Natural Disasters and Perceived Transformational Leadership Traits in Community Leaders

by

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Abstract

Hurricane Michael decimated the community of Bay County, Florida as a disaster of unexpected force. As its winds reached 161 miles per hour, leaders were forced to find ways of recovering during widespread and on-going devastation. The purpose of this study was to examine the lived experiences of these leaders through the lens of Bass's Transformational Leadership lens. This hermeneutical phenomenological study illuminated the experiences of nine individuals who were living in Bay County before, during, and after the hurricane. Their interviews were analyzed and the results revealed that effective leadership is best received by followers when leaders exhibit the traits of active listening, inspiration, vision articulation, thinking outside the box, and acting as role models. These results show that demonstrating transformational leadership traits can be helpful for leaders during disaster recovery.

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"Someone I loved once gave me/ a box full of darkness. It took years to understand/ that this, too, was a gift."—Mary Oliver, "The Uses of Sorrow"

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Chapter 1: Introduction

On October 10th, 2018, at 12:30 pm, Hurricane Michael made landfall with 161 mile per hour winds as a Category 5 hurricane affecting Panama City, Florida and the surrounding communities. Initially, Michael was considered a tropical storm with 40 mph winds but was upgraded after it was possible for residents to evacuate. It was, at the time, recorded to be the fourth strongest hurricane to make landfall in the United States (Bui et al., 2020) 2020). The result was the decimation of buildings, businesses, and the existing infrastructure. It is estimated to have caused $25 billion in damage.

The Panama City community was faced with an unprecedented level of disaster response and clean-up. Leadership faced a myriad of issues including loss of communication due to a damaged cellphone tower, prolonged power outages, and a lack of access to necessities. All tiers of leadership initially endured the challenges of emergency disaster relief as their community faced loss of stability in the form of destroyed homes, access to health, school systems, care services, and parental job loss. Though this occurred six years ago, Michael continues to have on-going negative effects on the residents.

The purpose of this on-going research is to record the lived experiences of educational and community leaders in the aftermath of Hurricane Michael with a hermeneutical phenomenology framework and the lens of Bass's transformational leadership styles. The goal of the research is to explore the elements of how transformational leadership manifests in times of crisis. Specifically, it seeks to answer the question: which type of leadership can best support recovery throughout a natural disaster? According to Simpson (2008), "A natural disaster is said to occur when a natural hazard, such a hurricane or flood, creates 'demands on the system [that] are greater than the capabilities of the community to meet them" (p. 646). Other communities

have faced similar crises in the form of earthquakes, hurricanes, and tornadoes (Beabout, 2010; Goswick et al., 2018; Mutch, 2015). Each type of natural disaster presented a specific set of problems for school leaders that went on for years without relief in sight. The styles of leaders can also change drastically as they deal with their own trauma and attempt to address the crises of other stakeholders, which is not unlike the trauma military leaders experience in war zones (Kramer & Allen, 2018). Understanding the lived experiences of community and educational leaders can help to illuminate what steps these leaders can take in the future during times of crisis.

The Background of the Problem

In the aftermath of a catastrophic event like a hurricane, leadership faces a variety of unique challenges as they continue to lead their communities through the immediate and subsequent challenges. This research seeks to address the problem of: which type of leadership can best support recovery throughout a natural disaster? Previous literature suggests that exposure to trauma has both positive and negative impacts on leadership and leadership development, although there is a lack of empirical research. Additionally, there is little published about leadership in extreme situations such as natural disasters.

The population for this study was community leaders who were living in Bay County, Florida before, during, and after Hurricane Michael. The focus is on how they perceived leadership throughout the catastrophe. Understanding these lived experiences becomes increasingly important as global warming escalates the frequency and impact of natural disasters and may have contributed to Hurricane Michael's creation. Global warming is predicted to have a large climatic influence on individuals, organizations, and governments (Begg et al., 2018).

Purpose

The purpose of this study was to explore the lived experiences of leaders throughout the Hurricane Michael crisis using a hermeneutical phenomenology framework and viewing their experiences through the lens of Bass's (1985) transformational leadership framework. The purpose of a hermeneutic qualitative phenomenological study is to illuminate the experiences of leaders as they undergo the lengthy process of restoration after a hurricane. After interviewing community leaders, I described the phenomenon of effective leadership in the aftermath of a natural disaster. As a result of this study, leaders will have a better understanding of effective leadership in times of crisis, highlighting transformational leadership traits and their perception by followers. The question, "What are the lived experiences of community leaders throughout the Hurricane Michael crisis in Bay County, Florida?" is the focus of this research.

Research Question

What are the lived experiences of community leaders throughout the Hurricane Michael crisis in Bay County, Florida?

Theoretical Framework

I grounded my research in hermeneutical phenomenology and Bass's (1985) transformational leadership model, drawing from Heidigger's phenomenology to understand the essence of phenomena through intentionality (Heidigger, 1971). Peoples (2021) defines phenomenology as "…the essence of something as it is described in terms of how it functions in the lived experience and how it shows itself in consciousness as an object of reflection (p. 29). Transformational Leadership is defined as an approach where leaders motivate and inspire their followers to exceptional outcomes (Bass & Riggio, 2006). The Full Range Leadership Theory [FRTL] views leadership as a spectrum and defines the traits that make a leader transformational.

These traits are Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration (Bass & Avolio, 1990).

To study the lived experiences of community and educational leaders during Hurricane Michael in Bay County, Florida, I used the hermeneutical phenomenological framework (Finlay, 2009). This methodology prioritizes individual experiences and acknowledges researcher biases (Peoples, 2021). I aimed to employ lenses like personal pre-understanding and transformational leadership styles to comprehensively capture participants' experiences (Bass, 1985). The study focused solely on lived experiences, rejecting other methodologies like ethnography or case studies (Peoples, 2021).

By using hermeneutical phenomenology, I sought to understand participants' experiences before, during, and after Hurricane Michael (Peoples, 2021). This approach acknowledges the role of biases in interpretation and allows for a nuanced understanding of lived experiences (Gadamer, 1975).

Significance

This research aimed to illuminate the challenges presented to communities and leadership affected by natural disasters, particularly through the lens of what makes effective or ineffective leadership. By undertaking a comprehensive review of existing literature, this study endeavors to illuminate the relationship between transformational leadership theory and the issues confronting leaders amidst such catastrophic events.

At its core, this research intends to offer practical insights into effective leadership strategies amidst crisis situations, thereby fostering enhanced disaster preparedness, response, and long-term recovery efforts. Through an exploration of lived experiences regarding transformational leadership, both pre- and post-disaster, this research endeavored to unveil the

traits leaders exhibit that inspire and motivate individuals to navigate adversity and attain extraordinary outcomes.

Furthermore, this study contributes to the theoretical advancement of leadership scholarship by creating dialogue with existing literature and applying transformational leadership theory to the specific context of natural disasters. By examining the traits of transformational leadership principles amidst such challenging circumstances, my hope was to extend the field's theoretical understanding of leadership effectiveness in difficult and unpredictable environments.

Moreover, by identifying gaps in current research surrounding transformational leadership and the unique challenges faced by leaders in disaster-affected communities, this study serves as a catalyst for future inquiry and scholarship in related fields. Additionally, the research underscores the need for further investigation to inform evidence-based practices and policy interventions aimed at bolstering community resilience and mitigating the adverse impacts of natural disasters (Beabout, 2010; Goswick et al., 2018; Mutch, 2015; Simpson, 2008).

This research endeavored to bridge the gap between theory and practice by offering insights gleaned from the lived experiences of leaders in Bay County, Florida. By examining the difficulties in leadership amidst disaster, I hoped to empower leaders with the knowledge and resources necessary to navigate these challenges adeptly and, in doing so, arm future leaders with a toolbox of effective practices and understandings.

Assumptions

1. All respondents answered the surveys honestly, to the best of their recollection.

2. The sample population represented other affected populations.

3. Participants' recollection of events accurately reflected their experiences.

Limitations

1. This study focused only on community and educational leaders who were living in Bay County, Florida during Hurricane Michael.

2. The overall sample size may be considered small.

3. The sample lacked diversity, but the researcher was limited to participants who consented to be interviewed.

4. The researcher is a former teacher in Bay District Schools.

Definitions

Hermeneutical Phenomenology: A philosophical framework that integrates elements of phenomenology and hermeneutics. It emphasizes the interpretation of lived experiences, acknowledging the role of biases and preconceptions in understanding phenomena (Gadamer, 1975; Heidegger, 1971; Husserl, 1999).

Hermeneutic Circle: A concept within hermeneutical phenomenology, proposed by Martin Heidegger, which describes the reciprocal relationship between understanding and interpretation (Heidegger, 1971). It suggests that our preconceptions influence our understanding of a text or phenomenon, while our understanding, in turn, shapes our interpretation of subsequent elements.

Lived Experiences: The first-hand experiences, perceptions, and interpretations of individuals within their own lifeworld (Finlay, 2009). In research, the term refers to the subjective realities and narratives of participants, often explored through qualitative methodologies such as phenomenology.

Transformational Leadership: A leadership approach characterized by inspiring and motivating followers to achieve extraordinary outcomes. It involves leaders engaging with

followers to elevate their drive and morals to new heights, thereby creating significant positive change (Bass & Riggio, 2006).

Natural Disaster: A catastrophic event resulting from natural processes of the Earth, such as hurricanes, floods, earthquakes, or tornadoes, which exceed the ability of a community to cope with its impacts. These events create demands on systems that surpass the community's capabilities to meet them (Simpson, 2008).

Full Range of Leadership Model (FRL): A leadership framework developed by Bass (1985) that integrates concepts of transformational and transactional leadership. It encompasses a spectrum of leadership behaviors, ranging from passive and transactional to active and transformational, providing a comprehensive understanding of leadership effectiveness.

Summary

This ongoing research aims to document the lived experiences of these leaders following Hurricane Michael, employing a hermeneutical phenomenology framework and Bass's transformational leadership styles. By exploring the essence of leadership in times of crisis, the study seeks to provide practical insights for future disaster response efforts. Natural disasters like Hurricane Michael create demands that often exceed communities' capabilities, necessitating effective leadership to navigate the challenges.

The study also acknowledges gaps in existing research, including the responsiveness of governing bodies and long-term psychological effects on school leadership. Through the lens of Bass's Transformational Leadership Styles, the research question aims to uncover the nuanced experiences of community and educational leaders before, during, and after the disaster.

Grounded in hermeneutical phenomenology, the research prioritizes individual experiences and aims to mitigate researcher bias. However, the study faces limitations, including

challenges related to generalizability, sample size, subjectivity, and resource constraints. Despite

these limitations, the research holds significance in advancing understanding of leadership

dynamics in the aftermath of natural disasters and informing future disaster response efforts.

Ch. 2: Review of Literature

In this section, a review of the existing literature pertaining to transformational leadership, trauma, and the challenges confronting community in the face of natural disasters was conducted. By providing a thorough understanding of these subjects through the synthesis and analysis of many sources, this literature review frames the complexities and richness. Scholarly articles, academic papers, books, and relevant studies were included to draw a straight line between transformational leadership theory, existing research on the stages of community and educational leadership response, and to ground the research in the real-time issues of the present. This also works to identify the key gaps in the existing research around these topics. Bass's (1985) Transformational Leadership Theory serves as the theoretical underpinning to help the researcher explore these topics in-depth. This is central to the theorical framework and provided a clear and robust foundation upon which to build the subsequent research.

The problems that educational institutions and educational leadership have faced and are currently facing in Bay County, Florida exist on multiple levels. All tiers of leadership initially endured the challenges of emergency disaster relief as their students, faced loss of stability in the form of destroyed homes, access to health, school systems, care services, and parental job loss.

The purpose of this on-going research is to record the lived experiences of community and educational leadership in the aftermath of Hurricane Michael through a hermeneutical phenomenology and transformational leadership framework. According to Simpson (2008), "A natural disaster is said to occur when a natural hazard, such a hurricane or flood, creates 'demands on the system [that] are greater than the capabilities of the community to meet them" (p. 646). Other communities have faced similar crises in the form of earthquakes, hurricanes, and tornadoes (Beabout, 2010; Goswick et al., 2018; Mutch, 2015). This research will explore

community leader's lived experiences with transformational leadership before and after a natural disaster.

Background of Transformational Leadership Theory

One way that leaders can affect change in moments of crisis is through the employment of transformational leadership practices. This type of leadership is well-known in its field and focuses on the impact that leaders have on their followers. It is specifically defined as a leadership approach by leaders who motivate and inspire their followers to achieve excellent outcomes (Bass & Riggio, 2006).

Downton (1973) established a link between a leader's charisma and his or her followers' devotion by researching the leadership tendencies of revolutionary leaders such as Hitler and Lenin, among others. House (1977) took this research a step further by laying out hypotheses about charismatic leaders. Burns (1978) expanded the traits and tendencies associated with charismatic leaders by examining the connection between leadership and followership. Burns created the transforming leadership theory and provided it with two types of leadership styles: transforming and transactional leadership. Transformational leaders, he defined, are those who can detect and exploit the current needs or wants of their people.

According to Burns (1978), transactional leadership practices are centered on the trade of goods and services between leaders and followers to accomplish mutually beneficial goals. Beyond this negotiating process, however, leaders and followers are not obligated by anything else. This type of leadership, however, lacks the ability to bond leaders with followers and falls short by only motivating through a pre-contracted outcome (Burns, 1978). On the other hand, transformational behaviors enable a leader to engage with followers "in such a way that leaders and followers both lift their drive and morals to new heights" (Burns, 1978, p. 20). By merging

Burns' (1978) idea of transformational leadership with House's (1977) theory of charismatic leadership, Bass (1985) developed the Full Range of Leadership Model (FRL).

Bass Transformational Leadership and Phenomenological Framework

Transformational Leadership Framework

The theoretical framework for this study is Bass's Transformational Leadership Framework, specifically the Full Range Leadership Theory [FRLT] (Bass & Avolio, 1990) and hermeneutical phenomenology, drawing from Husserl's phenomenology to understand the essence of phenomena through intentionality (Husserl, 1999). Beginning with Burns (1978), this researcher saw leadership typologies as separate and distinct; Bass considered them to be complementary. The FRLT sees leadership as a spectrum from laissez-faire to transactional to transformational. The expanded FRLT delineates nine patterns of leadership, but for the purposes of this study, I will be focusing on the four transformational leadership qualities: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1990).

According to Burns (1978), transformational leaders are attentive to the needs and motives of followers and work to help those followers reach their full potential. This process is mutually beneficial to both leaders and followers because they display higher levels of motivation and morality, separately and collectively. Those on the team can work beyond their own self-interest for the overall good of their organization (Bass & Steidlmeier, 1999).

The model of transformational leadership was expanded by Bass (1985) and refined to include an emphasis on followers' needs and describe transactional and transformational leadership as a continuum. It also extended House's work by focusing on the emotional elements

of charisma, while suggesting that charisma is not the only attribute that leaders needed to exhibit effective transformational leadership (Bass, 1985).

Bass and Riggio (2006) further define transformational leadership as the ability to inspire and motivate followers to achieve outstanding outcomes. They examine the qualities of transformational leadership through a military leadership lens. The authors described a study in which 141 military cadets who scored highly on the Multifactor Leadership Questionnaire for transformational leadership traits from subordinates were assessed on three measures of toughness (Bass and Riggio, 2006). The measures of toughness yielded a minor positive correlation with transformational leadership traits (Bass and Riggio, 2006).

Leadership style and the impact on follower's PTSD symptoms remains relatively unexamined and unknown. Except for supportive leadership, which has been linked to decreased PTSD symptoms and stress levels (Skakon et al., 2010), the relationship between leadership influence mechanisms and critical follower outcomes such as posttraumatic growth in extreme circumstances is mostly unexplored.

Figure 1

The Full-Range Leadership Model

Laissez Faire	Transactional			Transformational			
Hands-off Leadership	Management by Exception (MBE)		Contingent Reward (CR)	Individual Consideration (IC)	Intellectual Stimulation (IS)	Inspirational Motivation (IM)	Idealized Influence (II)
	Passive	Active					

This led to the full-range leadership model with factors that can be broken down into the following categories for transformational leadership: Idealized Influence (II), Inspirational

Motivation (IM), Intellectual Stimulation (IS), and Individualized Consideration (IC) (Bass, 1985).

Idealized Influence (II) involves transformational leaders modeling their expectations through lived experience, including strong morality and ethics. The effect is that followers want to emulate the leader and take on the mantle of their vision (Bass & Riggio, 2006). Inspirational Motivation (IM) requires the leaders to explicate high expectations and a shared vision for their followers. Leaders can use symbols to signal to followers that their work should be motivated beyond their self-interests. Intellectual Stimulation (IS) inspires followers to be creative and gives them the space for innovation. According to Bass (1996), "Intellectually stimulating transformational leaders can halt crises by questioning assumptions and disclosing opportunities, fostering unlearning, and eliminating fixation on old ways of doing things." Transformational leaders exhibit this facet when they create an environment that welcomes challenging belief sets and disrupts pre-standing values. Finally, Individualized Consideration (IC) finds transformational leaders exhibiting care through listening to needs, acting as mentors, and helping followers flourish through personal challenges (Avolio & Bass, 1990).

The truly transformational leader manifests individualized consideration and converts crises into developmental challenges (Bass & Riggio, 2006, p. 74). Transformational leaders are individually considerate, but they intellectually stimulate and challenge followers. They are attentive and supportive, but they also inspire and serve as leadership exemplars. On occasion, and when necessary, transformational leaders may, however, stand their ground, making unpopular decisions and asserting their authority. For example, in an emergency, when consultation is not possible, the transformational leader must be willing and able to take firm, directive charge (Bass & Riggio, 2006).

Figure 2

Transformational Leadership Behaviors, Characteristics, and Examples

Behavior/Component	Characteristic	Example
Idealized Influence	Role model Respected Admired High ethical standards	A junior officer volunteers off-duty time to support a local charity event to raise money for a local food bank.
Inspirational Motivation	Motivates Inspires Articulates a vision	A colonel inspires an organization to re-group and overcome adversity.
Intellectual Stimulation	Thinking "outside the box" Reframing old problems Innovative	An Airman finds innovative solutions to common mainte-nance issues.
Individual Consideration	Coaching Mentor Active listener Values diversity	A captain takes an extra hour after the normal duty day to assist a follower with a college course.

Hermeneutical Phenomenological Framework

Phenomenology, as founded by Husserl (1999), aims to describe the pure essence of phenomena, focusing on how our awareness (or "intentionality") shapes the phenomena we observe. This approach, known as transcendental phenomenology, involves "bracketing" or suspending one's own biases to understand events accurately, thereby promoting a clear understanding through reflective thinking (Husserl, 1999; Peoples, 2021). Van Kaam (1966) referred to this process as phenomenological vigilance.

In contrast, Heidegger (1971) introduced hermeneutical phenomenology, arguing that one cannot fully detach from their existence in the world, a concept he called "dasein." This

perspective emphasizes the Hermeneutic Circle, where our preconceived knowledge and experiences continually inform and revise our understanding of phenomena (Peoples, 2021). Gadamer (1975) further expanded this idea, suggesting that researchers should use their biases as tools to deepen their understanding through a process of continuous interpretation and projection.

Figure 3

The Hermeneutic Circle
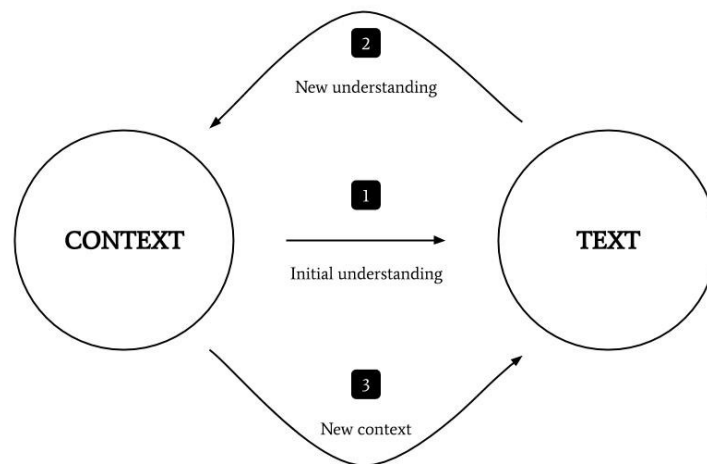
Community Leaders as Transformational Leaders

Within communities, educational and community leaders can exhibit these qualities and become transformational leaders. By leadership that is effective in coping with stress, we mean leadership that results in rationally defensible quality decisions (Bass & Riggio, 2006, p.73). Creating large changes within a community through the stages of implementation, execution, and completion is the overall scope of transformational leadership (Marzano et al., 2005). Within any community, being leaders practicing transformational traits can change an organization positively and in a profound way. Bennis and Nanus (1985) found that leaders can transform organizations through creating a clear vision through stating their positions and being consistent. Kouzes and Pozner (2011) expanded on this by creating a five-practice model that includes

modeling the way, inspiring a shared vision, challenging the process, empowering others to act, and encouraging the hearts of followers. Transformational leaders should have the focus of bettering their followers through empowerment, modeling strong ethics that lead to change, co-creating a vision accessible by all, architecting social change, and fostering a spirit of collaboration and trust (Bass & Avolio, 1990; Burns, 1978).

Transformational leadership actions have the potential to exert influence beyond the teacher-student connection within the school setting. Nguni et al. (2006), for example, discovered that administrators' transformational leadership behaviors positively influenced teachers' work satisfaction, organizational commitment, and organizational citizenship behavior. This study implies that teachers have more favorable outcomes in terms of performance and desired behaviors when the leadership displays transformational leadership qualities.

Koh et al. (1995) surveyed 846 teachers from 89 schools in Singapore for a similar study focusing on transformative leadership in educational administration. The researchers examined the effects of principals' transformational leadership behaviors on teacher attitudes and student performance using five assessment tools, including an older version of the Multifactor Leadership Questionnaire. These studies found a strong positive association between educational leadership exhibiting transformational leadership qualities and teacher job satisfaction, as well as organizational commitment and school improvement. According to Bass & Riggio (2006):

> Despite the popularity and widespread use of the MLQ as a measure of transformational leadership, it is important to develop other methods of assessing transformational leadership. The use of observational methods to objectively code transformational (and other) leadership behaviors, or behavioral diaries, will provide a different perspective, without relying on follower reports/ratings of

leader behavior. In addition, focusing on shared, team leadership behaviors offers another approach to measuring and understanding transformational leadership. (p. 229)

Additionally, according to Day et al. (2021), empirical research indicates that principals who combine instructional leadership with transformational leadership methods accomplish and sustain successful school reforms directly and indirectly. Both leadership types work well together because instructional leadership focuses on setting clear goals, developing curriculum, and evaluating teachers. Transformational leadership gives vision, inspires individuals, restructures the company and develops people, and focuses on culture and processes to improve teaching quality. The overall effect was net-positive by creating sustainable school reforms.

Furthermore, Leithwood et al. (2021) further explores the role of transformational leadership in schools, specifically regarding revamping processes. Restructuring efforts are most effective when they are characterized by visionary leadership, the ability to inspire followers, collaborative decision-making, change management, and the ability to acknowledge challenges, while overcoming them. Stakeholders are at the forefront of the process and are partners in creating lasting change when educational leaders employ transformational leadership practices.

Strengths of the Transformational Leadership Model

When transformational leadership is executed well, it can have a positive impact on followers' performances and the overall efficacy of the company (Rowold & Heinitz, 2007). There can also be an increase in perceived job satisfaction (Nemanich & Keller, 2007). Employees demonstrate a more positive outlook because their leaders tend to help them reach their goals (Hamstra et al., 2014).

This method has also been broadly researched and has been demonstrated to be an effective form of leadership. It makes intuitive sense to followers and focuses on the process, rather than just the outcomes. It can be used as an addition to other leadership models while promoting the leader's growth. The emphasis on the followers is also appealing because it addresses their needs, values, and morals (Bass, 1985; Dvir et al., 2002).

Criticisms of the Transformational Leadership Model

One criticism that is leveled against the Transformational Leadership Model is that it lacks conceptual clarity (Bass, 1985). Its elements are not clearly defined and there is a nebulous delineation between other ideas of leadership. Some argue that it simply states descriptions of leadership rather than well-defined dimensions (Judge & Piccolo, 2004). These critics also see transformational leadership traits as predisposition, rather than behaviors that can be taught while being elitist and antidemocratic (Gumusluoglu & Ilsev, 2009). They worry that it has the possibility of being abused and does not necessarily lead to organizational change (Tourish & Pinnington, 2002).

Another issue that some cite is that the Transformational Leadership Model cannot be effectively measured. The Multifactor Leadership Questionnaire is often used for quantitative assessment of transformational elements, but some question its validity and ability to accurately account for all transformational factors (Bass & Avolio, 2006).

Additionally, Valentine and Prater (2011) broke down educational leadership into three distinct styles: instructional, transformational, and managerial. Their study found that the instructional leadership style had a greater effect on school outcomes with transformational leadership style coming in second. This could be seen as a weakness to the approach, at least regarding student achievement.

Community and School Leadership Responses to Natural Disasters

Crises call for special leadership talents (Bass & Riggio, 2006, p. 63). Crisis refers to a situation facing an organization which requires that the organization, under time constraints, engage in new, untested, unlearned behaviors to maintain its desired goral states… a crisis requires uncertain action under time pressure. When uncertain action is required without time pressure, the situation may be viewed as a problem rather than a crisis. When required actions and outcomes are known but when time pressure exists, organizations engage standard, albeit critical, procedures, and routines (Krackhardt & Stern, 1988).

The Initial Response

Natural disasters can take multiple forms, though the bulk of the research focuses on the following events: Hurricane Katrina in 2005, an F-5 tornado in Joplin, Missouri in 2011, and a series of earthquakes in Christ Church, New Zealand beginning in 2010. Throughout all the literature, school and community leadership had to respond to their natural disaster from a crisis management perspective initially. Most schools and communities have disaster management plans that do not survive first contact (Mutch, 2015). As a result, school and community leadership find itself facing three tiers of disaster response: the immediate, the near-future, and the far-reaching. The issues sometimes resolve but often compound and force leadership to produce creative ways to problem-solve (Goswick et al., 2018).

Additionally, natural disasters are often omnipresent in the lives of school and community leaders (Mutch 2015) as they face the double-consciousness of both the on-going disaster in their community as well as the issues in their personal lives. They are facing the effects of a demolished infrastructure and personal trauma while trying to be responsive to those around them. Leaders must put on a "brave face" and do emotional labor while experiencing the

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same stress with which their followers are afflicted (Wright & Wordsworth, 2013). Despite this, in the aftermath of a crisis, leaders must exhibit strong leadership traits (Fletcher & Nicholas, 2016). Leaders must emphasize the importance of long-term goals, organizational directions, and boundary management (Burke, 2018).

Unfortunately, leadership is perceived to have a diminished ability to affect change after traumatic events as well as a loss of emotional and cognitive function. Leaders are sometimes seen as having experienced personal demoralization and lack of motivation. This can also lead to a reduced ability to inspire and motivate followers (Kramer & Allen, 2018). School and community leaders face a variety of personal mental health issues immediately following a crisis. For example, school and community leaders need to take time to initially reflect especially in the face of sleep disturbances (Goswick et al., 2018). The psychological and emotional needs of staff members need to be immediately addressed (Mutch, 2015). It is important for school and community leaders to seek encouragement from friends and family plus those they work with as they process the initial disaster (Notman, 2015).

Regarding community response, those in leadership roles must address a myriad of concerns. Even though schools need to be ready to respond to unexpected disasters (Mutch, 2015), they often do not have any plans post natural disaster. Most importantly, Principals need to prioritize parent communication as the landscape literally and figuratively shifts. Oftentimes, during a disaster, leadership may have to find temporary accommodations which can disrupt traditional communication methods. This is where new technologies can help school and community leadership communicate effectively with stakeholders (Fletcher & Nicholas, 2016). Keeping stakeholders informed even as many forms of communication breakdown should be a priority for school and community leaders.

Also, a level of delegation must take place for leaders to work effectively. Principals and other leaders must rely strongly on their middle management while they take on larger issues (Fletcher & Nicholas, 2016). Strategic teams must be built by the senior leadership based on mutual trust (Notman, 2015). Furthermore, in the immediate aftermath of a natural disaster, reopening schools and providing access to education must be prioritized, which may necessitate asking others to fill non-traditional roles (Mutch, 2015).

Even with delegation, public school systems may face great turbulence as they begin to reopen (Beabout, 2010). Everyone must be adaptable and comfortable with change as the school moves toward reopening. This is a necessary competency when responding to a crisis (Wright & Wordsworth, 2013). Once the immediate aftermath has been dealt with, principals should reestablish their roles (Fletcher & Nicholas ,2016). This may require extremely long hours, and their personal lives may suffer as they work to reassemble the school and all the stakeholders (Notman, 2105). These concerns are real and at the forefront of the minds of educational leaders after a crisis like a natural disaster, even as the issues are fluid and changing.

The schools and community centers also become a staging ground for crisis management. Immediately following the earthquake in Christchurch, New Zealand, the community poured into the school buildings as the remaining infrastructure was evaluated for damage and soundness (Mutch, 2015). The principals and other leaders must remain calm and decisive in the face of the disaster (Fletcher & Nicholas, 2016), even as those around them panic and mourn. After the Joplin tornado, students were positively affected by seeing administrators and assistant administrators ride through their neighborhoods on bicycles to check on parents and students (Goswick et al., 2018). Communities often turn toward educational institutions as places of safety and school leaders take on disaster-recovery roles.

The Subsequent Months

Following the initial crisis management response, school leadership must face new issues in the subsequent months. They must address the population's growing needs as the secondary traumas of the crisis grow, expand, and hopefully resolve. This is where school leadership can lay the groundwork for long-term recovery and a successful community in the face of crisis and loss.

One of the on-going problems that leadership faces is the lack of or decaying facilities as school resumes as usual. In a case study that examined the lives of teachers after Hurricane Katrina, Alvarez (2010) describes diminished and destroyed resources in the form of water-logged textbooks and moldy, dilapidated buildings. In some instances, all classes were moved to the upper levels of the buildings to avoid the water damage and mold so that class could resume as usual. Even though the floodwaters had receded, the long-term effects from the environmental damage were only beginning to rear their ugly head. The schools faced facility issues such as neglect and vandalism on a large-scale (Beabout, 2010). The physical school buildings and other lack of resources must be addressed at the leadership level.

Even more importantly, principals and community leaders must contend with a traumatized youth and adult population while trying to keep everything as normal as possible. A natural or human-caused disaster is a critical life event that may result in traumatic stress brought on by the unexpected changes of living without a home, clothing, food, or safety (Dyregrov & Mitchell, 1992). Children and young people who are most at-risk of psychological trauma need to be identified and prioritized (Mutch, 2015). One teacher described her students' post-earthquake as having no visible, but clear psychological wounds (Wright & Wordsworth, 2013).

Unfortunately, the psychological trauma that students experienced after the disaster exceeded the school district's ability to respond effectively (Beabout, 2010). Schools and surrounding communities may face an uptick in student violence and issues with engaging in riskier behaviors such as increased underage drinking and smoking (Alvarez, 2010). Also, Beabout reports that following Hurricane Katrina, one 5th grade teacher reported conferencing with a parent about student behavior only to find out that the student had watched his little brother drown in the storm (2010). Responding to students with empathy can help promote resilience and adaptability (Wright & Wordsworth, 2013). Schools and communities must have plans in place to address these needs should a crisis arise, and that onus falls on the shoulders of school leaders.

Furthermore, leaders must address the specific concerns that are unique to their populations in the months following a crisis. After Hurricane Katrina, students are described as returning to the city alone while their parents sought employment elsewhere, which made adult supervision sparse and shaky (Beabout, 2010). With groups of traumatized students who are now on their own for the first time, this can be a recipe for chaos. For all the students at these schools, their unpredictable living arrangements continued because of the job displacement of their parents and their inability to rebuild their former home or find suitable local housing. Following Hurricane Katrina, some students commuted from cruise ships to temporary housing or other short-term housing arrangements with relatives (Alvarez, 2010).

Further trauma can surface as the working memory and cognitive function of survivors is impaired. After the Christchurch earthquake, the cognitive disruption was dubbed "quake brain" (Wrights & Wordsworth, 2013). School leaders need to be cognizant of these challenges students may face as they process the trauma.

School leaders may face issues within their own schools following a crisis. Beabout (2010) found that schools faced issues in the form of underserved ELL populations as students changed schools and a decrease in teacher quality as many professional educators found employment elsewhere. Some schools also extend school in the summer to compensate for gaps in student education (Goswick et al., 2018). Thankfully, teachers report having to already have a certain level of resiliency that comes with the normal rigors of teaching that translates well in a crisis (Notman, 2015).

Additionally, school leaders must be given an opportunity after the initial crisis response to process their own trauma. It is important that educational leaders address their psychological and emotional needs as well (Mutch, 2015). Kramer & Allen (2018) found that for positive change to be realized, leadership must be given a chance to recover from the disaster, especially in the form of reflection. Wrights & Wordsworth (2013) warn of burnout and advise self-care needs to be taken by leaders to avoid psychological, physiological, and career consequences. This can allow them to return stronger and better prepared. This is echoed by Goswick et al. (2018), who found that reflection allowed leaders to evaluate their leadership team and responses in the subsequent months after a natural disaster.

The Long-Term Effects of Disaster Relief on Educational Leadership

From a long-term perspective, school leadership must address the far-reaching toll that a natural disaster has on a community. These challenges come in the form of reduced resources as a district rebuilds, the attrition and redistribution of remaining populations, the on-going emotional toll from the disaster, and remaining issues that go together with underserved populations. More positively, schools that respond well in crisis find themselves to be center to

the overall community and leaders who can process their trauma are found to be more empathetic and effective.

First and foremost, schools are faced with the uphill slog of rebuilding a devastated community. Students must feel safe to return to campus, which can be difficult in the face of continued disasters such as aftershocks (Wright & Wordsworth, 2013). Reduced resources affect the community in a variety of ways, such as teacher quality. At one point, following the rebuilding after Hurricane Katrina, one New Orleans principal reported having 26 uncertified teachers on his staff (Beabout, 2010). Underqualified teachers can have a huge effect on the quality of student education. The teachers that remained faced impossible demands, such as teaching multiple grade levels simultaneously and within the same classroom (Alvarez, 2010). Teachers were still pressured to maintain high levels of learning even in the face of these challenges (Wright & Wordsworth, 2013). These disasters can create untenable professional situations for both teachers and administrators as the landscape of a community is changed profoundly and irrevocably.

Additionally, schools and communities are not miraculously rescued from problems that were previously afflicting the school. In fact, the pre-existing problems were often further exacerbated. One teacher said after the Hurricane Katrina crisis that students who were previously apathetic continued to be so during the reconstruction and, in fact, increased their apathy (Alvarez, 2010). Beabout (2010) also found that there were higher rates of absenteeism, extreme tardiness, and even students having to engage in prostitution for survival.

Additionally, poverty, crime, and low skill levels continued to plague the schools and communities (Beabout, 2010). Schools that face state restructuring may find a difficult time attracting talented and high-scoring students when school choice is implemented, leading to

further educational inequality (Beabout, 2010). Even with the larger picture of rebuilding a community after a natural disaster ongoing, leadership must be ready to address the problems students are dealing with.

On another note, it can be advantageous for communities and leadership to seek outside help from professionals. Stakeholders and, especially principals, must deal with the inevitable bureaucracy that comes along with disaster recovery (Notman, 2015). Secretarial work becomes of even greater importance because of the need for documentation in the aftermath of the crisis.

Communities are also required to work with FEMA and need to outsource to legal experts. Additionally, they can benefit from hiring public relations firms, which can help with the flow of information in the wake of a disaster (Goswick et al., 2018). These highly qualified experts can fill a niche that is specific to communities recovering from a natural disaster.

One way that leadership can address on-going issues is through school initiatives such as implementing some kind of oral history or journaling project that assists victims of disasters in their ability to process traumas and move on. Alvarez describes using journaling to help acclimate students to school while also helping students use news articles to reconstruct the disastrous events they experienced and connecting canonical text to lived experiences (Alvarez, 2010). These sorts of initiatives tie into research that shows followers perceive leadership as showing a greater level of personal care to followers after experiencing traumatic events. (Kramer & Allen, 2018).

Finally, not all outcomes after a crisis are negative. Leadership can help move a community toward healing and deeper bonds. Positive changes in leadership can be perceived by followers after a crisis. Whether or not the effect is positive or negative, leadership will inevitably change through trauma (Kramer & Allen, 2018). Additionally, leaders are better

prepared after a crisis to help the community respond to any further crises that occur. This traumatic educational context can also be a unique opportunity for principles and community leaders to come together to rebuild what was lost (Notman, 2015). These crises were also perceived to strengthen the centrality of schools to community life (Mutch, 2015). It falls to the leadership to help students and families make sense of disasters (Fletcher & Nicolas, 2018).

Renewal and an Opportunity for Change

A natural disaster precludes itself from being optimal for what Burke (2018) describes as "deep structure" changes in an organization. Because of the disrupting effect that a natural disaster such as a hurricane has on learning, the organization of the school must pivot its fundamental mission to survive. Since this is already a "loss experience" there would be less resistance to change than would typically happen in a school building. School leaders and other stakeholders can take this horror and use it to disrupt the factory model thinking that is a disservice to modern schooling.

Initially, schools may believe that the reopening is an opportunity for radical change, but that is often contrasted with more pragmatic concerns such as resource allocation. There may be a temptation to delay re-openings to implement meaningful change (Wright & Wordsworth, 2013). There have been a variety of ways that schools have attempted to create meaningful change, such as through legislation or mandating better schools, but there are arguments that it may be more effective to nurture and develop schools and educators (Carr-Chellman et al., 2008).

Renewal is an opportunity for positive changes in the community. In the aftermath of the Christchurch, New Zealand earthquakes, teachers reported team leadership and optimistic team-members as areas of high satisfaction (Nortman, 2015). There are many stakeholders who have a

vested interest in restructuring schools, which leaders must be cognizant of. As Carr-Chellman explains, "Instead, we must critically analyze the unfolding of change, which is never politically neutral and continually ask of the evolving system, 'Who is well served and who is ill served by this change?'" Keeping the renewal students and community focused should be the central focus of the school administrators and stakeholders.

Addressing Trauma

Following a traumatic event such as a hurricane, school and community leaders are working with traumatized populations. Trauma can present in a variety of ways and since schools tend to be the "catchall" for social problems, trauma will inevitably become an issue for school leadership to address both directly and indirectly. Leaders will need to be cognizant of the trauma-load weighing on the community as a whole and work to identify the most vulnerable individuals.

Throughout the literature a few patterns emerge regarding who is most vulnerable to long-term negative impacts from traumatic experiences. Vulnerable populations such as those in low-resource communities face both subjective and objective traumas. Objective traumas can be defined as those where the individual has direct contact with the event i.e., being caught up in floodwaters, whereas subjective traumas tend to occur through feelings such as terror, horror, and helplessness (Norris et al., 2009, p. 93). Brown et al. (2011) also indicate that, "Natural disasters present both acute and enduring stressors to affected individuals" (p. 575). In the immediate aftermath, survivors experienced great disruptions in their everyday life which exacerbated the long-term stressors (Lowe et al., 2013, p. 757). Brown et al. (2011) further elaborated by indicating that immediate threats that involve bodily harm or death while enduring stressors tend to take the shape of housing-insecurity, job loss, and emotional hardship (p. 576).

Most would think only of the immediate aftermath of a natural disaster rather than having a holistic picture of how trauma can manifest in a long-term way in affected communities such as Bay County, Florida.

Lowe et al. (2016) explain, "... living in a low-resource community increases risk for post-disaster PTSD both independently and by enhancing the influence of disaster-related exposure" (p. 440). Having easily accessible resources is one of the main ways that trauma manifests differently across the socioeconomic spectrum. As Zweibach et al. (2010) states, "…those individuals who have fewer resources prior to stress are less equipped to invest resources in recovery" (p. 751). Additionally, survivors who experience initial resource loss can find themselves in "loss spirals" where they are then subjected to further loss of resources (Lowe et al., 2013, p. 753).

Norris et al. (2009) found that PTSD symptoms were meaningfully related to trauma exposure, suggesting that they are not simply from general distress. Lowe et al (2016) explains, "…community resources shape disaster survivors' risk of PTS both independently and in-tandem with individual-level exposure…these main and interactive effects might be enhanced over time" (p. 44). Bromet et al. (2017) cite the "stress sensitization hypothesis" as an explanation for why under-resourced communities experience higher rates of PTSD. This hypothesis suggests that prior trauma could increase the likelihood that the survivors would experience greater negative reactions to later stress and trauma.

Norris further explores this et al. (2016) when they researched the Vietnamese community that endured Hurricane Katrina. They found that those who had experienced greater adversity during emigration had more explicit reactions to the trauma induced by the hurricane

(p. 110). Additionally, "... stressors endured during the hurricane and its immediate aftermath were associated with more stressors in the subsequent wave" (Lowe et al., 2013, p. 757).

According to Bromet et al. (2017), the three most important indicators of survivors' mental health after an event like a hurricane are pre-disaster stressors, pre-disaster psychopathology, and the extent of disaster-related adversities (p. 108). A study conducted by Lowe et al. (2016) found that "... living in a community with high unemployment enhanced the impact of disaster-related stressors on post-month PTS severity among participants assessed 25–28 months post-disaster but not among those assessed 13–16 months post disaster" (p. 444). It can be assumed then that the long-term effects of a disaster take time to be seen and may be exacerbated on a long-term scale among vulnerable populations. In a separate study, researchers found that immediate stressors such as resource loss increased the likelihood of long-term stressors which caused a heightening of negative mental health effects (Lowe et al., 2013, p. 754).

Leaders themselves are not immune to the after-effects of traumatic events. In fact, one study found that there is an elevated risk of negative mental health symptoms for middle-aged adults. Norris et al. (2009) hypothesized that these tend to be the people group who are in leadership roles both professionally and in their family structure. That added pressure can create a secondary trauma as affected communities attempt to recover. This can manifest even more greatly among those who experience severe property loss, which further demonstrates the link between resources and manifestations of trauma.

Additionally, trauma can present in a variety of ways. Norris et al. (2009) found that one of the most prevalent issues that survivors faced was intrusive thoughts (p. 96). These individuals often found themselves recalling the traumatic events at unrelated times due to underlying

triggers. Lowe et al. (2013) also point out that, "Research on stress generation indicates that depressed individuals select into more stressful experiences, particularly those of an interpersonal nature" (p. 754). This means that those who experience a natural disaster tend to inflict further trauma on themselves within their personal lives. They also tend to exhibit risky behaviors.

Another symptom that survivors often experience is sleep disturbance. Studies have found that sleep disturbance can exacerbate trauma because it contributes to fatigue and irritability, which makes it more difficult for individuals to process traumatic experiences. Also, events such as hurricanes can be especially inducing of this particular symptom because, "... [hurricanes present] severe threats of harm to self, family, and/or home, as well as threatened or actual separations among family members, including children and their parents... this catastrophic event may have been particularly potent in engendering sleep disturbances and fear of sleeping alone" (Brown et al., 2017).

In the aftermath of a natural disaster, how the community responds to its members can have a lasting impact for the good or the bad. After something like a hurricane, the initial outpouring of support from social networks can have a positive impact on survivors, but it is rarely sustained (Lowe, 2013, p. 441). As survivors experience declines in physical and mental health, it becomes paramount to shore up services for survivors (Zweibach, 2010, p.757). Allen et al. (2010) cites "…providing for immediate safety and comfort, making effective contact, and engaging with survivors" as the most important services a community can provide (p. 512). Lowe et al. (2016) point out that survivors will continue to face disaster-related stressors, even after the support subsides. This can lead to increased psychological stress.

After a natural disaster, "…acute interventions… are best designed to establish a supportive relationship with survivors so as to help address their immediate safety needs and concerns, rather than be focused on more 'mental health' type interventions that involve dealing with disaster-related experiences and psychological reactions" (Allen et al., 2010, p. 512). Lowe et al. (2013) calls for the rapid deployment of services and the quick identification of survivors to decrease the long-term negative health affects (p. 760).

Trauma-Informed Education

Increasingly, schools are being called upon to close the gap in mental health services and address Adverse Childhood Experiences (ACEs). The National Task Force on Children Exposed to Violence estimates that 2/3 of children in the United States are exposed to some type of crime, abuse, or violence each year (Blodgett & Lanigan, 2018). Runaways and homeless youths, children in foster care, children in the juvenile justice system, and LGBTQIA+ adolescents (Gaetz, 2004, p. 46).

At the school level, trauma-informed or trauma-based practices are implemented in a variety of ways. This involves some adoption of cognitive-behavioral therapy that can be applied in various ways and at different levels of the school. Usually, these therapies are divided into individual or group interventions, classroom-level interventions, and school-wide interventions. One way to do this is using six principles for compassionate instruction and discipline: (a) always empower, never disempower (b) provide unconditional positive regard (c) maintain high expectations (d) check assumptions, observe, and question (e) be a relationship coach (f) provide guided opportunities for helpful participation (Wolpow et al., 2009).

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"…community resources shape disaster survivors' risk of PTS both independently and in-tandem with individual-level exposure…these main and interactive effects might be enhanced over time" (p. 44). Bromet et al. (2017) cite the "stress sensitization hypothesis" as an explanation for why under-resourced communities experience higher rates of PTSD. This hypothesis suggests that prior trauma could increase the likelihood that the survivors would experience greater negative reactions to later stress and trauma. When Trauma-Focused Cognitive Behavioral Therapy (CF-CBT), was applied on any level, students with diagnosed Post-Traumatic Stress Syndrome (PTSS) reported a reduction in their symptoms.

Additionally, applying Cognitive Behavioral Intervention to Trauma in Schools (CBITS), which broadened treatment from the individual to the community, demonstrated measurable success. Norris et al. (2016) further explored this when they researched the Vietnamese community that endured Hurricane Katrina. They found that those who had experienced greater adversity during emigration had more explicit reactions to the trauma induced by the hurricane (p. 110). Additionally, "... stressors endured during the hurricane and its immediate aftermath were associated with more stressors in the subsequent wave" (Lowe et al., 2013, p. 757).

According to Bromet et al. (2017), the three most important indicators of survivors' mental health after an event like a hurricane are pre-disaster stressors, pre-disaster psychopathology, and the extent of disaster-related adversities. A study conducted by Lowe et al. (2016) found that "... living in a community with high unemployment enhanced the impact of disaster-related stressors on post-month PTS severity among participants assessed 25–28 months post-disaster but not among those assessed 13–16 months post disaster" (p. 444). It can be assumed, then, that the long-term effects of a disaster take time to be seen and may be exacerbated on a long-term scale among vulnerable populations. In a separate study, researchers

found that immediate stressors such as resource loss increased the likelihood of long-term

stressors, which ultimately caused a heightening of negative mental health effects (Lowe et al.,

2013).

One way to approach these traumas and stresses is through the interface with a caring and

supportive adult, which helps to regulate stress hormones in a child (Martin et al., 2017). Leaders

themselves are not immune to the after-effects of traumatic events. In fact, one study found that

there is an elevated risk of negative mental health symptoms for middle-aged adults. Norris et al.

(2009) hypothesized that these are the people groups that are in positions of leadership both

professionally and in their family structure. That added pressure can create secondary trauma as

affected communities attempt to recover. This can manifest even more greatly among those who

experience severe property loss, which further demonstrates the link between resources and

manifestations of trauma.

Finally, the implementation of trauma-based practices should be used on the school level

because, "As a result of their regular and ongoing contact with youth, schools are in a unique

position to assist young trauma survivors by helping to buffer the effects of trauma and to assist

with access to appropriate care" (Martin et al., 2017, p. 465). CF-CBT classroom-based practices

can shift the lens from blaming the students to understanding what is happening to them (p. 428).

Additionally, the benefits can be observed in a multitude of studies. Children have reported a

decrease in symptoms, improvement in emotional regulation, social academic competence, and

improvement in academic performance. This is in addition to higher graduation rates and a

decrease in school-level punitive actions (Butler, 2014, p. 75; Goodkind et al., 2010, p. 39;

Mendelson & Letourneau, 2015, p. 43).

Unfortunately, there are also barriers to trauma-informed practices. These can often look like a lack of support from the administrators and teachers, competition with the other responsibilities of teachers, problems with parental engagement, and mental health stigmas (Langley et al., 2010, p. 2; Langley et al., 2013). Another challenge is that traumatized youths are often under-identified and/or may not attend the prescribed treatments (Martin et al, 2017, p. 431). Unfortunately, the psychological trauma that students experienced after the disaster exceeded the school district's ability to respond effectively (Beabout, 2010). Schools may face an uptick in student violence and issues with engaging in riskier behavior such as increased underage drinking and smoking (Alvarez, 2010). Also, Beabout reports that following Hurricane Katrina, one fifth grade teacher reported conferencing with a parent about student behavior only to find out that student had watched his little brother drown in the storm (2010). Responding to students with empathy can help promote resilience and adaptability (Wright & Wordsworth, 2013). Schools must have plans in place to address these needs should a crisis arise, and that onus falls on the shoulders of school leaders.

Description of Local Context

On October 10th, 2018, Hurricane Michael made landfall as a Category 5 hurricane in Mexico Beach, Florida, affecting the surrounding communities of Tyndall Airforce Base and Panama City, Florida. The storm was the third strongest on-record to make landfall in mainland United States with winds reaching up to 161 mph. Based on windspeed, it was the fourth strongest hurricane to ever make landfall in the United States. The result was the decimation of buildings, businesses, and the existing infrastructure. Initial estimates placed the destruction at over $116 million, a number which has only increased in subsequent years and is now placed closer to $25 billion (Bui et al., 2020).

The community of Bay County school district was directly affected. In the aftermath, the school experienced an enrollment loss of 3,679 students and 4,800 students were classified as "homeless." Additionally, the school lost 200 employees due to student attrition and budget cuts. One anecdotal example of this is Everitt Middle School, where I worked for two years, was demolished in 2024, due to its extensive damage in the storm. The students from Everitt were moved to the nearby Rutherford High School, where a makeshift middle school was created. In the past five years, the school continues to be under capacity, despite the addition of the middle schoolers, due to the post-storm shifting populations (Cobb, 2023a).

The leadership faced a variety of difficulties. Al Cathey, former mayor of Mexico City Beach, Florida, describes the last five years as wading through different state and federal regulations to acquire the funds to rebuild the destroyed community. The community has also been plagued with internal upheavals. For example, the former City Manager of Panama City, Michael Johnson, was charged with embezzling $1 million from an afterschool program and plead no-contest in March 2023. He was replaced by Jonathan Hayes, who is now the City Manager and overseeing the Community Redevelopment Agency (Cobb, 2023b). Mark McQueen, who was the former City Manager of Panama City that initially called out Michael Johnson for "sloppy bookkeeping," was appointed as Superintendent of Bay County Schools by Governor Ron DeSantis (Cobb, 2023b). He replaced William Husfelt, who was the superintendent during Hurricane Michael and led the recovery efforts. He chose to retire early due to personal reasons (Cobb, 2023b). These political issues could have a profound effect on the way that followers and leaders perceive transformational leadership in the aftermath of Hurricane Michael.

Current Bay County Response to Trauma Education

Since Hurricane Michael, Bay County has not been immune to outside political and social upheavals. On February 14, 2018, seventeen students were killed in a tragic shooting at Marjory Stoneman Douglas High School in Parkland, Florida. As a result of a grassroots campaign led by student survivors, the Marjorie Stoneman Douglas Act SA 7206 was passed by Governor DeSantis of Florida on March 9, 2018. The implications of this ruling were far reaching and impacted legislation on several levels statewide. One effect of this ruling was the State Board of Education enacting 6A-1.094121 Mental and Emotional Health Education mandate that creates an hourly Mental Health education requirement of five hours of training per student. This bill was passed on August 20, 2019, after school began on August 12th, 2019, leaving administration little time to implement it.

As a result, the district superintendent, Bill Husfelt, and the school board members fulfilled this requirement by relying on a program already in place called Freedom 180 (Husfelt, 2020). Freedom 180 is a Sexual Risk Avoidance Program that was put in place by the State Department of Public Health in 2001. It is under the umbrella of the REAL Essentials curriculum developed by The Center for Relationship Education, a non-profit organization based out of Denver, Colorado.

As of January of 2023, Bay County has secured $1.5 million in funding in the form of a five-year grant from the Substance Abuse and Mental Health Services Administration. The BDS Assistant Superintendent, Denise Kelley, explains that the purpose of the grant is to increase the number of school counselors within the schools to aid with teacher and student mental health. In the aftermath of Hurricane Michael, 72% of students and faculty reported depression, anxiety,

and trauma symptoms (Burrell, 2023). Hopefully, this grant will move the trauma-education and risk-reduction programs forward within the Bay County schools system.

The Researcher's Context Within the Study

Ortlipp (2008) states that qualitative research can also involve "…. asking participants to look at and comment on the researcher's analysis on the data that they have played a part in generating." Referring to the idea of reflexivity introduced by Schwandt (2015), a researcher must begin his or her research from a position of self-reflection and awareness of existing subjectivity, which is defined as a combination of reflexivity and emotion. However, this goes far beyond the realm of "I think…" or "I feel…" and trends into examining the self through the lens of ontology, epistemology, axiology, and methodology (Creswell & Poth, 2013). Several theoretical paradigms can be helpful in this reflection and definition (Mertens, 2010). It is important to note that as qualitative research progresses, the frameworks are often fluid as researchers reflect on their own beliefs that they bring to the study, the direction of research goals and outcomes, and the researcher's own scope of training and experiences (Creswell & Poth, 2013). This is an example of how a study shapes the researcher as much as the researcher shapes the study.

From the standpoint of a postpositivist framework, the researcher is challenged to strip themselves of "bias" and face the problem free from all previous experiences. The conception of "bias," which is defined by Schwandt as our understanding of ourselves and the world in relation to our pre-judgement and prejudice, is often characterized as "bad" or "disruptive." However, it is impossible for a human being to divorce its own nature and psyche even in the pursuit of knowledge. Additionally, Roegman et al. (2016) postulate that positionalities are the ways that "…researcher's cultures work as lenses through which they experience the world, and, how they

envision and conduct research." Thankfully, reflexivity, especially uncomfortable reflexivity, can force the researcher to take full account of their own biases, subjectivities, and positionalities. Roulston and Shelton (2015) state, "… subjectivity or 'bias' may not only 'unbalance and limit endeavor' in particular ways but also 'motivate and illuminate inquiry.'" Therefore, bias is not only not a threat to validity but can drive research to more holistic depths.

As a result, it is important that I, as the researcher, define my own context within the study and biases. From June of 2014 - December of 2015, my spouse was stationed at Tyndell Air Force Base and, from October 2014 to December of 2015, I worked at Everitt Middle School within the Bay County School District. During that time, I first taught Technology and Design to grades 6-8 and then ASPIRE English Language Arts to 8th grade. As a younger but experienced teacher in my fourth and fifth year of my career, I grew a great deal professionally and personally. I was able to work with limited resources and distinguish myself, with my students winning awards on the district level and my colleagues nominating me for Teacher-of-the-Year in 2015. My spouse and I received a Permanent Change of Station to Fort Sill, Oklahoma in December of 2015, but I continued to closely follow the district and was saddened to see the devastation wrought by Hurricane Michael in 2018. I have maintained a vested interest in the community since that time and these biases have an undeniable impact on the lens through which I view this research.

Implications of Literature Review for Developing the Study

Currently, there were no studies found that examine educational and community leadership before, during, and after a crisis through the lens of transformational leadership. Additionally, there is an increasing likelihood of extreme weather events as global warming continues to affect human populations. Global warming is expected to have a significant climatic

impact on individuals, organizations, and governments, manifesting itself through more severe storms and other weather patterns (Begg et al., 2018). Hurricane Michael is one such storm that some climate scientists believe could have gotten worse because of global warming (Elsner & Jagger, 2006). This conclusion is based on the premise that increased greenhouse gas concentrations in the earth's atmosphere contribute to rising ocean temperatures and more intense hurricanes, which derive their energy from water temperature (Rahmstorf et al., 2006). Leadership in all forms needs to have data to which it can refer to have an effective reaction plan. This study hopes to lend to the future discourse around leadership and natural disasters.

Conclusion

In conclusion, while there have been many case studies surrounding the response of educational leadership to natural disasters, there has been little research conducted into several arenas. First, little has been studied regarding long-term issues related to educational leadership and disaster relief. Additionally, nothing prescriptive has been researched or written in the vein of educational leadership. As Global Warming continues unchecked, school systems will be left to deal with its the worsening effects. In this scenario, the role of the school will become increasingly important even if the effects of natural disaster are mitigated. It is important to look at this research from the standpoint of a progressive response.

As time goes on, the role and importance of educational leadership changes. While different disasters create different problems, they all have difficulties that must be faced by those in charge. I believe that research into a prescriptive approach would be beneficial, there is also great need in other arenas. There is little to no research on how leaders can recover themselves before serving their populations. Leaderships in traumatized populations are re-traumatized by trying to deal with the trauma of those around them.

Finally, this research subject is deep, vast, and begging for further inquiry. It could foray into many different diverging studies, and the surface has only been scratched. I am looking forward to pursuing it and I hope to create a pathway that future school leaders can follow.

Chapter 3: Methodology

In this section, I presented the research methods, design, and rationale, as well as my role as the researcher. I discussed the selection of participants and instrumentation along with research procedures. In addition, I explained why I utilized the hermeneutical, phenomenological research design to evaluate the lived experiences of educational and community leaders before, during, and after Hurricane Michael. The purpose of this on-going research is to record the experiences of Community Leadership in the aftermath of Hurricane Michael through a transformational leadership framework. The participant population is composed of leaders in Bay County, Florida before and after Hurricane Michael in 2018. I sent emails to community leaders who were in the Bay County school district in Florida containing the consent to participate letter, which outlined the procedures for inclusion in the interview. The anticipated number of participants was between five to eight participants. Nine people agreed to participate in the interviews. The expected time to complete this survey was sixty minutes. I conducted the interviews and analyzed the results.

Design and Rationale

For this study, I used phenomenological methodology because it allowed me to illuminate rich descriptions and personal meanings of lived experiences related to Hurricane Michael. The following qualitative, phenomenological research study design was used to co-construct the lived experiences of community and educational leaders throughout Hurricane Michael (Peoples, 2021).

Based on the literature review, there is minimal research around the lived experiences of community and educational leaders regarding natural disasters. Viewing it through a

transformational leadership lens provides a unique understanding of how leaders respond and what the long-term traumatic effects can be.

As a grounding philosophy or theoretical framework, I selected hermeneutical phenomenology. Phenomenology was a philosophy originated by Husserl (1999) to describe the pure essence of a phenomenon. This type of phenomenology is referred to as transcendental phenomenology and is characterized by the idea that our "intentionality" or awareness of a phenomenon changes the phenomenon (Husserl, 1999). Van Kaam (1966) referred to this as phenomenological vigilance (p. 256). Husserl promoted bracketing or suspending one's own knowledge and prejudices to correctly understand an event. In this regard, he categorized the researcher as a "stranger in a strange land." Additionally, transcendental phenomenology emphasizes that the more people think about their own thinking, the more they can know something clearly (Peoples, 2021, p. 30).

In 1971, Heidigger explained that there is no way that a person can truly bracket themselves off from being within the world. He called this "dasein" and it is the foundation for the philosophy known as hermeneutical phenomenology. Heidigger (1971) saw the process of understanding a phenomenon as a circle, in which our preconceived knowledge or "foresight" informs how one experiences the world, and the world informs how one understands their former experiences. This is called the Hermeneutic Circle. People make sense of the world as a spiral where understanding of phenomena is increased through constant revision and reflection (Peoples, 2021, p. 33).

The researcher is not to suspend or bracket judgement, but rather to move through their own biases to inform their understanding. Gadamer (1975) took this idea one step further and believed that researchers interpret their own understandings through a process of renewed

projections and perceptions of phenomenon are formed because of biases, not in spite of. Researchers should use lenses to help them construct their understanding of a phenomenon.

A hermeneutical phenomenological study design was selected with the purpose of co-creating authentic lived experiences of community and educational leaders (Finlay, 2009). I wanted to focus on lived experiences and only lived experiences (Heidigger, 1971). This study was exploratory and there was no prior research to which the results could be compared. The purpose is to describe the lived experiences of participants (Hays & Wood, 2011). The studied phenomenon was a singular sampling of the participants' lived experiences and does not fully represent their story as leaders in a time of crisis. Therefore, I selected the hermeneutic phenomenological research design with the intention of understanding my own positionality through journaling my biases as part of the research reflexivity (Schwandt, 2015).

Three lenses were used to interpret the results through a constant process of renewed projection (Gadamer, 1975). The first lens was my own lens of pre-understanding. As a teacher who lived and worked in Bay County, Florida prior to Hurricane Michael, I came to the study as a researcher with my own biases and positionality. The second lens that I selected was Bass's Transformational Leadership styles (Bass, 1985). Viewing the participants' lived experiences through this lens changed my own view on how I viewed the phenomenon of a natural disaster. Finally, the third lens that I applied was a new and changed understanding of the overall event (Peoples, 2021). The intended outcome is to have an overall picture of participants' lived experiences before, during, and after Hurricane Michael in Bay County, Florida.

Figure 4

Hermeneutical Phenomenological Interpretation of Data
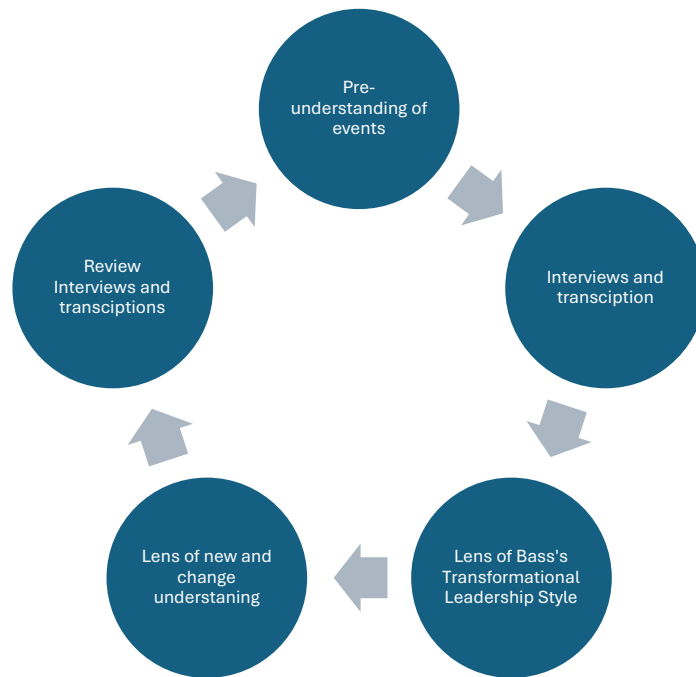
I chose the method of hermeneutical phenomenology for several reasons. While the method of ethnography is used to identify shared patterns of a cultural group, it is not appropriate for my study since culture is not the focus of the research. A case study approach, which allows the development of detailed portrayal and case analysis of a single case or numerous cases, was considered, it did not fully meet the requirements of focusing on experiences only as lived (Peoples, 2021).

Researcher Role and Positionality

Referring to the idea of reflexivity introduced by Schwandt (2015), a researcher must begin his or her research from a position of self-reflection and awareness of existing subjectivity, which is defined as a combination of reflexivity and emotion. However, this goes far beyond the realm of "I think…" or "I feel…" and trends into examining the self through the lens of ontology,

epistemology, axiology, and methodology (Creswell & Poth, 2013). The impetus from this study stems from my time of employment with Bay County Schools so it is important to note that I have an impact on the subject as the subject as an impact on the observer.

As a researcher, I am positioned as an insider since I am a former teacher at Everitt Middle School, which was decimated by Hurricane Michael. I taught there for 1.5 years so I was both an outsider and insider to the community. Many of my colleagues still teach in the district and have first-hand experiences as Educational Leaders during this time period. Additionally, I am also positioned as an outsider in this study. I only resided in Bay County for two years and taught in the school district for a year and a half. Much of the cultural nuance is lost on me as a middle-class, White Ohioan. This privilege has provided resources that have shielded me from many of the acute and chronic traumas faced by those who have less resources and agency. Also, I worked in Bay County as a teacher, not as an administrator so I was not aware of the undercurrent of politics that ran the school system.

Participants

Table 1

Demographics Table

	Age	Ethnic Origin	Gender	Education	Current Role	Role on October 10, 2018	# Years in Education	Years in Current Role
P1	38	White	Male	Professional degree	Supervisor of Career and Technical Education Programs	Assistant Principal	16	11
P2	46	White	Male	4-year degree	Teacher	Teacher	20	8
P3	37	White	Male	4-year degree	Teacher	Teacher	12	8

P4	40	White	Female	Professional degree	Principal	Principal	22	7
P5	68	White	Female	4-year degree	Substitute Teacher	Teacher	29	>1
P6	57	White	Female	Professional degree	Executive Director of HR	Staff	25	6
P7	54	White	Female	4-year degree	Executive Director of Panama City Downtown Improvement Board	Military Spouse	5	2
P8	66	White	Male	Professional degree	Former Superintendent	Super-intendent	41	15
P9	54	White	Female	Professional Degree	Retired Airforce Officer	Head of HOA	N/A	3

Methods: Sample/Sampling

      This study's population was teachers, administrators, and community leaders in Bay County who were living in Panama City, Florida before and after Hurricane Michael. The selected interviewees were those who were employed before the hurricane and after the hurricane in the same locations. Rather than using random sampling, purposeful sampling allows the researcher to select specific individuals. Purposeful sampling is important because certain types of participants may have varying viewpoints that may need to be included in the sample (Campbell et al., 2020). Snowball sampling was also used to identify cases of interest from other possible participants (Noy, 2008). Constructivist, phenomenological researchers look at smaller populations over longer periods of time (Ponterotto, 2005). For an adequate amount of data to be gathered, I had to meet the thresholds of sufficiency and saturation of information (Seidman, 2019).

There is no restriction or consideration of gender, race, or ethnicity about participant population. Inclusion criteria: Individuals in leadership positions in Bay County during Hurricane Michael in 2018. Exclusion criteria: Individuals not in leadership positions or not located in Bay County during Hurricane Michael.

The recruitment process was via email to community leaders who were present during Hurricane Michael. Using an email template, I stated the purpose of the study, estimated time required to participate in the study, risks and benefits of participating in the study, privacy and confidentiality statements, statement of voluntary participation, information about renumeration (there is none), and contact information for questions about the study. They received a copy of the informed consent as an email attachment and were asked to return it to me with a wet or digital signature. They also used a Doodle link to schedule a time for the interview that was convenient for them. Once they had chosen an interview time, I sent them a preview of the initial semi-structured interview questions as an email attachment and asked them to indicate their availability for either an in-person or ZOOM interview.

Instrumentation

The research procedures consisted of a short, voluntary conversation related to community leaders' experience of transformational leadership during Hurricane Michael in 2018. None of the questions ask community leaders to share confidential or sensitive information, and any question could be skipped. There are no right or wrong answers, and there is no penalty for specific responses. The entire purpose of this study is to create an accurate picture of what happened to leadership during Hurricane Michael to better support leadership in the future. The researcher does not hold a position of authority over any of the participants. All participants' names were changed to pseudonyms and the names and locations of specific

businesses will not be used. Participants had the benefit of seeing the questions prior to the interview to consider their responses and/or objections to each question in advance.

Research Question

What are the lived experiences of community and educational leaders throughout the Hurricane Michael crisis in Bay County, Florida?

Recruitment Procedures. The recruitment process was an email with a template to community leaders who were present during Hurricane Michael. Using the template, I will state the purpose of the study, estimated time required to participate in the study, risks and benefits of participating in the study, privacy and confidentiality statements, statement of voluntary participation, information about renumeration (there is none), and contact information for questions about the study. Participants were asked to sign up for a Doodle slot for the informed consent. They received a copy of the informed consent as an email attachment and will be asked to return it to me with a wet or digital signature. Then they received a preview of the initial semi—structured interview questions as an email attachment and were asked to indicate their availability for either an in-person or ZOOM interview along with a follow-up interview if necessary.

Data Collection. Once potential participants contacted me, I discussed the study, its parameters, and requested informed consent. After receiving a signed copy of informed consent, I sent a preview of semi-structured interview questions to the initial participants via their personal emails. The interviews were scheduled whenever it was convenient for the interviewees. Interviewees were recorded to be transcribed and then deleted. Responses will be coded inductively to identify themes regarding transformational leadership traits using a top-down approach (Creswell, 2022; Schwandt, 2015). Variables of interest include transformational

leadership characteristics and how they changed over time. Responses were analyzed to identify patterns regarding transformational leadership traits through thematic coding developed from the transcription of the initial interviews.

Interview Questions. Tell me a little bit about yourself and your work in the Bay County community.

Follow up: What is your leadership role in the community?

How would you describe a good leader?

Follow up: What traits and qualities does a good leader exhibit?

Can you share with me your experiences during the hurricane? How did it impact you and your community emotionally?

How would you describe your leadership style before Hurricane Michael?

Please describe any effective leadership you witnessed or led during the Hurricane Michael crisis.

What did leadership look like in the rebuilding and aftermath of Hurricane Michael?

What impact did leaders have on the Bay County community before, during, and after Hurricane Michael?

What lessons were learned by leadership and how did it impact future procedures and policy?

Did you notice any common emotional or psychological responses among individuals in your community following the hurricane? How did people cope with their emotions and trauma?

What strategies or practices have been helpful in promoting resilience and recovery from the trauma of the hurricane?

Data Analysis

In hermeneutical phenomenology, the parts inform the whole and the whole informs the parts (Heiddigger, 1971). Therefore, analysis is not quite the correct term, but rather the term "explication" should be used (Peoples, 2001, p. 57). Semi-structured interviews will be mined for the themes of transformational leadership, to help construct an understanding of the lived experiences of leaders before, during, and after Hurricane Michael.

I began by reading and deleting information relevant to the interviewees' stories. The purpose of this is to help get to the essential parts of the experiences without extraneous information. I viewed this through my first lens of pre-understanding. The second step involved applying the second lens of Bass's transformational leadership qualities for themes. This will allow me to create "meaning units" (Giorgi & Aanstoos, 1985). The traits of the phenomenon will begin to emerge during this process. After my understanding deepened, I reviewed the transcripts a third time to find final meaning in the participants descriptions of events. A fourth review will be focused on situated narratives and focus on highlighting repeated themes. I will then move to a general narrative to a general description (Peoples, 2001). Thus, the hermeneutic circle will be followed to its logical completion (Heidigger, 1971).

Validity and Reliability

I created credibility by using my judgement as to how long to remain in the field to establish "good themes" and works to create a persuasive narrative (Creswell & Miller, 2000, p. 125). Additionally, I employed triangulation to find common themes and categories by "eliminating overlapping narratives" (Creswell & Miller, 2010, p. 127).

When gather interviews from the participants, I honored their reality because "…reality is socially constructed and it is what participants perceive it to be" (Creswell & Poth, 2010, p. 125).

I sent participants a copy of the findings as well as my discussion so that they could check their own quotes and correct any inaccuracies and, thusly, engage in member checking. The members provided a variety of insights, which were then reflected in the findings section.

Reflexivity is also part of my case study because, "This validity procedure uses the lens of the researcher but is clearly positioned within the critical paradigm where individuals reflect on the social, cultural, and historical forces that shape their interpretation" (Creswell & Miller, 2010. p. 127). Finally, I employed the powers of rich description because it "…enables readers to make decisions about the applicability of the findings to other settings or similar contexts" (Creswell & Miller, 2010, p. 129).

Limitations

There are multiple limitations to this study. Purposive sampling's limits are related to the distinctions between qualitative and quantitative research. The major objective of qualitative research is to develop a thorough understanding of a subject, and the amount to which substantive information is gathered from more samples is used to determine whether sampling is adequate. In comparison, quantitative research places a premium on the generalizability and representativeness of the population under study (Gay & Airasian, 2002). Ex post facto and quasi-experimental designs have drawbacks, most notably the absence of random assignment. Random assignment ensures that each participant has the same chance of participation as any other, and participants are randomly assigned to either the treatment or control group. Without random assignment, the sample size is reduced and the researcher's control over the variables is limited, raising the likelihood of confounding variables (Cohen et al., 2011).

However, the variables in this study are difficult to control, and the experimental design is implausible (Cohen et al., 2011). Expectations of what the participants think researchers are

looking for can skew results (Hannum & Martineu, 2008; Pratt et al., 2000). Additionally, the time frame of observation is not controlled for, and the onset of PTSD can be delayed by several months (Kessler & Bromet, 2013).

Finally, the small participant size can limit the researcher's ability to generalize to other populations or situations (Tracy, 2010). Also, the use of telephone or Zoom as the mechanism for communication can affect the rapport between the participant and the researcher. However, it can also create a level of comfort since the participant is in a known environment and can avoid eye contact or being influenced by the researcher's reactions.

Summary

This research aims to collect and analyze the lived experiences of community leaders throughout the Hurricane Michael crisis. It implements a hermeneutical, phenomenological research design to explore the experiences of leaders in the aftermath. The study involved 9 participants, and each interview took between 30 and 60 minutes. The semi-structured interviews were used to identify themes of transformational leadership. The exploratory nature of this study focused on the lived experiences of participants and used three lenses for analysis: pre-understanding, Bass's (1985) transformational leadership styles, and a new understanding of overall events. By valuing the participants' realities and employing reflexivity, I was able to provide rich descriptions and ensure validity. The goal is to create a cohesive picture of the leaders' lived experiences and get to the essence of the phenomenon.

Chapter 4: Findings

In Chapter 1, I presented my reasons for researching community leadership during natural disasters through the lens of Bass's (1985) Transformational Leadership Framework. I outlined how leadership styles can affect populations undergoing crisis and influence the outcomes. In Chapter 2, I presented a literature review of leadership theory, previous crisis leadership studies, and trauma. In Chapter 3, I created and outlined a hermeneutical phenomenological study design to research and record the lived experiences of community leaders during Hurricane Michael in Bay County, Florida. This methodology prioritizes individual experiences and acknowledges researcher biases (Peoples, 2021). People make sense of the world as a spiral where understanding of phenomena is increased through constant revision and reflection (Peoples, 2021, p. 33).

This research illuminates the challenges presented to communities and leadership affected by natural disasters, particularly through the lens of what makes effective or ineffective leadership. At its core, the intent is to offer practical insights into effective leadership strategies amidst crisis situations, thereby fostering enhanced disaster preparedness, response, and long-term recovery efforts. Through an exploration of lived experiences regarding transformational leadership, both pre- and post-disaster, the study seeks to unveil the traits leaders exhibit that can inspire and motivate individuals to navigate adversity and attain extraordinary outcomes.

Purpose of the Study

The purpose of this ongoing research is to record the lived experiences of educational and community leaders in the aftermath of Hurricane Michael with a hermeneutical phenomenology framework and the lens of Bass's transformational leadership styles. The goal of the research is to explore the elements of how transformational leadership manifests in times of crisis.

Specifically, it seeks to answer the question: which type of leadership can best support recovery before, during, and after a natural disaster? Each type of natural disaster presented a specific set of problems for school leaders that went on for years without relief. This research will explore the lived experiences of transformational leadership before, during, and after a natural disaster. Understanding the lived experiences of community and educational leaders can help to illuminate what steps these leaders can take in the future times of crisis. The interview questions and data analysis were guided by Bass's Full- Range Transformational Leadership Model (1985).

Research Question

What are the lived experiences of community leaders before, during, and after Hurricane Michael in Bay County, Florida?

Data Collection

The hermeneutical phenomenological design was used to study the lived experiences of leaders in Bay County, Florida during the Hurricane Michael Crisis. A hermeneutical phenomenological study design was selected with the purpose of co-creating authentic lived experiences of community and educational leaders (Finlay, 2009). I wanted to focus on lived experiences and only lived experiences (Heidigger, 1971). This allowed me to illuminate rich descriptions and lived experiences (Peoples, 2021).

This study's population was teachers, administrators, and community leaders in the Bay County School District who were employed and living in Panama City, Florida before and after Hurricane Michael. These interviewees selected were those who were employed prior to and after the hurricane in the same locations. Rather than using random sampling, purposeful sampling allows the researcher to select specific individuals. Purposeful sampling is important

because certain types of participants may have varying viewpoints that may need to be included in the sample (Campbell et al., 2020). Snowball sampling was also used to identify cases of interest from other possible participants (Noy, 2008). Constructivist, phenomenological researchers look at smaller populations over longer periods of time (Ponterotto, 2005). For an adequate amount of data to be gathered, the researcher must meet the thresholds of sufficiency and saturation of information (Seidman, 2019).

Method

I created a literature review where they explored and cited academic literature around leadership during natural disasters and trauma. From that research, I selected Bass's (1985) Transformational Leadership Theory as the lens through which to view the data. Interview questions were created based upon that framework.

An IRB was written, submitted, and approved. All candidates were recruited through email. Once candidates had been contacted, I obtained informed consent from the participants and had them schedule a Zoom call at their convenience using Doodle. I used the semi-structured interview format with the participants receiving the questions in advance and also have them available for reference in the Zoom chat. These interviews were recorded and transcribed. The transcribed interviews were coded and analyzed for emergent themes through three phases. In hermeneutical phenomenology, the parts inform the whole and the whole informs the parts (Heiddigger, 1971). Therefore, analysis is not quite the correct term, but rather the term "explication" should be used (Peoples, 2001, p. 57).

Participants

Participant 1 (P1) is a white male who has sixteen years of experience in education. He has eleven years of experience as an administrator. He is currently serving as the Supervisor of

Career and Technical Education Programs in Bay District and was an Assistant Principal of a middle school when Hurricane Michael hit Panama City. He has a professional degree and is a native of Florida. He stayed in his home in-town during the hurricane and rode it out with his wife and child in the closet.

Participant 2 (P2) is a white male who has twenty years of educational experience as a teacher. He is currently serving on a team that serves at-risk students across the Bay District. P2 has a four-year degree and has served in his current role for eight years. He was serving in his role to at-risk students at the time of the hurricane. He evacuated from the beach side of Panama City into Lynn Haven during the hurricane, which ended up being hit harder than his own residence.

Participant 3 (P3) is a white male who has been in education for twelve years and in his current teaching role for eight years. He has a professional degree, and he also identifies as a church leader within his religious community. At the time of the hurricane, he was in his current role as a teacher. He evacuated to Biloxi before Hurricane Michael hit.

Participant 4 (P4) is a white female principal with a professional degree who has been in education for twenty-two years. At the time of the hurricane, she was serving as a principal in the role she has held for seven years. She began as a paraprofessional and substitute teacher in the Bay District and worked her way up. Where she sheltered during the hurricane did not come up in her interview.

Participant 5 (P5) is a white female who retired from teaching last year after twenty-five years in the Bay District. On October 10, 2018, her role was as an Advanced Placement art teacher for grades 9-12. She is currently working as a substitute teacher in the Bay District. She has a four-year degree and stayed in her own home during the hurricane.

Participant 6 (P6) is a white female who has been in Education for 25 years and in her current role as Executive Director of Human Resources for six years. She has a professional degree and plans to retire in July of 2025. She stayed in her own home during Hurricane Michael.

Participant 7 (P7) is a white female who worked as a teacher for five years at the advent of her career. She is currently the Executive Director of the Panama City Downton Improvement Board. She has been serving in her current role for two years and has a four-year degree. At the time of the hurricane, she was serving as a military spouse and evacuated to Birmingham.

Participant 8 (P8) is a white male who has been in Education for 41 years and retired as Superintendent to Bay District last year. He served in that role for fifteen years, including before, during, and after Hurricane Michael. He has a professional degree and stayed in his home during the hurricane.

Participant 9 (P9) is a white female who retired from the Air Force as Lieutenant Colonel three years ago. She is currently the head of her Homeowner's Association and has been in that role since 2005. She was Deputy Commander of Tyndall Airforce Base when the hurricane hit. Her professional degree is in Emergency Operations. She stayed in her home during the hurricane.

Table 2

Demographics Table

	Age	Ethnic Origin	Gender	Education	Current Role	Role on October 10, 2018	# Years in Education	Years in Current Role
P1	38	White	Male	Professional degree	Supervisor of Career and Technical Education Programs	Assistant Principal	16	11

P2	46	White	Male	4-year degree	Teacher	Teacher	20	8
P3	37	White	Male	4-year degree	Teacher	Teacher	12	8
P4	40	White	Female	Professional degree	Principal	Principal	22	7
P5	68	White	Female	4-year degree	Substitute Teacher	Teacher	29	>1
P6	57	White	Female	Professional degree	Executive Director of HR	Staff	25	6
P7	54	White	Female	4-year degree	Executive Director of Panama City Downtown Improveme nt Board	Military Spouse	5	2
P8	66	White	Male	Professional degree	Former Superintend ent	Super-intendent	41	15
P9	54	White	Female	Professional Degree	Retired Airforce Officer	Head of HOA	N/A	3

Data Analysis

Interviews

Once I completed data collection, they began data analysis. Responses were coded inductively to identify themes regarding transformational leadership traits using a top-down approach (Creswell, 2014; Schwandt, 2015). Variables of interest include transformational leadership traits and how they changed over time. Responses will be analyzed to identify patterns regarding transformational leadership traits through thematic coding developed from the transcription of the initial interviews. The transcribed interviews were coded several times. Interviews were transcribed using Zoom and then edited to eliminate irrelevant information, such as "ums," "uhs," or "likes." I uploaded the transcribed interviews into NVivo. After that, I went back through the code and wrote annotations for "sense making" and "memos" for reflections.

The interviews were also coded by questions number to help me in their sense-making. This was my first lens, or the lens of pre-understanding (Gadamer, 1975). Additionally, this was where I used reflexivity and memoing to record their initial thoughts regarding the topic.

My next step was to do a preliminary job of meaning making to reveal the traits or features of the phenomenon being investigated. During this stage, initial themes began to emerge such as Community Leaders Response: initial response, the subsequent months, and long-term effects. Additionally, Education Problems emerged with COVID-19 as a sub-theme. Finally, Transformational Leadership Traits and Trauma were identified as emergent themes. To move from preliminary meaning units to final meaning units, I reviewed the direct quotes for each of the categories and compiled them into situated narratives. They also focused on the Bass Transformational Leadership Style traits (Bass,1985) of Intellectual Stimulation, Inspirational Motivation, Individualized Consideration, and Individualized Influence. To code for those traits, they created themes for each trait based on key-terms from the participants.

Finally, how the themes loaded into these categories became Situated Narratives, which became themes. The themes were aligned with the research question. The final lens I applied was a new and changed understanding of the overall event (Peoples, 2021). The next section summarizes the key themes of my research question.

Research Question

What are the lived experiences of community leaders throughout Hurricane Michael in Bay County, Florida?

Themes as Related to Transformational Leadership. Throughout the interviews, many common ideas emerged from among the nine participants. These were coded and ascribed to a Transformational Leadership trait using key themes. It was considered common if three or more

participants mentioned it. Themes were derived from multiple coding sessions and stages. The

process was iterative and often required revisioning. Notes and charts in NVivo were used along

with member checking. All participants mentioned each Transformational Leadership Trait at

least once, as represented in Table 2 below. Table 3 breaks down how themes were coded within

each Transformational Leadership trait and Table 4 offers insight into the mention of each theme

by participant.

Table 3

Bass's Transformational Leadership Traits by Participant

	P1	P2	P3	P4	P5	P6	P7	P8	P9
Intellectual Stimulation	X	X	X	X	X	X	X	X	X
Inspirational Motivation	X	X	X	X	X	X	X	X	X
Individualized Consideration	X	X	X	X	X	X	X	X	X
Idealized Influence	X	X	X	X	X	X	X	X	X

Table 4

Transformational Leadership Traits and Themes

Transformational Leadership Traits	Themes
Idealized Influence	Admired, Decisive, High Ethical Standards, Respected, Role Model
Inspirational Motivation	Articulates a Vision, Inspires, Motivates
Intellectual Stimulation	Innovative, Reframes Old Problems, Thinks Outside the Box
Individualized Consideration	Listens Actively, Coaches, Mentors

Table 5

Transformational Leadership Trait Themes by Participant

	P1	P2	P3	P4	P5	P6	P7	P8	P9
Active Listener	X	X	X	X	X	X	X	X	X
Admired	X		X			X	X	X	
Articulates a vision	X	X	X	X		X	X	X	X
Coaches	X	X	X	X	X			X	X
Decisive				X		X	X	X	X
High Ethical Standards			X	X	X	X		X	X
Innovative				X	X	X	X	X	X
Inspires	X	X	X	X	X	X	X	X	X
Mentors			X	X	X	X		X	
Motivates	X					X			
Reframes old problems			X					X	X
Respected				X			X	X	X
Role Model	X	X	X	X	X		X	X	X
Thinks outside the box	X	X	X	X	X	X		X	X

The identified themes in this table were constructed from the lived experiences of the participants. These experiences have been aligned with Bass's (1985) Transformational Leadership Traits which are used to measure leader effectiveness. Further explanations for coding and alignment with traits can be found under each trait below. The themes are explained here in the words of the participants.

Bass's Transformational Leadership Theory is a leadership approach that is defined as leaders who motivate and inspire followers to achieve extraordinary outcomes. Transformational behaviors enable a leader to engage with followers "in such a way that leaders and followers both lift their drive and morals to new heights" (Burns, 1978, p. 20). By merging Burns' (1978) idea of transformational leadership with House's (1977) theory of charismatic leadership, Bass

(1985) developed the Full Range of Leadership Model (FRLT). The FRLT sees leadership as a spectrum from laissez-faire to transactional to transformational. The expanded FRLT delineates nine patterns of leadership, but for the purposes of this study, I will be focusing on the four transformational leadership qualities: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1990). As Bass & Riggio (2006) define, "By leadership that is effective in coping with stress, we mean leadership that results in rationally defensible quality decisions" (p. 73). As Participant 8 summarizes, "There was never a time we weren't trying to solve a problem. It was immediately what we were doing."

Idealized Influence. Firstly, Idealized Influence emerged as a theme of the lived experiences of leaders throughout the Hurricane Michael crisis. Idealized Influence (II) involves transformational leaders modeling their expectations through lived experience, including strong morality and ethics. The effect is that followers want to emulate the leader and take on the mantle of their vision (Bass & Riggio, 2006). The key ideas and phrases that emerged from the data and were coded for were "role model," respected, admired, "high ethical standards," and decisiveness. Participants described both how leaders are admired and cited examples of admiring them. Decisiveness became a strong theme because participants defined it as necessary during a crisis. Participants gave examples of themselves and others having high ethical standards and its importance to followers. Respect emerged as a key ingredient to all the other attributes. Participants both acted as role models and described instances of leaders acting as role models.

Admired. Being admired as a leader means that others view you positively and with high esteem. This often focuses on external traits or accomplishments that others find praiseworthy. When asked what makes a good leader, Participant 1 explained that having admiration for others

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and being admirable yourself is one quality for which he looks. He stressed, "Any good leader knows to surround themselves with people that compliment them…You gotta look for complimentary pieces. But I think the other part of it is, you surround yourself with those complimentary pieces and then you let them go and let them do."

Regarding admirable leadership during the subsequent clean-up of Hurricane Michael, Participant 1 describes a football game that leadership initiated within three weeks of Hurricane Michael. He explains that "People realized the longer we stayed out, the more we'd push into the summer, and nobody wanted that. What Mr. Husfelt and the district leaders did right was emphasizing the need to return to school." Participant 1 is expressing the high esteem with which he holds the district leaders and describing this as a moment of admiration for their handling of the crisis.

Participant 3 echoes this when he explains how his church leaders reached beyond their own problems and embraced the community in the aftermath. He illuminates, "We could have taken it one way and just said, hey, we're affected, help us. But our leaders within our own church were like, our community is affected…We need to be hands and feet [of Jesus]." Community leadership that extends beyond the confines of a single institution like a church leads to admiration from followers. The idea of admiration as a leadership trait during Hurricane Michael was further expounded by Participant 7 when she explained the role of the City Managers during the crisis.

So, Mark McQueen was someone who was here in the city at the time; he was our city manager, and he had all of two weeks on the job before he got hit with this, and I would say he handled it very well. He stayed in good communication with the citizens of Panama City. He's the one that stands out the most to me, I think, them and our

commissioners. Nobody had ever dealt with anything like this in their lifetime, and it was

my city commissioner who called to let us know our house was still standing.

To earn admiration, leaders were required to care about their followers in a personal way that exceeded their prescribed responsibilities. Having a reputation such as this can cause others to rely on admired leaders in an unforeseen crisis and tap their skills to help navigate difficulties. For example, Participant 6 illuminates her experience by describing how she ended up in a pivotal role at the Emergency Operations Center without having any previous experience or formal training:

> *And then on the way home, we went by the Emergency Operations Center because I*
> *wanted to see what I could do to be helpful. And so, I walked into the EOC, and my fellow*
> *PIO friends were like, oh, my God, can you stay? And I'm like, well, yes, I can stay, but I*
> *don't have anything. So let me go home and get some things, and I'll come back. I went*
> *home, got some things, came back to the EOC, and I stayed for three weeks.*

Decisive. Leaders who are decisive make timely decisions, especially in moments of crisis and uncertainty. They demonstrate confidence in their own judgement and prompt execution of their decisions. These decisions provide clear direction for followers. Participant 9, who is a retired, career military officer, elucidated that the quality of decisiveness is what she values most in a leader when she said, "You have to be strong enough to make the tough decisions, but compassionate enough to listen and genuinely care about those you're leading."

As people flail in their own personal tragedies, it falls to leaders to make clear and straight-forward decisions to a multitude of problems. Participant 4 offers a description of this when she explains what happened when her school building closed due to damage. Leadership

originally tried to have her be a co-Principal at a different school but "…Mr. Husfelt quickly realized that that wasn't going to work because you need one leader in a school building."

Leaders who are decisive also take the initiative to anticipate problems before they occur and act on them without permission or formal authority. As a community leader and president of their Homeowner's Association since 2005, Participant 9 recounts going door-to-door and making a list of everyone in her neighborhood's evacuation plan before the hurricane and making a contact list. She expresses:

> I'm president of our Homeowners Association. This was in 2018, and I had been the president since 2005, so I knew all the people, all my neighbors. So, I went door-to-door to find out who was evacuating and who was staying. The people that were staying, I made a list, I knew to check on them. The people that evacuated, I wanted to be able to check on their homes and get their phone numbers so that I can tell them the status of when to come back, if there was any damage to their homes, that sort of thing.

Additionally, decisive leaders can become bogged down in the minutia of recovery after a natural disaster and frustrated by the slow response of other people and organizations. Participant 6 depicts her personal experience with frustrations by explaining that people were doing some "…really great listening and some really fantastic research while people were starving." She indicates that she was willing to make many decisions even if, "…I had no idea if this was the right decision or the wrong decision, but by God, somebody's got to make a decision, and I'm willing to be that person." She further paints this picture with the following example:

> For example, a decision I made while I was embedded at the EOC was to give 10 school buses to the National Guard. I rounded them up through ham radio operators, the bus drivers, and arranged for the key delivery. All of those things and I was not able to talk to

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my superintendent while I was in the process of doing this thing. I'm like, they need these things, and I'm going to make this happen. So, I just thought someone who was waiting for the go-ahead at that point would not have been able to resolve the issue, and the National Guard needed the buses. So, I made a lot of decisions and just hoped that they were right and knew that I would ask for forgiveness if they were wrong.

High Ethical Standards. Having high ethical standards involves adhering to a strong moral code that encompasses integrity, fairness, and morality. These fosters trust in followers. Participant 9 explains that a good leader has "…morals and values and stick(s) to them, even when it's not easy. And, of course, you have to stand up for your people, too. That's crucial." Likewise, leaders live their exceptional standards in their everyday lives, even outside of a crisis. Participant 9 goes on to explain that since her retirement from the Airforce, she spends her time strictly volunteering to help the elderly in her community. She relates, "Just little things, mowing their yard because a lot of them don't have the income to pay someone. I text them every morning and every evening to make sure that they haven't fallen that day." Leaders who have high ethical standards go beyond the normal call of duty and address need in their community.

Leaders with high ethical standards are careful about what promises they make and whether they can fulfill said promises. Their word is their bond, and this creates trust in the communities who rely upon them. Participant 8 illustrates:

I think that's what I was so good at and I'm patting myself on the back for this. I was very methodical while I was superintendent. I never promised something I didn't know I could do, and I never said yes to something I wasn't totally sure about…. I think that's what leadership has to do today: you have to be very, very, very careful and very methodical in what you say and how you communicate what you say.

To embody high ethical standards, leaders have to listen to their inner voice and better angels, rather than just assuming it is someone else's problem to fix. Participant 3 was teaching outside of the area of decimation but still found himself feeling obligated to help. He explains:

I told my boss, I can't in good consciousness to sit in professional development all day. I need to be out there helping out as much as I can… For the longest time, every afternoon I was helping out with our church. I was just passing out that kind of stuff just because I knew that our community needed help and I knew that that was what I couldn't just sit there not do anything… I was making sure that I was doing my part in making sure that the community was kind of getting back on its feet.

Participant 4 reiterates this when she represents part of her role at the EOC as taking on the task of finding missing students. She narrates, "…then we realized that we had so many missing kids. Then my job from December and January became you're going to find these kids. And so, Crystal and I got a van, and we were driving around knocking on doors..." Another instance of leadership exhibiting high ethical standards is teachers who brought supplies and food to students for years after the disaster. Participant 5 elucidates, "This went on for almost two years…there was always something for them in the classroom or for them to take with them." Leaders who embody high ethical standards use their moral compass to look for problems that need solutions, even if no one else is asking it of them.

Leaders who have high ethical standards can also find themselves embroiled in frustrations with those who view the world differently. Participant 6 expounds about a party she attended with an unaffected population while she was working with under-resourced survivors at the EOC. She explicates:

When I left the EOC for the time, my husband and I went out to dinner on the further west

than us. The people there were having a holiday party and it's absolutely their right to

have a holiday party. But I had to leave because I was so pissed off.

Respected. Respect is a trait in leadership that is earned over time. Leaders develop it by being knowledgeable and consistent. They demonstrate credibility and trustworthiness. Participant 8 criticizes the way leadership positions are often handed to people with leadership skills but without the knowledge or credibility that comes with experience. He explains, "… I think you also have to be qualified…Getting elected or something does not mean you are qualified." Participant 1 further expounds, "I think leaders have to be knowledgeable, but they have to be humble when they don't understand or know something. I think that's very important when leading a school, because it's okay not to know all the things, but what matters is that you seek out the people to help you get the stuff that you're lacking."

Participant 9 illuminates her experience of respecting a leader by describing trying to get a generator for her 82-year-old neighbor's 101-year-old father after staging a rescue mission to get to him after the hurricane. Her respect for him is evident when she says:

…We did have one guy who was a chief in the Air Force…He came to our neighborhood

and saved the son and daughter-in-law. And this chief had a full house generator. He

took the generator over to the old man and hooked it up to his house.

Role Model. Leaders are strong role models when they set an example that their followers want to emulate. They influence and inspire through their actions and values. Participants highlight many examples of being a role model in their definitions of good leadership. Participant 5 describes a good leader as one who is visible to the community and doesn't dwell on the sidelines. She explains that "… you want them to feel comfortable working with you, you

want it to be a positive role model." Likewise, Participant 4 emphasizes that her own leadership style includes appear as a role model in all aspects, including, "… all the things that I've asked my people to do. When we don't have a custodian, I jump in and clean toilets and vacuum and all the things."

During the Hurricane Michael crisis, many examples of being a role model came up in the participants' lived experiences. Participant 3 described his church leader in glowing terms: "That's why he's amazing. He's an amazing speaker, but he's also just amazing leader in leading people through that. I think that was really cool just because you saw him kind of lead through uncharted waters, too."

Furthermore, being a role model involves personal sacrifice along with embodying many of the other desired qualities of a transformational leader. Participant 2 sums up his experience as:

> Some of the schools we worked with were opened up as shelters. I heard firsthand accounts of principals, administrators, and school staff who were literally living at their schools to manage the community members seeking shelter. It was fascinating to see how these leaders handled the situation, managing not just the shelter but also feeding, housing, and clothing people.

Table 6

Themes of Idealized Influence by Number of Sources and References

Name	Sources	References
Idealized Influence (II)	9	49
Admired (II)	5	8
Decisive (II)	5	12
High Ethical Standards (II)	6	10

Respected (II)	4	5	
Role Model (II)	8	13	

Table 7

Individualized Influence Themes by Participant

	P1	P2	P3	P4	P5	P6	P7	P8	P9
Admired	X		X			X	X	X	
Decisive				X		X	X	X	X
High Ethical Standards			X	X	X	X		X	X
Respected				X			X	X	X
Role Model	X	X	X	X	X		X	X	X

Figure 5

Individualized Influence Themes, Definitions, and Relationship to Other Themes
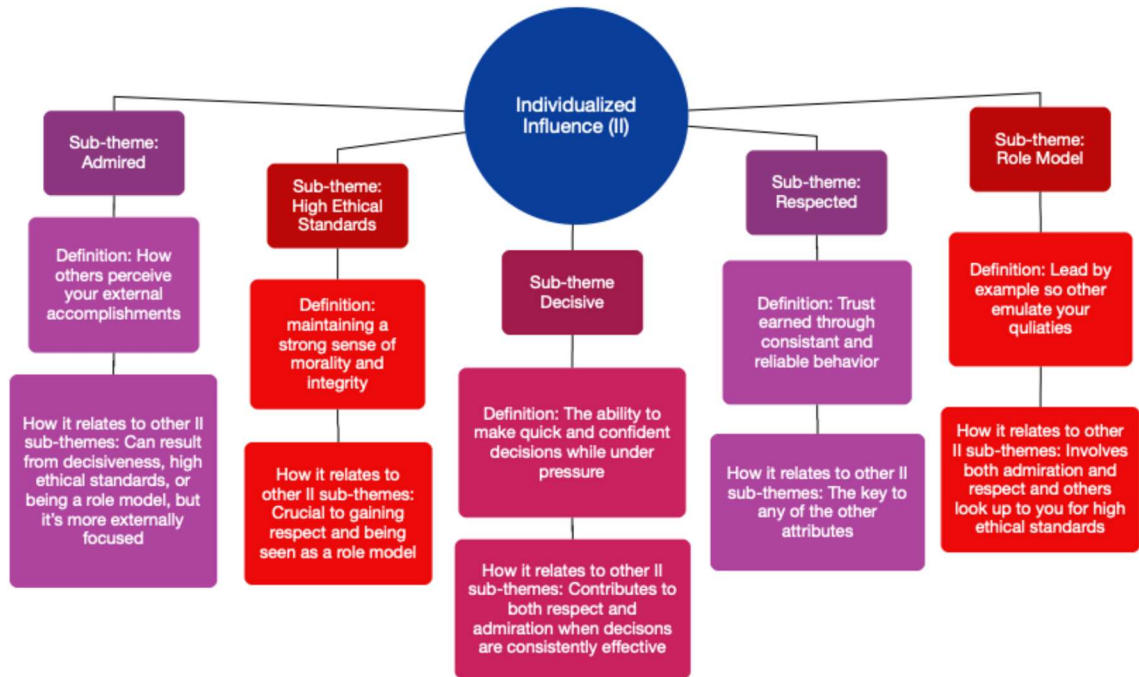
Note: The figure above illustrates how each theme relates to the overall leadership trait and the other themes. A definition is featured for clarity.

Inspirational Motivation. Inspirational Motivation (IM) requires the leaders to explicate high expectations and a shared vision for their followers. Leaders can use symbols to signal to followers that their work should be motivated beyond their self-interests. The key ideas and phrases I coded for were "articulates a vision," inspires, and motivates.

Articulates a Vision. Leaders articulate a vision when they are clearly expressing a long-term goal or idea for the future. It is done well when it provides clarity and direction. The focus is on the future and a bigger picture. According to Participant 3, "I think you have to be driven towards what you actually want to go for. You have to have a clear vision in your head of where you want to take your team."

Articulating a vision happens on both the macro and micro level. One of the main focuses for the community in the aftermath of Hurricane Michael was to get the students back to school. This involved getting many parts aligned and communicating that to others. Participant 8 explains:

> *So right away, the most important thing we knew was the ability of the families to get the kids back to school because we knew if the kids couldn't go back to school, parents couldn't go back to work, and I was getting those statements… You gotta understand, we had a war room for facilities. We had 40 schools and all of them had some damage…. But I mean, it was organizing all that. It literally is we had a catastrophe… We couldn't have done enough in facilities and in transportation and in communications. All those things together had to coordinate and work, and we had to be in sync.*

This is echoed by other district-level leaders, which is indicative of a clear vision being cast to many parties who were involved in the clean-up and disaster mitigation. Participant 4 reiterates:

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We reopened rather quickly…. Without kids being in school, society can't continue to run and that is the most important thing is as a district leader and as a school leader… We did do a great job making it as quickly and seamlessly as possible and for us moving forward it allowed the district to have a plan and procedure in place.

Furthermore, the teachers carried the vision from the Central Office all the way to their individual classrooms and personal philosophies. Participant 6, a high school teacher, reinforces, "After the three weeks when things settle down just a little bit, then we shifted focus from like the whole county recovery to what are we going to do to recover the schools?... Teachers had lost everything, and kids have lost everything."

Articulating a vision in the recovery process after a hurricane even influences individual students. Participant 1 discusses a conversation with one of his students when he recounts:

I remember talking to a student who needed to be sent home, and I told him, 'This is the only place you'll get food, internet, and other essentials. I know where you're living, and it's rough. You better do everything you can to stay here because it would be worse for you to go back.' It underscored just how valuable schools are to the community and the importance of getting them back up and running.

Articulating a vision also extends beyond the educational recovery process to the community. Participant 3 viewed most of his experience through the lens of his church, and he explains how his pastors were able to create a vision that brought other churches together in the renewal efforts. He explicates,

Pastor Wayne and Pastor Steve, they said, hey, you know what, this is what we need to do, and this is what the community needs. And so, with that, they work not only with our church, but they work with churches within the area… Bay County has a huge amount of

churches. Just within a five-mile span, they're five to six churches. And I think it's really cool that normally those churches are very separate, and they don't get together. But during this time, it was really cool seeing those leaders come together and saying, Hey, this is a whole community that's affected.

Inspires. A leader inspires when they spark emotional and intellectual energy in others by appealing to their passions and purpose. The focus is on the emotional or aspirational aspect of the goal. Followers feel that they are connected to something bigger than themselves. Several of the participants described inspirational leaders in their definitions of good leadership. Participant 2 explained that a good leader is "…someone who inspires others in a positive way."

As a community regains their footing, leaders can inspire in a multitude of unexpected ways. Participant 1 cited a high school football game that was played ten days after the Hurricane decimated Panama City. This was a pivotal point for a damaged community to come together and achieve a sense of normalcy. From there, he and other leadership found inspiration. He attests:

> *I think we played a freaking football game like 10 days later… I didn't have like a direct role in it, but the guy that was my principal at CC Washington, he's a guy that you can get things done and he's got some contacts out in the world. And so, the superintendent empowered him to be like the logistics guy for the event. And so somehow, we got all these things. All these things start happening and people needed that to happen. And so, they [leadership] made it happen.*

Inspirational leaders also help people feel emotionally connected to an overall goal, which often causes followers to collaborate with a spirit of cooperation that is often missing in organizations. This is especially notable as the community grapples with the consequences of a

natural disaster. Participant 2 describes feeling inspired by neighbors who showed up for each other and cooperated toward recovery. He says, "You start to see neighbors coming together to clear streets so everyone can get back to a more normal life…You witness a different kind of appreciation and community spirit, with neighbors helping each other in tough situations." Participant 5 furthers this narrative by explaining her own neighbors' service and sacrifice inspiring her. She explains, "Tragedies like this tend to bring people together…. like Sonny's barbecue… they served hot meals to the community. Two of my friends of my co-workers and their families own the business… she lost her house. She's standing in line, serving other people."

Participant 6 punctuates this idea by stating her own example of being inspired by the cooperation that leadership was demonstrating. She expresses:

I saw a level of cooperation between intergovernmental agencies that I'd not seen before.
I mean, everybody was trying to help everybody else and that was really great. Like, what
can we do to improve the lives of the people? Politics aside, and it wasn't about turf or
who's going to get the money or the credit or any of those things, it was about what's the
problem and how can we work together to solve it. And of course, since then, all of that's
been lost and we're back where we were before. But it was a great spirit of camaraderie
and coming together, and everybody just reaching down and pulling people up to be with
them without worrying about who's going to get the credit or who's going to pay the bill
or any of those things.

Motivates. Motivational leaders can prompt an action or performance by incentivizing or encouraging followers to engage in a task. This helps to achieve the vision. Participant 3 explained this element of leadership as, "But you have to be able to, I think, spread that mission

to the people around you. You have to be able to say, hey, this is where we're trying to go. This is how I feel like you guys can help us get there." Participant 8 sums up his experience as a motivating leader as,

> *We've been bragged on by the state, DOE, our local leaders, and everybody's friends. I don't think any organization could have done any better than what we did to get back started and put everything together and focus on the students' needs. It was something I was very proud of—not proud for myself, but proud for the organization that we were able to pull this off.*

Table 8

Inspirational Motivation Themes by Participant

	P1	P2	P3	P4	P5	P6	P7	P8	P9
Articulates a Vision	X	X	X	X		X		X	X
Inspires	X	X	X	X	X	X	X	X	X
Motivates	X					X			

Table 9

Inspirational Motivation Themes by Participant

Name	Sources	References
Inspirational Motivation (IM)	9	39
Articulates a vision (IM)	8	16
Inspires (IM)	9	21
Motivates (IM)	2	2

Figure 6

Inspirational Motivation Themes, Definitions, and Relationship to Other Themes
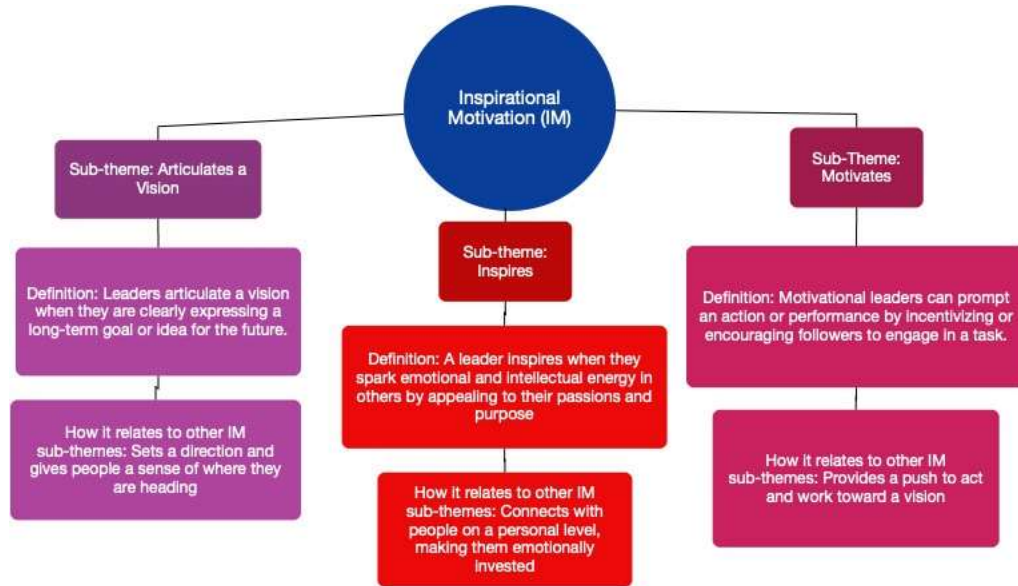
Note: The figure above illustrates how each theme relates to the overall leadership trait and the other themes. A definition is featured for clarity.

   Intellectual Stimulation. Intellectual Stimulation (IS) inspires followers to be creative and gives them the space for innovation. Transformational leaders exhibit this facet when they create an environment that welcomes challenging belief sets and disrupts pre-standing values. The key themes I coded for were "thinks outside the box," "reframes old problems" and innovative. According to Bass & Riggio (2006), "The intellectually stimulating leader moves the team to define the crisis or conflict, to identify the facts and opinions, to determine the desired results, and to obtain open statements of opinions (for which trust of the transformational leader is needed)" (p.71). Additionally, the truly transformational leader uses intellectual stimulation to foster followers' thoughtful, creative, adaptive solutions to stress rather than hasty, defensive, maladaptive ones (Bass & Riggio, 2006, p. 74). Intellectually stimulating transformational

leaders can halt crises by questioning assumptions and disclosing opportunities, fostering unlearning, and eliminating fixation on old ways of doing things (Nystrom & Starbuck, 1984).

Surprisingly, participants did not cite this trait in their initial definitions of leadership in question two of the interview. However, this trait came up repeatedly in their lived experiences as they described positive examples of leadership. This was particularly remembered from the standpoint of communication difficulties and the leadership's attempts to overcome those obstacles. Leadership reframed old problems such as safety, security, and lack of resource access. Finally, the participants spoke positively of the leadership "thinking outside the box" to deal with the severe disruption of the storm.

Thinking Outside the Box. Thinking outside the box is generally seen as producing a creative solution in a non-traditional way to a problem. Participants mentioned attempts to overcome communication obstacles and get the school running again with limited and damaged facilities. It is more exploratory and is not necessarily bound by traditional methods.

One area where thinking outside the box was necessitated by circumstance was holding regularly scheduled school hours in limited and damaged facilities while also working around the various transportation issues stakeholders experienced post-hurricane. One creative solution leaders implemented was split sessions at the schools that were still standing and were not being used as an emergency shelter for the newly unhoused populations. As Participant 8 explains, "We had one of the schools, Arnold…. They [the county] threatened to take it from me [as a full-time shelter]. I said, Look, I'll give it to you… we'll do split sessions at the middle school and split sessions at Surfside." Participant 3 recalls these split sessions as, "….so I know teachers have to share classrooms and there were some teachers teaching from eight to one and some teachers were teaching from one to six." While split sessions were not necessarily ideal, this

solution from leadership allowed the students and staff to return, which also gave the population a chance to return to work.

Additionally, leadership found themselves having to solve for their own staff's childcare issues since many of the daycares closed in the immediate aftereffects. To imaginatively solve this problem, the central office opened on-campus childcare. Participant 1 recalls:

Another part that I didn't understand then but really do now, and still see as a lingering effect on our community, is childcare. People couldn't go to work until there was childcare available. The district, along with FEMA and other federal and state agencies, found ways to support having onsite childcare at all the schools. Teachers with small kids needed childcare, so the schools made it possible to finish the year with childcare centers on campus. This was a huge win for the community.

Interviewees discussed the transportation issues that affected the entire population, as well. Participant 2 recounts having to change his whole schedule because some of the staff lived on one side of the bridge and some lived on the other. As clean-up efforts kicked into full gear, the bridge between Panama City and Panama City Beach became clogged with utility trucks. He explains their innovative solution as, *"To navigate these traffic issues, we rearranged our whole schedule. My team…only had to rotate between these two schools to avoid the bridge traffic. This change was necessary due to the severe disruption in our work schedule."* Another example of thinking outside the box to solve transportation issues is exemplified by Participant 9 when she says, "So, after the hurricane, people in Millville and Parker, they couldn't drive. There was no way for them to get the supplies they needed. We thought, why not use the trolley to bring them to Lynn Haven?"

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Thinking outside the box was further required by leaders who found themselves in informal leadership positions but disagreed with the prescribed approach. Participant 9 describes becoming increasingly frustrated at the Emergency Operations Center and what she believed to be inefficient policies. She shared,

> *I went up and worked at the Emergency Operations Center for two months. It was so chaotic…. They needed people with chainsaws. All these people show up with chainsaws and they're sending them out. But they didn't have gas tanks. They had one central gas tank. Then these chainsaws were running out of fuel, they'd go four or five miles, but you're going 10 miles an hour because of all the debris and all the traffic… It was absolutely insane. I called my son and told him, 'I need you to come down here, and I need you to stop at the [gas station]. And I said, buy all their fuel, their little gas cans. All of them. I had the credit card from the city. He bought 27 of them…. So, he got a police escort and got to go and distribute all these gas cans to the people that had chainsaws."*

Leaders in varied positions are required to creatively problem-solve or think outside the box in the fallout from a natural disaster.

Reframing Old Problems. After a natural disaster, previous problems continue to exist for leadership and are often exacerbated by the crisis. Participants noted leaders were able to look at these issues with new and effective ideas and encourage others to do the same. The goal is to change a fixed perspective to reinterpret how the problem is perceived.

Communication is often a problem for leadership, even in times of relatively low stress and peace. Following a natural disaster, leaders must contend with on-going and disruptive communication problems at a moment when communication is the most essential to renewal and

resilience. Participant 8 discusses how the Bay District Central Office personnel worked to streamline communication:

> *So, you have a lot of moving parts and a lot of people that have to come together, and you have to coordinate all that. And so, leadership has to make sure those groups are copied together. And so, one of the things that I think we were so successful at was nobody planned in isolation. You have to have each part involved in the communication and I've watched school districts that don't do that. The right hand doesn't talk about the left hand, and then they start doing something and realize, well, you can't do that because I'm doing this. And so, when you're not communicating those things together, somebody's going to drop a ball or someone's going to have an egg on their face.*

Participant 3 also articulates how old problems, such as how to assess student achievement, required further answers. He reframed how he saw this issue within his own classroom as "…. I couldn't necessarily count on the same things for that student [from Bay County] like any other student who wasn't as affected by that… I also had to look at from a more compassionate side versus this is what we have to get done." This illuminates that being a leader in the classroom requires teachers to reframe the problem of quantifying student achievement in a new light after a traumatic event.

Innovative. Innovative leaders face challenges by taking creative ideas and applying them to develop new solutions, products, or processes. To accomplish innovation, leaders must employ both thinking outside the box and reframing old problems.

Immediately following the cessation of Hurricane Michael, communications were largely cut off due to the Verizon cell phone tower being destroyed. Leadership struggled to find ways to

correspond with each other and their traumatized communities. Participant 4 recounts her first encounter with innovative communication solutions as:

> *I don't belabor it, but we were listening to the radio and I will never forget Mr. Husfelt coming on there and telling us that we are going to meet. If you can get there safely, go. So, in the days following the storm, district leadership and school-based leadership, that's where we went. It was very walking dead in terms of leaving notes for people and doing things without communication. He [Mr. Husfelt] worked to get us little cell phones to communicate.*

Central Office leadership was also in charge of communicating relief resources to their communities. Participant 5 asserts, "Michalik, who at the time was in charge of HR, was constantly saying if you need this, contact these people. If you need that, you can go here. If you need clothes, they had businesses like Macy's bring clothing..." Innovative recovery efforts extended into Christmas of 2018 and leadership sought to ensure high morale during the holiday season, despite the continuing recovery efforts. Participant 6 articulates her own contributions toward this as:

> *Once we got school opened, we focused on Christmas because so many people had been completely devastated. I'm a really big sucker for Santa, so I started a Save the Christmas campaign that ended up being featured on Good Morning America. We had Good Morning America come into a live show to help us, and so we were able to provide Christmas presents for 25,000 children, which was a monster operation in and of itself.*

Table 10

Themes of Intellectual Stimulation by Number of Sources and References

	P1	P2	P3	P4	P5	P6	P7	P8	P9
Thinking Outside the Box	X	X	X	X	X	X		X	X
Reframing Old Problems			X					X	X
Innovative				X	X	X	X	X	X

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Table 11

Intellectual Stimulation Themes by Participant

Name	Sources	References
Intellectual Stimulation (IS)	9	33
Innovative (IS)	6	13
Reframing old problems (IS)	3	4
Thinking outside the box (IS)	8	16

Figure 7

Intellectual Stimulation Themes, Definitions, and Relationship to Other Theme
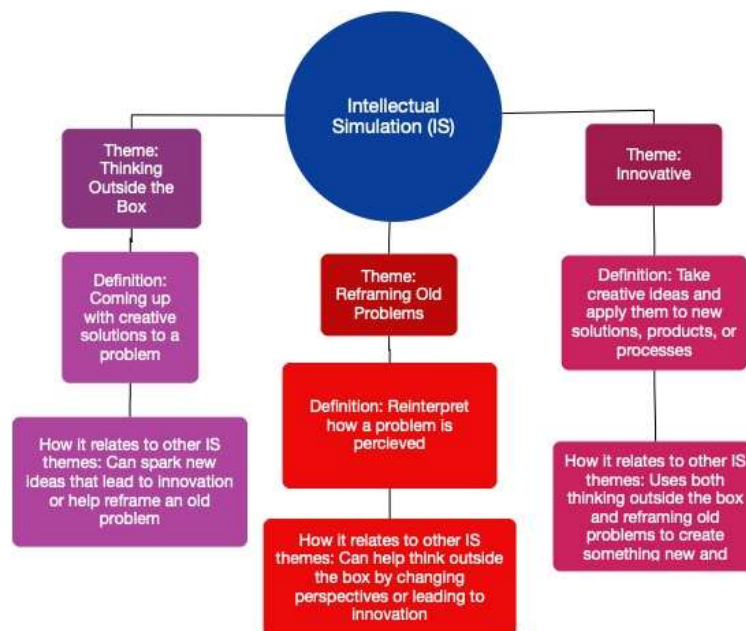
Note. The figure above illustrates how each theme relates to the overall leadership trait and the other themes. A definition is featured for clarity.

Individualized Consideration. Individualized Consideration (IC) finds transformational leaders exhibiting care through listening to needs, acting as mentors, and helping followers flourish through personal challenges (Avolio & Bass, 1990). Leaders demonstrate this trait when they actively engage with their followers through active listening, coaching through personal

challenges, and acting as a mentor. The truly transformational leader manifests individualized consideration and converts crises into developmental challenges (Bass & Riggio, 2006, p.74).

Listens Actively. Leaders who listen actively make the other person feel seen and heard. They focus on understanding what the other person is saying by interpreting both the words and the intent. These leaders encourage empathy and compassion in their followers. This theme came up the most frequently in the interviews, both as a definition of a good leader and in positive examples of leadership after Hurricane Michael. A good leader is defined by Participant 6 as, "…a good leader is able to listen, but also take action." Participant 8 echoes this by explain, "…I think that the best listeners are the best leaders a lot of times…" Being an active listener is further elaborated on by Participant 3 when they stress:

> *I think sometimes you can get very tunnel vision and like very like task oriented like this is what we have to complete this is what we have to do, but I think as a leader you also have to know that there are real people involved in that mission and they're real people that are going to be affected by it, but also are going to be involved and helping you get to the goal of completing the mission. So, I think you have to be cognizant of both aspects of that.*

Participant 1 uses his own leadership philosophy as an example of listening actively when he explains,

> *As I've moved into this district level role, I like to look at it as I'm the silent, silent partner. I'm the guy moving the papers and networking with the business community and those kinds of people. I'm trying to do everything I can to make life easier for everybody on the front line and I'm trying to get them all of the resources that they need to do the very best job that they can do.*

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Active listening generally precedes compassionate understanding and concern. Empathetic leaders signal their care through active listening. Following a crisis the magnitude of a category 5 hurricane, effective leadership draws on their tool as one of their most valuable. It can be as simple as Participant 4 feeling heard by the Superintendent when she shares, "Two or three months after we got the FEMA stuff up and moving, Mr. Husfelt called me in his office, and he said, I feel like you don't have joy in your job." Recognizing followers' struggles through active listening makes them feel seen and heard.

Furthermore, teachers exhibited this trait in their classroom as they helped their students process their losses and the chaos. Participant 5 explains how one of her students was living in an apartment with a hole in the roof and just a tarp over it. This was common in government subsidized housing as bureaucracy was slow to respond. She goes on to say the student and their parent could not leave because they had "nowhere else to go." She displays active listening when she reveals, "So we're sitting down, and they are telling me. We talked about it. We talked a lot, a lot of just listening. We are having this awesome conversation with this pent-up anxiety that some of these students had and that I had." Participant 2 furthers this narrative when he says:

> *I think compassion plays a big role in what you have to do…. When you are looking at hearts that are hurting and you're looking at that experience as a huge trauma, how you lead them is going to be a little different…. And so, what we're going to do is you have to kind of meet them where they are. Say, hey, this is something I know you just experienced, but I know if we get to this together, I think we can make it there. There are going to be some moments where you may need to stop and say, hey, I need to take a break because this is really hard for me.*

Finally, being an active listener is paramount to efficiently identifying and solving the myriads of problems that crop up because of a natural disaster. Compassionate and active listening can lead to efficacious resolutions for affected populations. Participant 8 best describes his own lived experience with this as:

And I'm going to give you one of the best examples I share with the community: I got this letter from this, or an email from this young boy right before I went to a board meeting. He was a high school student, and he had lost his computer that we had issued out. He didn't have internet capability, and he was living in a trailer behind a friend's house. He and his father and his stepsister and stepmother were living somewhere else because they couldn't find a place big enough. Things like that happened and you realize, golly, this is happening to lot of kids. So, we got some grants, and the community got together, St. Foundation is one of those organizations in town that's always helped us. So, we got a lot of money together real quick, and so we were able to buy laptops and Wi-Fi for these kids to get connected.

Coaches through Personal Challenges. This involves guiding someone through crises and difficulties by helping them set goals and overcome challenges. Leaders who demonstrate this help followers develop their own solutions that lead to self-discovery and growth. Participant 1 illustrates,

I think a good leader is what I've always tried to be. Anytime I've worked in the schools, I never allowed those that I worked with or that I was their supervisor or people who worked under me. I was constantly telling them don't call me boss. Don't do that. I'm here in the trenches with you. I just always thought that we're all pulling on the same

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rope and I'm on that rope with you. I'm out on the front lines and I'm doing all those

things with you.

Moreover, Participant 2 describes his role coaching students through their personal quagmires by explaining,

We affect hundreds and hundreds of students around, so I would say my leadership is

being a good cheerleader and an encourager and supporter of kids who obviously, for

whatever reason, had a bad semester in something or had more going on outside of

school that caused them to fall farther behind and need to get back on track.

As a by-product of a natural disaster, communities can become emotionally dysregulated and require leaders to help them navigate the ripple effects of trauma. Emotional dysregulation is especially prevalent in youth populations and requires those who work with them to have special tools in their emotional toolbox. Participant 4 describes coaching teachers in this when she states,

I think that when you don't know what's happening at your home, kids don't know how to

articulate with words. They show it with behaviors. That is their form of communication.

So being able to have people within our schools to work through things with students

while they're happening is huge. Being able to teach our teachers de-escalation

strategies and telling them, it's okay to have a moment. There's a lot of things that we had

to do for kids to be okay.

Military leadership is particularly adept at coaching others through their emotional states during moments of panic and fear. Participant 9 illuminates,

Honestly, I stayed pretty calm. I think it's just in my nature, or maybe it's the military

training. But the first thing I did when the storm passed was gather everyone who stayed

behind and told them, "You're breathing, you're not hurt. Take a deep breath. We'll

make it through this." There were a lot of people who were really shaken, but once they

saw that someone was calm, it helped them calm down too.

Acts as a Mentor. A leader demonstrating mentorship as a characteristic shows up as offering guidance, advice, and support through personal insights and advice. Their focus is sharing knowledge and building lasting relationships. Their goal is to help the mentee achieve their goal. Participant 4 describes that a good leader models mentorship when they "…remove variables for their people to be able to do the job they've asked them to do…. I have an open-door policy. I don't feel like people shouldn't be able to reach me if they need to." Participant 3 elaborates on what mentorship looks like when he states, "… if you're really good teacher you can see past where kids are and you can see what they can actually become, like almost like diamonds in the rough."

During the subsequent months, leaders used mentorship to refine their disaster response policies. Participant 6 depicts learning the lesson of leadership burnout when running emergency shelters. Her account is as follows:

We also learned because we, the school system, run the emergency shelters, and we had

no really great experience with long-term sheltering, and long-term shelter operations

are very emotionally draining. So, we kind of task our principles and like you have to do

this thing and good luck to you. I hope it goes well. We did what we could to support

them. But now the teams are a day team and a night team, and they're three teams deep,

and they rotate out after every third day because in a shelter situation you are dealing

with people who are emotionally panicked and they are not on their best behavior,

understandably, so it's very difficult work, and so we have a lot of people who really burn

out of that work, and so we don't want to be in that situation again. So, we also made a

lot of changes to how we're going to staff, how we're going to manage the people, and

how we're going to trade teams out.

Table 12

Themes of Individualized Consideration by Number of Sources and References

Name	Sources	References
Individualized Consideration (IC)	9	42
Active Listener (IC)	9	26
Coaching (IC)	7	9
Mentorship (IC)	5	7

Table 13

Individualized Consideration Themes by Participant

	P1	P2	P3	P4	P5	P6	P7	P8	P9
Listens Actively	X	X	X	X	X	X	X	X	X
Coaches through Personal Challenges	X	X	X	X	X			X	X
Acts as a Mentor			X		X	X		X	

Figure 8

Individualized Consideration Themes, Definitions, and Relationship to Other Themes
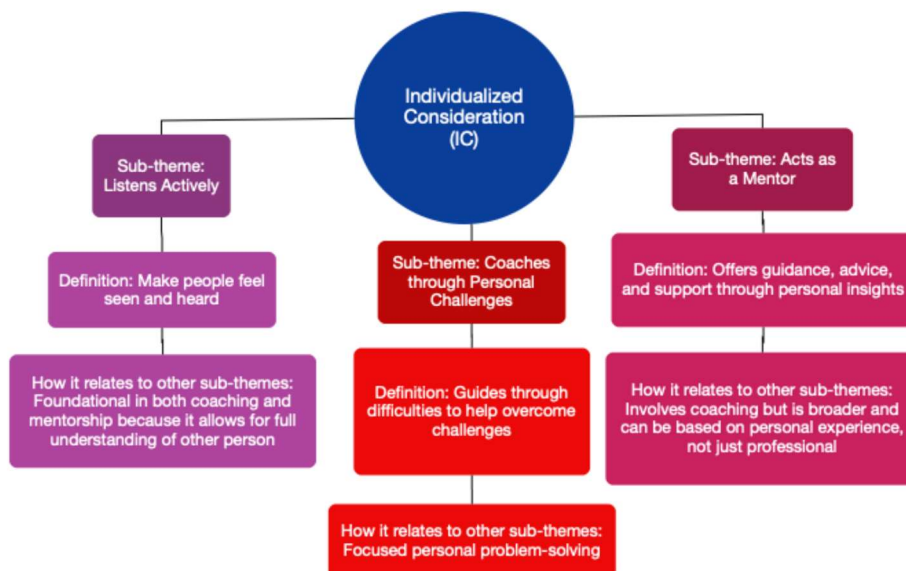
The figure above illustrates how each theme relates to the overall leadership trait and the other themes. A definition is featured for clarity.

General Summary of Findings. Participants spoke of 14 themes of how transformational leadership qualities were demonstrated during and after the Hurricane Michael crisis in Bay County, Florida. Each of these themes aligned with Bass's Transformational Leadership traits of Idealized Influence (II), Individualized Consideration (IC), Inspirational Motivation (IM), and Intellectual Stimulation (IS). According to Bass & Riggio (2006), transformational leadership is an approach by leaders who inspire their followers to achieve excellent outcomes. Those on the team of a transformational leader work beyond their own self-interest for the overall good of the organization (Bass & Steidlmeier, 1999). When transformational leadership is executed well, it can have a positive impact on followers' performances and the overall efficacy of the company (Rowold & Heinitz, 2007). There can also be an increase in perceived job satisfaction (Nemanich & Keller, 2007). Employees demonstrate a more positive outlook because their leaders tend to help them reach their goals (Hamstra et.al, 2014).

Table 14

Summary of Themes from Participant Interviews with number of sources and references

Name	Sources	References
Active Listener (IC)	9	26
Inspires (IM)	9	21
Articulates a vision (IM)	8	16
Thinking outside the box (IS)	8	16
Role Model (II)	8	13
Innovative (IS)	6	13
Decisive (II)	5	12

High Ethical Standards (II)	6	10
Coaching (IC)	7	9
Admired (II)	5	8
Mentorship (IC)	5	7
Respected (II)	4	5
Reframing old problems (IS)	3	4
Motivates (IM)	2	2

The data then revealed more specific findings. All participants' lived experiences revealed that they had demonstrated or seen demonstrated all the Transformational Leadership Traits in various ways. All participants cited Individualized Influence, Individualized Consideration, Inspirational Motivation, and Intellectual Stimulation in their interviews. Participants spoke of five attributes of Idealized Influence. Most of the participants cited the need for high ethical standards and for effective leaders to be role models. Many brought up being admired, decisive, and respected as examples of transformational leadership during a crisis. Participants cited three attributes of Individualized Consideration. Most brought up examples of active listening and coaching through leadership they witnessed. Many saw examples of mentorship. Participant described three attributes for Inspirational Motivation. Most explained instances where leaders articulated a vision and inspired their followers. Some had stories of leaders motivating them. Participants explained three attributes for Intellectual Stimulation. Most of them had examples of leaders thinking outside of the box. Many of them found effective leaders to be motivating and only some saw leaders reframing old problems. Additionally, all participants cited examples of resilience that overlapped with Bass's Transformational Leadership Traits.

Outliers

Throughout the interviews, the participants' lived experiences with leadership during Hurricane Michael went beyond simply Transformational Leadership. For the sake of brevity with this study, much of this data was set aside for future research. Transactional leadership was largely perceived negatively with a few isolated examples of positive perceptions. Here are some examples of transactional leadership through words of the participants:

> One of the things that was very frustrating to me after Hurricane Michael were the people that were doing some really great listening and some really fantastic research while people were starving. So there's a time and a place for listening and research, and there's a time and place for just somebody who's willing to make a decision. I made a lot of decisions after Hurricane Michael that, in the moment, I had no idea if this was the right decision or the wrong decision, but by God somebody's got to make a decision, and I'm willing to be that person. I gave, for example, a decision I made while I was embedded at the EOC to give 10 school buses to the National Guard, and I rounded up through ham radio operators the bus drivers and arranged for the key delivery and all of those things and was not able to talk to my superintendent while I was in the process of doing this. thing. I'm like, They need these things, and I'm going to make this happen. So I just thought someone who was waiting for the go-ahead at that point would not have been able to resolve the issue, and the National Guard needed the buses. So I made a lot of decisions and just hoped that they were right and knew that I would ask for forgiveness if they were wrong. (P6)
>
> The council members said, 'No, we don't want those people coming over here.' They were adamantly against it. But we pushed back and convinced them to allow

it, though with limits. Only twenty people could be transported at a time, and they

were allowed to fill up their bags with supplies and then be taken back. (P9)

Chapter 5: Discussion

Summary of Study

This study examined the lived experiences of nine community and educational leaders who lived in Bay County, Florida during the Hurricane Michael crisis using hermeneutic phenomenological framework and focusing on the lived experiences of the leaders. Bass's Transformational Leadership traits were broken down from Intellectual Stimulation (IS), Inspirational Motivation (IM), Individualized Consideration (IC), and Idealized Influence (II) into 14 attributes which emerged as themes: active listener, admired, articulates a vision, coaches through personal difficulties, decisive, high ethical standards, innovative, inspires, mentors, motivates, reframes old problems, respected, role model, and thinks outside the box.

The distillation of findings in this study can be reduced to the following outcomes, each of which will be discussed in more detail subsequently:

- Leadership and the Importance of Active Listening

- Leaders Who Inspire

- Articulating a Vision as a Leader

- Leaders Think Outside the Box

- Leaders as Role Models

Research Question

1. What are the lived experiences of community leaders throughout the Hurricane Michael crisis in Bay County, Florida?

Review of Methodology

For this research, a hermeneutic phenomenological study was completed to capture and analyze the lived experiences of community and educational leaders during the Hurricane Michael disaster in Bay County, Florida, which began in 2018. Nine participants were interviewed with ten questions based on one research question. The participants' interviews were then recorded and transcribed. The researcher proceeded to code them in a top down approach to reach overall themes.

Limitations

1. This study is focused only on community and educational leaders who were living in Bay County, Florida during Hurricane Michael.
2. The overall sample size may be considered small.
3. The sample lacked diversity, but the researcher was limited to participants who consented to be interviewed.
4. The researcher is a former teacher in Bay District.

Major Findings Related to Literature and Interpretations

In the following discussion, I present a dialogue with the literature review. Themes drawn from this study are compared and contrasted with findings from other studies to create a deeper understanding of followers' perceptions of leadership in times of crisis.

Transformational Leadership Traits as Perceived Effective Leadership

The participants described witnessing and executing Transformational Leadership traits throughout the Hurricane Michael Crisis. Each of these traits was then assigned several attributes that were referenced in my participants' interviews. When transformational leadership is executed well, it can have a positive impact on followers' performances and the overall efficacy

of the company (Rowold & Heinitz, 2007). This coincided with the participants' own lived experiences; furthermore, this has also been broadly researched and has been demonstrated to be an effective form of leadership. It makes intuitive sense to followers, and it focuses on the process rather than just the outcomes. It can be used as an addition to other leadership models while promoting the leader's growth. The emphasis on the followers is also appealing because it addresses their needs, values, and morals (Bass, 1985; Dvir et. al, 2002). Bass's Transformational Leadership traits were cited repeatedly by the participants in positive examples of leadership in the aftermath of the crisis. The four most referenced themes were leaders who listen actively, inspire, articulate a vision, think outside the box, and are role models. All five of the themes falls encapsulates the four Transformational Leadership traits as defined by Bass (1985).

  Listens Actively. Throughout the interviews, participants mentioned active listening with the most frequency. This was an unexpected finding. All nine participants cited this as an example of their lived experience during Hurricane Michael and "active listener" was coded 26 times. Leaders who listen actively make the other person feel seen and heard by focusing on understanding what the other person is saying by interpreting both the words and the intent. These leaders encourage empathy and compassion in their followers (Bass & Avolio, 2006). Active listening falls under the Transformational Leadership Trait of Individualized Consideration. Bass & Riggio (2006) define Individualized Consideration as, "Whether followers are treated as ends or means, whether their unique dignity and interests are respected or not" (p.14). Participants describe this in their lived experiences throughout Hurricane Michael in the following ways. First, they describe their own leadership style as being a "silent partner" who supports their followers figuring out what resources and red tape need to be overcome for their

followers to be effective in their roles. Interviewees used words and phrases to describe good leaders like "able to listen", "the best listeners are the best leaders", and "compassionate".

Furthermore, meeting followers "where they are" and responding with compassion were key ideas that participants discussed. Responding to students with empathy can help promote resilience and adaptability (Wright & Wordsworth, 2013). Compassion largely springs from listening to others and finding empathy with their experiences. Leaders from all backgrounds agreed that in moments of crisis, exhibiting compassion through active listening is the first step toward getting others to follow. Large concessions for survivors must be made during recovery efforts. Participants had many stories of both extending this kind of grace to others and also having it extended to them.

Active listening in these situations generally precedes an effective action for followers to perceive it as an example of effective leadership. Participant 8 explains, "I got a letter or email from this young boy…He didn't have internet capability…so we were able to buy laptops and Wi-Fi for these kids to get connected." This example demonstrates that leaders must use active listening skills to make followers feel seen and heard and then execute a solution for it to be viewed as effective leadership.

Leaders Who Inspire. The next most mentioned theme was leaders who inspire. All nine participants brought up examples during the interview process and 21 references were coded. This idea itself appears in the very definition of Transformational Leadership as Bass & Riggio (2006) define it as an approach by leaders who inspire their followers to achieve excellent outcomes. It was coded under the trait of Inspirational Motivation (IM), which is defined as a trait that sets high expectations for followers and a shared vision that motivates them beyond their own self-interest. Leaders inspire when they spark emotional and intellectual energy in

others by appealing to passion and purpose. It allows followers to connect with a larger aspirational goal.

Participants cited many examples of leaders exhibiting inspirational traits. Throughout the storm clean-up, strong inspirational leadership lead to community-wide efforts, particularly in the form of group-focused problem-solving such as neighbors taking down debris with chainsaws, serving hot meals despite individual hardship, and unprecedented cooperation among intergovernmental agencies. Leaders also inspired others to create opportunities for moral-boosting events like football games in the immediate aftermath of the crisis. By appealing to a sense of community and inspiring that community through opportunities for collaboration, leaders are perceived as effective and help move their people through what may feel like an impossible crisis to overcome. This aligns with Leithwood et. al (2021) who explains that restructuring efforts are most effective when they are characterized by visionary leadership and the ability to inspire followers.

Articulating a Vision. Another strong theme that emerged from participants lived experiences throughout Hurricane Michael was the Transformational Leadership trait of being able to articulate a vision. "Articulates a Vision" was also coded under the Transformational Leadership Trait of Inspirational Motivation. Eight of the nine participants cited examples in their interviews and this theme was coded 16 times. It was defined for the purposes of my research as expressing a long-term goal or idea for the future, particularly with clarity and direction. It is different from the idea of a leader inspiring because inspiration focuses on the emotional component while articulating a vision has a more tangible roadmap and end goal. While leaders may inspire large, concerted efforts by the group toward cooperation, articulating a vision works beyond emotionality to create end results.

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One example of this that emerged was leaders coordinating the effort to get students back to school as quickly as possible. The community was largely paralyzed and could not return to work until childcare was resolved either through daycare or the schools. This required leadership to conduct "war room" efforts that included communication, facilities, and transportation. Additionally, community-wide, church leaders found themselves having to "cross the aisle" and work with other churches to help their members in the aftermath. Coordinating so many pieces and parts requires leaders to have a clarity of vision, understanding of needed steps, end goal, and the ability to articulate what is needed to followers. According to existing research, one of the ultimate goals of transformational leadership is to create followers who want to take on the mantle of their vision (Bass & Riggio, 2006). This is consistent with my findings regarding the lived experiences of community leaders during the Hurricane Michael crisis.

Thinking Outside the Box. Furthermore, participants who cited effective leadership during the crisis of Hurricane Michael specifically referenced valuing leaders who "think outside the box". Leaders who think outside the box come up with creative solutions in a nontraditional way. This theme was coded as part of Intellectual Stimulation (IS), which is defined as when leadership creates an environment that encourages the disruption of pre-existing beliefs and structures to give space for innovation. Leaders exhibiting this trait foster thoughtful and adaptive solutions to stressors by questioning assumptions (Bass & Riggio, 2006; Nystron & Starbuck, 1984). This theme was coded across eight of the nine interviews and was referenced sixteen times.

During the crisis, followers saw the trait of "thinking outside the box" particularly through the actions leadership took around communication and the logistics of restarting the school year. Due to the damage to various school buildings that made them uninhabitable, and

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those facilities being used as shelters for unhoused residents, leaders found themselves implementing split school sessions. Issues such as this are sometimes resolved but often compound and force leadership to come up with creative ways to problem-solve (Goswick et. al, 2018). For example, teachers and students were either attending class from 8 am to 1 pm or 1 pm to 6 pm. Hurricane Michael also caused the closure of all childcare facilities on the Lynn Haven side of the Panama City bridge, leaving those with children who were not school-aged without a way to work. The district and FEMA created on-site childcare for staff members to enable them to get back into the classroom and fulfill their various roles. In accordance with the literature review, even with delegation, public school systems may face great turbulence as they begin to reopen even though it must be prioritized (Beabout, 2010; Mutch, 2015). This turbulence requires inventive solutions from leaders as well as followers. Thinking outside the box allowed followers to see their leaders as effective as the recovery efforts marched forwards.

Moreover, leaders also found themselves wading through inefficiencies and having to come up with new solutions. One participant (P9) illuminates this through an anecdote of their lived experience about the Emergency Operations Center (EOC) and the EOC's strategy for sending out chainsaws to clear debris without access to sufficient fuel. This leader's solution was to initiate their teenage son filling as many gas cans as he could and then sending him to the workers with a police escort. Fletcher & Nicholas (2016) explain that leaders must exhibit strong leadership traits in the aftermath of a crisis and, in this case, it required unofficial leaders to work around existing systems. In order to be perceived as effective, one needed characteristic is to think outside the box and creatively problem-solve.

Leaders as Role Models. Likewise, being a role model became an emergent theme from participant interviews. Being a role model was classified as a theme under Idealized Influence

(II), which is defined as when leaders model expectations through their own lives, specifically their morality and ethics. This encourages followers to copy leaders and follow their vision (Bass & Riggio, 2006). Role models specifically influence their followers through their actions that reflect their strong ethical values. Participants explained that leaders are role models when they do the difficult jobs themselves while also asking their followers to do the same. According to the participants, role models clean toilets and live in the schools to help manage community members seeking shelter. After a natural disaster, "…acute interventions… are best designed to establish a supportive relationship with survivors so as to help address their immediate safety needs and concerns, rather than be focused on more 'mental health' type interventions that involve dealing with disaster-related experiences and psychological reactions" (Allen et. al, 2010, p. 512). Effective leaders lead through uncharted waters and are widely recognized by the community. Leaders are role models in times of crisis when they are the people sheltering, feeding, and clothing people. To be a role model is to reach deep within oneself and take on the harsh realities of disaster cleanup. These leaders model strong ethics that leads to change (Bass & Avolio, 1999; Burns, 1978).

Summary of Findings Related to Literature Review and Interpretations

Overall, each of the Transformational Leadership traits were represented in the themes of leaders as active listeners (IC), inspirational (IM), articulating a vision (IM), thinking outside the box (IS), and being a role model (II). This aligns with literature review from chapter 2, regarding transformational leadership traits inspiring followers toward aspirational ends that are bigger than their own personal wants and needs. Transformational leadership traits are found to be pivotal in crisis leadership and the long- and short-term success of leaders during natural disasters.

Findings Related to Research Problem

Chapter 1 discussed the research problem of which type of leadership can best support recovery throughout a natural disaster. This questions originally arose because the intensification and increased frequency of natural disasters calls for a greater understanding about effective leadership practices during these crises. Little research has been conducted on the topic and what has been done has been largely focused on the school populations and not the leadership styles. On a personal and reflexive note, as I have been writing these chapters, both Hurricane Helene and Hurricane Milton have wreaked havoc through the Gulf of Mexico and caused unforeseen damage. There is more need than ever to understand what type of leadership best supports recovery in the aftermath of a natural disaster can, particularly a hurricane.

For the purposes of this study, Bass's Transformational Leadership traits were used to assess the qualities that perceived effective leaders exhibited throughout Hurricane Michael. Participants' lived experiences throughout Hurricane Michael provided data to analyze the crisis through this lens. All participants cited examples of each leadership trait with most illustrating positive narratives. The focus of transformational leadership is a focus on the process and not just the outcomes (Bass,1985; Dvir et.al, 2002).There is a link between how leaders embodied Transformational Leadership traits and their follower's perceived outcomes.

The findings of this study support the idea that Transformational Leadership traits were seen positively by the participants in the aftermath of the natural disaster. When transformational leadership is executed well, it can have a positive impact on followers' outcomes and that of the organization (Rowold & Heinitz, 2007). Participants gave examples of how leaders with these traits promoted resilience among their followers and were integral to the recovery efforts. Interviewees cited being an active listener, inspirational, a role model,

articulating a vision, and thinking outside the box as the traits they most observed and demonstrated throughout the hurricane crisis. The purpose of Transformational Leadership is to motivate followers to work beyond their own self-interest and were able to better overcome their own trauma when leadership exhibits strong transformational leadership traits. As the community continues to recover, the findings of this study open a dialogue that Transformational Leadership traits may be important to the community finding its way forward after a hurricane of this magnitude.

Findings Related to the Research Question

Regarding the lived experiences of community and educational leaders during Hurricane Michael, several themes emerged: effective leaders as active listeners, inspirational, creative problem-solvers, role models, and visionaries. Their rich and illuminated experiences ranged from explanations of riding out a hurricane in a closet to the long-term effects of dealing with FEMA. The researcher chose to focus on the Transformational Leadership aspects of their narratives; however, that does not discount the depth of their encounters and stories.

Since in hermeneutical phenomenology the researcher cannot bracket themselves off from the impact of their participants' stories, the researcher found themselves employing one of the main traits the emerged from the study: active listening. Active listening falls under the heading of Individualized Consideration in Transformational Leadership, but it also goes beyond that. Active listening may be the key that unlocks the door to the human experience and thusly, meaningful leadership. The hermeneutic circle insists on acknowledging no person is completely isolated or bracketed off from impacting or being impacted by others. Transformational Leadership traits in times of crisis demonstrate this principle because there is blur between who is having an influence on whom. The leader is exhibiting traits such as active listening, but

through that they are also being changed and impacted. Sharing the lived experience of a natural disaster changes how leaders show up for their followers and changes potential followers into leaders.

Significance of the Study

This research aims to illuminate the challenges presented to communities and leadership affected by natural disasters, particularly through the lens of what makes effective or ineffective leadership. The findings point to Bass's (1985) transformational leadership traits positively influencing followers in the aftermath of a crisis. Furthermore, there are few studies that have drilled down into the elements of what makes the various Transformational Leadership Traits effective in the eyes of followers. Defining active listening, inspiring, articulating a vision, thinking outside the box, and being a role model can lend concrete definitions of how leaders can create positive change in the aftermath of a crisis.

Furthermore, since Hurricane Micheal made landfall in October of 2018 and affected the surrounding community of Bay County, Florid, there has been little to no research done on its overall effects and the lived experiences of community members. Community leaders shared their narratives, and the researcher was able to use their own lens to create themes. Recording these lived experiences and rich narratives is valuable unto itself because society tends to lurch from crisis to crisis with little time or inclination for reflection or mindfulness, which leads to an intellectual and emotional loss for survivors and their stories.

Moreover, as global warming continues, the frequency and impact of natural disasters on educational communities will increase, leading to a greater need for documented lived experiences and prescriptive approaches to recovery. Global warming is expected to have a significant climatic impact on individuals, organizations, and governments, manifesting itself

through more severe storms and other weather patterns (Begg et al., 2018). Hurricane Michael is one such storm that some climate scientists believe could have gotten worse because of global warming (Elsner & Jagger, 2006). As the researcher writes this, communities from Florida and up through North Carolina are reeling from the double-hit of Hurricane Helene and Milton. The future may not allow the luxury of long-term recovery and study as compounding storms leads to reactionary responses from leaders. Community leaders can take lessons learned from this study like how to utilize Transformational Leadership in the event of a natural disaster. Ultimately, this study seeks to empower leaders with the knowledge and resources necessary to navigate these difficult and on-going problems.

Implications for Practice

In the face of ongoing disasters, leaders should be trained in effective leadership and educated on how to implement these practices. Many people find themselves in positions of leadership without any formal training; this can be tenable until disaster hits. As the world saw with the COVID-19 pandemic, no leaders are precluded from navigating unexpected crises. Leaders should be taught to embody the four traits of Transformational Leadership: Individualized Consideration, Intellectual Stimulation, Inspirational Motivation, and Idealized Influence. Bass & Avolio (2006) describe Transformational Leadership workshops that can promote these understandings in leaders. Practicing active listening before a catastrophe strikes can help to create the dialogue with followers that will be needed to navigate future problems. Leaders as role models who are able to articulate a vision while creatively problem-solving can motivate and inspire their followers, despite unavoidable calamities.

Additionally, efforts should be made to create a prescriptive approach to crisis leadership in the event of a hurricane and it should be implemented in at-risk schools. As natural disasters

increase in frequency and intensity, leadership needs to be prepared to lead effectively while also caring for themselves. For example, the Texas Safety School engages in practical leadership training in the face of crisis. There should be a centralized and prescriptive opportunity for leaders to receive both trauma-informed training paired with Transformational Leadership practices.

Recommendations for Future Research

Future research in leadership and natural disasters should continue to examine the impact that leaders and their styles have on future outcomes. While this study focused on Bass's (1985) Transformational Leadership traits, other leadership styles should be examined for effectiveness. The researcher coded for transactional leadership but did not include the findings in this study for the sake of scope and brevity. This data could also be analyzed through a Leader-Member Exchange Theory lens and then compared for emergent theme of effective or perceived "good" leadership.

Furthermore, this study was originally imagined as a quantitative study where followers rated leaders before and after Hurricane Michael using the Multifactor Leadership Questionnaire. However, Bay District schools was reluctant to give the researcher access to their populations; therefore, the researcher pivoted to a hermeneutical phenomenological study. The execution of this previously envisioned study could offer additional insights into the leadership and natural disaster research body which this research intends to expand upon.

Moreover, there should be more investigation into the direct correlation between leadership styles and trauma outcomes among community populations. Brown et. al (2011) explain, "Natural disasters present both acute and enduring stressors to affected individuals" (p. 575). The researcher originally also coded for trauma but had to abandon the efforts in order to

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focus the study. There appears to be a link between effective leadership and trauma recovery in vulnerable populations. Resilience and renewal could be analyzed, in order to best understand how leadership impacts followers and communities following a natural disaster or similar catastrophe.

Final Thoughts and Conclusions

This dissertation analyzes the lived experiences of nine community leaders in Bay County, Florida, throughout the Hurricane Michael crisis in 2018 and beyond. It examines their leadership styles, focusing on the transformational leadership framework of Bass (1985) and its effectiveness during a crisis. The study aims to understand the challenges faced by leaders in navigating disaster recovery. The findings suggest that transformational leadership traits, such as idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation, were perceived as effective in guiding the community through the crisis. Specifically, effective leaders exhibited the traits of active listening, inspiring, articulating a vision, thinking outside the box, and acting as a role model to positively affect change in their followers after a crisis. The study highlights the crucial role of leadership in facilitating recovery efforts and embracing opportunities for positive change.

Likewise, this study has allowed community and educational leaders in Bay County, Florida to share their lived experience during the Hurricane Michael disaster and subsequent recovery. All the participants cited Transformational Leadership traits as examples of effective leadership in the aftermath of the natural disaster. These examples can function as a model for leaders dealing with future crises and how to best serve their population. A natural disaster is a burden for leadership, but it is also an opportunity for renewal and to promote well-being in followers. As communities are physically destroyed and must be rebuilt, leadership can guide

that process and effect positive change that will continue long after they are out of that leadership

position.

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Appendix A

1

AUBURN UNIVERSITY HUMAN RESEARCH PROTECTION PROGRAM (HRPP)

EXEMPT REVIEW APPLICATION

For assistance, contact: **The Office of Research Compliance (ORC)**
Phone: **334-844-5966**   E-Mail: **IRBAdmin@auburn.edu**   Web Address: **http://www.auburn.edu/research/vpr/ohs**
Submit completed form and supporting materials as one PDF through the IRB Submission Page
Hand written forms are not accepted. Where links are found hold down the control button (Ctrl) then click the link..

1. Project Identification   **Today's Date: March 11, 2024**

     Anticipated start date of the project: April 4, 2024 Anticipated duration of project: 1 Year
  a. **Project Title: Natural Disasters, Trauma, and Perceived Transformational Leadership in Educational Leadership**

  b. **Principal Investigator (PI): Colleen McCambridge**   Degree(s): PhD
     Rank/Title: Graduate Student   Department/School: Educational Foundations, Leadership, and Technology
     Role/responsibilities in this project: **Principal Investigator**
     Preferred Phone Number: **931-249-4923**   AU Email: cze0031@auburn.edu

     Faculty Advisor Principal Investigator (if applicable): Dr. Ellen Hahn
     Rank/Title: Professor   Department/School: Educational Foundations, Leadership, and Technology
     Role/responsibilities in this project: **Faculty Advisor/Supervisor**
     Preferred Phone Number: **706-573-7563**   AU Email: reamseh@auburn.edu

     Department Head: William Murrah   Department/School: Educational Foundations, Leadership, and Technology
     Preferred Phone Number: 334-844-3806   AU Email: wmm0017@auburn.edu
     Role/responsibilities in this project: None

  c. **Project Key Personnel –** Identify all key personnel who will be involved with the conduct of the research and describe their role in the project. Role may include design, recruitment, consent process, data collection, data analysis, and reporting. (To determine key personnel, see decision tree). *Exempt determinations are made by individual institutions; reliance on other institutions for exempt determination is not feasible. Non-AU personnel conducting exempt research activities must obtain approval from the IRB at their home institution.*

     Key personnel are required to maintain human subjects training through CITI. Please provide documentation of completed CITI training, with course title(s) and expiration date(s) shown. As a reminder, both IRB and RCR modules are required for all key study personnel.

     Name: Colleen McCambridge   Degree(s):**M.ED- Integrated Language Arts Education**
     Rank/Title: Ph.D. Candidate and Principal Investigator   Department/School: EFLT- Administration and Supervision of Curriculum
     Role/responsibilities in this project: **To design, conduct, and report research project. To protect the rights and privacy of participants of the study and to ensure protection of data. The PI is responsible for recruitment, consent (answer questions posed by participants), data analysis, etc.**
     - AU affiliated? ☒ Yes ☐ No   If no, name of home institution: Click or tap here to enter text.
     - Plan for IRB approval for non-AU affiliated personnel? **N/A**
     - Do you have any known competing financial interests, personal relationships, or other interests that could have influence or appear to have influence on the work conducted in this project? ☐ Yes   ☒ No
     - If yes, briefly describe the potential or real conflict of interest: Click or tap here to enter text.

> The Auburn University Institutional
> Review Board has approved this
> Document for use from
> 04/21/2024   to   ---------------
> Protocol #   24-820 EX 2404

- Completed required CITI training? ☒ Yes ☐ No If NO, complete the appropriate CITI basic course and update the revised Exempt Application form.
- If YES, choose course(s) the researcher has completed:

IRB Additional Modules-Defining Research with Human Subjects	12/13/2026
Responsible Conduct of Research- AU Basics RCR Training	No expiration date
Responsible Conduct of Research for Social and Behavorial- RCR	05/26/2025
IRB #2 Social and Behavorial Emphasis- Basic Course	12/13/2026

Expiration Date

Name: Ellen Hahn   Degree(s): **Ed.D.**

Rank/Title: Professor/Faculty Advisor   Department/School: EFLT-College of Ed

Role/responsibilities in this project: To oversee study and to share expertise that guides PI with collection and analysis of data and reporting of findings. To ensure compliance with ethical standards throughout data collection, analysis, and findings until the completion of study.

- AU affiliated? ☒ Yes ☐ No   If no, name of home institution: Click or tap here to enter text.
- Plan for IRB approval for non-AU affiliated personnel? **N/A**
- Do you have any known competing financial interests, personal relationships, or other interests that could have influence or appear to have influence on the work conducted in this project? ☐ Yes ☒ No
- If yes, briefly describe the potential or real conflict of interest: Click or tap here to enter text.
- Completed required CITI training? ☒ Yes ☐ No If NO, complete the appropriate CITI basic course and update the revised EXEMPT application form.
- If YES, choose course(s) the researcher has completed: Human Sciences Basic Course   1/29/2025
                                                      Human Sciences Basic Course   1/29/2025

Responsible Conduct of Research for Social and Behavorial Sciences RCR- RCR Referseher

IRB Additional Modules- Research in Public and Elementary and Secondary Schools -SBE

IRB #2 Social and Behavioral Emphasis- AU Personnel- Basic/Refresher

Name: Click or tap here to enter text.   Degree(s): Click or tap here to enter text.

Rank/Title: Choose Rank/Title   Department/School: Choose Department/School

Role/responsibilities in this project: Click or tap here to enter text.

- AU affiliated? ☐ Yes ☐ No   If no, name of home institution: Click or tap here to enter text.
- Plan for IRB approval for non-AU affiliated personnel? Click or tap here to enter text.
- Do you have any known competing financial interests, personal relationships, or other interests that could have influence or appear to have influence on the work conducted in this project? ☐ Yes ☐ No
- If yes, briefly describe the potential or real conflict of interest: Click or tap here to enter text.
- Completed required CITI training? ☐ Yes ☐ No If NO, complete the appropriate CITI basic course and update the revised EXEMPT application form.
- If YES, choose course(s) the researcher has completed: Choose a course   Expiration Date
                                                      Choose a course   Expiration Date

d. **Funding Source –** Is this project funded by the investigator(s)? Yes ☐ No ☒

Is this project funded by AU?   Yes ☐ No ☒ If YES, identify source Click or tap here to enter text.

Is this project funded by an external sponsor? Yes ☐ No ☒   If YES, provide name of sponsor, type of sponsor (governmental, non-profit, corporate, other), and an identification number for the award.

Name: Click or tap here to enter text.   **Type:** Click or tap here to enter text. **Grant #:** Click or tap here to enter text.

\

e. List other AU IRB-approved research projects and/or IRB approvals from other institutions that are associated with this project. Describe the association between this project and the listed project(s):
Click or tap here to enter text.

2. Project Summary

    a. Does the study _TARGET_ any special populations? Answer YES or NO to all.

Minors (under 18 years of age; if minor participants, at least 2 adults must be present during all research procedures that include the minors)	Yes ☐ No ☒
Auburn University Students	Yes ☐ No ☒
Pregnant women, fetuses, or any products of conception	Yes ☐ No ☒
Prisoners or wards (unless incidental, not allowed for Exempt research)	Yes ☐ No ☒
Temporarily or permanently impaired	Yes ☐ No ☒

    b. Does the research pose more than minimal risk to participants?   Yes ☐ No ☒
    If YES, to question 2.b, then the research activity is NOT eligible for EXEMPT review. Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research is not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or test. 42 CFR 46.102(i)

    c. Does the study involve any of the following? *If YES to any of the questions in item 2.c, then the research activity is NOT eligible for EXEMPT review.*

Procedures subject to FDA regulations (drugs, devices, etc.)	Yes ☐ No ☒
Use of school records of identifiable students or information from instructors about specific students.	Yes ☐ No ☒
Protected health or medical information when there is a direct or indirect link which could identify the participant.	Yes ☐ No ☒
Collection of sensitive aspects of the participant's own behavior, such as illegal conduct, drug use, sexual behavior or alcohol use.	Yes ☐ No ☒

    d. Does the study include deception? Requires limited review by the IRB*   Yes ☐ No ☒

3. MARK the category or categories below that describe the proposed research. Note the IRB Reviewer will make the final determination of the eligible category or categories.

    ☐ **1.** Research conducted in established or commonly accepted educational settings, involving normal educational practices. The research is not likely to adversely impact students' opportunity to learn or assessment of educators providing instruction. 104(d)(1)

    ☒ **2.** Research only includes interactions involving educational tests, surveys, interviews, public observation if at least ONE of the following criteria. (The research includes data collection only; may include visual or auditory recording; may NOT include intervention and only includes interactions). **Mark the applicable sub-category below (I, ii, or iii). 104(d)(2)**

    ☒ **(i)** Recorded information cannot readily identify the participant (directly or indirectly/ linked);
        OR
        - surveys and interviews: no children;
        - educational tests or observation of public behavior: can only include children when investigators do not

participate in activities being observed.

☐ **(ii)** Any disclosures of responses outside would not reasonably place participant at risk; **OR**

☐ **(iii)** Information is recorded with identifiers or code linked to identifiers and IRB conducts limited review; no children. **Requires limited review by the IRB.***

☐ **3.** Research involving Benign Behavioral Interventions (BBI)** through verbal, written responses including data entry or audiovisual recording from adult subjects who prospectively agree and ONE of the following criteria is met. (This research does not include children and does not include medical interventions. Research cannot have deception unless the participant prospectively agrees that they will be unaware of or misled regarding the nature and purpose of the research) **Mark the applicable sub-category below (A, B, or C).** 104(d)(3)(i)

☐ **(A)** Recorded information cannot readily identify the subject (directly or indirectly/ linked); **OR**

☐ **(B)** Any disclosure of responses outside of the research would not reasonably place subject at risk; **OR**

☐ **(C)** Information is recorded with identifies and cannot have deception unless participants prospectively agree. **Requires limited review by the IRB.***

☐ **4.** Secondary research for which consent is not required: use of identifiable information or identifiable bio-specimen that have been or will be collected for some other 'primary' or 'initial' activity, if one of the following criteria is met. Allows retrospective and prospective secondary use. **Mark the applicable sub-category below (i, ii, iii, or iv).** 104 (d)(4)

☐ **(i)** Bio-specimens or information are publicly available;

☐ **(ii)** Information recorded so subject cannot readily be identified, directly or indirectly/linked investigator does not contact subjects and will not re-identify the subjects; **OR**

☐ **(iii)** Collection and analysis involving investigators use of identifiable health information when us is regulated by HIPAA "health care operations" or "research" or "public health activities and purposes" (does not include bio-specimens (only PHI and requires federal guidance on how to apply); **OR**

☐ **(iv)** Research information collected by or on behalf of federal government using government generated or collected information obtained for non-research activities.

☐ **5.** Research and demonstration projects which are supported by a federal agency/department AND designed to study and which are designed to study, evaluate, or otherwise examine: (i)public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or service under those programs. (must be posted on a federal web site). 104.5(d)(5) (must be posted on a federal web site)

☐ **6.** Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives and consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture. The research does not involve prisoners as participants. 104(d)(6)

Revised 09/13/2023

Limited IRB review – the IRB Chair or designated IRB reviewer reviews the protocol to ensure adequate provisions are in place to protect privacy and confidentiality.

**Category 3 – Benign Behavioral Interventions (BBI) must be brief in duration, painless/harmless, not physically invasive, not likely to have a significant adverse lasting impact on participants, and it is unlikely participants will find the interventions offensive or embarrassing.*

*** Exemption categories 7 and 8 require broad consent. The AU IRB has determined the regulatory requirements for legally effective broad consent are not feasible within the current institutional infrastructure. EXEMPT categories 7 and 8 will not be implemented at this time.*

4. Describe the proposed research including who does what, when, where, how, and for how long, etc.

    a. Purpose

        The purpose of this on-going research is to record the experiences of Community Leadership in the aftermath of Hurricane Michael through a transformational leadership framework. The participant population is composed of leaders in Bay County, Florida before and after Hurricane Michael in 2018. The researcher will send an email to community leaders who were in the Bay County school district in Florida containing the consent to participate letter, which outlines the procedures for inclusion in the interview. The anticipated number of participants will be between 5-8 participants. The expected time to complete this survey is 60 minutes. The researcher will conduct the interview and analyze the results.

    b. Participant population, including the number of participants and the rationale for determining number of participants to recruit and enroll. Note if the study enrolls minor participants, describe the process to ensure more than 1 adult is present during all research procedures which include the minor.

        Participants are adult community leaders who agree to be interviewed about their impressions of transformational leadership during Hurricane Michael. There will be between 5 to 8 participants who self-select in.

    c. Recruitment process. Address whether recruitment includes communications/interactions between study staff and potential participants either in person or online. *Submit a copy of all recruitment materials.*

        The recruitment process will be via direct phone call with a script to community leaders who were present during Hurricane Michael. Using a phone script, I will state the purpose of the study, estimated time required to participate in the study, risks and benefits of participating in the study, privacy and confidentiality statements, statement of voluntary participation, information about renumeration (there is none), and contact information for questions about the study. Participants will be asked to provide a non-work associated email address for the informed consent. They will receive a copy of the informed consent as an email attachment and will be asked to return it to me with a wet or digital signature. Then they will receive a preview of the initial semi—structured interview questions as an email attachment and be asked to indicate their availability for either an in-person or ZOOM interview along with a follow-up interview if necessary.

    d. Consent process including how information is presented to participants, etc.

        The recruitment process will be via phone call from a script to community leaders who worked in Bay County during Hurricane Michael. The phone conversation will state the purpose of the study, what participants are being asked to do as part of the study, estimated time required to participate in the study, risks and benefits of participating in the study, privacy and confidentiality statements, statement of voluntary participation, the minimal risks to participations and that it is not practicable to obtain traditional "wet" signatures, potential participants will be asked if they will provide a non-work email address to receive a copy of the information as a an attachment. A copy of the information letter is attached.

    e. Research procedures and methodology

        (1)After receiving a signed copy of consent, the PI will send a preview of semi-structured interview questions to the initial participants via their person emails. The interviews will be scheduled outside of the

6

workday whenever it is convenient for the interviewees. Interviewees will be recorded in order to be transcribed and then deleted. The number of interviews will be determined by the saturation of responses through in vivo coding to develop a priori codes with follow up interviews for clarification (Saldana, 2014). (2) Data will be collected and triangulated through use of the initial and potential follow up interview and review of documents voluntarily offered by the interviewees (Creswell & Miller, 2000). Variables of interest include transformational leadership characteristics and how they changed over time. Responses will be analyzed to identify patterns regarding transformational leadership characteristics through a priori coding developed from the in vivo coding of the initial interviews.

    f. Anticipated time per study exercise/activity and total time if participants complete all study activities.
Each participant should expect to complete a semi-structured interview for 20-30 minutes. There is a potential for a short follow-up interview if necessary, that should require no more than 15 minutes. Total time possible for a single participant to take part in all activities would be 45 minutes.

    g. Location of the research activities.
All research activities will be remote.

    h. Costs to and compensation for participants? If participants will be compensated describe the amount, type, and process to distribute.
There will be no compensation for participation.

    i. Non-AU locations, site, institutions. *Submit a copy of agreements/IRB approvals.*
None.

    j. Describe how results of this study will be used (presentation? publication? thesis? dissertation?)
This study will be used for my dissertation.

    k. Additional relevant information.
Click or tap here to enter text.

5. Waivers
Check applicable waivers and describe how the project meets the criteria for the waiver.

    ☐ Waiver of Consent (Including existing de-identified data)

    ☒ Waiver of Documentation of Consent (Use of Information Letter, rather than consent form requiring signatures)

    ☐ Waiver of Parental Permission (in Alabama, 18 years-olds may be considered adults for research purposes)
https://sites.auburn.edu/admin/orc/irb/IRB 1 Exempt and Expedited/11-113 MR 1104 Hinton Renewal 2021-1.pdf

    a. Provide the rationale for the waiver request.
N/A

6. Describe the process to select participants/data/specimens. If applicable, include gender, race, and ethnicity of the participant population.

There is no restriction or consideration of gender, race, or ethnicity with regard to participant population. Inclusion criteria: Individuals in leadership positions in Bay County during Hurricane Michael in 2018. Exclusion criteria: Individuals not in leadership positions or not located in Bay County during Hurricane Michael.

7. Risks and Benefits

7a. Risks - Describe why none of the research procedures would cause a participant either physical or psychological discomfort or be perceived as discomfort above and beyond what the person would experience in daily life (minimal risk).

The research procedures consist of a short, voluntary conversation related to community leaders' experience of transformational leadership during Hurricane Michael in 2018 and potentially a short follow up interview for clarification. None of the questions asks community leaders to share confidential or sensitive information, and any question can be skipped. There are no right or wrong answers, and there is no penalty for specific responses. The entire purposed of this study is to create an accurate picture of what happened to leadership during Hurricane Michael in order to better support leadership in the future. The researcher does not hold a position of authority over any of the participants. All participants' names will be changed to pseudonyms and the names and locations of specific businesses will not be used. Participants will have the benefit of seeing the questions prior to the interview in order to consider their responses and/or objections to each question in advance.

7b. Benefits – Describe whether participants will benefit directly from participating in the study. If yes, describe the benefit. And, describe generalizable benefits resulting from the study.

The overall benefit to this study is for there to be a larger understanding of how natural disasters affect leadership.

8. Describe the provisions to maintain confidentiality of data, including collection, transmission, and storage. Identify platforms used to collect and store study data. *For EXEMPT research, the AU IRB recommends AU BOX or using an AU issued and encrypted device. If a data collection form will be used, submit a copy.*

No personally-identifiable information such as name, employer, email address, etc will be collected.

The interview will be conducted outside of work hours and not on work-related computers using non-work related emails. The information collected will only be used for its intended purpose and will not be provided to any other organization or entity. The interviews will be conducted via ZOOM through Auburn University for its built-in safety features and only audio will be recorded. Participants will be encouraged to complete activities in a private place to ensure confidentiality, to disable "cookies", and to close their device browser. Transcription will take place immediately. Transcripts and audio will be kept on a password protected computer using Auburn University's cloud storage, BOX. However, if the server is compromised, the transcripts and recordings could be viewed by individuals without permission. Once transcription is complete, all audio recordings will be destroyed. A copy of the collection form is attached. The computer storing information saved for the study will only be accessible with a secure password. IRB approved interview participant-signed consent forms will be kept on-campus for three years after the study ends in Dr. Hahn's office, Haley Center, Room 4012.

a. If applicable, submit a copy of the data management plan or data use agreement.

9. **Describe the provisions included in the research to protect the privacy interests of participants (e.g., others will not overhear conversations with potential participants, individuals will not be publicly identified or embarrassed)**. Collection of consent forms from as many potential participants as possible will protect the identity of those participants who actually participate in the interviews. Recordings of interviews kept in Auburn University's cloud storage, BOX, will be deleted once the transcriptions have been completed. The original contact will eb made by phone call using a script. All written communication will be sent to nonwork-related email provided by the participant. Interviews will take place outside of work hours or the work environment. No other persons will be permitted to be in the room during the interviews. No names or identifying information will be released in the data, and participants will be offered the opportunity to member-check their responses prior to publication of the results. Participants can remove themselves from the study at any point. Only the researcher and the faculty advisor will have access to individual responses. None of the participants are currently associated with Auburn University's EFLT program. There will be no mention of the name of any specific business in the reporting results. All participants names will be changed to pseudonyms and the names and locations of specific business and schools will not be used.

10. **Does this research include purchase(s) that involve technology hardware, software or online services?**
     ☐ **YES**   ☒ **NO**
     If YES:
     A. **Provide the name of the product**   Click or tap here to enter text.
        and the manufacturer of the product   Click or tap here to enter text.
     B. **Briefly describe use of the product in the proposed human subject's research.**
        Click or tap here to enter text.

     C. **To ensure compliance with AU's Electronic and Information Technology Accessibility Policy, contact AU IT Vendor Vetting team at vetting@auburn.edu to learn the vendor registration process (prior to completing the purchase).**
     D. **Include a copy of the documentation of the approval from AU Vetting with the revised submission.**

11. **Additional Information and/or attachments.**
     In the space below, provide any additional information you believe may help the IRB review of the proposed research. If attachments are included, list the attachments below. Attachments may include recruitment materials, consent documents, site permissions, IRB approvals from other institutions, data use agreements, data collection form, CITI training documentation, etc.
     CITI Program Training Reports

Informed Consent Letter

Information Letter

Required Signatures *(If a student PI is identified in item 1.a, the EXEMPT application must be re-signed and updated at every revision by the student PI and faculty advisor. The signature of the department head is required only on the initial submission of the EXEMPT application, regardless of PI. Staff and faculty PI submissions require the PI signature on all version, the department head signature on the original submission)*

Signature of Principal Investigator: *Colleen McCambridge*   **Date:** 03/28/24

Signature of Faculty Advisor (If applicable): *Ellen Reame Hahn*   **Date:** 3/28/24

Signature of Dept. Head: _____   **Date:** 03/28/2024

Version Date: 10/24/2023

Attachment A

INFORMATION LETTER
for a Research study entitled
"Natural Disasters, Trauma, and Perceived Transformational Leadership in Educational Leadership"

You are invited to participate in a research project investigating leaders' perceptions of transformational leadership styles before and after Hurricane Michael in the Bay County, Florida school district. The study is being conducted by Colleen McCambridge, Graduate Student, under the direction of Dr. Ellen Hahn in the Auburn University Department of Educational Foundations, Leadership, and Technology. You are invited to participate because you are a K-12 teacher in the Bay County school district and are age 19 or older.

What this study is about: The purpose of this on-going research is to record the experiences of Community Leadership in the aftermath of Hurricane Michael through a transformational leadership framework. The participant population is composed of leaders in Bay County, Florida before and after Hurricane Michael in 2018. You were selected as a possible participant in this research study because of your record of community leadership in Panama City, Florida.

What I will ask you to do: If you agree to participate in my research, I will ask you to provide me with a personal email address to use for research purposes. You will be asked to complete a short semi-structured interview that should last no more than 20-30 minutes with the possibility of an abbreviated follow up interview for clarification and confirmation if necessary. This interview will include questions regarding your remembrances of transformational leadership before, during, and after Hurricane Michael. Your total time commitment for this research study will be approximately 20-30 minutes if you only complete the initial interview. If you also participate in a 15 minute follow up interview, you may spend a combined total of 45 minutes but not in one sitting. You may choose to skip any questions.

Risks and discomforts: Minimal risks are associated with this study since the interview will be kept confidential and work-related email will not be used. In addition, no personally identifying information is requested. You will be asked about your lived experiences around Hurricane Michael and your perception of leadership during this time period.

Benefits: If you participate in this study, you can expect no direct benefits. However, indirect benefits include: (1.) reflection on your leadership experience may lead to personal growth; and (2.) information from this study may be used to benefit yourself and other principals in the future by helping to identify areas of need for future support and training. I cannot promise that you will receive any of the benefits described.

Compensation for your participation: There will be no compensation offered. It is requested that you not complete interview during work hours.

1

Costs involved: There are no costs related to participation in this study.

Taking part is voluntary and you can withdraw at any time during the study. You may refuse to participate before the study begins, but it is requested that you complete and return the consent form regardless in order to reduce the likelihood that a respondent might be identifiable from this small sample.

If you change your mind about participating, you may discontinue at any time, or skip questions that may make you feel uncomfortable. You will be able to see the questions prior to the interview. Your decision about whether to participate or to stop participating will not jeopardize your future relations with your current or future work at Auburn University, Department of Educational Foundation, Leadership, and Technology or those people involved in this research study.

Privacy/Confidentiality/Data Security: Your privacy will be protected. Every effort will be made for data obtained in connection with this study to remain confidential. I will not collect any personally identifying information nor identify which schools were represented in the analysis or presentation. No IP addresses will be collected from the web server. The findings of this research study will be used to fulfill an educational requirement for a dissertation; and may also be used to create presentations or publications. All interviews will be recorded for transcription purposes using Auburn University's ZOOM because of its safety protocols. After the transcription is complete, interview recordings will be deleted. Transcripts will be stored in Auburn University's secure cloud-based storage, BOX.

If you have questions about this study, please ask them now or contact Dr. Ellen Hahn at reamseh@auburn.edu or Colleen McCambridge at cze0031@auburn.edu. A copy of this information letter will be given to you to keep for your records.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone 334-844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. SUPPLYING YOUR PERSONAL EMAIL ADDRESS INDICATES YOUR WILLINGNESS TO PARTICIPATE.

Colleen McCambridge   03/28/24

Investigator   Date

The Auburn University Institutional Review Board has approved this document for use from _____ to _____ . Protocol #_____

Appendix B
Recruitment telephone Script

My name is Colleen McCambridge, and I am a graduate student from the College of Education, Educational Foundations, Leadership, and Technology at Auburn University. I would like to invite you to participate in a research study I am conducting on community leaders' perceptions of transformational leadership during Hurricane Michael. You have been selected as a community leader and I believe your perspective and insight would add great value to this body of research. I am hoping you would be willing to consider participation in this research.

Should you agree to participate, you would be asked to participate in a short interview on your leadership experiences before, during, and after Hurricane Micheal. The information letter and scheduling arrangements for the interview would be sent to a personal email that you provide. The interview should require no more than 20-30 minutes with the potential for an abbreviated follow up interview if necessary to confirm and clarify information. The entire process should take no more than 45 minutes between both the interview and any potential follow up, and each would be conducted at separate times.

(Briefly review information outlined in Informed Consent that might be influence the participant's interest in the study)

Risks: Breach of confidentiality is a minimal risk of the study, due to identifiable data being collected. However, pseudonyms will be used once data has been collected to minimize any associated risk, data will be collected outside of work hours through personal emails, and no specific school will be identified in the presentation of this information. Recordings of interviews for the purposes of transcription will be deleted once they have been transcribed.

Compensation/Benefits: The is no compensation and no direct benefits associated with participation. However, indirect benefits may include However, I cannot promise that you will receive any or all of the benefits I have described.

Cost: There is no cost associated with participation in this study.

Privacy: Any data obtained in connection with this study will remain confidential. The researcher will use pseudonyms and will not use any identifiable data in the analysis or presentation of information. Findings of the study will be used to fulfill an educational requirement for a dissertation and may, also, be used for presentations or publications.

If you would be willing to participate in this research study, please provide me with a personal email to contact you. I will contact you with a copy of the information letter and initiate the scheduling of an interview.

Do you have any questions that I might be able to answer at this time? If so, please feel free to ask them now or you are welcome to email me, Colleen McCambridge at cze0031@auburn.edu or you may also contact my advisor, Dr. Ellen Hahn, at reamseh@auburn.edu. I will provide a copy of the information letter to you for your records.

May I have a non-work email address to contact you regarding this research study?

Attachment C
Interview Protocol
Interview Protocol Project: *Natural Disasters, Trauma, and Perceived Transformational Leadership in Educational Leadership*

Time of Interview:

Date:

Place:

Interviewer: Colleen McCambridge

Interviewee: Participant #

Position of Interviewee:

Brief Project Description The purpose of this on-going research is to record the experiences of Community Leadership in the aftermath of Hurricane Michael through a transformational leadership framework. The participant population is composed of leaders in Bay County, Florida before and after Hurricane Michael in 2018.

Introduction: Hello, I am Colleen McCambridge. I am a former teacher in the Bay County school system working on my dissertation. I am studying the experiences of community and educational leaders before, during, and after Hurricane Michael through a transformational leadership lens. Thank you for agreeing to answer a few interview questions for me today to help me generate some data on this topic. I have 10 questions which you have already had an opportunity to review, so let's get started.

Questions:

1. Tell me a little bit about yourself and your work in the Bay County community.
   Follow up: What is your leadership role in the community?

2. How would you describe a good leader?
   Follow up: What traits and qualities does a good leader exhibit?

3. Can you share with me your experiences during the hurricane? How did it impact you and your community emotionally?

4. How would you describe your leadership style before Hurricane Michael?

5. Please describe any effective leadership you witnessed or lead during the Hurricane Michael crisis.

6. What did leadership look like in the rebuilding and aftermath of Hurricane Michael?

7. What impact did leaders have on the Bay County community before, during, and after Hurricane Michael?

8. What lessons were learned by leadership and how did it impact future procedures and policy?

9. Did you notice any common emotional or psychological responses among individuals in your community following the hurricane? How did people cope with their emotions and trauma?

10. What strategies or practices have been helpful in promoting resilience and recovery from the trauma of the hurricane?

Attachment D

(Email to participants after receiving signed informed consent document)

Subject: Research Study – Natural Disasters, Trauma, and Perceived Transformational
Leadership in Educational Leaders

Dear (Insert Name),

I would like to first thank you for participating in the study titled "Natural Disasters, Trauma, and Perceived Transformational Leadership in Educational Leadership." Your contribution to this research is valued and appreciated. You are receiving this email because I have received your signed informed consent form indicating your willingness to participate in the study. As we discussed previously, your participation includes a ZOOM interview with only audio recording, and also the potential for a brief follow-up interview.

Please send me a proposed date and time that you can be available (include your time zone). You should plan for no more than 30 minutes for this interview. I will send you a copy of the questions in advance so that you can spend some time thinking about your responses, a confirmation email, and a ZOOM link. This is a reminder that you should choose a private location for this interview free from interruptions.

A potential follow-up interview should take no longer than fifteen minutes to complete if necessary. You will be contacted via email regarding this within three months of the initial interview. If you come to a question you prefer not to answer, please indicate that you would prefer to skip it and we will progress to the next question. If you have any questions, please do not hesitate to email Colleen McCambridge at cze0031@auburn.edu or my faculty advisor, Dr. Ellen Hahn, at reamseh@auburn.edu.

Thank you for your participation and time in assisting with this research project.

Respectfully,

Colleen McCambridge

Colleen McCambridge
Doctoral Candidate
College of Education
Auburn University

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS*

* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Colleen McCambridge (ID: 9149736)
- **Institution Affiliation:** Auburn University (ID: 964)
- **Institution Email:** cze0031@auburn.edu
- **Institution Unit:** Education
- **Phone:** 9312494923

- **Curriculum Group:** IRB Additional Modules
- **Course Learner Group:** Defining Research with Human Subjects - SBE
- **Stage:** Stage 1 - Basic Course

- **Record ID:** 47594740
- **Completion Date:** 13-Dec-2023
- **Expiration Date:** 13-Dec-2026
- **Minimum Passing:** 80
- **Reported Score*:** 100

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
Defining Research with Human Subjects - SBE (ID: 491)	13-Dec-2023	5/5 (100%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?k7b2956db-9edd-4302-98d2-ce43d7297bff-47594740

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Fort Lauderdale, FL 33301 US

Email: support@citiprogram.org
Phone: 888-529-5929
Web: https://www.citiprogram.org

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 2 OF 2
COURSEWORK TRANSCRIPT**

** NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** Colleen McCambridge (ID: 9149736)
- **Institution Affiliation:** Auburn University (ID: 964)
- **Institution Email:** cze0031@auburn.edu
- **Institution Unit:** Education
- **Phone:** 9312494923

- **Curriculum Group:** IRB Additional Modules
- **Course Learner Group:** Defining Research with Human Subjects - SBE
- **Stage:** Stage 1 - Basic Course

- **Record ID:** 47594740
- **Report Date:** 13-Dec-2023
- **Current Score**:** 100

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES	MOST RECENT	SCORE
Defining Research with Human Subjects - SBE (ID: 491)	13-Dec-2023	5/5 (100%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

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COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS*

* NOTE: Scores on this <u>Requirements Report</u> reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Colleen McCambridge (ID: 9149736)
- **Institution Affiliation:** Auburn University (ID: 964)
- **Institution Email:** cze0031@auburn.edu
- **Institution Unit:** Education
- **Phone:** 9312494923

- **Curriculum Group:** Responsible Conduct of Research for Social and Behavioral
- **Course Learner Group:** Social, Behavioral and Education Sciences RCR
- **Stage:** Stage 1 - RCR
- **Description:** This course is for investigators, staff and students with an interest or focus in **Social and Behavioral** research. This course contains text, embedded case studies AND quizzes.

- **Record ID:** 36784132
- **Completion Date:** 27-May-2020
- **Expiration Date:** 26-May-2025
- **Minimum Passing:** 80
- **Reported Score*:** 96

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
Authorship (RCR-Basic) (ID: 16597)	27-May-2020	5/5 (100%)
Collaborative Research (RCR-Basic) (ID: 16598)	27-May-2020	4/5 (80%)
Conflicts of Interest (RCR-Basic) (ID: 16599)	27-May-2020	5/5 (100%)
Data Management (RCR-Basic) (ID: 16600)	27-May-2020	5/5 (100%)
Mentoring (RCR-Basic) (ID: 16602)	27-May-2020	5/5 (100%)
Peer Review (RCR-Basic) (ID: 16603)	27-May-2020	4/5 (80%)
Research Misconduct (RCR-Basic) (ID: 16604)	27-May-2020	5/5 (100%)
Plagiarism (RCR-Basic) (ID: 15156)	27-May-2020	5/5 (100%)
Research Involving Human Subjects (RCR-Basic) (ID: 13566)	27-May-2020	5/5 (100%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?k8b0d0a26-3f25-48e3-a6dd-f600ff4eeaa7-36784132

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COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 2 OF 2
COURSEWORK TRANSCRIPT**

** NOTE: Scores on this <u>Transcript Report</u> reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** Colleen McCambridge (ID: 9149736)
- **Institution Affiliation:** Auburn University (ID: 964)
- **Institution Email:** cze0031@auburn.edu
- **Institution Unit:** Education
- **Phone:** 9312494923

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- **Course Learner Group:** Social, Behavioral and Education Sciences RCR
- **Stage:** Stage 1 - RCR
- **Description:** This course is for investigators, staff and students with an interest or focus in **Social and Behavioral** research. This course contains text, embedded case studies AND quizzes.

- **Record ID:** 36784132
- **Report Date:** 27-May-2020
- **Current Score**:** 96

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES	MOST RECENT	SCORE
Research Involving Human Subjects (RCR-Basic) (ID: 13566)	27-May-2020	5/5 (100%)
Plagiarism (RCR-Basic) (ID: 15156)	27-May-2020	5/5 (100%)
Authorship (RCR-Basic) (ID: 16597)	27-May-2020	5/5 (100%)
Collaborative Research (RCR-Basic) (ID: 16598)	27-May-2020	4/5 (80%)
Conflicts of Interest (RCR-Basic) (ID: 16599)	27-May-2020	5/5 (100%)
Data Management (RCR-Basic) (ID: 16600)	27-May-2020	5/5 (100%)
Mentoring (RCR-Basic) (ID: 16602)	27-May-2020	5/5 (100%)
Peer Review (RCR-Basic) (ID: 16603)	27-May-2020	4/5 (80%)
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For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?k8b0d0a26-3f25-48e3-a6dd-f600ff4eeaa7-36784132

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COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS*

* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

• **Name:**	Colleen McCambridge (ID: 9149736)
• **Institution Affiliation:**	Auburn University (ID: 964)
• **Institution Email:**	cze0031@auburn.edu
• **Institution Unit:**	Education
• **Phone:**	9312494923

• **Curriculum Group:**	IRB # 2 Social and Behavioral Emphasis - AU Personnel - Basic/Refresher
• **Course Learner Group:**	IRB # 2 Social and Behavioral Emphasis - AU Personnel
• **Stage:**	Stage 1 - Basic Course
• **Description:**	Choose this group to satisfy CITI training requirements for Key Personnel (including AU Faculty, Staff and Students) and Faculty Advisors involved primarily in Social/Behavioral Research with human subjects.

• **Record ID:**	47594739
• **Completion Date:**	13-Dec-2023
• **Expiration Date:**	13-Dec-2026
• **Minimum Passing:**	80
• **Reported Score*:**	88

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
Belmont Report and Its Principles (ID: 1127)	13-Dec-2023	3/3 (100%)
The Federal Regulations - SBE (ID: 502)	13-Dec-2023	4/5 (80%)
Assessing Risk - SBE (ID: 503)	13-Dec-2023	5/5 (100%)
Informed Consent - SBE (ID: 504)	13-Dec-2023	4/5 (80%)
Privacy and Confidentiality - SBE (ID: 505)	13-Dec-2023	5/5 (100%)
Students in Research (ID: 1321)	13-Dec-2023	5/5 (100%)
Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928)	13-Dec-2023	3/5 (60%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

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COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 2 OF 2
COURSEWORK TRANSCRIPT**

** NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** Colleen McCambridge (ID: 9149736)
- **Institution Affiliation:** Auburn University (ID: 964)
- **Institution Email:** cze0031@auburn.edu
- **Institution Unit:** Education
- **Phone:** 9312494923

- **Curriculum Group:** IRB # 2 Social and Behavioral Emphasis - AU Personnel - Basic/Refresher
- **Course Learner Group:** IRB # 2 Social and Behavioral Emphasis - AU Personnel
- **Stage:** Stage 1 - Basic Course
- **Description:** Choose this group to satisfy CITI training requirements for Key Personnel (including AU Faculty, Staff and Students) and Faculty Advisors involved primarily in Social/Behavioral Research with human subjects.

- **Record ID:** 47594739
- **Report Date:** 13-Dec-2023
- **Current Score**:** 88

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES	MOST RECENT	SCORE
The Federal Regulations - SBE (ID: 502)	13-Dec-2023	4/5 (80%)
Belmont Report and Its Principles (ID: 1127)	13-Dec-2023	3/3 (100%)
Assessing Risk - SBE (ID: 503)	13-Dec-2023	5/5 (100%)
Informed Consent - SBE (ID: 504)	13-Dec-2023	4/5 (80%)
Privacy and Confidentiality - SBE (ID: 505)	13-Dec-2023	5/5 (100%)
Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928)	13-Dec-2023	3/5 (60%)
Students in Research (ID: 1321)	13-Dec-2023	5/5 (100%)

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COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS*

* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Ellen Hahn (ID: 944893)
- **Institution Affiliation:** Auburn University (ID: 964)
- **Institution Email:** reamseh@auburn.edu
- **Institution Unit:** eflt
- **Phone:** 7065737563

- **Curriculum Group:** Responsible Conduct of Research
- **Course Learner Group:** AU Basic RCR Training for ALL Faculty, Staff, Postdocs, and Students
- **Stage:** Stage 1 - RCR
- **Description:** This course is for investigators, staff and students with an interest or focus in **Biomedical Research**. This course contains text, embedded case studies AND quizzes.

- **Record ID:** 50319525
- **Completion Date:** 22-Jan-2023
- **Expiration Date:** 22-Jan-2026
- **Minimum Passing:** 90
- **Reported Score*:** 94

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
Authorship (RCR-Basic) (ID: 16597)	01-Oct-2022	5/5 (100%)
Collaborative Research (RCR-Basic) (ID: 16598)	01-Oct-2022	5/5 (100%)
Conflicts of Interest (RCR-Basic) (ID: 16599)	22-Jan-2023	3/5 (60%)
Data Management (RCR-Basic) (ID: 16600)	22-Jan-2023	5/5 (100%)
Mentoring (RCR-Basic) (ID: 16602)	22-Jan-2023	5/5 (100%)
Peer Review (RCR-Basic) (ID: 16603)	22-Jan-2023	5/5 (100%)
Research Misconduct (RCR-Basic) (ID: 16604)	22-Jan-2023	5/5 (100%)
Plagiarism (RCR-Basic) (ID: 15156)	22-Jan-2023	4/5 (80%)
Using Animal Subjects in Research (RCR-Basic) (ID: 13301)	22-Jan-2023	5/5 (100%)
Research Involving Human Subjects (RCR-Basic) (ID: 13566)	22-Jan-2023	5/5 (100%)

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COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 2 OF 2
COURSEWORK TRANSCRIPT**

** NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** Ellen Hahn (ID: 944893)
- **Institution Affiliation:** Auburn University (ID: 964)
- **Institution Email:** reamseh@auburn.edu
- **Institution Unit:** eflt
- **Phone:** 7065737563

- **Curriculum Group:** Responsible Conduct of Research
- **Course Learner Group:** AU Basic RCR Training for ALL Faculty, Staff, Postdocs, and Students
- **Stage:** Stage 1 - RCR
- **Description:** This course is for investigators, staff and students with an interest or focus in **Biomedical Research**. This course contains text, embedded case studies AND quizzes.

- **Record ID:** 50319525
- **Report Date:** 22-Jan-2023
- **Current Score**:** 94

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES	MOST RECENT	SCORE
Using Animal Subjects in Research (RCR-Basic) (ID: 13301)	22-Jan-2023	5/5 (100%)
Research Involving Human Subjects (RCR-Basic) (ID: 13566)	22-Jan-2023	5/5 (100%)
Plagiarism (RCR-Basic) (ID: 15156)	22-Jan-2023	4/5 (80%)
Authorship (RCR-Basic) (ID: 16597)	01-Oct-2022	5/5 (100%)
Collaborative Research (RCR-Basic) (ID: 16598)	01-Oct-2022	5/5 (100%)
Conflicts of Interest (RCR-Basic) (ID: 16599)	22-Jan-2023	3/5 (60%)
Data Management (RCR-Basic) (ID: 16600)	22-Jan-2023	5/5 (100%)
Mentoring (RCR-Basic) (ID: 16602)	22-Jan-2023	5/5 (100%)
Peer Review (RCR-Basic) (ID: 16603)	22-Jan-2023	5/5 (100%)
Research Misconduct (RCR-Basic) (ID: 16604)	22-Jan-2023	5/5 (100%)

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COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS*

* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Ellen Hahn (ID: 944893)
- **Institution Affiliation:** Auburn University (ID: 964)
- **Institution Email:** reamseh@auburn.edu
- **Institution Unit:** eflt
- **Phone:** 7065737563

- **Curriculum Group:** IRB # 2 Social and Behavioral Emphasis - AU Personnel - Basic/Refresher
- **Course Learner Group:** IRB # 2 Social and Behavioral Emphasis - AU Personnel
- **Stage:** Stage 1 - Basic Course
- **Description:** Choose this group to satisfy CITI training requirements for Key Personnel (including AU Faculty, Staff and Students) and Faculty Advisors involved primarily in Social/Behavioral Research with human subjects.

- **Record ID:** 48419823
- **Completion Date:** 30-Jan-2022
- **Expiration Date:** 29-Jan-2025
- **Minimum Passing:** 80
- **Reported Score*:** 91

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
Belmont Report and Its Principles (ID: 1127)	30-Jan-2022	3/3 (100%)
The Federal Regulations - SBE (ID: 502)	30-Jan-2022	5/5 (100%)
Assessing Risk - SBE (ID: 503)	30-Jan-2022	5/5 (100%)
Informed Consent - SBE (ID: 504)	30-Jan-2022	4/5 (80%)
Privacy and Confidentiality - SBE (ID: 505)	30-Jan-2022	3/5 (60%)
Students in Research (ID: 1321)	30-Jan-2022	5/5 (100%)
Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928)	30-Jan-2022	5/5 (100%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

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COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 2 OF 2
COURSEWORK TRANSCRIPT**

** NOTE: Scores on this <u>Transcript Report</u> reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** Ellen Hahn (ID: 944893)
- **Institution Affiliation:** Auburn University (ID: 964)
- **Institution Email:** reamseh@auburn.edu
- **Institution Unit:** eflt
- **Phone:** 7065737563

- **Curriculum Group:** IRB # 2 Social and Behavioral Emphasis - AU Personnel - Basic/Refresher
- **Course Learner Group:** IRB # 2 Social and Behavioral Emphasis - AU Personnel
- **Stage:** Stage 1 - Basic Course
- **Description:** Choose this group to satisfy CITI training requirements for Key Personnel (including AU Faculty, Staff and Students) and Faculty Advisors involved primarily in Social/Behavioral Research with human subjects.

- **Record ID:** 48419823
- **Report Date:** 22-Jan-2023
- **Current Score**:** 91

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES	MOST RECENT	SCORE
Students in Research (ID: 1321)	30-Jan-2022	5/5 (100%)
Belmont Report and Its Principles (ID: 1127)	30-Jan-2022	3/3 (100%)
The Federal Regulations - SBE (ID: 502)	30-Jan-2022	5/5 (100%)
Assessing Risk - SBE (ID: 503)	30-Jan-2022	5/5 (100%)
Informed Consent - SBE (ID: 504)	30-Jan-2022	4/5 (80%)
Privacy and Confidentiality - SBE (ID: 505)	30-Jan-2022	3/5 (60%)
Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928)	30-Jan-2022	5/5 (100%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

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