing.”* This did not appear to be a completely abstract observation. They acknowledged that emergency management and resilience leaders ought to prepare by being financially safe from such repercussions. Senior leaders must be able to critique their partners, provided one is doing it in good faith. This was identified as a privilege of being in good standing that was not so easy to make early in one’s career. Interviewee #6 carried on the theme of trust. They spoke about its role in effective resiliency. This was not unlike interviewee #15’s situation, who no doubt had to rely on the trust of their people when offering them constructive feedback.

Technical skills (e.g., subject matter expertise, ability to use complex communication systems) complement but do not replace emotional intelligence. Psychologist Daniel Goleman (1995) wrote that soft skills or emotional intelligence contribute to success and failure. Interviewee #13, who had an engineering background, brought this observation to their emergency management context. They admit that as a technician their soft skills needed specific attention. The actions of the state's Cabinet Secretary were influential to them. They would deliver bag lunches in-person to check on the well-being of their subordinates. Seeing a superior attendant to the details of their staff's lives inspired Interviewee #13 to adopt a new ethic. They continue to maintain the importance of their team's humanity as a driver of success and value.

Interviewee #18 argues that emotional intelligence is necessary to successfully integrate higher levels of authority into decision making. Emotional intelligence is of course important to lead among horizontal institutions, but emergency management and resilience leaders will find soft skills especially critical as they must negotiate hierarchies to secure scarce resources. In their COVID-19 response emotional intelligence was a necessary component to communicate with governors and state legislatures about appropriate policy. Emotional intelligence allows for humility, itself a necessary ingredient for the planning element of future disasters.

IMPLICATIONS FOR COLLABORATIVE LEADERSHIP

Emergency management and resilience leaders are necessarily trained in different competencies than their collaborative partners. The most fruitful collaborations address these imbalances and add up to more than the sum of their parts. This section suggests how the perspectives of emergency management and resilience leaders may support policy, theory, and development of leadership skills and competencies.

For Practice

Practitioners can use this section to reflect on the most important skills and competencies to have during disasters and/or other health issues. They will better understand how to evaluate their performance, train accordingly, and proactively build the right collaborative partnerships. Waugh and Streib (2006) argued collaboration is a necessary element of successful emergency management leadership. During the pandemic, adaptable collaborative leaders added operational value by integrating local and community leaders. These partnerships were reinforced through regular meetings that reminded participants of their shared vision. Interviewee #14 suggested that there is no getting around partnerships; conceptually speaking, one is forced into them by the nature of the job: *“I answer to elected officials; my partners at the local level answer to elected officials; my partners at the federal level, ultimately answer to elected officials.”* The COVID-19 pandemic response was often collaborative. This mindset drives successful decision-making in times of scientific complexity and logistical uncertainty.

Interviewee #20 suggest some implications for innovating within pre-existing bureaucratic structures. Of course, collaboration requires not only knowing these instructions intimately but guiding one’s team to go above, around, or through them. Emergency management during the COVID-19 pandemic meant *“a lot of plans, a lot of standard operating procedures and guidelines, a lot of legislation.”* They explain that the training in procedure was not always adequate. However, in other cases the plans themselves were insufficient. For example, a remote work plan was not in place to guide leaders, so they had to create one without guidance. Emergency management leaders ought to be familiar with what guidance exists without becoming reliant on its direction. This is part of building their ethos as collaborators.

For Education and Training

Excellence in emergency management and resilience depends upon intense and continuous training. Interviewees uniformly agreed on this point. Interviewee #1 set their team a training regimen that extended beyond what seemed materially important at the time. Besides the normal credentialing of their personnel in state emergency management systems and Incident Command training, the interviewee was generous with their training allowances. They allowed “*whatever kind of training we can identify.*” In times of budget shortfall, it might be tempting to trim training budgets since they only impact future efficacy, with somewhat remote consequences for the department. However, Interviewee #1 understood that this comes with a price.

The COVID-19 pandemic had an outsized impact on vulnerable populations. For example, rural communities faced obstacles related to health care provision (Melvin, Wiggins, Burse, Thompson, and Monger, 2020). Interviewee #3 stressed that social justice awareness can and should be a focus of training. Past hazards, whose impacts were felt disproportionately by one or more communities, are cautionary tales for the future. Skilled leaders query their strategic plan to see if it addresses equity and equality. Existing standards of disaster management – and even technological frameworks – may not be ready for a shift in focus toward equity. Training addresses this deficiency. Interview #3 summarizes the state of equity and equality as, “*informational but not actionable.*” Keen-eyed leaders understand this difficulty while seeking to make equity actionable through integrative partnerships. Consistent with Interviewee #3’s claims, Interviewee #5 suggest that relationship-building ought to take place before an emergency begins. There are perhaps some ideas here of creating networks of vulnerable populations so that they can speak about the risks they face. Interviewee #5 networked with their state’s commissioners of health, transportation, and state police, referring to them as those “*big*

partners who make his state safe,” but this vertical approach to management should also include less powerful stakeholders.

Emergency management leaders prize “*real life experience*” as an important if somewhat intangible factor on their success. Interviewee #17 joined others in believing that classroom study was insufficient to prepare an emergency management leader. An implication for emergency management is to take these claims on their face but not accept them as deterministic. In other words, classroom training should closely resemble real-world scenarios. The gap between the classroom and real world is not a fact that emergency leaders are forced to accept. Emergency management pedagogy is a worthy area of study and collaborations might be secured to create new forms of training. More than one emergency management leader has described themselves as a teacher or mentor.

Interviewee #4 stressed the context-dependent nature of disaster communication. The public, and to some extent the response teams, do not have a full picture of the data they receive. Emergency management and resilience professionals must present it. They suggest that training and education programs ought to implement different modalities of learning, whether they are auditory or visual. The medium is sometimes the message when it comes to dealing with communities in crisis. They offer the example of many of their military partners: their standardized, systematic approaches often succeed or fail due to external factors. The adaptive emergency management and resilience professional is ready to change communication strategies when necessary and to innovate within multiple modalities.

Interviewee #18 suggests another implication for training and education regimes. They involve the entirety of the command structure within the real-world training environment. Their example of an exercise of radiological exposure, for instance, would integrate partners as varied

as state leaders and community institutions such as nonprofits and faith-based organizations. Interviewee #18 looks for cross-sector relationships to fuse the public and private sectors. As interviewee #5 suggested, communicating with local stakeholders, as opposed to public officials, requires different skills. However, building cross-sector partnerships ahead of time keeps these rhetorical challenges in the spotlight and ensures an emotionally intelligent organization that anticipates rather than merely reacts to future communication challenges.

THE NATURE OF COLLABORATIVE EMERGENCY MANAGEMENT AND RESILIENCE IN THE COVID-19 PANDEMIC CONTEXT

Earlier sections of this study discussed collaborative skills and competencies. In this section, emergency management and resilience leaders discuss the nature of their collaborations and partnerships. Interviewee #4 indicated the importance of their state's hospital association, which acted as a voice for the major hospitals within the state. This suggests that partnerships may function well when smaller stakeholders – individual hospitals in this case – share their knowledge and concerns through representatives. In this way, the less resource-rich partners know where they can go if others fail to recognize them.

Perspectives from different emergency management and resilience leaders showed that the collaboration concept is associated with their routine work. Integrative Public Leadership during uncertainty comprehends the emergency management and resilience responsibilities. Interviewee #16, a senior leader at the Emergency Operations Center in their state, indicated that their role changed when they began collaborating. At first, their department, which they described as having a connection to natural resource management, was not asked to do anything. However, soon after, they began to manage procurement for the statewide pandemic response.

Interviewee #17, a professional from the Real Safety and Emergency Management Response Division, also welcomed new work. At the onset of the pandemic they were asked by their Governor to help with the Department of Human Services. Their team was challenged to set up quarantine facilities for the homeless population. They related challenges in identifying and tracking this process as well as securing the facilities. They also developed guidance regarding the intake and dispatch of COVID-19 patients. Emergency management and resilience leaders were asked to be flexible during the response phase to the COVID-19 pandemic.

Interviewee #15 viewed the COVID-19 response phase as a stance to adopt an active role rather than wait for supply chain issues to resolve themselves. They were supportive no matter the changes to their routine. Their roles varied from procurement to wastewater treatment, to serological study and other data analysis. The old adage that the best leaders are also gifted followers seems apropos here. Interviewee #16 was of a like mind. They considered collaboration to be a core part of their pandemic response, warning, *“we’re just not the subject matter experts in all of these issues, impacts, and effects that come out of whatever issues we’re confronting.”*

Interviewee #20 noted that telework changed the nature of emergency management and resilience training. This was an environment where remote training proceeded rapidly. However, some team members were reluctant to volunteer their questions in this setting. In-person classrooms were more intimate settings that allowed people not to be shy about asking a question. On the contrary, introverted people were encouraged by the new modality whereas they might not have spoken within the classroom setting.

Interviewee #3, a member of their state’s Emergency Management Agency, details the collaboration with their state’s Homeland Security Department [DHS]. They described the

structures they put in place. DHS dealt with medical issues such as establishing CDC guidelines and communicating about them. They gave the example of developing signage about mask use. The public messaging was likely to come from DHS. The interviewee's organization supported DHS. Their bailiwick was logistical support, whether this was providing masks, vaccines, or refrigeration. This integrative behavior ensures how the emergency management professionals practiced collaborative leadership approaches.

Interviewee #14 indicated that emergency management and resilience work happen less conspicuously than that of other officials. They compared their agency's collaboration to a nerve system: *"your body tells how the left foot and the right foot work together."* Emergency management and resilience partnerships are collaborative in ways that the public may not see. In many cases they are invisibly directing various groups (e.g., private citizens, The Red Cross, The Salvation Army). Each agency or organization is responsible for its continuity of operations and coordination among agencies. Comfort (2007) argued for the presence of a "common operating picture" among leaders and "a sufficient level of shared information among the different organizations and jurisdictions" (p. 192). The nerve center metaphor seems to be apt once again. In the description given by Interviewee #14, the common operating picture proceeds from the central point of the disaster relief network.

Interviewee #10 collaborated with their state's Department of Health [DoH] to bolster their operational readiness. The DoH was well-resourced but lacked sufficient personnel to battle the COVID-19 pandemic over a long period of time. The participant seemed to suggest a link between the collaboration with the DoH and the integrative resource management and integrative behaviors. A collaborative management structure allows state agencies to address the deficiency of resources and skills that they will face during a novel crisis.

Interviewee #21, a program manager in their state's Department of Social Services, indicated that COVID-19's effect on children shaped the nature of their collaboration with agency partners and community stakeholders. They were participating in a learning collaborative related to trauma and resilience when the COVID-19 pandemic hit. As it happened, the disruption did not change their mission. They, along with their partners doing similar work, began to focus the resilience work on mitigating new traumas of children during the COVID-19 pandemic, including for example, increased rates and severity of child abuse because of children being unable to access in-person support from teachers. Interviewee #21's work also involved the coordination and dissemination of federal funding to DSS and other agencies and organizations. They seemed to regard themselves as fortunate that their policy work was supported by federal support and state prioritization of mitigating adverse childhood experiences and promoting resilience.

Each interviewee experienced their duties in responding to the COVID-19 pandemic differently. All of the interviewees performed a collaborative leadership approach with either inter-organizational or intra-organization matters. Table 4 (below) summarizes the leadership attitudes of the study participants. Quotes from the interviewees offer insights about the comparisons of Transformational Leadership and Integrative Public Leadership. Possibly, the following table explains how each interviewee's perspective matches Transformational Leadership and/or Integrative Public Leadership and associated skills and competencies. One transformational leader expressed a successful means of interaction with other busy professionals, *"I gave them a one-pager [informational graphics] and I get them a very high level understanding of it and then we can have a discussion."* The quote indicates leadership skills and competencies such as: situational understanding, innovative thinking, and flexibility.

On the other hand, an example of a successful Integrative Public Leadership style was to “*get consensus to implement decision making, take action quickly, and then make it a part of our process to review what is going on.*” The interviewee held daily meetings to discuss incident objectives, stake out priorities, and ensure proper collaboration. The Integrative Public Leadership skills and competencies associated with this statement are: decision-making, time management, collaboration, coordination, and communication.

Table 4. Collaborative Leaders and Their Leadership Approach and Skills.

Interviewees' Leadership Approach/Their Fields	Quotes From Interviews	Leadership Skills and Competencies
Transformational Leadership/ Emergency Management Professional	“A good leader is a good follower”	Empowerment
Transformational Leadership/ Emergency Management Professional	“Being able to transition and shift your priorities depending on what the needs are throughout the state and throughout the local governments is huge.”	Decision-making Understanding

Transformational Leadership and Integrative Public Leadership/ Emergency Management Professional	“Communicate a vision, you form a team of different partners, provide motivation, and then really celebrate achievements because that's what really fuels the engine of getting things done.”	Communication Shared-vision Team-working Motivation Collaboration and partnership
Transformational Leadership and Integrative Public Leadership/ Emergency Management Professional	“We sort of developed some new ways of communicating and relaying the information while trying again to maintain CDC guidelines of distancing and so on. So when we're using the new technologies, we are finding new ways of collaborating across doc so whether digital documents or touch-free signatures, or whatever the case is, we've been using some of that to kind of expand our knowledge base”	Communication Knowledge and Information sharing Innovative thinking Collaboration Adaptability and Resilience

Transformational Leadership/ Emergency Management and Resilience Professional	“So for people that are busy is I gave them a one page [informational graphics] and I get them a very high level understanding of it and then we can have a discussion. So that is one of the things that I think we've been very successful at it”	Understanding Flexibility Innovative thinking
Integrative Public Leadership/ Emergency Management Professional	“So bring people together and communicate clearly, and not having egos involved during the emergency, recognizing that everyone's working towards the same goals and objectives”	Communication Collaboration Shared vision
Integrative Public Leadership/ Emergency Management Professional	“Brings an interesting just a mindset, certain mindset and perspective, that's across all disciplines of just working together, doing what you can to be successful”	Collaboration and Partnership Open-mindedness

<p>Integrative Public Leadership/ Emergency Management Professional</p>	<p>“My colleagues in the office here. My emergency management folks of the county in the local levels, my police fire, I don't need a crisis to bring us together we work with them, we train with them, we interact with them, and we attend conferences [together]”</p>	<p>Collaboration and Partnership Information-sharing Relationship-building</p>
<p>Integrative Public Leadership/ Emergency Management Professional</p>	<p>“Get consensus to implement decision making, take action quickly, and then make it a part of our process to review what is going on and how those efforts are helping by meeting together on a daily basis talking through our incident objectives and our priorities, and using that decision making process and really just all of this ensuring</p>	<p>Decision-making Time management Communication Collaboration Coordination</p>

	that we are coordinating and collaborating with each other each day”	
Integrative Public Leadership and Transformational Leadership/ Emergency Management Professional	“There's probably a percentage of people that will follow whatever you say, but that number grows much bigger. People that don't do that, when they don't trust you anymore. Do things in a way that is more understandable and that people can grasp and grab a hold of and make sure that they really, truly get the message that you're trying to prove”	Transparent Information-sharing Communication Motivation
Integrative Public Leadership/ Resilience Professional	“We started really looking at resilience and focusing on what we can do to help that it's not all bad, that we really can build resilience is I mean, we just do things now really	Resilience Communication Understanding Motivation

	communicating about the importance of like supporting each other at work and supporting our workers”	
Integrative Public Leadership/ Resilience Professional	<p>“We went from once a month meetings to weekly as a team to bring all that together internally, whereas there were multiple daily meetings of subunits and in different areas but for my team specifically, it was important to have a regular frequency regular cadence of meetings, where people could count on that meeting happening. They knew there was a forum that they could come to address any issues and the response that needed to be addressed”</p>	<p>Understanding Communication Networking Team-working Collaboration Problem-solving</p>

Transformational Leadership and Integrative Public Leadership/ Resilience Professional	“I could easily do [motivation] every morning when we have these debriefs that say, hey, remember, we're here for the department of transportation, we're here to ensure public safety and just kind of reiterating that and touching all of those people and making sure that they understood every morning”	Motivation Visionary
Transformational Leadership and Integrative Public Leadership/ Resilience Professional	“I have not really a Department of Health Services employee, but I was able to go over here and to share my expertise or share whatever experience I had with them to be able to resolve some of the issues that they have”	Knowledge and Information- sharing Team-working Collaboration Problem-solving

<p>Integrative Public Leadership/ Resilience Professional</p>	<p>“I host quarterly that we call the mitigate [state] quarterly calls or meetings. So we have state agencies, local agencies, sometimes federal agencies, and professional associations, things like that. Sometimes universities, and we basically just have these calls, four times a year, we discuss mitigation funding opportunities, we discuss for example, the state hazard mitigation plan”</p>	<p>Collaboration and Partnership Problem-solving Communication</p>
<p>Transformational Leadership and Integrative Public Leadership/ Resilience Professional</p>	<p>“I always let my team have the last word. So we run down a roll call and we just go right down the line. Hey, how's it going? Everybody? Okay, yes, we're good. Hey, everybody, okay. No, I've got three people that are sick.</p>	<p>Understanding Motivation</p>

	<p>Okay. Do you need anything?</p> <p>No. I think we're okay. Okay, keep me informed”</p>	
<p>Integrative Public Leadership/ Resilience Professional</p>	<p>“So bring people together communicating clearly and not having egos involved during the emergency. Recognizing that everyone's working towards the same goals and objectives”</p>	<p>Collaboration</p> <p>Communication</p> <p>Shared-vision</p>
<p>Transformational Leadership/ Resilience Professional</p>	<p>“Where I've developed my leadership skills, I think has been just more from mentoring of other leaders that I've worked with, and seeing what works, what makes other leaders successful, and sort of mimicking or replicating what they do, I think that the biggest factor in being a successful leader is being</p>	<p>Empowerment</p> <p>Understanding</p> <p>Motivation</p> <p>Knowledge and Information-sharing</p>

	willing to be a follower when you need to be”	
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DISCUSSION OF FINDINGS RELATED TO THEORY AND THE CONCEPTUAL FRAMEWORK

The findings of this study suggest that Integrative Public Leadership and Transformational Leadership were prominent in emergency management and resilience collaborations during the COVID-19 pandemic response. The study also showed a combination of skills and competencies that primed emergency management and resilience leaders to demonstrate Integrative Public Leadership and Transformational Leadership styles. The skills and competencies in the study merit inclusion in discussions of both Integrative Public Leadership and Transformational Leadership theory. This study of pandemic-era resilience and emergency management suggests three main attributes – effective communication, situational understanding, and expertise and knowledge-sharing – associated with Transformational Leadership and Integrative Public Leadership. Findings from this study reinforce each theoretical framework construct for collaborative emergency management and resilience leaders (e.g., inspirational motivation leadership persisted even in the adoption of a virtual modality). These attributes are: ability to communicate, situational understanding, and expertise and knowledge-sharing.

Effective Communication

Demiroz and Kapucu (2012) consider effective communication to be the most important component of crisis leadership. Transformational Leadership and Integrative Public Leadership must promote communication, assuring the inclusion of the right partners in the response. The present research seemed to confirm this. By count, communication skills were a priority for participants. Sixteen participants mentioned its role during the COVID-19 pandemic, while another seven touched on the related concept of shared leadership vision (see Figure 1).

Implementing new technologies in emergency management— as participants in this study had switched to virtual environments— improved the communication, coordination, and collaboration quality of the emergency response (Comfort, 1999; Comfort and Kapucu, 2006). It is noteworthy that communication skills was the most frequent skill from the perspectives of collaborative leaders. This suggests consideration of the effective communication practices during the response to an emergency to better connect to both Transformational Leadership and Integrative Public Leadership. Effective communication is essential to networking with and integrating one's own team as well as external partners. This attribute supports the existing research on integrative behavior, integrative resources, and individualized consideration.

Situational Understanding

The research literature agrees that stakeholders in an emergency system have to collaborate and network with each other in order to secure safe outcomes (Waugh, 2003; Patton, 2002; Kapucu, 2006; Kapucu et al., 2010). The present study hints at the ingredients of successful emergency management partnerships, with situational understanding identified as critical by twelve participants and flexibility/adaptability by four. Comfort (2007) approaches situational understanding systematically. Risk managers often break down organizational objectives into a series of steps. Comfort notes that this process is cumulative, where later

objectives depend upon previous triumphs. Correspondingly, early failures – she mentions risk detection, cognition, and communication - may lead to negative outcomes later. Situational understanding is the ability to orient oneself in the process and to measure one's mastery (or lack thereof) of these cumulative steps. Situational awareness is management of one's potential to fail in whole or in part.

Interviewee #18, a head of the public health preparedness and response team, outlined a management structure that demonstrated flexibility in its pandemic response. The COVID-19 pandemic response that they initially coordinated was eventually managed at the departmental level, which they identified as unique. Significant disasters in the past, especially Hurricanes Florence and Matthew were lower-level managed responses. The adaptation was driven by the duration of the pandemic. Hurricanes effects are felt over three to four weeks, but the COVID-19 pandemic was of a longer duration and had a tendency to generate fresh problems needing a higher level of organizational involvement. Thus, timely awareness of these secondary effects meant getting intelligence from a lower management level.

Interviewee #18 spent their pandemic coordinating among stakeholders of various levels of authority, an *“exercise [between] the entire depth of an organizational structure...at the very top levels all the way to the local level.”* Situational understanding was key to success in this whole-government scenario. In this case, state-level leaders had been asked to work outside of a hierarchical capacity and instead provide support services to a department-led response. This presupposes managerial flexibility. Successful response to the COVID-19 pandemic emphasized the complex nature of collaboration and the diverse sets of partners that an emergency management and resilience leaders may come to need. Leaders ought to prepare themselves for these non-traditional partnerships. They should cultivate a style that is open-minded,

interdisciplinary, and outcome-driven. Interviewee #18 sees a promising trend of collaboration as disaster managers seek an “*all-hazards perspective*.”

Expertise and Knowledge-Sharing.

It may seem axiomatic that knowledgeable leaders are to be preferred to those who are not. It is probably the case that all long-tenured emergency management and resilience leaders have expertise and experience. What is important are marginal improvements such as the ones mentioned by Boin (2010). Their eloquent explanation is worth quoting in full: at the strategic level, crisis leaders must figure out which systems should be switched off and which ones should be put on life support. This not only requires an intimate knowledge of complex systems, but also capacities for transboundary cooperation” (Ansell et al., 2010). Boin (2010) implies that transboundary cooperation is a difference-maker; knowledgeable people who can integrate data outside of their expertise will find themselves advantaged. This section details non-obvious sources of knowledge transfer. Sharing information and knowledge properly is one of the key factors in the effective emergency response (Kapucu, 2006).

Caro (2016) suggested that transformational leaders look to “knowledge diffusion” (p. 199). With the right partnerships with universities or think tanks, emergency management and resilience leaders may be able to commission customized management studies or workshops. What is not immediately on offer may be created if the right partners at the right time share in a strategic vision. Knowledge and expertise support idealized influence, integrative structures and processes, and even inspirational motivation.

Experienced professionals create stable cultures around them to attract the right partners. Such cultures brim with confidence that they will find a way through whatever faces them. They praise hard work, train, and drill to build a culture of awareness (Weick and Sutcliffe, 2002). The

study findings support the discussion of Boin et al. (2019)' book. They presented three type of learning capacity from a crisis: experienced-based learning – where leaders learn from unforgettable experiences and translate memories into lessons; explanation-based learning – where leaders learn from a rational-scientific approach to find out causes of failures during the emergency response; competence or skill-based learning – where leaders required to learn and develop new skills through experimentation of direct response to an emergency.

CHAPTER V.

SUMMARY AND CONCLUSION

SUMMARY OF FINDINGS

This dissertation answered three research questions:

- 1) *What were the necessary skills and competencies for emergency management and resilience leaders during the pandemic?*
- 2) *What were the changes in skills and competencies throughout the COVID-19 pandemic?*
- 3) *What were the lessons learned and implications from the collaborative leaders?*

The study identifies the core skills and competencies for collaborative leadership during the response phase of the COVID-19 pandemic. The most prominent skills were the ability to partner, collaborate, and communicate effectively with internal and external partners. Being knowledgeable and skillful was not enough to ensure success for emergency management and resilience leaders. Relationships initiated before and during the COVID-19 pandemic became the vectors through which they exchanged information, expertise, and resources. The pandemic rewarded visionary leaders capable of sharing and communicating vision, a key skill according to the study participants. The ability to build, understand, and motivate a team proved crucial for emergency management and resilience leaders during the pandemic.

The COVID-19 pandemic changed which skills and competencies were most relevant to crisis management. For instance, emergency management and resilience leaders came to understand and communicate information about mental health, both their own, and of their partners and staff. In general, across the broad range of participants' experiences, the ability to share knowledge and information during the COVID-19 pandemic became a key skill and

competence. For example, interviewee #16 expressed that pandemic management meant “*being open to acquiring knowledge outside of your normal realm.*” Interviewee #18 described the same deficit. Knowledge was time-sensitive since the scientific landscape was rapidly changing.

Participants regarded adaptation to a virtual work environment as another skill. The participants uniformly showed adaptability to technological changes – even if they regarded the switch as difficult. Virtual work is subtly different than the face-to-face model, but participants understood the tradeoffs as opportunities. Moreover, the study shows that the participants gained in competence of risk assessment during the COVID-19 pandemic. As collaborative leaders gain skills and competencies during their response to the pandemic, they learn great lessons that may be beneficial for future health issues or disasters.

Since the pandemic was regarded by participants as a challenge, this exploratory study describes gaps in preparedness and response efforts of emergency management and resilience leaders. The pandemic required expert leaders to scrutinize many processes once taken for granted. Interviewee #3 surveyed the landscape of potential partners and found new sources for cross-sector collaboration. Some of the participants regretted a lack of outreach with the public early in the response phase. Interviewee #20 wished they knew how to “*be more cognizant of people's personal time,*” especially in a virtual work environment. It sometimes happened that virtual work erodes the boundaries of work and home. Despite the challenges of collaborative leadership during an emergency, most participants indicated that they learned a lot from the COVID-19 pandemic.

The COVID-19 pandemic has been a stress test for every leader serving the public, precisely, emergency management and resilience professionals. This study showed the collaborative leaders learning hard-won lessons. The move to remote work was an opportunity to

gain knowledge and transform their leadership practices in the future. The adaptive mindset may mitigate potential workplace disruptions from subsequent emergencies. Participant narratives show how the COVID-19 pandemic response required the skill to mentor and empower teams. Empowering the public and building trust with them are important corollaries as well. Because emergency management concerns their welfare they should be given agency in decision making.

DISCUSSION OF KEY OBSERVATIONS

This study advanced the theory of Integrative Public Leadership and Transformational Leadership by examining the skills and competencies of emergency management and resilience collaborative leaders during the COVID-19 pandemic. Findings from this study demonstrated that skilled and competent leaders exhibited both Transformational Leadership and Integrative Public Leadership. Most participants perceived their collaborations as be successful. However, it is worth noting that this study does not evaluate or define successful collaborative leadership. Rather, the focus is on identifying elements of collaborative leadership in the specific context of emergency management and resilience.

Despite their expertise, emergency management and resilience leaders sometimes needed prompting to fully explore their experiences with the COVID-19 pandemic. However, once motivated to reflect on the pandemic, their ideas revealed enduring patterns of effective leadership. This study revealed that health departments and emergency management agencies were critical to the COVID-19 pandemic response. Despite managers having different nominal titles, their status as emergency management leaders and/or resilience leaders revealed a lot about what they did.

Most of the participants confirmed that the direct response phase is handled by emergency management leaders and public health officials as the pandemic response was considered a public health issue, disaster, and emergency. Meanwhile, different agencies were in support of the response to the COVID-19 pandemic indirectly. Some of the respondents were partnered either formally or informally/voluntarily with emergency management. However, not all state leaders encountered the same contexts. For example, Delaware's response included the emergency management department and the Delaware Department of Health and Social Services, which is not a public health organization in the traditional sense. Nevertheless, the Department of Health and Social Services acted in support of the public health agenda surrounding the COVID-19 pandemic, especially in its work with traumatized juveniles.

Respondents spoke a great deal about the nature of their collaborative approaches during the response phase of the COVID-19 pandemic. As Bodin and Nohrstedt (2016) noted, "a collaborative approach is common when managing complex and disastrous problems" (p. 193). Interviewee #4, an emergency management senior leader, went so far as to call collaboration a *"key role in state response activities in emergency management."* The state's collaborative emphasis during the COVID-19 pandemic confirms the research on Integrative Public Leadership; the collaborative leader integrates supported partners in the response to the COVID-19 pandemic. Interviewee #4 noted that their state's response phase assembled heads of key state agencies, emergency management professionals, the Department of Health and Environmental Control, National Guard, and the Hospital Association (a sort of representative body for medical facilities) as well as key agencies whose operations were hurt by the COVID-19 pandemic. Such a degree of breadth in an emergency the coalition had never been seen before, even in a state with its share of hurricanes. But the state is not an isolated case. This study argues that

collaborative leadership is a must needed approach in a context like the COVID-19 pandemic.

Sadiq et al. (2021) confirmed that governors of California, New York, Texas, and Florida states collaborated with both public, private and non-profit sectors to address the COVID-19 pandemic.

Collaborative leadership during a pandemic is like rolling dice in an earthquake: plans constantly change in complex environments. A shared decision making process also comes with difficulties (e.g. turnover was reported as an issue). However, collaborative leadership increased the capacity of emergency management and resilience leaders. Not only could they leverage their management experience, they also accessed the judgments of peers and partners. Findings from this empirical study identified the evidence of the effectiveness of the COVID-19 pandemic response as handled by skilled and competent collaborative leaders. Different perspectives from this study showed the importance of collaborative systems during the COVID-19 pandemic not only between government agencies but also across public, private, and non-profit sectors.

The researcher acknowledged that leadership experiences would change throughout the response phase. Indeed, the researcher hypothesized that first-year management would be fraught with anxiety, stress, and uncertainty. These were byproducts of a new routine that had not yet become habitual. The researcher was able to gain information about the challenges that leaders faced during the first year of the pandemic and how they overcame these challenges during the second year of pandemic response. By including reports of interview participants in both years, the researcher was able to show how the identified skills and competencies added value to organizations over time. Although the original plan was to include two different sets of emergency management leaders, respondents from the first group also answered the call for participation in the study of the second year. Saturation was reached with only a single group.

The response to the COVID-19 pandemic has shown the necessity of transformative and integrative leadership in an effective emergency response. Narratives of performance, challenges, and responsibilities during the two years of the response phase show this. Moe (2012) identified that the success of emergency management and resilience processes relies on leaders who promote effective strategic vision – i.e., sustainable goals for an indefinite time frame. Interviewee #20 indicated that shared vision “*has got to happen regularly*” – it is not built all at once. Weekly meetings may support the effectiveness of the shared vision. Collaborative leaders integrate supported partners when building a shared vision. It is not a solo activity. Successful emergency management leaders during the pandemic were already prepared by their ongoing desire to build trust in collaborative relationships. This pre-pandemic effort bore fruit early in the response phase.

Communication skills are broadly indicative of the effectiveness of emergency management response and recovery (Ansell et al., 2020; Demiroz and Kapucu, 2012; Kapucu, 2011; Kapucu et al., 2010; Khunwishit et al., 2018; Mahmud et al., 2020; Michell, 2016; Ross, 2013; Van Wart and Kapucu, 2011). Participant narratives place particular importance on communication with the governor of the state. He or she is revealed to be a key stakeholder. Knowing how to communicate is aided by knowing with whom to communicate. Collaboration is a highly useful mode of discourse but emergency management leaders seldom practice it outside of what is most practically useful.

The relevant literature suggests that technology can act as an answer for uncertainty (Caro, 2016). The COVID-19 response phase was notable for how emergency management leaders incorporated new technological systems into their daily routines. Interviewees reveal how their emergency management and resilience work was enhanced by the switch to a virtual work

environment. No interviewee dissented from this view. Some only regretted their lack of training at the beginning, and some pointed out that the new modalities enhanced participation from new participants who were usually unlikely to speak during meetings. Technological change enhanced the collaborative response across-sectors. Interviewee #20, an emergency management leader, noted that all future disasters in their state will have virtual components. They were optimistic about this shift.

The interviews from the response phase supported existing beliefs about Integrative Public Leadership and Transformational Leadership styles. This study suggests that collaborative leaders in emergency management and resilience exhibited transformational and integrative behaviors. Interestingly, most of the leaders interviewed mentioned the importance of collaborative leadership to effective emergency management and resilience. Interviewee #14 stated that their job was reduced to “*coordination, communication, and collaboration,*” a sentiment seen from other participants as well. As a group, participants frequently mentioned communication, collaboration and partnership, human understanding, and strategic vision as core collaborative leadership skills and competencies.

This study found that management of the pandemic involved robust communication between government, private, and non-profit agencies. They networked to promote their strategic visions and appeal for the resources needed to succeed at emergency preparedness. Emergency management leaders and public health officials were not able to handle the COVID-19 pandemic response when isolated from each other. Their collaborative mindset made them more than the sum of their parts. While emergency management and resilience leaders were experienced with natural and manmade disasters, the response phase to the COVID-19 pandemic demanded rational, scientific information that could only come from public health authorities.

Correspondingly, public health authorities required the expert coordination and contingency planning of emergency management leaders. Time and time again, agencies struggled to take the lead during the pandemic response phase until they adopted collaborative approaches to shore up their own strategic weaknesses.

Each respondent provided data about the COVID-19 pandemic: collaborative skills and competencies, the nuts and bolts of their collaboration, challenges they faced, and their implications for future emergencies. The information explained both Integrative Public Leadership and Transformational Leadership approaches operated during the COVID-19 pandemic. The researcher showed how the participants related to the two approaches based on the behaviors explored in their stories (see Table.4, p. 127-136). Relying on in-depth interviews from emergency management and resilience leaders, the researcher developed a comprehensive picture of the most vital collaborative leadership skills and competencies.

The results also show how the emergency management and resilience leaders performed a Transformational Leadership style during their response to the COVID-19 pandemic. For example, leaders had to pay attention to the fatigue levels and overall mental health of their teams. Leaders had to maintain a vigorous response to COVID-19 while being flexible enough not to compromise their response by overworking their staff.

Sun and Anderson (2012) see essential similarities between Transformational Leadership and Integrative Public Leadership. However, a missing component is the moral and personal development of individuals – civic engagement. Interviewee #15 also speaks of this leadership quality: *“If someone wants me to do something that's unethical or immoral or illegal, immoral or unethical, they can have the job.”* The ability to be detached enough to walk away from an operation one cares deeply about is the result of a highly developed moral mind.

RESEARCH CONTRIBUTIONS

The research findings add knowledge to the emergency management and resilience field by aggregating narrative data from senior leaders of South-Atlantic states. The data explains the perceived effectiveness of collaborative leaders' performance and demonstrates the usefulness of Transformational Leadership and Integrative Public Leadership in emergency management and resilience. Practitioners will find the research useful as they build a strategic vision of emergency management and resilience for their constituents. The attributes built upon in the interviews – ability to communicate, expertise in knowledge sharing, and situational understanding – will aid in training and program design.

The COVID-19 pandemic demonstrated that senior emergency management and resilience leaders, despite their vast experience, may still be caught unprepared for disaster scenarios, especially those that disrupt the conventional approaches. This study's structure allows scholars and practitioners to witness leadership transformation as they emerged during the COVID-19 pandemic response. The lessons learned may benefit training programs for collaborative leadership skills and competencies at local, federal, and state levels. Applications and recommendations based on the emergency management and resilience leaders' experiences from responding to and coping with the COVID-19 pandemic will offer insights for future emergencies. Developing the identified collaborative leadership skills and competencies will help with challenges that may face leaders experiencing new types of emergencies.

This research contributes to the public administration literature by responding to the call for experience-based perspectives of leadership (Crosby and Bryson, 2018; Smith et al., 2018; Van Wart and Kapucu, 2011). With a focus on emergency management and resilience, this study

advances the leadership literature by capturing perspectives from different states, making it possible to generalize the findings from this interpretive work to other states and countries. Collaborative leadership in emergency management and resilience domains has become increasingly important. Collaboration across sectors allows leaders to share information, create a training plan for their staff, and implement their vision for crisis management. The experiences, perspectives, and lessons from this research show value across a wide range of leadership tasks.

The current experience-based literature discusses the experience of governors (Sadiq et al., 2020; Zhong et al., 2022), political leaders (Owoye and Onafowora, 2021), organizational leaders (Balasubramanian and Fernandes, 2022), city managers, non-profit leaders, and private leaders. However, emergency managers and resilience leaders are differentiated from these populations by the nature of their collaboration and uncertainty on a state-level. The COVID-19 pandemic necessitated complicated cross-sector partnerships. A wide array of perspectives from nine South-Atlantic states allow for discussion about how to assist and improve emergency management and resilience work. Because emergency management and resilience leaders are central to crisis response, their perspectives are likely to be of interest to those with whom they work: businesses, policymakers, and government agencies. Long after the pandemic ends, the skills and competencies necessary for its management will be studied as history, much as these leaders looked to past crises for inspiration during the response phase.

LIMITATIONS

The lack of research on collaborative leadership within emergency management and resilience necessitated a pilot study. Interviews with two states' leaders showed that the hypothesis about Transformational Leadership and Integrative Public Leadership was supported.

Evidence from the pilot study was corroborated later by the remaining interviews. However, there was also a lack of research on COVID-19-era leadership. Interviewees had built their careers managing disasters, but none had handled a pandemic of COVID-19's size and scale. Each interviewee brought specific strengths and weaknesses in terms of their ability to represent the population. For instance, an interviewee might have a public health background but understand less about emergency management.

Interviews of participants were useful to generate codes, but this methodology is limited in the quantitative results it can render (Creswell and Poth, 2018). A second type of data collection (e.g., focus group, document analysis, survey) would have allowed for a mixed methods approach. Scheduling interviews with emergency management and resilience leaders was difficult. Two potential participants sent follow-up emails to be sure they met the inclusion criteria. Three potential interviewees had to decline participating in the study due to departmental policies. As a result, these emergency management contexts went underrepresented in the study. The researcher recruited other respondents who met the inclusion criteria but were not limited by agency policy.

The study had a response rate of less than forty percent; more than sixty emails netted only 24 replies. However, saturation was reached at eighteen participants. Of the six people excluded from the 24 responses to the invitation emails, one did not schedule the interview, one did not add new information beyond saturation, one declined to interview but provided answers to questions asynchronously, one was excluded for not being a state leader, and two turned out to work for nonprofit organizations.

The researcher also found it a challenge to reach out to the participants to perform member checking. Some of the participants were not able to respond on time due to the

Hurricane season and/or their department IT system would not allow them to access the document. Therefore, the researcher followed up via email and attached a Microsoft Word document on it while adding some of the participants' personal email to access the shared document. Member-checking was employed to give participants a chance to clarify meanings and interpretations as well as rectify possible errors caused by transcription software like Express Scribe or Otter.ai. The transcription software sometimes produced results that contradicted the actual interview, which necessitated re-listening to interviews and re-transcribing certain parts.

As an international student funded by scholarship, the researcher had a set timeline to finish the study. Gathering, reviewing, and transcribing the data ran longer than expected. For example, one unexpected challenge came when the interviewees used terms outside of the researcher's discipline, necessitating additional research as well as the judgment of context clues. The researcher was able to overcome this challenge by relying on the Otter.ai software for the initial transcription process. Following that, the researcher reviewed FEMA documents that supported the emergency management and resilience functions during the COVID-19 pandemic. The researcher consulted the literature to help interpret any jargon in the interviews.

As a trained management professional, the researcher's background threatened to bias the interpretation of the findings. In other words, the researcher may have had notions of critical skills and competencies in mind before the research began. To overcome this challenge, the researcher analyzes the data by using a thematic analysis approach guided by Nowell et al. (2017). The researcher followed up with the interviewees for a member-checking strategy to ensure the trustworthiness of the transcribed interviews. Each participant was able to go through the whole data analysis and interpretation and make sure their perspectives and experiences were faithfully represented.

Of course, the results of the leadership skills and competencies were expected to vary according to internal, external, and political factors (e.g., access to strategic resources). However, the questions asked were specifically designed to identify possible political influences on outcomes. This increased the validity of the sample, separating dependent and independent variables. Lastly, a change in method mid-study is noteworthy. While the researcher hypothesized that first-year emergency management and resilience leaders would report different experiences than their second-year counterparts, the decision was made to treat these cohorts together. The data collection process revealed that the emergency management and resilience leaders in the study were still in their roles during the second year of the pandemic. Deciding to study only one cohort allowed the researcher to measure a change in interviewees' mentality in a way that would not have been possible if two or more cohorts were studied instead. In addition, a longer-term study of a single population allowed for more time for them to reflect upon the challenges facing them, since occasionally the consequences of their decisions were distant in time from the situation in which the decision was made.

RECOMMENDATIONS FOR FUTURE RESEARCH

The study confirms that collaborative leadership within emergency management and resilience evolved during the pandemic. In the future, different emergency management contexts will yield interesting variations on the findings of this study, much as this study had findings that departed from previous research. Future research can investigate the collaborative leadership experiences in responding to and coping with the COVID-19 pandemic from different states. South-Atlantic state leaders have had their skills and competencies honed through continuous hurricanes, but what would it mean if applied to tornado and earthquake preparedness and

response? Interviewees frequently admitted that their experiences provided a framework for adaptation to future emergencies or disasters, and it stands to reason that different disasters would act as dependent variables.

This study shows the role of Transformational Leadership and Integrative Public Leadership in collaborative emergency management and resilience contexts. The COVID-19 pandemic saw state leaders pursuing Transformational Leadership and Integrative Public Leadership approaches. Future research should explore the struggles of their contexts to exhibit Transformational Leadership and Integrative Public Leadership styles. Scholars can expand the inquiry through interviews, focus groups, and observations of the collaborative meetings. Thus, they will get close to the context and learn more about each construct of leadership and how the leaders perform them.

Replicating the study with a population of different leaders – governors, mayors, and city managers perhaps – may show a fuller picture of critical collaborative skills and competencies. New perspectives will also challenge or reify the data of this study. Non-profit leaders may be consulted too, especially as they have different levels of political friction in their operations than state leaders. While it is important to study collaborative leadership skills across different levels of management, another important axis is the level of bureaucracy: local-state-federal. Furthermore, international researchers may take a cue to study pandemic management and resilience in other countries as well. Whatever variables subsequent researchers choose to isolate, they will find that different policies, resources, experiences, and government systems led to wildly different results.

The COVID-19 pandemic offers a window into emergency management and resilience during uncertain times. It suggests many paths forward to better understand the components of collaborative leadership as such.

CONCLUSION

Despite the richness of the data generated from this study, the body of literature in emergency management and resilience needs more attention. Competent and skilled leaders across different disciplines may lead in unexpected and important ways. The participants in this study burned the midnight oil to protect their communities. They faced arguably the most significant public health challenge in a century, and learned and changed in ways that will be meaningful to the literature for a decade to come.

When handling a pandemic, collaborative leadership helps to direct the available resources to the organization to achieve a common vision efficiently and effectively (Balasubramanian and Fernandes, 2022). It is a must. Success during the COVID-19 pandemic hinged on the combinations of material, personnel, and technology built by state leaders. Fear and uncertainty had to be met with the calm demeanor of unflappable state leaders. As shown in the study, proper leadership provides partners and people with a clear vision of a goal, allows effective communication, and commits to new perspectives.

Moreover, this study adds to the theoretical framework knowledge by including that flexibility, experience, and the formation of robust relationships are imperative skills of emergency managers and resilience leaders. Indeed, findings from this study support the presence of both Transformational Leadership and Integrative Public Leadership styles in participants' strategies. This study concurs with existing literature that collaborative leaders must

find a wise understanding of the situation, communicate with and build trust in new partners, respect uncertainty, promote a shared vision, and remain flexible (Demiroz and Kapucu, 2012). It is a tall order, and much of the data points to the proper enculturation of transformational and integrative public leaders. Previous experience in crises was regarded by participants as a significant contributor to success in the response phase of the pandemic.

The COVID-19 pandemic showcased how skilled and competent leaders stare down challenges. A study by Crosby and Bryson (2010) highlighted the difficulty of achieving success in collaboration outcomes “regardless of leadership effectiveness” (p. 277). Against these long odds, successful pandemic leadership in the South-Atlantic states does not seem to be a product of mere chance. The field of emergency and resilience leadership is making the necessity of cross-sector approaches apparent to the wider field of public administration.

This study has explored the skills and competencies, challenges, and lessons learned by collaborative leaders during the COVID-19 pandemic. Participants’ data supports the researcher’s hypotheses of leadership training and development; namely, emergency leadership is improved by collaborative approaches. The emergency management and resilience professionals in the study have tested a variety of collaborative skills and competencies under duress, sorting between what was critical and what was merely valuable. This paves the way for further research in emergency management in different contexts such as my native Saudi Arabia.

From the researcher’s point of view, leaders who are capable of collaborating will be best suited to handle emergency situations and crises. This research expands the researcher’s understanding of how collaborative efforts may influence public safety and decision making quality. It was not only a dissertation for a PhD program, rather it was an opportunity to gain experience from experts in emergency management and resilience. From their principles, lessons

learned, and suggestions throughout this journey, the researcher's enthusiasm has been increased for future researchers and training development.

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APPENDIX (A)

INTERVIEW PROTOCOL

My name is Norah Alshayhan, a PhD student in the School of Public Service at Old Dominion University. I am conducting research to explore the skills set that collaborative leaders in emergency management and resilience need to be successful in leading relevant to today's environment, especially as we are concurrently dealing with the COVID-19 pandemic and other disasters and issues that challenge resilience.

Effective emergency management leaders and resilience professionals can foster organizational effectiveness through their capability of decision making, problem solving, and the collaboration. As part of this dissertation, you are invited to participate in an interview about your perceptions of the important emergency manager and resilience professional leadership skills in an interview discussion that will last for 45 to 60 minutes. This data collection is part of my dissertation and will provide useful research findings for my future research. The research findings will be published in a further stage. The interview will be voice recorded and transcribed for the purpose of the research project.

Interview Questions

1. How have you collaborated with others representing the public health officials in responding to the COVID-19 pandemic? Can you share an example of this collaboration and your leadership role in it?
2. How have interaction, collaboration, and coordination during the COVID-19 pandemic been different, if at all, compared to previous or other crisis/public issues?

3. What has helped you be successful in collaborating with other people and organizations during previous emergencies and/or the current COVID-19 pandemic? What challenges have you faced in these collaborations? And what was/were the lesson/s learned to overcome future challenges?
4. What internal (to your organization or to state government) factors have played an important role in how you have collaborated with others during the COVID-19 pandemic response? What external factors have played a role? How about the role of political context at the state level?
5. What do you see as the most important core skills and competencies for collaborative leadership in emergency management or resilience during the COVID-19? Why and how are they important?
6. In terms of communication during a crisis, such as the current COVID-19 pandemic, how do you communicate a shared vision, integrate supported partners, motivating them, and understanding individual's need of achievements? What factors contribute to the effectiveness of this communication?
7. In terms of collaboration during the COVID-19 pandemic, how have your experience, education, and training helped you in your leadership position? What education or training do you need more of?
8. How has COVID-19 changed how you lead and collaborate with others? Are there specific skills or competencies that could have helped you be more effective?

APPENDIX (B)

HUMAN SUBJECTS RESEARCH EXEMPT DETERMINATION LETTER



**OFFICE OF
THE VICE
PRESIDENT
FOR
RESEARCH**
Physical
Address

4111 Monarch Way, Suite 203
Norfolk, Virginia 23508
Mailing Address
Office of Research
1 Old Dominion University
Norfolk, Virginia 23529
Phone(757) 683-3460
Fax(757) 683-5902

DATE: October 28, 2020

TO: Norah Alshayhan

FROM: Old Dominion University Business Human Subjects Review Committee

PROJECT TITLE: [1676263-2] Leadership in Emergency Management and Resilience

REFERENCE #:

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: 10/28/2020

REVIEW CATEGORY: Exemption category # [2]

Thank you for your submission of New Project materials for this project. The Old Dominion University Business Human Subjects Review Committee has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact Haiwen Zhou at (757) 683-5785 or hzhou@odu.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Old Dominion University Business Human Subjects Review Committee's records.

APPENDIX (C)
MEMBER-CHECKING INVITATION

Dear,

Greetings!

I would like to thank you again for being part of this research! The whole data analysis is available now. The study analysis shows how your provided information was used in the study. The attached document is the analysis draft of all findings and will be shared with all participants involved in the study with anonymized all of the quotes. Your responses were highlighted for your focus. Would you please visit the shared document to check and confirm the findings to determine the accuracy of the analysis for the purpose of reducing any potential researcher bias? You have the opportunity to comment on whether the results resonated and matched with your experiences and perspectives, to add further comments, change anything, or deny it.

Let me know if you have any questions, I really appreciate your support.

Regards,

Norah Alshayhan

VITA
Norah Abdullah Alshayhan

School of Public Service
 2084 Constant Hall
 Old Dominion University
 Norfolk, VA – 23529

EDUCATION

Old Dominion University

2019 – Present

PhD of Public Administration and Policy

California State University

2016 – 2017

MPA

King Saud University

2008 – 2011

Bachelor of Business Administration

PROFESSIONAL EXPERIENCE

2018 – 2019 Faculty member, IPA

2012 – 2017 Teaching Assistant, IPA

2011 -2012 Business Administration Trainer, Alfaisal International Academy, Riyadh,

KSA2011 Intern, Ministry of Municipal Affair, Riyadh, KSA

CONFERENCE PRESENTATIONS

- Paper Presented at NECoPA 2022 Nov 4-5, 2022
 Collaborative Leadership Skills and Competencies In Emergency Management and Resilience: Lessons and Implications From The Response To The COVID-19 Pandemic
- Paper Presented at ASPA 2022 Mar 2022
 Equitable Leadership in Collaborative Emergency Management and Resilience: Lessons Learned From Virginia State Response to the COVID-19 Pandemic
- Paper Presented at COMPA 21 Feb 25-27, 2021
 Leadership in Collaborative Emergency Management and Resilience
- Paper Presented at LEADCC 21 Feb 18-19, 2021
 Leadership in Collaborative Emergency Management and Resilience
- Paper Presented at British Academy of Management Doctoral Symposium Sep 2020
 Middle Managers and Leadership Development
- Poster Presented at Virginia Sea Grant Symposium Feb27-28, 2020
 Middle Managers & Leadership Trainings for Effective Senior leadership Positions in Public Organizations; Applications in Emergency Management
- Poster Presented at ODU Graduate Research Day Apr 2020
 Leadership in Collaborative Emergency Management and Resilience