Impacts of COVID-19 on Health Promotion Within Higher Education: Exploring Organizational Resilience

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IMPACTS OF COVID-19 ON HEALTH PROMOTION WITHIN HIGHER EDUCATION:
EXPLORING ORGANIZATIONAL RESILIENCE

by

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ABSTRACT

The close proximity of students learning, living, socializing and working on university and college campuses presents a unique setting to understand organization responses to the COVID-19 pandemic. This concurrent, mixed methods qualitative study explored how one institution of higher education demonstrated resilience and how its health promotion activities pivoted and adjusted to reduce virus transmission and maintain safety while continuing to promote learning and education. Based on the organizational resilience conceptualization developed by Duchek (2020), data collection methods combined individual interviews with university leaders, self-interview and reflection, and a review of organization documents a connection between health promotion, organization resilience, and critical incident response was found. Data analysis revealed a set of themes unique to this university, but also supports recent literature on organization resilience. Findings suggest that organization preparation, the use of reflection in the response process and the expression of organization values, (care and compassion) provide opportunities for the organization to practice adaptive resilience. In addition, the study findings suggest the importance of health promotion to assist in the critical incident response planning. The analytical process of combining stakeholder interviews, self-interviews, and organization documents provides one path for deeper learning of the connection between health promotion and organization resilience.

Keywords: Organizational resilience, Coronavirus (COVID-19), higher education, emergency management, health promotion.
Dedicated to my family, Ann-Marie, so incredibly grateful to you! Avery and MacKenzie, you can do anything you put your mind to, and I’ll be cheering you along the way. Thank you for always cheering me on. To my husband, Chris, thank you for your endless love and support.
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CHAPTER ONE: INTRODUCTION

Statement Of Problem

Unprecedented. Extraordinary. Crisis. Challenging and new normal. University leaders and health experts have used all these words to describe the COVID-19 pandemic. A novel coronavirus is defined as a new virus that has not yet impacted the health of humans that causes illness like the common cold (Centers for Disease Control [CDC], 2019). The impact of coronavirus is far reaching. The World Health Organization (WHO) estimates 485 million cases worldwide, and more than 6.1 million deaths, as of March 16, 2022. The United States alone has reported more than 79.9 million cases with 978,000 deaths (WHO, 2022).

The novel coronavirus, known as COVID-19, is considered a pandemic, which is defined by the WHO as, “an epidemic occurring worldwide, or a very wide area, crossing international boundaries and usually affecting numerous people” (WHO, 2020). COVID-19 is the common reference name for the coronavirus – “CO” representing corona, “VI” describing virus, “D” for disease and “19” signifying the year the virus was first detected (CDC, 2019). An important aspect of a “true pandemic” is that transmission occurs almost simultaneously worldwide (WHO, 2020). As such, a coordinated global effort to mitigate its impacts is imperative.

While illness and death numbers continue to increase, there is no facet of life that has not been impacted by the virus (Dubey et al., 2020). Governments, industries, schools, and private organizations needed to act swiftly while also being flexible to address the ever-shifting health recommendations as more is learned about the virus. To add to the levels of uncertainty, 2020 brought a contested presidential election, heated Senate and Congressional races, critical climate
crisis discussions and racial unrest. With the outcomes of the pandemic continuing to evolve we see burdened communities, families stressed to their limits with childcare needs, food insecurity, job loss and economic despair (United States Chamber of Commerce Foundation, n.d.). This despair is compounded by the lack of an end in sight for this pandemic (Walsh, 2020).

COVID-19 has had significant social and economic impacts to society (Nicola et al., 2020). The pandemic has impacted individuals and families due to reduced workforce because of illness, caring for children learning from home, caring for aging relatives, reduced work hours, limited patrons or customers, and companies simply shutting down (Office of Regional Operations, 2021). The social implications of COVID-19 include loneliness, isolation, lack of or reduced access to non-COVID-19 health care, lack of or reduced physical activity, children learning from home (with or without the help of and adult), reduced childcare and supervision, increased use of unhealthy coping skills like drug and alcohol use, and many more issues that continue to plague society (Singh et al., 2020).

The World Health Organization (2018) utilizes several factors when identifying a new virus and the potential risks it presents. Transmissibility and disease severity are critical factors when understanding the scope of a virus e.g., how far geographically it has spread, and if it has a risk of reaching pandemic status. The term transmissibility describes the average number of people infected by a single infectious person (WHO, 2020). Severity on the other hand, describes the case fatality ratio (WHO, 2020), or how many people will succumb to the disease. Data collected indicate that most COVID-19 transmissions occur by asymptomatic individuals, therefore, it is passed on by those who are unaware they are infected. (CDC, n.d.). Due to its transmissibility and severity the best preventive measures individuals can take is reduce contact with people living outside of the shared dwelling unit. In addition, washing one’s hands,
avoiding touching eyes, nose, and mouth, and wearing a facial covering, in particular face mask that covers the mouth and nose when you were in contact with others (CDC, n.d.), are other preventive measures. Risk reduction recommendations continue to evolve as experts and health leaders learn more about the disease (CDC, 2021).

While there are numerous actions being taken by cities, states, and non-government organizations to communicate risk and protect people from infection, such as closing schools and businesses, mask mandates, and large public health campaigns (CDC, 2019b), this study examined the short term and long-term systems, protocols, processes, and networks developed as a result of the pandemic by one large public university located in the southeastern region of the United States. An institution of higher education was selected as the study focus because of the public health implications of a highly social population living, working, and studying in close quarters (CDC, 2020). This institution was selected because of the extensive expertise in emergency management; faculty, staff, and facilities at this university are dedicated to critical event responses. Additionally, the University of Central Florida has a fully equipped emergency operations center and mobile command units that provide immediate response at the largest university in the United States (University of Central Florida, Emergency Operations Center, 2014).

There are two research questions of this study: 1. how has the organization (University of Central Florida) developed and enacted resilience during the COVID-19 pandemic (the focusing event), and subsequently, 2. how has the delivery of health promotion education within the organization changed? This study uses a mixed method design with qualitative and quantitative data collection and analysis methods. This study utilized two data collection methods: interviews (both self-interview and stakeholder interviews) and a collection of relevant secondary sources.
including policies, correspondence, and documents (Azungah, 2018). Both deductive and inductive approaches were used to analyze the collected data to explore organizational resilience (Thomas, 2006).

The timeline for the data collection follows the pandemic from December 2019 through August 2021. These dates were selected because information on the impacts of COVID-19 pandemic on individual health was more widely distributed after December 2019. August 2021 was selected to show how the university prepared to “return to normal” in the fall semester, approximately nineteen months after the study start date. Additionally, these dates were selected to show how the organization responded during three different semesters (fall, spring, and summer), each unique for all stakeholders.

During those nineteen months, the world felt the ripple effect of the deadly pandemic in so many ways outside from the death toll. The global shut down sowed economic implications that are far reaching and will impact individuals, families, and businesses for years to come (Nicola et al., 2020). According to the United States Bureau of Labor Statistics [USBLS] (2020), the unemployment rate peeked in April 2020 at its highest level of 14.7% in the United States since the Great Depression at 25% (USBLS, 2020).

There were systematic waves of industries (particularly service industries) that were impacted in the early stages of the pandemic which caused a domino effect that spread to other industries and produced significant economic hardship for individuals and communities. With limited travel and tourism, economic hardship was concentrated on the food and entertainment industries, and over time, local and state tax revenue streams were reduced (Organization for Economic Co-operation and Development [OECD], 2021). A reduction in state revenues impacted education funding, including higher education institutions, among many other
programs and services (OECD, n.d.). Moreover, record-breaking unemployment impacted already food insecure households, drove up homelessness, and resulted in economic instability for millions of Americans (Hawkins et al., 2020). To mitigate some of these impacts, the United States Department of Agriculture (USDA) approved free school meals for both in-person students and students learning online for a limited time (USDA, 2020; Dike, 2021).

The feeling of relief came sooner than expected with the potential for multiple vaccines (Burgos et al., 2021) and treatments. There were rapid developments happening daily regarding vaccines, including tens of thousands of participants in various stages of trial (Nicola et al., 2020). There were three available vaccines that were provided first for high-risk individuals including those over 65 years of age, pre-existing conditions, and health care workers and then by age groups (CDC, 2021). Now, vaccine development is focused on making a vaccine for children under the age of five years. Additionally, research regarding booster shots and the effectiveness of the protection it provides from viral transmission.

**Importance of Storytelling**

Keightley et al. (2012) discuss the use of self-interview methodology as an effective way to collect data in social research. Similarly, autoethnography provides personal perspectives, stories and reflections that enrich the context of what was experienced (Chang, 2013). Throughout the self-reflection process this author uses “I” to provide introspective commentary as the director of a health promotion education office at a large, public institution. The use of “I” provides context, connects interview responses with interpretation, and deepens the readers’ understanding of what is happening in a particular setting (Ettore, 2017; Doloriert & Sambrook, 2009).
The process of the self-interview is used to collect data about everyday experiences, recording social relationships and social structures that might aid in formation of personal memories (Keightley et al., 2012). When the researcher is also a member of the community that is experiencing the phenomenon, as in this study, the role the researcher takes could be as a co-participant (Lowes & Prowse, 2001). “All researchers bring their personal contexts with them to the process of research, and it is important to understand how different assumptions, theories, and backgrounds shape researchers’ decisions about their mixed methods research practice” (Plano Clark & Ivankova, 2016, p.192). Through the self-interview process, the researcher, with their own personal experiences, reflections, and reactions, is present in the data collected (Keightley et al., 2012).

The self-interview provides the opportunity to share personal perspectives, stories and reflections that enrich the context of what was experienced (Chang, 2013). This author uses “I” throughout the introspective commentary as the director of a health promotion education office at a large, public higher education institution. The use of “I” provides context, connects interview responses with interpretation, and deepens the readers understanding of what is happening in a particular setting (Ettore, 2017; Doloriert & Sambrook, 2009). The experiences shared by the researcher are considered primary data (Chang, 2013).

This study explores the impact of COVID-19 on the field of health promotion education at a large, public university situated in the southeast region of the United States. This mixed methods study includes a personal account of developing new health promotion policy and procedures while living (and working) through a pandemic. It is a unique experience of actively living through the experience that is being studied (Pillay & Pithouse-Morgan, 2016). Reflection through the self-interview process is more than just an account of what occurred; it provides
meaning and context in culture (Jeffrey, 2018) The use of self-interview as a part of mixed methodology provides much needed context to this unique and distinctive research opportunity.

The reflective element of this study is coupled with meeting notes, university documents, public records, planning reports and correspondence along with individual interviews with leaders across the organization. Collectively, these sources provided the data to conduct a thematic analysis through open and axial coding process to explore organizational resilience and health promotion efforts.

**Health Promotion and Resilience**

Health promotion is an integral part of community resilience (United States Department of Health and Human Services [HHS], 2005). Health promotion is defined as “the process of enabling people to increase control over and to improve their health (Kumar & Preetha, 2012).” This definition emerged from the Ottawa Charter, which was the first international conference on health promotion in 1986.

To reach a state of complete physical, mental and society well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs and to change or cope with the environment (WHO, n.d.) Health promotion education on a college campus typically focuses on student risk reduction education topics such as alcohol and other drugs, sexual health, and physical activity (White et al., 2009). During a pandemic, much needs to be learned regarding delivery of typical education and public health crisis response.

Health promotion is a common service provided by institutions of higher education (e.g., universities) (Newton et al., 2015). While there is variation among universities in where health promotion services are located within the organizational or administrative structure, health
education, resources are shown to aid student academic success (Lederer & Oswalt, 2017). The World Health Organization considers institutions of higher education as a “healthy setting,” meaning a perfect environment provide health education that will last a lifetime (Lederer & Oswalt, 2017). When health and well-being are a part of the academic mission and vision of a university, students are healthier and more engaged in the learning process (Lederer & Oswalt, 2017).

Historically, health promotion efforts were focused on developing strategies to reduce chronic illness like diabetes, heart disease and obesity (Basch et al., 2013). These efforts were often generalized and not targeted to specific audience and therefore missed the opportunity to teach prevention in such a way that resonates with the individuals of a specific the population. In a college setting, health promotion looked like reactionary programs and events aimed at engaging students in learning ways to reduce any harm from drinking too much, participating in risky sexual behaviors, or lacking physical activity (Czachowski et al., 2019). Research tended to focus on motivation, human behavior, and root causes of chronic illness. Health promotion emerged as a major shift in how to engage individuals in behavior change (Schmidt, 2016).

While these and other preventative behaviors remain critical for health promotion efforts, the shift toward “second generation” efforts expanded the concept of health promotion to include preventative and health promotive educational opportunities for students (Kumar & Preetha, 2012). These health promoting behaviors are far more focused on prevention and not just reaction to negative health outcomes. These interventions are considered part of lifestyle medicine, complimentary health interventions, or allied health services. Reducing academic impediments and teaching long lasting life skills became the cornerstone of many health promotion offices at college campus across the United States (American College Health
Association [ACHA], 2020). Health promotion is more relevant today because of the triple burden of disease combined with the globalization of trade, urbanization, and the ease of global travel (Kumar & Preetha, 2012). This radical shift in theory and practice is underscored even more during the COVID-19 pandemic.

Due to this paradigm shift in the field of health promotion, professionals are asked to address public health wholistically – spiritually, physically, emotionally, environmentally, and financially. Barriers to this approach are exacerbated by the already existing social determinants of health and health disparities (Connley, 2020). Social determinants of health consist of social and economic inequalities impacting people’s ability to have control over their own health (Braveman & Gottlieb, 2014). Social determinants of health include factors such as education, employment and neighborhood or environmental conditions (Gottlieb et al., 2019). Health disparities include chronic health conditions like diabetes, heart disease and obesity, that tend to impact people of color at a higher rate (Denham & Telford, 2020). The same is true for individuals contracting COVID-19. They are more likely to be people of color, living in close communities, and without adequate access to health care services (Substance Abuse and Mental Health Services Administration [SAMHSA], 2021). While public health officials and college administrators routinely develop health promoting programs that reduce barriers to healthy lifestyles, a global pandemic forces administrators to think differently including how to protect international students, residential students, and on-campus labs (Sahu, 2020).

Colleges and universities explored (and eventually adopted) a myriad of strategies to support students and staff during the pandemic (Aguilera-Hermida, 2020). Of particular importance for health promotion administrators was identifying strategies to maintain contact with students and connect them with services in non-traditional ways. While traditional methods
of engagement, such as student counseling centers, health services, and the dean of students’ offices remained vital, additional services focused on promoting physical activity and using innovative technology e.g., tele-health, virtual and video conferencing, to keep students engaged in their well-being. While keeping services open for student engagement, health promotion professionals were also busy connecting with emergency management teams to increase resilience.

Health promotion is directly aligned with critical incident response. Health is the foundation for all other resilience efforts (Wulff et al., 2015). A healthy population, as Wulff and colleagues (2015, p. 366) describe “is necessary for communities and organizations to thrive as well as to better withstand and recover from disaster.” A variety of strategies can be employed by health promotion professionals play during a critical incident response, such as utilizing strategic community development, creating partnerships, managing the efficient use of resources, and including community members during the incident (Jackson et al., 2017). The COVID-19 pandemic has highlighted the value of health promotion experts during each phase of the emergency management response (Corbin et al., 2021). Moreover, the COVID-19 pandemic has solidified the role of health promotion in all systems; political, cultural, social, and educational (Corbin et al., 2021).

Many of these new ways of providing services to students would potentially be lost without a written record of what was done and why. More importantly is the new way of conducting the work of health promotion on college and university campuses. The unique data collected for this study including, reflective material, official university documents and correspondence, and individual interviews with key stakeholders, provides relevant and timely information to better understand how this virus impacted a university campus. In addition to
providing findings that advance scholarship, this study provides helpful recommendations for college administrators and health promotion educators to use in the unfortunate event that another pandemic (or similar critical event) occurs.
CHAPTER TWO: LITERATURE REVIEW

A thorough review of literature was conducted on the responses to COVID-19 by institutions of higher education and related information on community impacts from coronavirus. In addition, a targeted review of relevant emergency management literature was considered. These sources included studies of major events that required local, state, and federal responses, specifically the Influenza Pandemic of 1918, September 11th terrorist attacks, and Hurricane Katrina. Additionally, notable literature from the emergency management perspective focuses on organizational resilience was included in the literature review. Moreover, literature focused on self-interview along with the utilization of a mixed method study design during a major crisis was reviewed. A combination of peer reviewed journal articles, scholarly books, and articles were utilized in this literature review. The purpose of the literature review is to identify the theoretical elements that inform the process of data collection and to develop a conceptual framework that links a critical event to organizational resilience. This chapter also includes gaps in literature that call for a study such as this one. There is a clear gap in available literature regarding how universities develop resilience to respond to global pandemics as well as how health promotion professionals are impacted.

Health Promotion and resilience are completely intertwined. “Health underpins all other resilience efforts” (Wulff et al., 2015, p. 365). At our core as a society, our health is necessary for organizations to thrive and better avoid or recover from any disasters. Due to this need to ensure the U.S. is prepared to withstand such crises that may impact health, there have been multiple agencies tasked with the effort including a health and well-being effort through the FEMA Whole Community program, the Health and Human Services’ National Health Security
Strategy, along with the Center for Disease Control and Prevention’s Public Health Preparedness Program and the Assistant Secretary for Preparedness and Response’s Hospital Preparedness Program that provides grants aimed at building community resilience (Wulff et al., 2015). This is a clear indication that when health promotion professionals are a part of the mitigation, preparedness, response and recovery process for a community, the intent is to increase resilience.

**COVID-19 at Colleges**

The coronavirus has impacted every industry across the globe, including higher education (Nicola et al., 2020). From this point forward “universities” will be used to indicate institutions of higher education, which include two- and four-year degree granting institutions. Universities often serve as anchors in communities in which they are embedded (OECD, n.d.). They provide employment opportunities, are sources of innovation, members of local and regional partnerships, and serve as a “door” for personal growth and professional advancement (Myran et al., 2021; Jongbloed et al., 2008). In addition to being a stakeholder in communities, students represent a large portion of the population in the United States (U.S.), with more than 20 million people enrolled in universities (Lederer & Oswalt, 2017). Campuses need to plan and prepare similar to how cities prepare for service delivery and maintaining and improving community well-being.

With more than 33 million COVID-19 cases in the U.S. alone over the past year, it can be difficult to see an end to the pandemic in sight (CDC, 2021). The COVID-19 cases cause a range of manifestations, from minor cold or flu symptoms to major respiratory distress requiring intubation or death (Mayo Clinic, 2019). As of May 31, 2021, coronavirus has taken the lives of more than 590,000 people in the U.S. (CDC, 2021). Much of the world responded by going into “lockdown.” People were quarantined and required to stay home. Travel with limited and some
cities mandated a curfew (Ren, 2020). People who were able to work from home did so, but many front line and service personnel needed to come to work, putting themselves at risk of infection (Adams & Walls, 2020). When people are sick or in fear of becoming infected or infecting others, people are unable to work, study, and lead normal lives (Khan, et al., 2020). The lockdowns, required quarantines, and general fear of infection impacted all communities.

**Tracking COVID-19 Cases**

A COVID-19 tracker was developed by The New York Times to identify cases at universities that are separate from cases counted in the community. This tracker provides an accurate data source for researchers to better understand COVID-19 at universities (Cai, et al., 2021), and is used as a reliable data source for the purposes of this study. According to The New York Times, as of December 11, 2021, 397,000 cases of new coronavirus cases emerged on college campuses, including 90 deaths, since the start of the pandemic. Most cases on college campuses have been announced since students returned to campus during the fall 2020 semester. Additionally, most of the deaths reported in the spring of 2020 were college employees and not students (Cai et al., 2021), asking the question if it was safe for employees to return to campuses.

As cases were continuously tracked, hotspots were designated at universities across different states. According to The New York Times COVID-19 tracker, as of January 2021, Texas universities collectively reported the highest number of positive COVID cases (31,157) across 84 institutions (Cai et al., 2021). The state of Ohio reported the second highest number of cases at 19,842 from 62 institutions. Florida ranked third highest with 18,810 cases in 129 schools reporting. Because student-athletes live and practice in close quarters, athletic departments were not exempt from changes in plans and concerns for players and spectators alike. More than 6,000 cases were identified in athletic departments of the 130 universities that
compete at the highest level of Division I football (Cai et al., 2020). With increasing cases, decisions needed to be made about the athletic season. Boston College, for example, announced that its football team would not participate in a bowl game, which would normally increase ticket sales and fundraising opportunities (Redden, 2020b). Seemingly, there is not a corner of universities that was not impacted by COVID-19.

As the virus continues to spread across the country, different states experience surges and spikes in both new cases and deaths (Jogalekar et al., 2021) and as such, universities and colleges continue to be impacted. Currently, there is not a national standard for counting or reporting cases at universities. Some universities only reported statistics for on-campus residents, while others removed cases once the student recovered (Cai et al., 2021). Moreover, there is no uniform standard on the availability of statewide data. As such, sharing data across universities become widely inconsistent (Foraker et al., 2020).

When a report of positive cases data from universities was requested, some universities responded with zero cases, however more accurate reporting was only achieved in some instances after open records requests were provided (Cai et al., 2020). It was also found that some universities subtract cases from their tallies once people recover from the virus so there are only active cases being reported (Cai et al., 2020). Further, Cai et al. (2020) found some universities report only cases that are tested on campus at the university health center or testing center. Because universities report data differently, and because cases continued to emerge even in the months when most campuses were closed, it became clear that there is a need for more accurate and up-to-date record keeping by the responsible agencies.

It became necessary for universities to develop a strategic response to mitigate the surges and spikes in positive COVID cases (Ivory et al., 2020). Universities invested in testing
strategies, technology infrastructure, and safety measures like air purifying filtration systems, signage, and hand sanitizing stations (Redden, 2020a). Some universities, hoping to quickly identify cases and prevent broader outbreaks, tested students aggressively to detect cases in some instances that might otherwise have been missed (Redden, 2020a). The University of Nebraska-Lincoln for example, where nearly 2,000 people tested positive in the fall 2020 semester, required campus community members be tested every two weeks in the spring 2020 semester (Redden, 2020b). Other strategies included faculty in research opportunities testing the wastewater to ascertain potential asymptomatic individuals (Thompson et al., 2020). Further, some institutions began wastewater testing to identify buildings were potentially high incidents of COVID-19 may occur, such as residence halls, common buildings like student cafeterias or student unions, and large academic buildings (Gibas et al., 2021). Ostensibly, universities attempted to stay ahead of the spread of the virus using all means necessary.

In addition to random student testing and wastewater surveillance, administrators had to be creative and innovative in an effort to keep up with the new research. Universities had to make difficult decisions and continuously pivot as more was learned about how the virus spread, how long it stayed on hard services, and how effective protective strategies were. While some institutions focused on canceling large university events, others moved courses online to reduce potential transmissions (Redden, 2020b). Collin College in Texas for example, where a faculty member died from the virus, moved all winter term classes online, citing a surge in regional coronavirus cases. The University of North Carolina at Chapel Hill, which quickly aborted an attempt to hold most fall classes in person after an early outbreak, required undergraduates to be tested before returning to campus (Redden, 2020b).
As testing became more widely available and mask mandates were in place at many campus locations, campuses like the rest of the world, turned next to the hope of vaccines (Forman et al., 2021). Subsequently, a question of upmost importance was whether universities would be able to be a vaccine distribution site for the campus community? If so, how would it all be planned, funded, and communicated at the university and surrounding community where many students, staff and faculty lived?

There were three vaccines approved by the United States Food and Drug Administration’s (FDA) Center for Biologics Evaluation and Research (CBER) (CDC, 2014). After further investigation, it was determined that only two of the three vaccines were preferred in the prevention of COVID-19 (CDC, 2022). The vaccine development process includes a six-step process of exploratory state, pre-clinical stage, clinical development, regulatory review, manufacturing, and quality control (CDC, 2014). These steps were taken for the FDA approved vaccines for emergency use developed by Johnson and Johnson (Janssen), Moderna, and Pfizer-BioNTech for individuals sixteen years of age or older (FDA, 2021). There are limitations to the vaccine distribution planning as both Pfizer and Moderna required a freezer for storage and are given to individuals in two doses (Athoff & Stuart, 2021). Many locations that might be ideal to serve as a vaccine site, did not have the proper freezer to keep the doses viable. There are also challenges tracking patients coming for two doses of the vaccine (Athoff & Stuart, 2021). Because the Johnson and Johnson vaccine only required one dose and did not need the freezer on site, it seemed this option would work best for many vaccine sites with the ease of distribution and reduced costs (James, 2021). There was a rare blood clot associated as a side effect in six individuals that received the Johnson and Johnson vaccine (Mahase, 2021). The Johnson and
Johnson vaccine was halted for a brief time while more information was gathered (Mahase, 2021), but ultimately its distribution continued.

Since making COVID-19 vaccines available in December 2020, more than 254 million doses have been provided within the U.S. alone (CDC, 2022b). With many opting to get vaccinated, the CDC updated some prevention guidelines like limiting mask wearing guidelines. After the success of administering vaccines was experienced by cities and states in the U.S. (Schoch-Spana et al., 2020), the question of requiring vaccines soon became a debated topic among higher education institution administrators.

Return to Campus and Vaccines

To return campuses back to “normal operations,” more universities reported they planned to require students to be vaccinated prior to coming to campus (Nadworny, 2021). Universities defended the decision to require vaccination by reminding the public that vaccination requirements are not a new public health effort designed to reduce infectious disease (Kecojevic et al., 2021). Almost 90% of universities require proof of vaccine for measles, mumps, and rubella (MMR) prior to starting classes. As of April 11, 2021, 100, four-year institutions required proof of vaccination to enroll. In addition to students, according to the Equal Employment Opportunity Commission, employers could require staff to provide proof of vaccination prior to the start of the fall semester (Nadworny, 2021). These potential requirements also necessitate thoughtful policy development and a look to past critical events could aid in the process.
Theoretical Approach

Organization Resilience

Resilience has been conceptualized differently by multiple fields of study in the social science and as such it can be difficult to define (Bruneau, et al., 2003). Due to the variety of fields utilizing resilience as a concept, Table 1 organizes different definitions of resilience used by public administration, emergency management professionals, and health promotion educators. Resilience is often used to describe both strength and flexibility. Moreover, Bruneau (et al., 2003) described resilience as reduced failure probabilities, reduced consequences from failure and reduced time for recovery.

Wildavsky (1988, p. 77) suggests resilience is the “the capacity to cope with unanticipated dangers” (Wildavsky 1988, p. 77). From a different perspective, the American Psychological Society [APA] (APA, 2012) defines resilience as the process of adaption during adversity, trauma, tragedy, threats, or stress. In other work, notably Comfort (1999, p.21), capacity building as a key to resilience. Improving individual and community capacity includes adapting existing skills and resources to counter potential external threats. The National Aeronautics and Space Administration [NASA] defines resilience in two categories; specified resilience – resilience of parts of a system to identified disturbances, and general resilience – capacity of all parts of the system to cope with kinds of shocks or disturbances, which is also referred as “coping capacity” (NASA, 2021).

Considering resilience as a function of capacity building, researchers focus on what the organization has, what it needs, and what actions steps it must take to increase capacity. In other words, to increase organization resilience, an organization or agency first must understand how to increase the capacity of the organization (Bruneau et al., 2003). Capacity building can include
a supportive environment and ability to adapt or evolve. One such study by Brouselle et al. (2020) states that to increase capacity, leaders must improve their ability to make decisions and adapt. This is particularly important for evolving critical events where leaders must have support from their organizations. Jung and Song (2015) state organizational resilience depends on structures, processes, and practices that increase flexibility and capacity to manage disruptions to operations. In short, capacity increases as flexibility in infused in the organizational system.

Duit (2016) shares resilience as a two-prong concept, either a measure of a societal function like access to clean, running water or a governance structure, like the communication system. The definition used in the theoretical foundation of this study is provided by the National Research Council (2012). In their definition, resilience is the “ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events.”

Table 1: Resilience definitions and uses.

<table>
<thead>
<tr>
<th>Type of Resilience</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Capacity building</td>
<td>Capacity building is a key to resilience or the ability to adapt existing skills and resources (Comfort, 1999).</td>
</tr>
<tr>
<td></td>
<td>The ability to cope, “the capacity to cope with unanticipated dangers” (Wildavsky 1988, p. 77).</td>
</tr>
<tr>
<td>Resilience as process</td>
<td>National Research Council defined resilience as the “ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events” (National Academy of Sciences, 2022).</td>
</tr>
<tr>
<td>Adaptive resilience</td>
<td>Jung and Song (2015) state organizational resilience depends on structures, processes, and practices that increase flexibility and capacity to manage disruptions to operations. In short, capacity increases as flexibility in infused in the organizational system.</td>
</tr>
<tr>
<td></td>
<td>To make decisions and adapt, particularly to evolving critical events, leaders must have support from their organizations (Brouselle et al., 2020)</td>
</tr>
</tbody>
</table>
Adaptive resilience is defined as the extent to which an organization can learn and implement changes (Duit, 2016).

| Recovery to normal | Reduced failure probabilities, reduced consequences from failure and reduced time for recovery (Bruneau et al., 2003). |

To create increased capacity, organizations first need to decide what steps are fundamental to ensure continued operation (Bryson, 2018). What parts of the agency are critical to continued service? Facilities, safety, power, and shelter are considered critical for communities to focus on first (Bruneau, et al., 2003). While these vital services are also important within an institution of higher education, one could argue that communication tools could be considered the one of the most important services (Savoia et al., 2013). While reviewing the definition of resilience utilized to measure adaptability, one might consider what factors contribute to increased capacity.

Dimensions of community resilience can be applied to organizations or agencies as well (Bruneau, et al., 2003). Because resilience cannot be measured by only one measure of performance, resilience must also contain the properties of robustness, redundancy, resourcefulness, and rapidity. Each of these properties can be applied to the four dimensions of resilience described by Bruneau et al. (2003), including technical, organizational, social, and economic. To determine if a community or organization has been resilient, a baseline measure is necessary. This enables a comparison of the aforementioned dimensions pre and post event (Bruneau, et al., 2003). Boin (2005) states that once the event is over and there is a return to “normal,” lessons can then be learned. Boin et al., (2013) asks further if the leaders of the organization allowed for reflection, encouraged feedback and whether the process was recorded so others could learn from it? If organizations can build systems that consider the dimensions
(technical, organizational, social, and economic), perhaps their capacity to be resilient and
efficient increase (Duchek, 2020).

Efficiency in emergencies is a core goal of public administrators (Mergel et al., 2020). As
described by Bruneau et al. (2003) getting communities and organizations through the recovery
period and “back to normal” as quickly as possible is ideal. Getting critical services to those
most in need in a timely manner is at the core of many emergency management goals.
Streamlining processes and creating decision rules and procedures are strategies for providing
supplies and services quickly to people in greatest need. Standardized service delivery via formal
processes reduces employee stress by clearly outlining expectations and their specific roles and
the sequence of steps of the tasks they are responsible for implementing (Palmiter et al., 2012,
Van de Walle, 2014). This “comfort,” however, may also stifle creativity. Van de Walle (2014)
continues stating highly efficient organizations have low innovative capacity.

Van de Walle (2014) suggests routine practice of responding to non-routine events can
increase resilience and recovery. Organizations that “normalize” the process of quickly shifting
resources during normal business and emergency events aids in the creation of flexible and
innovative organizations. The practice of making adjustment in the absence of an event, such as
when organizations are conducting their business “as usual,” encourages innovation while also
removing the stressors that originate from emergency events.

DeJoy and Wilson (2003) describe the integration of health promotion (its principles and
capacity via dedicated staff) into an organization’s practices and operations as a core strategy to
improve the physical and psychological well-being of employees. This, in turn, has a positive
impact on organization resilience.
It is assumed organization leaders want to return to normal after an emergency event as soon as possible. However, an immediate return to a pre-event environment within the organization can stifle innovation that is necessary to adequately respond to future events (Bruneau et al., 2003). DeJoy and Wilson (2003) state that the wellness of employees should start with the adoption, by the organization, of best practices in health promotion. In addition to improving the organization’s resilience, it can improve performance, which is a common organization objective. Bruneau et al. (2003) discuss the tensions that emerge from the need to innovate and become more flexible with preferences for stability. Health promotion provides one perspective that integrates these objectives; its principles are oriented toward learning, adapting, flexibility and change with a goal of improving the ability of an organization to withstand shocks or critical events. Underpinning the conceptual relationship between these factors, which are described by Bruneau and replicated in Figure 1, is a balance between flexibility and stability. Both impact an organization’s ability to adapt, but health promotion can be considered a vehicle for achieving a greater balance between the two components.

Figure 1. Balance between stability and flexibility throughout emergency response.
Both flexibility and stability play a part in an organization’s ability to cope during an emergency, however, Brunelle et al. (2003) contends that this balance continues to influence adaptability much longer. Preferences for maintaining status quo is important to consider in understanding resilience post-event or what emergency managers refer to as the recovery phase of a disaster. Understandably, an organization’s leaders seek to create a stable environment that calms or regulates the workforce after an event. Instead of returning to normal operations, Kennedy et al. (2019) recommend using the opportunity to build the organization back in a healthier, more resilient way. In looking to create that balance, organization leaders may have a limit to change tolerance. Some organization members might interpret this intolerance as inflexibility or not being “heard” by leadership.

This push and pull of organization stability and flexibility is depicted in various instances described below. With a focus on recovery, in particular to stabilize and return to pre-disaster conditions, it is possible the organization misses the opportunity to build environments that can protect the organization during future crises (Kennedy et al., 2019). This very experience is what Kennedy et al (2019) argues could increase resilience for organizations. For example, The National Aeronautical Space Administration (NASA) created a vulnerability and resilience framework in the context of survival in the arctic (NASA, 2020). This resilience framework consists of drivers, impacts, consequences, and responses that all play a part in organization or community vulnerability. Within this cyclic process, different scenarios of stressors were considered including causes of change, changes to ecosystems, social systems, and services (NASA, 2020). This framework describes high resilience as a contributing factor to organization sustainability when the organization wants to return to their previous state (NASA, 2020). The desire to “return to normal” predicates the question, can an organization be resilient if it simply
survives without change or adaptation? Reviewed briefly in the following sections are three notable events that demonstrated some elements of how communities adapted and changed.

**Previous Critical Events**

To start to understand the impact of acute health events, it is critical to understand how epidemics, pandemics, and plagues are defined. Epidemics are defined by the World Health Organization (WHO) as an illness where the number of cases is more than expected (Kelly, 2011). The WHO defines pandemics as epidemics that occur worldwide, crossing international boundaries and impacting a large amount of the population (Kelly, 2011). Lastly, a plague is defined as an infection caused by a specific bacterium, Yersinia pestis and is not a general term for epidemics or pandemics (WHO, n.d.).

Acute and critical illness breakouts have occurred over history causing us to learn more about illness, disease and other crises that threaten our lives. There are records of illnesses wiping out communities as early as 3000 B.C. with the Hamin Mangha archeological site in China where people died so quickly, it was clear mass graves were necessary (Hays, 2005). The major epidemics and pandemics that we have learned about in our history books include the Bubonic Plague or Black Death as it was known as, occurred from 1346-1353 took an estimated 75 – 200 million people (Hays, 2005). These communities were not prepared for the illness and certainly not for the vast number of deaths they would have to address.

Feinberg (2005) states a commonly held assumption is that communities must be able to react to a catastrophe for at least 72 hours before federal intervention. The concept of 72-hour response requirement, however, does not consider the scale of the event (Feinberg, 2005). It may be reasonable to expect a local community, agency, or organization to be able to contain an event
for 72 hours if the event was an expected or typical event like a hurricane or a blizzard, however, the scale of the current pandemic is global in nature with more than a year in duration (Feinberg, 2005). Although this 72-hour concept is usually discussed independent of event scale, the basic premise is that for any natural or human caused disaster the local community must be able to understand, react and respond to unfolding events for the first three days after the disaster.

Some disasters do not occur all on one day, but over several days and often have ripple effects across communities (Walsh, 2007). These ripple effects are called secondary events or secondary hazards and result from an initial event or triggering event (Federal Emergency Management Agency [FEMA], n.d.). An example of a secondary event could be flooding after a blizzard. The response to the secondary events can be just as devastating as the event itself with more lives lost and resources strained. The toll of the event must include the secondary hazards to comprehend the extent to which a community has been impacted (Perry et al., 2001).

Communities and agencies have traditionally measured devastation quantitatively; the amount of lives lost, cost of rebuilding property, and the quantity of jobs lost are common measures (Gotham, 2008). However, there are alternative ways to determine how people are impacted by critical events. One such measure to consider is the range or how widespread is the emergency - one neighborhood, one community, one city, and so on (Klinenberg, 2002). An additional measure of impact is how long the event lasted or how long it takes to fully recover (Carlin et al., 2017). Examples of critical events that have multiple ways of measuring impact include the Influenza Pandemic of 1918, September 11, 2001, and Hurricane Katrina in 2005.

**Pandemic 1918**

Influenza Pandemic of 1918, sometimes referred to as the “Spanish Flu” was the most recent health crisis that measured pandemic status (CDC, 2019). The Center for Disease Control
and Prevention [CDC] (2019) shares that it has been estimated that 500 million people were infected with the H1N1 influenza virus world-wide. The Influenza Pandemic of 1918 lasted roughly eighteen months and took the lives of an estimated 50 million people (CDC, 2019). The pandemic was devastating and quick to spread, taking the lives of an estimated 195,000 Americans in one month alone (CDC, 2018). To fully appreciate how widespread the impact of a pandemic that occurred more than 100 years ago, it is essential to compare the toll to other critical events. Adjusting for today’s population, the death toll of the Influenza Pandemic of 1918 would have been and estimated 175 million deceased (Jordan et al., 2019).

There are multiple theories as to how the pandemic developed, how it spread and what contributed to the virus’ persistence. All important lessons that can be used today to manage the COVID-19 pandemic. It is thought that the pandemic sparked due to World War I as troops traveled globally, faced unsanitary conditions, and experienced major overcrowding (CDC, 2018). This pandemic also highlighted the considerable influence mass transit and mass consumption has on a world that now travels together, spreading illness faster (Tomes, 2010). Medical science had not yet progressed to meet the public health education demands and no vaccine was yet developed for this strain of the flu. The United States also experienced a dire shortage of trained, skilled professional nurses because of the war, limiting the care of patients (CDC, 2018). Lastly, a large-scale resurgence of the virus was blamed as people gathered in large groups to celebrate Armistice Day where soldiers and citizens celebrated the end of World War I (CDC, 2018).

There were efforts put in place to reduce transmission policies developed to fight against continued transmissions. Public health education was developed by the American Public Health Association to educate citizens on how they could reduce the spread themselves with
understanding better how the virus is transmitted (CDC, 2018). City officials across the U.S. employed various interventions to help reduce vulnerabilities like closing public places where people would gather indoors like theaters, required those infected to be isolated at home or in hospitals, and required anyone masks to be worn (Tomes, 2010). Requirements for skilled nurses were reduced as well to increase staffing for hospitals as well as recommending staggered hours at stores, factories, and public transportation to reduce overcrowding (Tomes, 2010). These were all helpful policy, environmental, and behavior changes albeit with a slow ability to share information that could have been useful to medical staff and citizens. History took note of this pandemic with best practices and norms were created to manage any other health crisis (Kain & Fowler, 2019).

*September 11*th, 2001

Eighty-three years after the Influenza Flu of 1918, New York City along with the rest of the nation was devastated by the four coordinated terrorist attacks on September 11, 2001. The attack focused on the two planes that struck the World Trade Center twin towers, the United States Pentagon and a fourth plane that crashed in a field in Pennsylvania which was believed to be headed for the United States Capitol or White House (Kean & Hamilton, 2004). More than 2,600 individuals perished, surpassing the deaths at Pearl Harbor in 1941 (Kean & Hamilton, 2004). This attack altered much of what citizens and the world had come to know as safety (Margulies, 2013).

Because of the attack and rising fear of vulnerabilities September 11*th* exposed, there was an immediate response to protect the nation. In 2001, the U.S. defense budget rose from $287 billion to $530 billion due to terror attacks (Plumer, 2013). While defense spending escalated,
individual lives shifted toward safety as well, racial tension escalated, and violence increased (Huddy & Feldman, 2011). How people traveled changed instantly from shutting down flights entirely (Bureau of Transportation Statistics, 2012) to more extreme security screenings that still exist today.

In addition to the changes and stressors citizens experienced, there were important political and policy changes as well. There were major governmental services and agencies were created in response to terrorism including the Department of Homeland Security, National Counter Terrorism Center as well as policy development with the U.S. Senate passing the Homeland Security Act in 2002 and the Intelligence Reform and Terrorism Prevent Act of 2004 (U.S. Senate Committee on Homeland Security and Governmental Affairs, 2021). Additionally, the creation of the National Response Plan in 2004, the Presidential Preparedness Directive 8 in 2011, and the National Disaster Recovery Framework in 2011 focused on community capacity, defines roles of agencies and organizations while connecting all potential hazards through the same framework (Hu, Knox, & Kapucu, 2014).

As the previous review of important historical events shows, adaptation is a critical factor in sustainable organizations where systems of decision-making need continual transformation in the face of future (and in many cases unexpected) events (NASA, 2020). One such example of this transformation that illustrates this framework is after September 11th when the Department Homeland Security (DHS) was established to address flight safety (DHS, 2015). After September 11th, we could not simply return to how things were done prior to the incident. The entire travel system was transformed with laws, policy and behaviors aimed at supporting safety (DHS, 2015).
While major governmental processes changed, a long military conflict was also waged in the Middle East in an attempt to solidify U.S. and ally safety (Kean & Hamilton, 2004). Not only were there long-standing adaptations made by government agencies and organizations due to this conflict, but citizens also experienced catastrophic losses. According to the United States Department of Defense (2021), the military conflict lasting 20 years with more than 50,000 casualties.

**Hurricane Katrina**

Previous critical events that have been researched like the Influenza Pandemic of 1918 and September 11th were prolonged events with continued threat to life and property while people were caring for the ill and injured. Hurricane Katrina was a category five hurricane that struck the city of New Orleans and the surrounding area including Mississippi, Alabama and more in 2005 (Johnson, 2006). According to Brigadier General David Johnson of the National Oceanic Atmospheric Association (2006) Hurricane Katrina was responsible for more than 1,800 deaths with more than $125 billion dollars of damage. Hurricane Katrina was such an enormous storm that took a total of nine days to pass hitting the gulf coast area over a period from August 23, 2005, through August 31, 2005 (Johnson, 2006).

After a natural disaster like Hurricane Katrina there is an opportunity to learn ways to mitigate loss during future hurricanes. Feinberg (2005) points to lessons learned about capacity to respond and depending on currently systems designed to respond to major stores but not that to the scale of this major storm. A pivotal lesson learned by Feinberg (2005) was that a flexible structure and strategy is needed including equipment, data, and staffing. This flexibility needs to be utilized because events will occur beyond existing preparedness strategies (Feinberg, 2005).
While it has been said that Hurricane Katrina is a once in a lifetime storm, the lessons learned can aid in response to future storms that come more frequently (Townsend, 2006).

Interestingly, these three critical events occurred over the past one hundred years, have countless differences and similarities. There are lives lost, pain and suffering along with livelihoods hindered, property and homes destroyed and emotional scars that last generations (Boss, 2006). There are different responses, policies and laws passed to mitigate loss and increase chances of survival. Each critical event provides lessons learned that can be routinely reevaluated and practiced for better outcomes. Each critical event also highlights gaps in literature that this study aims to address.

**Gap in Literature**

During COVID-19 it was clear that organizations, agencies, and institutions of higher education need to not only endure the crisis but adapt and transform (Hadley et al., 2020). In fact, many colleges have already felt the impact of the pandemic having to make changes including downsizing, offering more online learning opportunities, increased financial aid through donors, or even having to file for bankruptcy and close (Hadley et al., 2020).

The COVID-19 pandemic is an ongoing, evolving event. Literature is being developed from multiple disciplines on several topics ranging from epidemiology and the development of vaccines to unemployment and education. Yet, there is limited research on the impacts of COVID-19 on institutions of higher education.

We, as a society, have only begun to scratch the surface of research topics surrounding COVID-19 and the ripple effects of this crisis. Public administration, as a field, has much to gain from studies that utilize a variety of methodologies and populations. As such, this study
highlights one university’s health promotion efforts (and its changes) over a nineteen-month period during the COVID-19 pandemic.

College and university health promotion research and practice as they relate to major crises and disasters should be studied because of the unique settings they provide, and because of the large populations they serve (Lederer & Oswalt, 2017). Studies on health promotion in a university setting during major events and emergencies (such as the COVID-19 pandemic) will add value to understanding organization resilience. Studying COVID-19 (in the context of higher education) will provide new information on how to measure resilience and identify measures that aid in efficient recovery (Bruneau, et al., 2003).

Health promotion and risk reduction information is a part of how recovery can be more efficient. This important safety information must pass through multiple organizations, agencies, departments, and then on to citizens must be done efficiently and accurately. The information shared by health promoting and regulating organizations changed quickly as research was unveiled. As a result of swiftly changing information multiple communication networks needed to be utilized. Communication between agencies COVID-19 has also highlighted the need to increased data sharing across different organizations, government agencies and even globally (Jung & Song, 2015). This shared information across organizations can help to reduce the spread of a virus (Van den Broucke, 2020). Due to several factors including privacy concerns, data is not easily shared among different health care, educational, and public administration agencies is limited (Foraker, et al, 2020). Research focused on improved shared data could revolutionize emergency management (SAMHSA, 2016).

Strategies on shared data during critical events is only one of the many gaps in literature as a global pandemic is a complicated and multifaceted critical event. The gap in literature this
The study is focused on resilience in organizations during critical events and how delivery of health promotion services is impacted during a pandemic. A once in a century pandemic provides the opportunity to explore various topics and better understand how it impacts our lives, organizations, and culture.

This study investigates organizational resilience during a global pandemic lasting longer than any pandemic in history and significantly longer than recent critical incidents discussed above. Due to COVID-19, this is the first-time higher education institutions have had to respond during a pandemic lasting two years. This is an opportunity to test critical response plans, better understand different processes and develop policies to address various challenges. This is the opportunity to learn how higher education institutions can be resilient during a crisis so they are better informed and prepared should another pandemic or other critical incident occur. It is also an opportunity to understand how health promotion is impacted within an organization during a pandemic.

Lastly, the methodology selected (concurrent mixed method design) for this study presents another area of literature that is lacking. “The least developed area of mixed method research is the process of data integration, or mixing” (Guest, et al., 2014). The gap in literature specifically focuses on how data integration in application of thematic analysis, precisely what is applied in this study (Guest et al., 2014). Chapter three describes the methodological approach, data collection process, limitations, and analytical strategy to address these gaps in the literature.
CHAPTER THREE: METHODOLOGY

Mixed Methods Analysis

Both qualitative and descriptive methodologies are commonly used in a variety of social science research settings, including education and public administration (Nassaji, 2015). All descriptive research is done to describe a phenomenon with its characteristics (Nassaji, 2015). Two types of methodologies (qualitative interviews and content analysis) were selected for this mixed methods study. Utilizing a mixed methods approach allows for both interpretivist and positivists epistemologies (Fugard & Potts, 2010). The data used in this study was collected through interviews and organization documents for analysis. The mixed method design was selected to provide richness and depth to very personal experiences shared during a pandemic (Creswell, 2006). After data collection, thematic analysis is often used to discover a level of patterns or meaning within the data (Fugard & Potts, 2015).

While mixed methods provide a deeper understanding of the phenomenon studied, there are other benefits of using a mixed method design. These benefits include creating a stronger study because the two approaches offset weaknesses, provides more extensive evidence, and can facilitate interdisciplinary collaboration (Guest et al., 2014). Integrating methodologies also benefits the researcher by supplementing data sources and strengthens results by triangulating data (Guest et al., 2014). This chapter will review the research design including validity and reliability of selected design, explanation of data collection methods, and a detailed description of collected data (self-interview, stakeholder interviews, and organization documents).
Data Collection

Research Design

The two overarching questions this study seeks to answer are: in what ways has the organization, (University of Central Florida), demonstrated resilience due to the COVID-19 pandemic (the focusing event), and subsequently, how has the delivery of health promotion education within the organization changed? A concurrent mixed method research design is utilized to collect three types of data in this study. This study couples autoethnographic self-interview with stakeholder interviews and review of relevant university documents to explore organizational resilience and employs both deductive and inductive approaches to analyze the resulting data (Thomas, 2006). A three-pronged data collection strategy was utilized: self-interview, stakeholder interviews, and a collection of relevant secondary sources including policies, correspondence, and documents (Azungah, 2018). Using multiple data sources creates triangulation as described by Guest, MacQueen, and Namey in their 2014 publication. The next section describes the research sample, data collection and data analysis for each of the study components.

A concurrent mixed method research design provides a way to add context to the experience studied (Mayoh & Onwuegbuzie, 2013). Figure 2 illustrates how a concurrent mixed methods design integrates data during the analysis part of the discussion section of the study. The data collection process in qualitative research is often applied both at the same time and iteratively (Creswell & Plano Clark, 2018)
Autoethnography

Autoethnography has been described as stories that express and interpret personal cultural experiences both artistically and analytically (Chang et al., 2013). The “culture” discussed in an autoethnography is one's own description of an event with personal context (Ellis et al., 2011). This methodology applies personal experiences to describe cultural beliefs, practices and experiences and acknowledges and values a researcher's relationships with others (Chang et al., 2016). The individual experience is valuable because people experience things differently and therefore interpret it differently so there is a uniqueness in each story and interpretation (Spradley, 1979).

From an autoethnography approach, the context rich stories of the researcher’s personal experiences are often used to describe cultural beliefs, practices, and values from the researcher’s
perspective (Adams et al., 2015). Context, along with the qualitative data that is often produced through an ethnographic study, provides deeper understanding of the research setting. It emphasizes a holistic approach to collection (Nassaji, 2015). Autoethnography can aid in the advancement of research strategies, particularly for integrating personal experiences into data collection and analysis, and even though it is an underutilized method compared to quantitative research designs (Vesa & Vaara, 2014).

While the collection of autoethnographic data can be conducted through journaling, diaries, artwork, or recordings, the process of collecting data is more complex as the author is also the researcher (Wall, 2008). Zavattaro (2020) defines autoethnography as both a process and an outcome. As a process, autoethnography focuses on what one does (Hughes & Pennington, 2017). As a product, it is considered what one gets after completion (Ellingson & Ellis, 2008). From both perspectives, it utilizes narrative as descriptive and interpretive tool for researchers (Boufoy-Bastick, 2004).

This narrative storytelling gives meaning to identities, relationships, and experiences which in turn help create relationships with the past and those that feel “different than” others (Adams et al., 2015). Zavattaro describes authoethnography as “accessible” in that it connects with larger societal phenomena, it is applicable to practice, it appreciates lived experiences, and it allows for a bit of honesty and vulnerability that is missing from traditional academic writing" (Zavattaro, 2020 p.7). This expressed vulnerability and honesty are benefits for using autoethnography in this study.

Each individual person has their own unique story living through the COVID-19 pandemic. Autoethnography is selected as the methodology specifically because of the distinctive research topic, experiencing a pandemic. Living through a pandemic is truly a unique
cultural, political, economic, and emotional experience that can be examined through an autoethnographic lens. It cannot be overstated that surviving a pandemic is living through history about which future generations will learn (Halpern et al., 2020). As such, autoethnographers offer complex, insider accounts of sense-making and show how and why particular experiences are challenging, important, and/or transformative (Adams et al., 2015). Autoethnographers give meaning to life experiences, relationships, and individual and community identities by connecting narrative and storytelling (Adams et al., 2015). Storytelling that emerges from an autoethnographic study deepens the understanding of the collective findings of quantitative studies (Greenhalgh et al., 2018).

Numerous studies focusing on COVID-19, including the transmission, vaccine effectiveness, economic impacts, and the impact on mental health, have advanced the scientific endeavor (Felsenstein et al., 2020; Hevia & Neumeyer, 2020; Khan, et al., 2020). Autoethnography can complement this research. A researcher’s feelings, attitudes, and beliefs about an event, and a reflection of their experiences is a useful strategy for connecting readers to past events and encouraging self-reflection and change in behavior (Adams et al, 2015; Sparkes, 2000).

This study draws from the reflections of personal experiences leading a university health promotion program during the COVID-19 pandemic, as well as the experiences of key stakeholders across the campus. The data is collected both in meetings and planning events and through recollection. Crossley’s (2000) work advocates for autoethnographic research to support a deeper analysis of major cultural than what can be achieved through a recounting of historic events. Living through a pandemic is a significant historical and cultural event that lends itself to an autoethnography.
The data collection process for the self-interview autoethnography consisted of utilizing a daily journal along with summary of the self-interview protocol used to collect reflections of experiences during the pandemic from January 2020 to August 2021. In Table 2, the list of questions is outlined as well as the timeframe these self-interview questions were completed. A total of two hundred and sixteen personal journal entries were collected for thematic analysis.

Table 2: Self-interview protocol.

<table>
<thead>
<tr>
<th>Self-interview Entries</th>
<th>Self-Interview Timeline</th>
<th>Self-Interview: Questions asked of Researcher:</th>
</tr>
</thead>
</table>
| 216 Personal Journal Entries | January 2020 – August 1, 2021 | 1. Who did I talk with today about COVID-19 related topics?  
2. What were the topics?  
3. Did it impact health promotion work?  
4. What were the outcomes?  
5. Other important information? |

Note. Summary of the self-interview process and data collection.

Reflection

The self-interview questions were developed to cover the broad range of potential topics that could come up in daily interactions and communications. Five questions were selected to make the information brief and succinct to allow for quick reflection at the end of the workday. The data collected for the thematic analysis could also be used for health promotion leaders to better understand their roles within a pandemic response within a university or college. These questions allowed for reflection and a personal historical timeline of COVID-19.

Reflection is defined as a thought, idea, or opinion formed or statement shared after contemplation (Merriam-Webster, n.d.). Reflection is an essential element in every action of this
study providing the most impactful learning opportunities (Wall, 2006). The act of reflection is fundamental in health promotion and behavior change (Hinyard & Kreuter, 2007). It is also a core component of a larger public health response and health education (Jayatilleke & Mackie, 2013). Reflection allows for emergency managers to gain an understanding as to whether the response to a crisis has been effective (Kapucu & Knox, 2013). Reflection is also essential in the autoethnography process (Chang, 2016). Reflexive views of experience, identities, and relationships help recognize how they influence what we do (Vesa & Vaara, 2014). The process of reflecting is a higher order thinking and skills used to learn, problem solve, think critically, and make decisions (Halpern, 1998).

There are other several benefits of employing a mixed method research design. Additionally, there are benefits to utilizing reflexive self-interviews in research, particularly when studying extraordinary and consequential events like a pandemic (Pardies, et al., 2021). Anderson (2006) states that there is an increased focus on emotion within social sciences than can help reduce skepticism with the method. Without interviews, the public administration field may gloss over the rich descriptions of the lived experiences (Zavattaro, 2020). Moreover, this approach challenges personal, professional, and disciplinary norms (Zavattaro 2020) causing researchers to think differently about the literature.

There are several limitations to using autoethnography. One limitation is that as a methodology, it is typically retrospective (Zavattaro, 2020). In other words, the accuracy of the lived experiences hinges on one’s memory. To reduce this retrospective limitation, Zavattaro (2020) recommends stories about one’s experience are compiled using notes from meetings, conversations, and encounters. Bias can also be addressed by denoting the context of the stories,
such as the institutional, political, and other factors that describe the particular context (Jeffrey, 2018).

Critics of autoethnography argue the method can be self-centered, focused on the author, and not the larger social issue (Ellis et al., 2011). Additionally, autoethnographers must include ethical considerations of how to protect those that are written about. In light of these questions, Zavattaro (2020) asks, how will people feel after reading their story? “All I can do is tell the story as I interpret it” (Zavattaro, 2020, p.16). Because this process can be very personal, an additional limitation is the difficulty in analyzing emotions and personal stories, and the inability to easily generalize experiences to a larger population (Vesa & Vaara, 2014). Although the lack of generalizability can be a limitation, personal stories provide a unique perspective to better understand a crisis (Austin et al., 2010).

Given these critiques, this study utilizes triangulation as a method to mitigate the limitations. Triangulation generally refers to the use of more than one methodology (Natow, 2020). However, there is more than one way a study can employ triangulation including collecting data from different time periods, perspectives, locations, and levels of power. Triangulation could also include varied methodologies, meaning qualitative and quantitative or more than one qualitative data collection method (Natow, 2020).

In addition to using multiple methodologies, triangulation tools can also be to apply multiple techniques to analyze the findings (Natow, 2020). One way this triangulation technique is to include inductive and deductive analysis. Previous studies utilized multiple qualitative data collection methods including Ness and Mistretta (2010) using both interviews and document analysis. Ness and Mistretta (2010) used inductive coding process for thematic analysis and then a deductive approach for finding patterns. This study follows the same triangulation process
through multiple data collection methods and multiple data analysis outlined in the methods section of this study.

This study uses a total of three sources of data – self interview, stakeholder interviews and organization documents applying two qualitative methodologies (qualitative interviews and content analysis). This approach is meant to “triangulate” the data. Triangulation is a common research strategy in contexts where a single data source may be biased or provide only limited information from which to draw reasonable conclusions (Guest et al., 2014). While adopting multiple data collection methods provides triangulation to increase validity of results, the additional data sources describe the experience in greater depth (Natow, 2020). This process is detailed in the following subsections.

*Stakeholder Interviews - Research Sample*

Students, staff, faculty, and community members make up the stakeholders of the university campus. From these populations, participants were identified for the individual interviews based on criteria developed by Spradley (1979). Researchers must determine what kind of current involvement the participant has in the organization. Essentially asking, does the participant have adequate knowledge about the topic being researched (Spradley, 1979)? Participants should be selected through their individual enculturation into the organization, current involvement in the topic being studied, adequate time to participate, and who will be nonanalytic and willing to provide honest answers to question that are asked of them (Spradley, 1979).
**Sampling Strategy**

Purposive sampling is used to derive the participant pool for this study stakeholder interviews (Polkinghorne, 2005; Creswell & Plano Clark, 2018). Selecting the participant pool takes time as the researcher must understand the role of the person and how they influence decisions across an agency or institution (Chang, 2013). Participants for this study were intentionally recruited because of their individual experience with this topic, their individual roles within the organization, as well as their collective involvement in the COVID-19 response and communication at the university. Additionally, participants were selected because this researcher has had the opportunity to engage with each of them at different points throughout the university’s closing and planned reopening process. Moreover, each study participant has had the opportunity to engage with the Wellness and Health Promotion Office, and thus understands this researcher’s role at the university and why this topic is of interest. There was no requirement to participate.

Participants in the stakeholder interviews included university administrators, medical professionals, emergency response professionals, faculty, and staff members. To recruit the participants, an invitation letter was sent to the stakeholders in Table 3 requesting a one-hour virtual (or face to face if preferred by the interviewee) meeting to discuss the study and ask for their involvement. The purpose of the study and research plan was described in the informed consent document that was provided to all participants.

*Table 3: Stakeholder interviews – requested participant list.*

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>Participant Role Within Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 10</td>
<td>Administrative Leadership</td>
</tr>
<tr>
<td>Participant 11</td>
<td>Administrative Leadership</td>
</tr>
<tr>
<td>Participant 8</td>
<td>Administrative Leadership &amp; Pandemic Response</td>
</tr>
<tr>
<td>Participant 12</td>
<td>Administrative Leadership &amp; Pandemic Response</td>
</tr>
<tr>
<td>Participant 13</td>
<td>Administrative Leadership</td>
</tr>
<tr>
<td>Participant 14</td>
<td>Administrative Leadership &amp; Pandemic Response</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Participant 2</td>
<td>Administrative Leadership</td>
</tr>
<tr>
<td>Participant 3</td>
<td>Administrative Leadership</td>
</tr>
<tr>
<td>Participant 6</td>
<td>Pandemic Response</td>
</tr>
<tr>
<td>Participant 9</td>
<td>Pandemic Response</td>
</tr>
<tr>
<td>Participant 7</td>
<td>Administrative Leadership</td>
</tr>
<tr>
<td>Participant 4</td>
<td>Administrative Leadership</td>
</tr>
<tr>
<td>Participant 5</td>
<td>Pandemic Response</td>
</tr>
<tr>
<td>Participant 15</td>
<td>Administrative Leadership &amp; Pandemic Response</td>
</tr>
</tbody>
</table>

Note. List of stakeholders requested to participate in individual interviews.

Doloriet and Sambrook (2009) denote three ethical considerations for conducting interviews: protecting participants and organizations, protecting family and friends, and protection of the documents. In this study participants were protected by keeping their names confidential and providing participants with a pseudonym. The organization was protected by asking future focused questions, not blaming, and by using publicly available documents.

To ensure a productive and comfortable environment for the participant the researcher must be skilled in the interview process. Spradley (1979) also recommends building interpersonal skills to create the optimal interview where questions are asked, the researcher does more listening than talking in a passive role, and the researcher shows interest with eye contact and nonverbal body language. Applying the interview framework created by Crossley (2000), a semi-structured interview described as “dialogical” or conversational interview was conducted with the participants. The questions displayed in Table 4, provide a detailed list questions aimed to answer the first research question and to allow the participant to provide detail and depth in all interview areas of interest.

Ideally, interviews should resemble a conversation where the participant is able to feel comfortable and even add more detail to the responses they share (Crossley, 2000). Chang
(2007) states there are several interview types from which to select when completing an autoethnographic study, including but not limited to, oral history, personal narratives, or topical interviews. Oral history, from the perspective of the individual, is described as a recount of social, historical, or political experiences or events, whereas personal narratives are a personal reflection on identity, event, or experience (Chang, 2013). Topical interviews, however, are narrower consisting of participant comments on a specific subject (Chang, 2013). The interview style used for this study was semi-structured topical interview style with open-ended questions where participants can feel free to add more information to what has been asked.

*Stakeholder Interviews: Interview Questions*

Grounded in the capacity-based conceptualization of organizational resilience framework, interview questions for this study are designed to determine how decisions were made and what the outcome was for the organization as well as the staff and students. The interview questions identify characteristics, behaviors, and strategies, and if any exist, how they aid in creating resiliency (Boin & Lodge, 2016). These responses are opportunities to create new knowledge around adaptive and organizational resilience for higher education and public administration, a worthwhile endeavor as lives depend on the way organizations react to crises (Boin & Lodge, 2016).

The questions selected for the participant interviews are based on previous studies examining factors of organization resilience including management style and relationships, strategies, and decision making. These four factors are connected to organization resilience, specifically answering the first research question – how has the organization developed and enacted resilience during the COVID-19 pandemic.
There is a connection between organization resilience and management styles, relationships, strategies, and decision making. One such study that makes that connection investigates this connection found that manager abilities, ability to be adaptive and flexible, increased innovation (Ali et al., 2017). Within the management style, decision making was found to be an important measure connected to resource management, trust and motivation of organization members. A study by Brien and Hamburg in 2014 found investigating collaboration as a strategy to increase innovation and resilience. Brien and Hamburg’s (2014) findings were connected to economically stressful time as an impetus to employ training and mentorship to increase strategic relationships. Considering both the theoretical framework developed by Duchek (2020) and the study by Ali et al (2017) the interview questions were created to accommodate the circumstances of this study, a large higher education institution during a pandemic.

Table 4: Lists of questions asked during stakeholder participant interviews.

<table>
<thead>
<tr>
<th>Question Category</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Style &amp; Relationships</td>
<td>Tell me about the relationships across the university that were essential in your roll during the pandemic.</td>
</tr>
<tr>
<td></td>
<td>Please share about any gaps in those relationships that would have been more helpful.</td>
</tr>
<tr>
<td></td>
<td>Tell me how you go about applying your management style to your work.</td>
</tr>
<tr>
<td></td>
<td>Can you share an example of ways have you had to adjust your style during the pandemic?</td>
</tr>
<tr>
<td>Strategy</td>
<td>When we think about strategic planning, we can consider the importance of communications and the importance of individual and collective reflection. Can you comment on the importance of reflection in strategic management of your unit?</td>
</tr>
<tr>
<td></td>
<td>Another aspect of strategic management is adopting a values system. Can you tell me</td>
</tr>
<tr>
<td>Question Category</td>
<td>Question</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Decision Making</strong></td>
<td>about the values that guided your work during the pandemic? Can you give me an example of a time you were able to take the opportunity to use reflection in your decision making? Many factors impact how we make decisions, timing, resources, external pressures for example. Please share an example during the pandemic, of a time you were unable to make a firm decision as quickly as you would have liked. Ultimately, decisions are made on both a small scale and university wide with intended and unintended consequences. Tell me about some decisions made during the pandemic, that you later became aware of unintended consequences. Overall, how would you describe the decision-making process environment during the pandemic as opposed to during hurricane preparation?</td>
</tr>
<tr>
<td><strong>Resilience</strong></td>
<td>Turning to another but related topic, how would you define resilience in the context of your role at the university? From your perspective, what ways has UCF demonstrated or failed to demonstrate resilience during the pandemic? Looking to the future, can you describe any processes, rules, or skills that would help to strengthen organizational resilience for future events?</td>
</tr>
<tr>
<td><strong>Open-ended</strong></td>
<td>Is there anything else you would like to share that I have not yet addressed today?</td>
</tr>
</tbody>
</table>

*Note. Stakeholder questions addressing how the organization (University of Central Florida) responded to the COVID-19 pandemic.

The participant questions are derived from the capacity-based conceptualization of organizational resilience developed by Stephanie Duchek in 2020. Duchek (2020) describes this framework as three stages of anticipation, accepting, and adaptation (Figure 3). The anticipation stage is focused on preparation and it prior to the critical event occurring. The accepting stage is
focused on coping or action and occurs during the critical event, for example, during the hurricane. Adaptation, the final stage, focuses on the critical task of reflection, change and learning and occurs after the conclusion of critical event. **Figure 3** displays the three stages, when they occur, and what factors influence each stage.

![Figure 3: A linear process concept model displaying factors influencing organizational resilience.](image)


*Figure 3: A linear process concept model displaying factors influencing organizational resilience.*

Duchek (2020) explains the four factors that impact the three stages. These factors include prior knowledge within the organization, resource availability, social resources and power or responsibility. It is important to understand that Duchek assigns weight of factors
differently within the three stages. While the visual in Figure 3 shows each factor occurring in one of the stages, it is to communicate the weight Duchek (2020) describes in her theory.

Prior knowledge base is depicted in the beginning of the concept of organizational resilience; however, it could be reasonable to need and depend on previous knowledge and experience during any of the stages. Therefore, understanding that the factors could impact any of the stages and how Duchek assigns weight to the factors, the factors are more impactful during the specific stage. Resource availability for instance, could have a more significant impact on the anticipation stage. An organization uses this information in the planning process for budget, supplies, and staffing. For example, as organizations prepare, an audit of what the organization has is conducted as well as a needs assessment to tally what the organizations must acquire in order to prepare for the event (Duchek, 2020).

Duchek (2020) describes social resources as information sharing, collaboration, resource exchange, and sharing responsibilities. At the core of social resources is relationships, trust and prior positive experiences working together. Social resources are not a new concept and has been described as social contracts influencing organization resilience in other crises like climate change (O’Brien et al., 2009). In order to increase the likelihood of building those social resources, opportunities for organization members must have the chance to collaborate and problem solve before the critical event occurs.

Power and responsibility are the fourth factor that impacts the stages of organization resilience (Duchek, 2020). Power and responsibility are related to the relationships between organization members and within the hierarchy of the organization (Duchek, 2020). O’Brien et al. (2009) also suggests that some power relationships can create imbalances in systems, political alliances, and potentially promote values that are not in line with the organization. Just because
someone has the power to adjust the learning phase of the conceptualization, does not mean that it is their role within the organization to make the change. Conversely, it could be an organization member’s responsibility to make the adjustment to a policy or response, they may not have the power to do so. Combining the power and responsibility through power relationships is one strategy organizations can implement ensure that when changes are identified, it is possible to make the change so that the organization can practice capacity building and increase resilience.

Organizations may experience resistance using critical energy and resources to control damage (Duchek, 2020). Organizations may see innovation and adaptation as evolution, using resources “smarter” but also recover in a way that allows the organization to be stronger, helping reduce future damage (Doerfel et al., 2013). Lastly, anticipation is the shift that encourages organizations to develop prediction and prevention skills with the goal of saving valuable resources and time. It is reasonable to bridge adaptive resilience with organizations because as resilience evolves, organizations evolve and vise-versa (Doerfel et al., 2013). Adaptive resilience is defined as the extent to which an organization can learn and implement changes (Duit, 2016). This is where all the learning that took place is put into action for the organization to respond better to future events (Duchek, 2020).

*Organization Documents*

Table 5 provides a list of documents collected for data analysis. Documents were collected via personal emails, university documents including developed policies, announcements, meeting summaries, and emergency management plans. All the collected documents are considered public record according to Florida Sunshine Law (Florida Statute
668.6076), sent from various organization members representing different departments and University Presidential Cabinet. In addition to personal emails, personal journals kept including a bullet journal kept in a calendar, and professional emails sent to staff members and colleagues throughout the state were read and included in the document analysis.

Within Table 5, the title of the document as well as the type of document is identified (i.e., email, policy). Along with the title and type is a description of the location the document is retrieved from whether within the organization or externally. The date each of the documents were published is also included to provide a sense of when during the pandemic the information was shared. Lastly, a summary of the document along with the purpose of the document is included.
Table 5: Organizational documents.

<table>
<thead>
<tr>
<th>Document Title</th>
<th>Document Type</th>
<th>Date published</th>
<th>Retrieved From</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications announcing organization action including potential closures.</td>
<td>Emails from Human Resources, Provost Office, President’s Office, Vice President of Student Affairs, Associate Vice President of Student Affairs, Executive Director, Recreation and Wellness Center</td>
<td>March 16, 2020- July 28, 2021</td>
<td>Personal employee email account</td>
<td>Educate faculty and staff on university policy, protocols and processes to address COVID-19 (ex. “Keep working,” “Return to Normal”)</td>
</tr>
<tr>
<td>Communications identifying different health risks and implications of COVID-19</td>
<td>Emails from Associate Vice President, Student Health Services, President’s Office, External organizations (American College Health Association)</td>
<td>February 10, 2020- July 28, 2021</td>
<td>Personal email. Distributed by Dr. Michael Deichen, Associate Vice President, Student Health Services.</td>
<td>Educate campus community on health risks and how to protect students, faculty, and staff from infection.</td>
</tr>
<tr>
<td>Florida Gov. DeSantis suspends all remaining COVID restrictions: “We are no longer in</td>
<td>CNBC online publication by Amanda Macias</td>
<td>May 3, 2021</td>
<td><a href="https://www.cnbc.com/2021/05/03/florida-governor-desantis-suspends-all-remaining-covid-restrictions.html">https://www.cnbc.com/2021/05/03/florida-governor-desantis-suspends-all-remaining-covid-restrictions.html</a></td>
<td>Florida Governor removing all COVID-19 requirements. This change informed the Board of Governors and Florida educational institutions.</td>
</tr>
<tr>
<td>Document Title</td>
<td>Document Type</td>
<td>Date published</td>
<td>Retrieved From</td>
<td>Purpose</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>-------------------------</td>
<td>---------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>a state of emergency”</td>
<td></td>
<td></td>
<td></td>
<td>Outlines State of Florida legislative outcomes and plans for the fiscal year including budgets and predictions for costs and policy.</td>
</tr>
<tr>
<td>Tallahassee Update 2021 Legislative Session (1-4)</td>
<td>Email attachments</td>
<td>Quarterly throughout 2020-2021</td>
<td>Reports provided by organization Vice President for Government Relations</td>
<td>Summarizes executive orders related to COVID-19 state of emergency</td>
</tr>
<tr>
<td>State of Florida: Office of the Governor Executive Order Number 21-102</td>
<td>Email attachment</td>
<td>March 9, 2020- April 29, 2021</td>
<td>Provided by organization Vice President for Government Relations</td>
<td>Summarizes executive orders related to COVID-19 state of emergency</td>
</tr>
<tr>
<td>State of Florida Department of Health Public Health Advisory</td>
<td>Policy collected from Florida Department of health webpage</td>
<td>April 29, 2020</td>
<td><a href="http://www.floridahealth.gov">www.floridahealth.gov</a></td>
<td>Outlines the health threats related to COVID-19</td>
</tr>
<tr>
<td>University Pandemic Response Plan</td>
<td>University policy written by Student Health Services and Office of Emergency Management</td>
<td>2017 with edits dated 2019</td>
<td>Office of Emergency Management</td>
<td>Planned actions for preparing, responding, and recovering from a potential pandemic (Zika Virus, H1N1 etc.)</td>
</tr>
<tr>
<td>EICRT Meeting Summaries</td>
<td>Emergency response</td>
<td>Range: February 2020-August 2021</td>
<td>Risk Management and Insurance</td>
<td>Documenting all emergency meetings preparing for and responding to the pandemic.</td>
</tr>
</tbody>
</table>

*Note. This table provides a list of organizational documents collected and analyzed.*
Data Analysis

Data collected from individual interviews, personal notes, self-interview, relevant documents, policies, and communications were prepared for analysis by transcription, creation of a code guide and formatting the data (Creswell & Plano Clark, 2018). All participant interview recordings were transcribed utilizing oTranscribe (2021) and entered in software designed for qualitative research. Qualitative data analytic software, NVivo (released March 2020) will be used to analyze the collected data and look for themes. The coding process is the first step in the analysis of the collected data.

A deductive approach is used to code the data collected that is grounded in theory (DeCuir-Gunby et al., 2011). An inductive approach is used to identify data driven codes (DeCuir-Gunby et al., 2011). During this process, a codebook was developed that relies on past literature about the topics discussed during the interviews and data collection process (Creswell & Plano Clark, 2018). The coding process allowed for broad topics to be explored and then narrowed or grouped together to explain the story more thoroughly (Creswell & Plano Clark, 2018). For example, for this study, these data included strategies to prepare for the COVID-19 response and other concepts described by the stakeholders. The inductive approached used to analyze data show themes that emerge from the data not already outlined in the organizational resilience theory (Creswell & Plano Clark, 2018). Themes emerged when the same topic, phrase or concept is repeated in the data.

Deductive Coding

The deductive coding process is theoretically based (DeCuir-Gunby et al., 2011). When preforming deductive coding, the researcher must continuously reconsider the theory throughout
the coding process to ensure that it continues to align with the core of the theory (DeCuir-Gunby et al., 2011). Deductive coding is a continuous iterative process that includes the theory. The researcher must use the terms as defined by the theorist in the assignment of codes.

The assignment of codes for this study follows a three-stage process as developed by Boyatzis in 1988 as shown in Figure 4 (DeCuir-Bunby et al., 2011). The first step is to create codes connected to the theory. In this study, the first steps included the theoretical framework created by Stephanie Duchek, organizational resilience conceptualization (2020) in that development. The second step involves a process of revising the codes within the context that they are found in (Boyatziz, 1998). This step can often lead to editing, condensing, and integrating codes as the researcher connects the code in context of the collected data. The final stage of Boyatzis’ (1998) code creation process involves the reliability and implementation. The final stage can be more complicated with multiple coders, however in this study the researcher was the only coder which aids in reliability of developed codes. The code development is a multiple step process to aid in “sense-making” of the collected data (DeCuir-Gunby et al., 2011). This process depicted in Figure 4 shows the cyclic nature of the process, where the research returns to the theory and literature repeatedly to finalize codes and then themes.
Holton (2007) describes the process of inductive thematic analysis as the themes that develop are coded through a two-step process referred to as open and axial coding. Open coding is the first step in thematic analysis, is intended to be an initial review of all data and will be done by hand to develop general topics or categories. This first step helps to rid the collected data of superfluous information to allow the second step, axial coding, to provide a deeper dive into the data. Axial coding is a more advanced coding process that involves critical analysis of fieldnotes, interviews, and reports one category at a time. Using these guidelines, the questions developed for this study are connected directly to the organizational resilience theory.

Figure 5 depicts an example of a three-step inductive coding process to determine selected themes from collected data. First, open codes are developed after reading through the collected interviews, self-interview, and organization documents. The open codes are the longest list of common phrases or terms that appear multiple times throughout the data. Next, the open
codes are condensed down to axial codes or terms that combine together that are similar to another. Lastly, the selected theme is determined after combining those axial codes to an “umbrella” term that summarized the selected theme, axial code, and open code together.

The inductive coding process is an art that requires practice (Williams & Moser, 2019). It is a process of collecting data and sifting through the information to categorizing the data to find meaning (Williams & Moser, 2019). The shared human experience includes collective cultural norms for acting and interpreting things through a shared experience (Spradley, 1979). Kapucu and Garayev (2011) state that the capacity to act in difficult and urgent settings depends on full understanding of the context of the situation. Moreover, Kapucu and Garayev (2011) state that this context allows for the formulation of an action strategy.

Deep understanding with context is provided through the autoethnographic process (Sochacka et al., 2016). Employing autoethnography for sense making of how we respond in times of a deadly global crisis should prove enlightening (Markham, et al., 2020). Offering an insider account describing in detail how different experiences were wearisome, critical and/or transforming (Vesa & Vaara, 2014) which are a part of the sense-making process of this study.
Context offers a deeper understanding of what people experienced during this crisis so that we can better respond both economically and emotionally. Context can be described using a variety of methodologies, but none more so than ethnography (Eriksson & Kavalainen, 2015). While context and deeper understanding is helpful for other researchers to replicate the study, there are also steps that can be taken to increase the reliability and validity of the findings.

Validity And Reliability

Validity and reliability are essential factors in research design (Roller & Lavrakas, 2015). In quantitative studies, validity is defined as the extent to which a concept is accurately measured in a study (Adcock & Collier, 2001). Reliability is defined as how consistently something is measured (Adcock & Collier, 2001). Each researcher is responsible for using accurate “techniques for conducting, documenting, and evaluating data analysis” (Nowell et al., 2017, p.2). Creswell and Plano Clark (2018) share that using these analysis procedures applied by mixed methods researchers “represents, interprets, and validates the data and results” (p. 209). There are numerous strategies researchers utilize to increase the validity and reliability of the qualitative study.

There is a clear difference within quantitative research design and qualitative research designs in terms of validity and reliability (LeRoux, 2017). Validity in autoethnography is measured by genuineness and authenticity and connects the reader to an experience or culture that is plausible (Ellis et al., 2011). The key to validity in qualitative research is the use of reflexivity (Finlay, 2002; Morse, 2010). Creswell and Plano Clark (2018) state that validity is concentrated on accuracy and credibility. Reliability is measured by the researcher’s credibility (Ellis et al., 2011). As such, only one coder will be used to increase reliability (Creswell & Plano
Clark, 2018). Therefore, the information shared by the researcher, about who they are and how they are qualified and able to address the topic thoroughly and thoughtfully are factors in success or failure.

Critics of autoethnography state the method can be self-centered and focused on the author and self-centered, versus a larger social issue which presents challenges for the generalization of findings (Anderson, 2006; Vesa & Varaa, 2014). Therefore, some researchers critique the method because it fails to meet the ‘holy trinity’ of reliability, validity, and generalizability (Sparkes, 1998). It can be argued that as one reads the findings, they can be interpreted differently throughout different parts of our lives questioning how the work holds up to time (Sparkes, 2000). Another critique warns autoethnographers to take epistemic and aesthetic practices seriously (Ellis et al., 2011) and ensure limitations are addressed.

Various strategies are used by the researcher to address the limitations and potential biases and increase validity and reliability in autoethnography studies. To mitigate biases, researchers use multiple strategies including triangulation, additional sources (correspondence, reports, individual interviews, etc.), member checking (Creswell & Plano Clark, 2018) or observations (Anderson, 2006). Yin (2014) states the additional observations aid in strengthening or testing the quality of the purposed constructs. These data sources triangulate data collected to enrich and validate findings (Anderson, 2006). Another such strategy is to share findings with participants to confirm accuracy. Additionally, triangulation is used with supporting documents including correspondence, policies and records from meetings, events, and trainings (Leech & Onwuegbuzie, 2007).

Findings are strengthened as themes are developed and are found in more than one reference (i.e., researcher, interview, correspondence, notes) (Hays et al., 2016). Lastly, an
approach to strengthen research quality, researchers can compare and contrast findings with previous studies measuring similar topics (Hays et al., 2016). Comparing and contrasting findings from a pandemic can be difficult because it is an infrequent occurrence, however because every person across the globe has been impacted by the pandemic in some way, perhaps consistency and similarity can be found across the human experience.

Credibility of the researcher is called into question when employing autoethnography. The same criteria that are used to determine if a participant is a qualified informant is used by the reader to determine trustworthiness and believability. Readers may ask, is it plausible the researcher has access to the locale or environment to write on the topic? Was the researcher in that environment long enough to be enculturated and understand the subtleties of the setting, relationships, and policy? The answer to these questions not only increases credibility, but also adds to the richness of the findings. The embeddedness of the researcher and comprehensiveness of fieldnotes lend authenticity to results.

As stated by Vesa and Vaara (2014), researchers must be embedded within an organization while maintaining awareness of their role in study and organization. As such, I am uniquely positioned to respond to this topic as I am the director of Wellness and Health Promotion Services at the largest university within the United States. Within the director role I develop, manage, and deliver services to students in various health topics, but also serve on various committees, task forces, and work groups organized to address critical public health needs. Additionally, I have specialized training and certifications in harm reduction, health promotion and disease prevention.

If there are concerns and limitations in using autoethnography, why use it? According to Chang (2016) there are three considerations in why using autoethnography in research could be
helpful that include changing ideas about what qualifies as research, inclusion and representation in research and the acknowledgement of increase importance of social identities. These recent conceptual adjustments and to some degree, the rise in the ubiquitous use of social media, has shifted the view of how data are collected (Moors, 2017). Another benefit of the autoethnographic method is it brings the reader a deeper understanding of unfamiliar experiences of others (Chang, 2016; Chang et al., 2016). Furthermore, there is a general lack of comparison in the strategy process and practices research that calls for new kinds of research designs and methods (Vesa & Varaa, 2014).
CHAPTER FOUR: SELF-INTERVIEW

This chapter is a collection of personal reflections and experiences as the director of a health promotion department within an institution of higher education during the COVID-19 pandemic. It is important to state that the reflections infuse the multiple roles I play—mother, spouse, health educator, friend, department leader, and immunocompromised person. These roles influence my perspective and how this pandemic has impacted me as I describe these experiences with emotion, passion, and personal stories. Throughout this chapter reference to “I” will be used in the narrative to make clear what information I am sharing is personal experience and reflection (Ellis, 2009). In this chapter, I have selected particularly poignant experiences and reflections that stand out and highlighted major decisions, turning points that and were significant in decisions made in my role within the organization.

Self-interview Summary

January 2020

“Watching a virus spread in China, it is scary to see how quickly it is spreading. Watching the information come in from the World Health Organization and people are spreading it quickly and it is alarming. The virus is respiratory, seemingly flu-like symptoms. The WHO reports it was detected in December of 2019. Should we be concerned?”

“I am reading more and more information about the virus in China, I know people with family there and they are saying that the government hides a lot from citizens, so it is unclear what the actual impact is. The news says it is coming from exposure to infected bats, lots of judgement (global it seems) about people eating bats.”
Reflection: “At this point in the pandemic, it really was uncertain how quickly this virus would spread. It was clear that there was some skepticism from politicians if this would even impact the United States. There was also some negative sentiment and racist statements around blaming Chinese people for their seemingly “barbaric” lifestyles. It is difficult to sit back and wait with no plan of action and people in China dying.”

February 2020

“The world is preparing for a new virus. It has been found in Italy and it is getting scary. There are many questions if it is going to make it to the United States. I am seeing concerns about questions for preparing large cities and popular travel points like flight destinations to the west coast (California) and New York City on the east coast. Talking to my family up north and they don’t seem to be too concerned yet.”

“Hearing that the CDC confirmed cases in the United States in Washington State. I am getting more connected to the CDC and WHO information to learn more. There is simply a deep cavern of information, culling what you need feels impossible.”

“This virus is being called Coronavirus or abbreviated as COVID-19 indicating the year. Now Italy is being called a hotspot, with many cases developing there. There is discussion that the country is limiting travel and locking down. I’m not entirely sure what that entails, but this is now being covered constantly as the world braces.”

“Trump has declared a public health emergency I think because the WHO declared a Global Health Emergency, not a pandemic yet.”

“There is so much research happening focused on how this virus spreads, what the health implications are and how the spread can be reduced or contained. It is difficult to keep up with
all the information being shared. My department is updating our Continuity Of Operation Plans (COOP) to make sure we have everything we need to keep the office working.’

**Reflection:** “This is when I truly had real fear in what would happen to my family. I had terrible images of the black death as it was portrayed in books and films. I immediately was concerned for my children, ages seven and nine, and how I would be able to protect them. I think the feeling of a helpless vulnerability best describes this unsettling emotion, unsure of what the United States’ response is. When something is out of your own person control, it opens up one’s vulnerability and makes the experience scary.”

*March 2020*

“Called into an emergency meeting with other directors, we were told to gather information, quickly about what it would take to have our team work remotely for two weeks, extending spring break. What technology was needed, how we keep them up and running for two weeks, what cost was associated with that, what could be put on hold?”

“This virus is now a global pandemic, it is everywhere. We need to stay home and quarantine, a lockdown required by the governor. If we can all settle in and reduce the spread, we will be able to contain the virus, and hopefully knock it out. We can do this as a community. It will be hard, but so far, it is not in our community. We will try and make it “fun” for the kids.

**Reflection:** “Looking at my staff, spread out in our lobby, syncing laptops for remote work, they were scared. They were looking for answers, reassurance, a promise that things would be ok, safety. I keep saying, the plan is to return in two weeks just do your best… and we walked out the door. Explaining this all to my children is a different story. Waiting for the right time to tell them what is going on. Really, they just want to see their friends.”
April 2020

“Working and learning from home is lasting longer than we anticipated. The girls are still home and now are trying to figure out a longer-term solution. We were supposed to return to work and school after spring break and now it is simply unclear when we will return. We were asked if the girls had a computer they could work on, at least one. Chris had to quickly find laptops for the girls, knowing the school didn’t have enough to give all the kids one to work on. What happens for those kids who don’t have access at home, they cannot be logged on at the same time, this is messy. We have to pick up school supplies and assignments for the girls. We’ve set up workstations for the girls, learning very quickly that they cannot work next to each other. Trying to work while the girls are working is hard, next to impossible. We are going to try to learn remotely. The first US citizen has died from COVID, that hits hard.”

“Trying to find things for the girls to do to stay engaged and entertained is feeling harder and harder. We are walking everyday and taking longer and longer bike rides. The girls are struggling and we are all feeling the pressure. We had to cancel their birthday party and they are so very sad.”

“Mackenzie fell on a bike ride today. She fell hard, hitting her face on the sidewalk, almost knocking her teeth out entirely and cutting up her face, arm and knee. She was with our “quarantine friends” and they called for me to come get her. I could hear her screaming on the phone. When I arrived, I found her covered in blood and screaming. My other daughter was crying, scared. I had to think quickly and luckily there is a dentist office that has late day hours. They were not letting people into the office without checking in, getting temperatures taken etc. I was desperate shouting, can you help me or not? They agreed to help and the dentist returned to the office as he had just left. It was traumatic for all of us, exhausting and scary because she
could not have a mask on. I was so very grateful for their help. Having a medical emergency
during a pandemic was one of the scariest things I could have thought of, I cannot imagine what
people having major surgery or critical health issues were doing to manage this.”

Reflection: “This shift is complicated for so many reasons, we have already been home
together now for weeks and the added pressure of keeping everyone safe is wearing on us. The
distance from others is scary. I’ve avoided going to stores and I’ll need to soon. Work is strange
as leaders try to lead with really the same information we all have. I’m used to asking my
supervisors what is next, what is expected and right now, we are all learning together. That alone
is unsettling, not having answers and not having anyone to ask. Trying to make good decisions
over and over is tiring.”

May 2020

“Watching stores and restaurants around being closed and trying to figure out what to do.
Restaurants are selling what is in the contents of their freezers in an attempt to make some
money and not lose what they have. People are getting laid off. Stores are putting signs out at the
road to show they are open, encouraging people to come shop. It is hard to find things at stores.
You cannot get bleach, cleaning wipes, soap… this is crazy. You cannot get toilet paper of all
things – not in the store and not online.”

“Back in the office full time, trying my best to keep everyone home and safe. Coming
back into the office was a strange experience. Everything was exactly where we left it thinking
we would be ‘back in two weeks.’ The calendar was still turned to March, and we had just
walked out. I imagine it would be like returning to a place like Chernobyl after the meltdown,
everything just as it was and it is eerie.”
Reflection: “This is how I imagine the book War of the Worlds… just Armageddon and lack of care for others. Nothing on the shelves, stores are closing and feels like a ghost town. Makes you question humanity and what we are really doing here. The plus side is I am alone, so I feel safe from the virus, but creeped out being alone in the office. I know my employees are grateful they do not have to come in.”

June 2020

“They are scheduling a virtual town hall to prepare people for returning to campus. We are required to complete a training before coming back to campus that reviews policies and helpful behaviors to keep us safe.”

“I was asked to attend a “return to campus” subcommittee meeting and was asked about outreach with the peers and what it would take to organize a compliance team to ensure community members were completing the COVID-19 self-checker that was being launched. I found it challenging to be a part of a consultation for a service that was already decided, so I could be a part of it and organize it in a way my training and education has reinforced or step back. I wanted it to be successful, so I said yes.”

“We’ve ended the semester and ending the school year. I cannot express how relieved I am to be done. Remote learning is not only not ideal for kids, I fear it has been detrimental. Avery has cried almost every single day. The hardest part is watching them being so alone and quiet. They are just staring at the screen, but not participating. We all just need a break.”

“The president is calling this the ‘Kung Flu’ and is causing violence toward the Asian population. People are being attacked in the street unprovoked and in some cases, elderly.”
Reflection: “The systemic racism that is just under the surface is showing in violent behavior blaming Asian Americans for this virus. The burnout is more intense as we watch people targeted and hurt.”

July 2020

“I was asked to join the COVID-19 self-checker app meeting to discuss how it worked so I could train the students on the Armor Up Ambassador Team. Joining these meetings that had already been meeting regularly was tricky to catch up with the rest of the team, but there was sincere interest in how these peers would support the compliance effort.”

“Staff are now required to complete the COVID self-checker on the app. It is essentially a way to have people self-report symptoms and alerts them to stay home if they have symptoms. The app alerts the supervisor as well, so they are not just absent. We will have a report sent to us if any staff do not complete the self-checker.”

Reflection: The self-checker is a way to increase safety and compliance. I am being asked how I will know if someone is lying about having symptoms – lying? My thought is if people feel that they need to lie on the self-checker to get a break and don’t feel like they can be honest, ok, just rest. Perhaps not the best management opinion, but everyone has been through so much. This immediate trust was new to me, someone in one of these meetings thought it would be helpful to have information I could share, this was foreign and I found myself holding back information because I was so excited to have a seat at the table. I wanted people to know and understand how we can help, what we do, and how hard this team works.

Reflection: “With the focus being on urgent health care, there was some opportunity to share how sustainable health promotion aids in the reduction of risks, chronic and acute health
risks. For example, it has been found that those who are obese or diabetic are more susceptible to more severe symptoms of COVID-19 and even saw higher death rates than those without these chronic conditions. But these were considered “lifestyle choices” and there was push back and even anger in some cases that someone might receive lifesaving help before someone who was not overweight or someone “otherwise healthy.” A reminder that we have so much to teach this community about health disparities and chronic conditions.

Reflection: “I have worked here for more than ten years, but there are so many people I have never had the chance to meet. These subcommittees have been ways to connect with marketing and communications staff, IT staff (including staff that develop apps), human resources team members, ethics and compliance officials, faculty, and student government representatives. Once you were asked to join a meeting, you were trusted a part of an inner circle sharing information that was treated like rich data. With this data, we were able to make changes to the compliance policies in real time. This was powerful to make immediate changes and empowering for students to see how they could help change something that wasn’t working.

August 2020

“The proposal to manage the compliance efforts, Armor Up Ambassadors was approved. I have been given funds to hire students and train them to ensure people are wearing masks and completing the self-checker on the app. I am glad to be able to be a part of the effort to help, to make a difference. We are also providing handwashing stations at various location across campus so people have the visual reminder and a sense of control and action they can take to protect themselves. Not everyone can use hand sanitizer over and over. These stations are also a great opportunity to connect with students, help them in other ways.”
Reflection: “I am grateful for the chance to help, share what I know and make a difference. It goes without saying that I am fearful, I need to be interacting with lots of students in this program and that is all potential exposure. Joining the meeting to plan for this effort was interesting, a peek behind the curtain of how these meetings were running, how decisions were made and who was at the table.”

September 2020

“Finally hired all the Ambassadors, grateful to be able to provide a place that students can work. Interestingly, many of the students I was able to hire were international students, essentially stuck here or those that do not have work study, all very eager to work. So far, people are complying and are glad we are out and about. The app and tracking where people are on campus is surreal. The intent was to be able to understand how people are complying and to send the students to the locations where they can make the most impact.”

“Suddenly, I was contacted by multiple news stations and asked about the services we offer. Interviews were with professional and student organizations focused on the way we were trying to reduce the spread, increasing safety, and how we were spending COVID related dollars.”

Reflection: “It is working and I feel purpose with this role. We have been able to increase the compliance rate, hopefully reducing the spread. The recommendations some of the students have had truly helped the decision makers make real time adjustments to the app and to protocols. This is why I love the work I get to do.”
**October 2020**

“Had to make a very difficult decision, to send the girls to head back to school. Trying to balance their physical health with their mental health (and truly the mental health of the family) is the impossible choice. They are miserable and I’m certain at this point, are hardly paying attention to the teacher. Watching your kids slowly lose themselves through this experience is painful. It is clearly pushing teachers to their limits and the whole system is strained. We had to wait until the first quarter was over to opt back into the classroom. I know many parents are opting to send back now as well. I feel fortunate to have had been able to keep them home this long, I know so many cannot.”

“October is typically our busiest month of the fall semester, lots of events and engagement opportunities. This fall was different and I worry about the information that students would normally get during this time is lost. We have been creative thinking of ways to connect with them online, but so much of health promotion is hands on experiences and right now, everyone is staying away.”

**Reflection:** “What a surreal time, sending my children back to school where they will be put in harms way. I am fearful that they will get sick, but fearful that they will not be able to sustain this at home. While I know college students are in a different place in life, they are experiencing this too. I don’t think we have even begun to understand how this has impacted them.”

**November 2020**

“Got word from the Board of Trustees that for the Spring 2021 semester we need to have at least 50% of staff back in the office, but they can stay working remotely if they have a
reported chronic condition supported by physician documentation. I have been in the office for months, but I should report my chronic condition so in case I get very sick, I would have it documented should I need an extended leave.”

“There is a voting station here and there are community members coming onto campus and the ambassadors were approaching the voters asking them to put masks on and to use the app. I was called by the President’s office saying that they could not be approached. They were doing as they were told, but because it was thought of as infringing on voter rights, we were asked to stay away.”

Reflection: “Staff are feeling good that there is an alternative for people with chronic conditions. I have one staff member with a child who has special health considerations and one staff with serious health worries. I attempted to file my paperwork and there was simply more and more information that the organization wants me to share. I am not willing to continue to share more so I will need to abandon the documentation. Requiring people to continue to go through hurdles creates more barriers to care. It is disappointing because I was not asking for any remote time, I am willing to be here and keep my team home and safe.”

December 2020

“We have served more than 20,000 students for the ambassador program. We are being asked to now provide support for graduation. Instead of having graduation, they are offering something new called the ‘grad walk’ allowing families to celebrate with the graduate with distance. We also received continued funding for the Spring semester, until at least March.”

Reflection: “I do feel proud that we might have helped to keep the campus safe, but I am running out of staff. Students are getting sick or exposed and need to quarantine. We are also
experiencing some push back from students, staff, and visitors. Running out of steam. I was thinking that this would be a temporary program, but it is not sustainable without enough staff. Also, decisions about funding are coming at the last minute as CARES ACT fund is awarded, again grateful for it, but I lost some staff because I could not commit to their employment.”

January 2021

“New Year, same virus. Starting the spring semester trying to keep energy up as everyone is simply tired, burnout is clearly setting in.”

“Today (January 6th) was an absolutely terrifying day. There was an attempted coup at the United States Capital, honestly, I cannot believe I am writing these words. It is being called an insurrection, which I had to look up (a violent uprising), by Trump supporters about the election. Trump claims the election was “stolen” and there was an attempt to stop the validation of the election for Joe Biden. I watched this unfold, live and couldn’t turn away. There were people with weapons, flags, what looked like police or military style equipment and uniforms (helmets, bullet proof vests, face shields, etc.) marching to the Capitol after a rally with Trump. This march quickly escalated and I saw gallows erected on the lawn calling for the hanging of Vice President Pence. I’m speechless, I’m sick. People were attacking the Capitol police, representatives were hiding and they barricaded the House Chamber doors, guns drawn. Finally, Trump made a statement, but it felt half-hearted and still supportive of those who were violent. I’m speechless, I’m sick.”

Reflection: “This is awful, we are living through a pandemic and this horrific day is stressing all available resources and attention. I feel numb and terrifying at the same time, which is clearly trauma. They are showing the horrific photos and videos from the day with people
literally being tortured. How are people capable of this? After watching people literally beat up elderly Asian Americans, spit on servers and grocery store workers, mock those who have lost loved ones, and hurt those who secure our country has left me with a feeling of disbelief and disconnectedness from those that I believed to be reasonable, rational citizens. What have we become?”

February 2021

“A list of decision triggers were developed by the EICRT and Clinical Oversight Committee and shared on the Coronavirus Information webpage including a surge on campus could cause a movement back to remote only and residence hall closures and most significantly, closure of the campus. There would need to be an increase rate of death of students, faculty and staff, ten percent increase in positive tests, inability to adequately test, or community triggers that increase orders from the governor or other official and insufficient ICU beds at local hospitals.

Reflection: “Knowledge is power! I have been waiting to see this information. I think it just so helpful to better understand what will cause further action answering, what has to happen for a change to occur? It is also reassuring that there is a standard for which leaders will act. One question that I did not see directly answered by these triggers was, how will offices function should staffing is impacted – at what point are specific offices closed? We have a small office, so this is a challenge for us.”

March 2021

“An email came from the Provost entitled ‘Update on Our Return to More Normal’ outlining how policy and process have evolved over the past few weeks based on cases. The university is planning a full return to face-to-face learning, working and activities for the fall
2021 semester. There is a plan to mitigate risk by increasing sections of courses, keep physical distancing and still make sure people stay home if they are not feeling well. It also said that masks and cleaning would continue. They reported that the University applied to become a mass vaccination site.”

“Due to funding constraints, health promotion is typically reserved for students only, however during the pandemic we provided direct services for staff (stress management, nutrition, physical activity, drug use/abuse). “People are hurting and asking for help, we have always limited our services to staff and faculty because of how we are funded with health fee funds, but how do we help people when I feel called to help? When could one argue that as you help staff and faculty function their best, they are able to help students succeed? When is ok as a professional that this is extenuating circumstances? While we provided meditations, presentations on stress management, cooking demonstrations and prevention information on drug use/abuse, I was always battling the internal dialogue that yes, a meditation would be helpful to offer in the moment, but well-being is not a “one and done” approach, it has to be a “diet” of different resources, services, practices and skills. COVID changed that for me because the need was so omnipresent.”

Reflection: “I understand why this information is being shared, the organization is trying to prepare us, prepare for a ‘back to normal’ approach for the organization. The response from those around me is fear, fear that we aren’t ready, fear that cases will spike and fear there is no back up plan should we need to pivot again. There are positive feelings that we may become a vaccination site but that brings more people to campus and who would be responsible for staffing the site? As a leader, it is hard to hear updates without any other resources to guide my team. If face to face is required, how will we manage in person appointments without proper distancing?”
It is clear that the need of the people at the organization is great, shifting our efforts to ensure those trying to care for students are cared for too.”

“An email from human resources was sent out to the campus community titled ‘Return to Normal Operations Update’ announced that there will not be a university wide requirement for a specific number of staff to be working in person this summer. The email goes on to say that there will be no staffing capacity limits and face coverings are still required.”

**Reflection:** “This communication seems to feel tentative, still some information is better than nothing. It feels early to make decisions about the fall when we are not through the spring semester. We are still awaiting the infection rate after spring break. I can honestly say that this is particularly difficult because the pandemic has created a sense of lost time, making it very disorienting to refer back to situations – a time warp, like we’ve lost a year or two.”

*April 2021*

“Started this month off with my first vaccination shot. I also volunteered at the vaccination site. I feel ok. I was not going to get the vaccine at first because I was worried there would not be enough to give to those most in need. I listened to Dr. Fauci and he was explaining how getting the vaccine helps prevent the virus from mutating and targeting those with compromised immune systems. I felt that this was something I could do to help those most at risk.”

**Reflection:** “Watching everyone line up to get their shot was an incredibly moving experience. The health center staff was working so hard, I was proud of them, many I know personally. I saw people give high fives like they just won the lottery. I saw fear and relief in the same breath from so many. I teared up watching this all unfold.”

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May 2021

“We were alerted that the governor has lifted the health mandates are removed, no one is required to wear masks and all signage must be taken down. We can only encourage mask wearing. All in person services must be provided.”

Reflection: “This is another place where politics impacting health is evident, feeling a tug of war between what might keep people safe and having to follow the policy.”

June 2021

“The Delta variant is now starting to be talked about on the news. Delta is seemingly more severe of an illness, more deadly too. As we learn how deadly Delta is, we were told we need to plan on returning to campus by June 23rd by President Cartwright. All staff must prepare to return to campus for regular work schedules.”

Reflection: “This announcement has hit me harder than the announcement to leave campus. I honestly am not sure how to talk to my staff members about this as they are terrified to return. I do not know how to answer questions about their safety and feel conflicted if this is the right thing to do. Knowing it is right for our students to be on campus makes sense to me, but not at the risk of people getting sick and dying. The different hats I wear are beginning to topple as I try to square being a health educator and an administrator.”

July 2021

“Everyone has returned. Most staff are keeping their doors closed and keeping to themselves. I am trying to be gentle in my interactions since I’ve been back to the office for
months and months. It is clearly upsetting to some. Meetings are still remote. It feels like a shift from how to address COVID to administrative changes that are occurring.”

Reflection: “This shift feels like a disconnect with the organization. We were meeting regularly, getting updates and understanding what was next. We have not had that update in a while. This shift feels like people just want it to be over and move on and I can appreciate that need, but it isn’t over and people are still dying.”

August 2021

“We are starting the fall 2021 semester. We are still dealing with the Delta variant. There is some hope and fear feelings coinciding. We have some staff working remotely but most of what we do must be in person. I have one staff member requesting to stay home and must go through the process of getting an ADA exemption. To say that she is scared is an understatement. She is not yet vaccinated, having a terrible reaction to the first shot she got and needing to go to the emergency room. We must have in person events and programs wherever possible.”

Reflection: “What is strange about this is, this is what we have been wanting, normalcy, but what is normal now? It feels unsettling to go back to “normal.” People are asking for flexible, that flexible is now normal. Normal doesn’t feel normal anymore, it feels forced, unsettled and myopic. Normal may feel routine and routine can be calming, but the routine could still cause illness and death. This feels like I am trying to feel like there is hope and there is less restriction, but hesitant.”
Reflection Summary

These shared experiences and reflections are a fraction of what was experienced and documented. Because the pandemic is not yet over, it is difficult to truly reflect on its cumulative destruction and consequences. What is clear however, is that there is a human experience, regardless of position within an organization, that must be acknowledged, cared about, and treated. This treatment must include adjustments to how organizations conduct business, how pandemics are planned for, and how policies are developed through active learning. If the learning does not occur, all the death, loss, stress, and pain is for nothing. We learned that we are vulnerable and when there is potential severe illness and death, “normal” or “regular” responses cannot address all concerns. We learned that all the hats we wear do influence decisions within our organization and “returning to normal” does not mean those hats are removed. Leading with compassion requires sustainability that cannot wane or suddenly to stop. As a society we cannot collectively experience something and individually repair it.
CHAPTER FIVE: DATA ANALYSIS

Research Question One

The data analysis chapter addresses the study findings for the two research questions. Three data collection methods were used: participant interviews, self-interview (reflection), and organizational documents (emails, reports, meeting minutes). Both research questions are answered below along with excerpts from the participant interviews, organization documents, and self-interview that bridges the experiences and lessons learned during the COVID-19 pandemic.

The first research question asks how the organization developed and enacted resilience during the COVID-19 pandemic and used participant interviews and organization documents to collect data. Focusing on the interviews first, fourteen prospective participants were identified as university leaders that had experience and knowledge about the response to COVID-19. Fourteen prospective participants were sent an email inviting them to participate in the interview along with an outline of the study goals and confidentiality information. Of the fourteen prospective participants, nine agreed to complete the interviews. Each interview lasted from between one hour and 90 minutes, were completed virtually between September 2021 and November 2021. Interviewees included faculty and employees across the organization’s hierarchy representing such diverse offices as executive/central administration, emergency management, and departments dedicated to student and staff affairs.

All interviews were conducted via an online meeting platform, the preferred platform identified by each interviewee. All interviewees were provided a pseudonym (“Participant X”,

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with the “X” indicates the number assigned to the interviewee) to allow for anonymity and protection through the interview process. The interviews were recorded with participant permission using and a transcript was then created using oTranscribe (2021) based on those recording and handwritten notes take during the interview. A written transcript was provided to any participant that requested a copy to review and make clarifications. A summary of the participant interview requests and communications is provided in Table 6 below. It is important to note that during several of the interviews conducted, another organization member was recommended for participation. A request to participate in the interview was made; however, the interview was not completed.

Each participant was selected based on their role within the organization, their role in response to the COVID-19 pandemic, and on their engagement with the health promotion education during the pandemic. While most organization members participated representing the office or department in which they serve, some organization members were selected as representatives of entire units (representing multiple people). One such participant represented multiple organization members because they served in a significant role in the pandemic response for the organization. Further, participants that were selected to represent multiple areas also had specialized expertise in critical health issues and served in previous medical professional roles throughout their careers.

The collected data were examined through deductive and inductive coding. Provided in this chapter is a summary of each type of collected data and the analysis completed to discover themes, commonalities, and contradictions of those developed themes. Additionally, the procedure of data analysis through the use of NVivo (released March 2020) is shared. The
developed themes from self-interview data are then compared to the themes from the stakeholder interviews and organization documents to find similarities or contradictions.

**Participant Interviews**

A summary of the participant interviews is shared in Table 6. This summary identifies the completed interviews from those requested. The type of position the stakeholder holds is identified as well as if they agreed to participate in the interview. As can be seen in Table 6, only nine of the requested stakeholders completed the interview.

Table 6: Participant interview summary.

<table>
<thead>
<tr>
<th>Name of UCF staff contacted for scheduling an interview</th>
<th>Title/Position</th>
<th>Completion</th>
<th>Additional Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 10</td>
<td>Administrative Leadership</td>
<td>Not Completed</td>
<td>After second request, one participant was selected to represent a number of different administrative leaders and pandemic responders.</td>
</tr>
<tr>
<td>Participant 11</td>
<td>Administrative Leadership</td>
<td>Not Completed</td>
<td>Emailed three times, no response.</td>
</tr>
<tr>
<td>Participant 8</td>
<td>Administrative Leadership &amp; Pandemic Response</td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Participant 12</td>
<td>Administrative Leadership &amp; Pandemic Response</td>
<td>Completed</td>
<td>This participant was selected to represent multiple administrative leaders and pandemic responders based on their professional experiences and role within the organization.</td>
</tr>
<tr>
<td>Participant 13</td>
<td>Administrative Leadership</td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Participant 1</td>
<td>Pandemic Response</td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Participant 14</td>
<td>Administrative Leadership &amp;</td>
<td>Not Completed</td>
<td>After second request, one participant was selected to represent a number of different</td>
</tr>
<tr>
<td>Name of UCF staff contacted for scheduling an interview</td>
<td>Title/Position</td>
<td>Completion</td>
<td>Additional Communication</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>----------------</td>
<td>------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Participant 2</td>
<td>Pandemic Response</td>
<td>Completed</td>
<td>administrative leaders and pandemic responders.</td>
</tr>
<tr>
<td>Participant 3</td>
<td>Administrative Leadership</td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Participant 6</td>
<td>Pandemic Response</td>
<td>Not Completed</td>
<td>Emailed three times, no response.</td>
</tr>
<tr>
<td>Participant 9</td>
<td>Pandemic Response</td>
<td>Not Completed</td>
<td>Emailed three times, no response.</td>
</tr>
<tr>
<td>Participant 7</td>
<td>Administrative Leadership</td>
<td>Not Completed</td>
<td>Emailed three times, no response.</td>
</tr>
<tr>
<td>Participant 4</td>
<td>Administrative Leadership</td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Participant 5</td>
<td>Pandemic Response</td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Participant 15</td>
<td>Administrative Leadership &amp; Pandemic Response</td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Participant 16</td>
<td>Pandemic Response</td>
<td>Not Completed</td>
<td>Added after multiple interviewees mentioned as a critical stakeholder. Emailed three times, no response.</td>
</tr>
</tbody>
</table>

*Note.* This table outlines each participant that was contacted, how each responded and any helpful notes pertaining to their participant.

**Deductive Thematic Analysis: Stakeholder Interview & Documents**

After conducting the stakeholder interviews and collecting all relevant organization documents, the data was analyzed to find themes utilizing the process of thematic analysis as described by Braun and Clark (2012). The three-step deductive process as described by Boyatzis (1998) is followed to find initial codes. The theoretical framework for organizational resilience outlined by Duchek (2020) with the phases of anticipation (preparation), coping (accepting), and adaptation (reflecting and learning) along with the action associated with the phase including
resource availability, social resources, and power and responsibility was used as potential initial codes, completing the first phase of Boyatzis’s (1998) process.

Next, with the theory grounded codes, all stakeholder interviews, and organization documents were reviewed in detail to further process the code with the context of the interview and document. This process is time consuming that requires re-reading the theory and documents. The process of assigning statements and comments to the determined codes is the next step (Boyatizis, 1998). Table 7 displays an example of the first two stages of the deductive coding process.

Table 7. Deductive coding process example

<table>
<thead>
<tr>
<th>Code-Phase 1</th>
<th>Code – Phase 2</th>
<th>Quote</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipation</td>
<td>Anticipation</td>
<td>Stakeholder Interview: “In the first spring it felt like we were just in panic mode. I tried to tell people not at the table, we are meeting every day, we are trying to tackle these things and I would try to share this with others. We didn’t have furloughs but other organizations did. Some people didn’t see that as a success, but that was. We had to prepare for it just in case and these decisions made sure to keep the university afloat.” (Participant 3, 2021)</td>
<td>This stakeholder was sharing how the EICRT had to anticipate all possibilities for the organization to continue to stay open, reduce financial losses, and serve students.</td>
</tr>
<tr>
<td>Preparation</td>
<td>Stakeholder Interview: “We were able to mobilize and come together quickly” (Participant 6, 2021).</td>
<td>Within the anticipation phase, the organization moved quickly to get technology in place, write policy, and communicate out plans.</td>
<td></td>
</tr>
<tr>
<td>Preparation</td>
<td>Coping</td>
<td>Stakeholder Interview:</td>
<td>A stakeholder sharing a very personal</td>
</tr>
<tr>
<td>Accepting</td>
<td>Stakeholder Interview: “Calls early on were with leaders from Disney and Lockheed Martin, everyone was sharing practices they were going to put into place to bring their workforce back in place. Sharing lessons learned and what everyone was doing or not doing.” (Participant 2, 2021)</td>
<td>Understanding that there needed to be a plan for large organizations during the pandemic.</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Coping</td>
<td>Reflection &amp; Learning&lt;br&gt;Stakeholder Interview: “I would go back and ask leaders to explain it again. The time to reflect was after the deadline, there might not be time to fully navigate through the problem.” (Participant 7, 2021)&lt;br&gt;Stakeholder Interview: “This interview is the first time I have been asked to reflect on what happened.” (Participant 4, 2021)</td>
<td>Not enough time to process what was happening during the event, having to keep moving and that could be potential for lost learning. Reflecting was not a part of the regular process for those serving on the emergency management team.</td>
<td></td>
</tr>
<tr>
<td>Accepting Resources</td>
<td>Stakeholder Interview: “One community relationship that has continued throughout, the Orange County Public Health Department. Contact tracing has been in connection with Orange County and then our college of medicine students served as contact tracers. And then their epidemiologists sit on that oversight and surveillance committee.” (Participant 9)</td>
<td>Understanding what networking resources, the organization has aids in ability of the organization to reduce case transmission.</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Adaptation Power &amp; Responsibility</td>
<td>Stakeholder Interview: “There was a decision made that masks were no longer required. We went home that day and then an email came out saying that masks were no longer required. It caused friction because we were not able to inform our staff that there was a change and staff were enforcing this old policy. Why was the change effective at seven o’clock at night. Couldn’t that been a phone call to help prepare for this, we would work with the team to make sure the information was out to the staff.” (Participant 5, 2021)</td>
<td>There were negative consequences of leaders making decisions and organization members are not in the position to make changes.</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** A description of the integration process of codes is described on page 85.

After completion of the of the two steps of the deductive process, the third and final step taken be to finalize the selected theme as it connects to the theory within the context of the collected data. The example of the final stage as described by Boyatzis (1998) is displayed in **Figure 6**. The full description of the coding process is included in the appendix of this study.
Following the deductive process, the findings can show how the findings support or contradict the theory (DeCuir-Gunby et al., 2011). Returning to the theory and literature with the assigned codes and determined themes can further require the researcher to simplify codes and/or themes (DeCuir-Gunby et al., 2011). While the determined themes did capture a great deal of the collected data, there were still gaps. After the deductive process is completed, the inductive procedure was conducted to process the self-interview data to fill the gaps in themes.

*Figure 6. Deductive coding process*
Identified Themes

Preparation

In this study, preparation was assigned as an important theme to describe both the expectation of how the organization would respond to COVID-19, and how it did respond throughout the pandemic. Preparation is defined as the ability for the organization to respond quickly to address threats because planning was thorough and inclusive. Interview participants used a variety of words such as quick, fast, and pace, in their reflections in relation to how quickly the organization addressed community needs and minimized potential harm, how prepared they were. The concept of preparation was used by seven of the nine interview participants (77% of participants) and was referenced a total of 88 times by these seven participants over the course of the entire interview process. Quotes from participants related to the concept of the speed of the organization’s response are shared below.

1. “We were able to stand up these services quickly, think about it, we moved an entire university to remote working and remote learning in two weeks. We brought people together to problem solve and activate our response teams” (Participant 3, 2021).

2. “We were able to mobilize and come together quickly” (Participant 6, 2021).

4. “Covid is here to stay but not as prevalent it will be like the flu with outbreaks. I hope that’s true, that’s the prediction” (Participant 1, 2021).

5. “We had to come together in March, so there really wasn’t any time to train people in emerging issues” (Participant 1, 2021).

There were many factors that impacted the ability to prepare for the pandemic. The speed to which the virus was spreading, the speed at which the members of the organization needed to respond, and the speed of the scientific discoveries related to COVID-19 were happening causing ripple effects within the organization. The implications of the speed on how prepared the organization was to respond to the changes that the pandemic required organizations and individuals to respond resulted in both positive and negative outcomes as told by the interview participants.

Potential negative outcomes could include the reduction in decision time, increased stress, resource waste, disruption to education and services. There are potential positive outcomes as a result of how quickly the organization responded. How quickly decisions were made and communicated to staff, faculty, and students increased ability to continue services which in turn could reduce disruption to education. In addition, the need to make quick decisions may contribute to the opportunity for innovation and creativity (Johnson & Murray, 2021). How ready the organization was to respond connects directly to the first phase of Duchek’s (2020) organizational resilience conceptualization, anticipation.

The ability to make predictions or anticipate before and during the pandemic is another factor influencing the ability of the organization to prepare. This study defines prediction as the ability to understand potential consequences or impacts of future threats or disruptions to the
organization. In the context of this study, prediction is used to describe the role of planning and preparation for emergencies. Interview participants discussed the use of prediction in various ways including how the end of COVID-19 would impact the organization, and how critical events, whether similar or not to COVID-19, motivate the organization to improve the ability to use what was learned to predict new threats.

The difficulty with relying on predictions to prepare during COVID-19, even those that have been relatively accurate, is that the information was continuously changing. As the information kept shifting, the organization’s ability to use predictions in the decision-making process can be difficult. In addition, the tendency for the organization’s predictions (and specifically those with responsibility for making them) to shift over the course of the critical event had the unintended consequence of creating perceived “chaos.” While some members of the organization felt, as a result of the shifting predictions, there was disarray, other interviewees noted shifts in predictions in positive terms. The ability to change was a marker of resilience.

What was also discussed during the interviews and within the organization documents regarding preparation was training. During the individual interviews, nine participants or 100%, commented on training that was completed, needed or lacking one hundred and forty times. When discussing training opportunities, the term was defined as organized opportunities to learn the emergency management process. Within the context of responding to the pandemic, training could include in the moment training (guest speakers at EICRT meetings (continuous/periodically) or longer-term preparation or ongoing, regular trainings. The ability to train organization members as a part of the preparation activities could help to increase resilience.
Acceptance

The concept of acceptance is defined as coping and managing the critical event according to Duchek’s (2020) organizational resilience conceptualization. This was discussed by numerous participants and was connected to the ability to respond, pivot, learn new ways of working, and the rapid change of information needing to be processed. The theme of acceptance included codes like resiliency, adaptation/adaptability, decision making, support and caring, all instrumental during the response phase or acceptance phase. That ability to pivot during the critical event also connects to the push and pull of creating flexibility and stability for the organization as described by Brunelle et al. (2003).

Participants reported feeling as though the organization’s ability to respond during the pandemic, in the acceptance phase, were stalled thus causing unintended consequences. Inversely, the speed of changes allowed for innovation and adaptation which can increase organization resilience (Davidson, 2010). Participants commented on acceptance 61 times throughout the individual interviews. Acceptance was commented on by nine of the participants creating a proportion of 100%. Statements made by participants focused on the concept of acceptance include:

1. “Being able successfully plug along. Just plugging along that it is successful mode. Well-being comes in with the success, information helps you be resilient. It cannot just be up to me to be resilient, there should be ways to teach it. Successfully move forward” (Participant 8, 2021).

2. “From the outside looking in the university looks resilient, but not all individuals were not successful. I go back to well-being and
how do people know how I am doing through this unless they ask me. No one in upper leadership ever asked me. Yes, I got my work done, could I have done better, I am sure I could have. I don’t think the university knows how people were resilient. How does that resilience translate to the individual” (Participant 9, 2021)?

3. “We were still able to create experiences for our students. We were able to demonstrate that we will continue to move forward, be near each other, we will continue to provide education, to know what it is like to be at UCF. I think we tried to do this for employees too, keeping employees engaged. Just think about everything we did to move online” (Participant 4, 2021).

4. “Your ability to when you get knocked down you are able to get back up and keep going” (Participant 6, 2021).

5. Leaders are making decisions. This was truly being led from the top of the organization on how the university is going to navigate through this” (Participant 2, 2021).

6. “Your compassionate leadership will be essential for UCF’s success again this spring” (Organization document, February 11, 2022).

7. “As a manager, you can play a big role in reducing the spread of the virus and conveying care and support for your team members” (Organization document, February 11, 2022).
8. “The president has been meeting every other Friday with other university presidents, the board of governors and the chancellor. That has happened during the entire pandemic. This was not just a university response, but a system response” (Participant 1, 2021).

9. “There are some significant political overtones involved, from community and political directions from the state and board of governors” (Participant 4, 2021).

10. “Is another great example of under unintended good consequence because they were minors who couldn't get vaccinated we were really intimately concerned about how are you going to host a sports camp affectively” (Participant 5, 2021).

The comments made by participants about acceptance pointed to the organization’s ability to keep services open and to respond to emerging issues. These connected to the common definition of resilience participants shared, which was to keep a state of normalcy and the ability to keep services open. Repeatedly, participants shared that resilience was “returning to normal” or “plugging along”, suggesting adaptation was not a part of the organization resilience, but rather, it reflects going back to what the participants knew to be normal. Recalling Bruneau et al. (2003) organization leaders work to create balance between normalcy or stability and flexibility and innovation. It is important to note that while participants described resilience as returning to normal, many also shared that the organization pivoting, creating new policy, and developing new programs, which is incongruent with the shared definition.

During the accepting phase, the organization is continuously developing solutions and implementing the plan previously created (Duchek, 2020). During the interviews participants
shared that information was gathered and shared quickly and as a result, it was difficult to consume and process the changes. In this context, decision making referred to how the organization processed potential threats. Threats, in this context included potential spread of illness, death rates of the sick, lost revenue and lack of resources, as well as student withdrawal from school.

Decisions needed to be made quickly in many instances and the opportunity to consider every potential outcome would be impossible. A risk-reduction model of decision making had to be implemented, using what the organization has available at the time to make the best possible decision. In this case, speed can also produce negative outcomes in situations where staff do not feel connected to the decisions being made (Kniffin et al., 2021).

Throughout the individual interviews and organization documents the values of the organization was discussed in connection with the acceptance stage of Duchek’s (2020) organizational resilience. Specifically, the valuing the staff, faculty, and students through this difficult time. The organization mentions care and compassion repeatedly in communications and safety instructions. Participants reported feeling as though those caring messages and communications ended abruptly.

The interpretation of these findings, it appears that there was a period of time that regular communications sharing a compassionate tone was evident to participants but once that ended and the pandemic continued, there was incongruence. This dissonance combined with the continued threat of illness or death could erode the good faith and trust that was built during the compassionate messaging. Perhaps these findings demonstrate need for sustained compassionate messages is needed to maintain the resilience building during such a prolonged stressor.
As described by the interview participants, stakeholders include students, parents/families, staff/faculty, larger community, researchers, and grant funders. Stakeholders are major factors in all decisions made, policy developed, and risk reduction plans and therefore was discussed frequently by interviewees. Findings in this study showed that stakeholders had many opinions on how decisions were made making it difficult for leaders because of the added pressures. Without understanding the needs of each stakeholder group, delays in research, delays in progression to graduation, delays in grants fund distribution could be potential outcomes.

Leaders were faced with those unintended consequences and while trying to make the best of it, these consequences highlight gaps in policy, protocol, and intra-organization understanding of individual department capacity. Due to these consequences, departments had to take more time to respond, create new processes and drained resources.

Resources

The theme of resources encompasses the physical resources, social resources, and financial resources the organization has access to. Physical resources include supplies, including masks, hand sanitizer, technology, and signage. Social resources include the employees of the organization, relationships and networks connected to the organization, and internal/external stakeholders that have special interest in the organization operations. The financial resources include the fiscal assets the organization has itself, but also what financial resources those the organization has relationships with might have access to. The theme of resources was mentioned 71 times by participants. Resources were mentioned by eight of the nine participants, creating a proportion of 88%.
The social resources were generally described by interview participants as relationships and networks developed over time and as a feeling of comfort and openness. As one interviewee suggested, “It was good that I already had a relationship with her, I mean, we have worked together for years” (Interviewee 4, 2021). Organizational relationships are not just formal or dictated by the structure of the organization that determines with whom and for what purpose exchanges between staff are made. The theme of resources was mentioned 71 times by participants.

Often social resources have a foundation in trust (Murphy, 2007). Participants in this study generally described trust as being developed through prior positive experiences with members in the organization. Those relationships might also influence some of the financial resources the organization has access to. Using those social resources or networks, allow for shared resources during critical events.

1. “Having to work closely together, so quickly, I hope that he realized I was someone he could trust” (Participant 6, 2021).
2. “We have worked together on different projects over the years and I knew her, I knew I could ask questions” (Participant 7, 2021).
3. “I might not have known individuals on the leadership team, or cabinet as well as I needed to, but we became closer” (Participant 3, 2021).
4. “Yes, the players on EICRT. It was an unknown committee going in. Honestly, I still can’t tell you who was on and who was on to listen or make decisions. I would have liked to have stronger
relationships with them prior to the pandemic” (Participant 3, 2021).

5. “I felt like I made some new connections and we still communicate, especially with faculty” (Participant 6, 2021).

“Everyone was sharing practices they were going to put into place to bring their workforce back in place. Sharing lessons learned and what everyone was doing or not doing” (Participant 2, 2021).

6. “There is definitely a lot of coordination conversation holing among our sister institutions” (Participant 1, 2021).

7. “I think our ability to work collectively and leverage our knowledge and expertise, and it took courage” (Participant 3, 2021).

8. “Having a medical background was very helpful. Being a champion and getting to realize that people were scared. Those leading had a variety of experience to lean on” (Participant 1, 2021).

A noteworthy result of the interviews is the relatively large proportion, 88%, of interviewees reported that trust was a factor in all relationships, regardless of position or title. Additionally, trusting individuals in the organization translated into them having a perceived higher reputation within the organization. Interviewees shared that trust was seen when depending on others for consultation when decisions were made. Social resources benefited the organization especially in stressful situations where decisions are made quickly and time to reflect is reduced.
Informal relationships drastically altered how a person felt in regard to decisions being made. Informal relations that were established by staff that were not a part of the decision-making process enabled them to learn from those that may have information participating directly in meetings or other venues. These relations provided a means for interviews to understand the decision processes and make them feel more connected to the organization. Participants that had established relationships found it easier to work through challenges and it resulted in surface level relationships being strengthened. This finding reflects previous studies that highlight the importance of relationships in organizational resilience and emergency management (Jung & Song, 2015).

These findings support previous studies examining networks, social capital, and collaborations. Having consistency among state institutions can be reassuring for organization leaders (Ungureanu et al., 2020). This collaboration also aids in creating network relationships, efficiency with shared resources, and lessens competitiveness (Hardwick et al., 2013). These strengthened network bonds can also help should future critical events occur allowing for swift response (Hardwick et al., 2013).

The use of expertise in connection with the social resources was discussed throughout the interviews. Participants described expertise as advanced professional training, experience, and knowledge in a particular area. Participants reported decision makers connected with experts to inform policy. These experts that were called upon could be internal or external to the organization. Organization benefits from having expertise contributing from different areas of expertise, faculty members with research specialties, medical experts, and communication professionals because this creates calculated decisions.
Reflection/Debriefing

Interview participants interchangeably used reflection and debriefing to describe the process of pausing to consider what organization members learned as a result of decisions made. Reflection is a critical part of emergency response process and is used by participants to describe their process for thinking critically about organization changes, suggests they see the benefit of reflection. Reflection was commented on seventy times throughout the individual interviews. Reflection was mentioned by seven of the participants creating a proportion of 77%. Much of what was shared by interviewees regarding reflection was done in isolation, by themselves or in small groups, not as a larger organization. Some quotes from participants that include the concept of reflection or reinforce organization members wanting to circle back to discuss how to make improvements in how decisions are made (the process) and the substantive elements of the decision (what changed in the organization). Examples of quotes connected to the codes are provided below:

1. “To start with, this has to be talked about. There has to be, there have been other emergencies on campus and we have debriefed” (Participant 4, 2021).

2. “Did something happen to require us to allow masks at seven pm. I never saw anything that said it must be today. I would ask about that if we debriefed” (Participant 8, 2021).

3. “Effective debriefing has to be timely. The details are forgotten. If I bring that seven o’clock issue now, people have forgotten. We have missed some of the windows to prevent something to happen again (Participant 8, 2021).
While some participants reported that reflection occurred within leadership teams or on their own, larger organization wide reflection and debriefing were conducted only sporadically. It is possible that the required speed of decisions, coupled with a new university president, interim leadership positions, and general stress for the lack of the reflection process impact the organization resilience. The lack of formal reflection and debriefing process can negatively impact resilience due to a lost opportunity to learn and provide a shared experience as an organization.

*Power & Responsibility*

Participants often described relying on a small group of trusted leaders for information and to reflect with during the pandemic. Most interviewees noted the University President’s Cabinet Members (ex. vice presidents) as comprising this group. Individuals interviewed that were both a part of this group, and outside it, commented on its members being able (and encouraged) to reflect together and to debrief with one another. Participants included the subtheme of “inner circle” one hundred and 25 times. While only five of the participants mentioned the concept of an inner circle, (creating a proportion of 55%) those five participants mentioned this concept repeatedly, suggesting the importance and value placed on being in this trusted leadership group. Examples of quotes related to the code is shared below:

1. “The relationships within the leadership, they were strengthened. With a new president, the president had to be comfortable leaning on me and trusting the leadership team”

(Participant 2, 2021).
2. Difference was when we developed the EICRT made up mostly of vice presidents, the other emergency response plans funnel up to them. They are meeting and feeding information up” (Participant 1, 2021).

3. “The whole process of the EICRT and not fully understanding who is in charge, how to communicate with that committee. My understanding the vice president for compliance chairing the committee. There may be reasons why, but I do not understand it because it hasn’t been clear. During a hurricane, I always know who to go to” (Participant 8).

Although the concept of an “inner circle” was used less frequently than other themes throughout the interviews, it is important because of the potential perception that members of the small group make decisions without consultation or operate in a more insular fashion than what is desired by others in the organization. It could be considered valuable for the organization leaders to deepen the relationships across the organization to increase member buy in and trust.

In summary, there were five themes assigned through the individual interviews and organization documents. Through the analysis of the transcripts and documents what became apparent that while communication is vital for organizational response to a critical incident, it is how the information is shared throughout a prolonged crisis that is the key to the capacity to adapt, evolve and increase resilience. It is the expression of organization values, care and compassion as discovered through the data analysis that is the takeaway from these findings. It is not just important to share information, but it is how it is shared that is critical (Lui et al., 2021). Messages without sustained compassion is just information, compassion creates a critical
component of resilience. The partner to organizational values is reflection, providing a space to ensure those values are being communicated throughout the critical event.

A summary of the thematic analysis is provided in Table 8. The themes are defined and put into context for the reader to have a deeper understanding of how the theme was generated. Additionally, implications of the theme are shared to emphasize the importance or significance of the coded theme. This process provides a level of evidence that aids in the connection of the findings, the participants and to the theory itself.
Table 8: Themes generated from thematic analysis.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Theme Definition</th>
<th>Context</th>
<th>Frequency</th>
<th>Proportion</th>
<th>Implication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>To anticipate and plan for potential risks.</td>
<td>How quickly the organization responded to the pandemic and different needs of the community to reduce harm.</td>
<td>88</td>
<td>77%</td>
<td>Reduce decision time, reduce budgetary waste, reduce resource waste, reduce stress, increase ability to continue services, reduce disruption to education.</td>
</tr>
<tr>
<td>Accepting</td>
<td>The capability to act quickly using varied coping strategies including sustained care during the emergency.</td>
<td>During the critical event to be able to put plans into action.</td>
<td>71</td>
<td>88%</td>
<td>Enacting the plan causes continuous evaluation. Using the organization resources can aid in timing of response, lessen negative impacts, and increase organization connectedness.</td>
</tr>
<tr>
<td>Theme</td>
<td>Theme Definition</td>
<td>Context</td>
<td>Frequency</td>
<td>Proportion</td>
<td>Implication</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-----------</td>
<td>------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Reflection/Debriefing</td>
<td>The ability to think critically about decisions to be innovative and adapt</td>
<td>A critical part of emergency response process to not only learn from the event, but to process as an organization.</td>
<td>70</td>
<td>77%</td>
<td>Reflection and debriefing were conducted sporadically due to speed of decisions. Lack of process could have also been due to interim positions. Lost opportunity to learn.</td>
</tr>
<tr>
<td>Resource</td>
<td>The physical, social, and financial resources available to the organization.</td>
<td>A critical part of emergency management planning and preparations.</td>
<td>41</td>
<td>55%</td>
<td>Reduction of wasted resources, saved funds, shared resources, increased social bonds, enhanced networks and trust.</td>
</tr>
<tr>
<td>Power &amp; Responsibility</td>
<td>The ability, authority, or duty to make a change within the organization.</td>
<td>As organization members learned of decisions made or were made aware of issues or concerns did they have they authority or duty to make the change.</td>
<td>103</td>
<td>88%</td>
<td>Organization members who are not empowered to make changes can feel disconnected and reduce buy in while members who are able to make decisions are potential more connected and experiencing increased resilience.</td>
</tr>
</tbody>
</table>
Inductive Thematic Analysis: Self-Interview

The inductive approach to coding data is an iterative process of reviewing the data allowing the codes to be developed through the reading and re-reading. The three-step procedure was followed as described by DeCuir-Gunby et al. (2011). The process of open coding, axial coding and identified selected theme was completed using the self-interview data collected.

The collected data was read thoroughly with notes made indicating potential topics or themes. Next, initial codes were developed through systematic analysis (Figure 7). Then, all data was entered into the NVivo (released in March 2020) software. Analysis through NVivo (released in March 2020) included word frequency searches and performing a topics search based on the notes taken during the first step of analysis. After themes were identified in the analysis process, the themes were coded into the specific topic areas. Like Braun and Clark (2012) state, these emerging themes are responses that are noticed patterns.

![Diagram](image)

*Figure 7: Coding process example for organization values.*
Research Question Two

Self-Interview

The second question this study asks is if due to COVID-19, how has the delivery of health promotion education within the organization changed? This question helps not only health educators within higher education settings but other health promotion professionals that have had to respond during critical health events. COVID-19 brought challenges and opportunities for health educators including an increased value to health education, deeper understanding of the importance of public health on a college campus, and how health promotion professionals strive to reduce academic impediments, decrease health disparities, and increase self-efficacy by building self-care knowledge and skills.

A daily self-interview was performed between January 2020 and August 2021 and recorded in a personal journal. The same thematic analysis process developed by Braun and Clark (2012) was followed to analyze the collected data. First, a review of all self-interview notes was conducted. Through this first read, common phrases and terms were revealed and highlighted to facilitate the next steps in the thematic analysis process. Next, all notes and journal entries were entered into the NVivo (released March 2020) software for further analysis. Utilizing NVivo (released March 2020), further analysis was conducted including word frequency searches and theme coding to find relationships between the themes.

Through thematic analysis of the self-interview questions and reflections, six themes were discovered. The primary themes include purpose, communication, reflection, fear, organization values, and prediction. The frequency, which delineates the number of times each of the themes were revealed during the analysis of each of the themes is included within Table 10. Within the context of a routine self-interview and reflection process, each theme integrates the perspective of a
department director with multiple roles within a public institution of higher education and an individual living through a pandemic. Included in Table 10 is each discovered theme, how the theme is defined, the context that the theme was derived from, the frequency it occurred, and the resulting implications. Each theme is described in the narrative following Table 10 below.

Table 9: Themes from personal reflection.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Theme Definition</th>
<th>Context</th>
<th>Frequency</th>
<th>Implication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Feeling needed, helpful, supportive and mission driven.</td>
<td>As a health educator, being able to be useful was motivating.</td>
<td>103</td>
<td>When including those with topic expertise, it benefits the organization and the organization member.</td>
</tr>
<tr>
<td>Communication</td>
<td>Giving and receiving information, sharing data and meeting as a team.</td>
<td>Shared data from trusted organization members regularly.</td>
<td>110</td>
<td>Communication is at the core of organization planning and execution of policy and programs.</td>
</tr>
<tr>
<td>Reflection</td>
<td>To pause, think about the decision made, potential impact prior to and/or after a critical point in the response.</td>
<td>The organization needed people to adapt programs and projects quickly to reduce risk.</td>
<td>66</td>
<td>A critical part of emergency response process to not only learn from the event, but to process as an organization.</td>
</tr>
<tr>
<td>Fear</td>
<td>Fear of illness, death, loss of employment, childcare, medication, vaccination and the unknown.</td>
<td>The unknown of if you or a loved one would get sick, suffer, and die and all potential negative consequence of the pandemic.</td>
<td>93</td>
<td>Fear was connected to information received and understood. Fear could be debilitating at times and influences all areas decision making.</td>
</tr>
<tr>
<td>Organization Values</td>
<td>What does leadership believe in and put into practice that is at the core of the Values of care and compassion for staff,</td>
<td>Trust in the organization was critical. Participants put at risk. Fear increased and communication decreased. Some</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Theme</td>
<td>Theme Definition</td>
<td>Context</td>
<td>Frequency</td>
<td>Implication</td>
</tr>
<tr>
<td>-------</td>
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</tr>
<tr>
<td>belief system or philosophy of the organization.</td>
<td>faculty, and students.</td>
<td></td>
<td>processes were put in place to limit exposure, but cost was employee security. Messaging was strong at the beginning of pandemic and lessened as time passed and political pressures increased. New leadership could impact values across organization.</td>
<td></td>
</tr>
<tr>
<td>Prediction</td>
<td>To understand potential consequences or next threat looking forward.</td>
<td>A critical part of emergency management planning and preparations.</td>
<td>84</td>
<td>Predictions continuously changed impacting decision-making process.</td>
</tr>
</tbody>
</table>

*Note. Summary of coded themes from personal reflection.*

**Purpose**

The theme of purpose was discovered from the self-interview documents. The concept of purpose is defined as a reason people feel like they are making a difference and are valued in the work they do, specifically during COVID-19. The theme of purpose is significant for a health educator because the professional goal of health promotion is to improve the health and lives of community members. The concept of purpose was commented one hundred and eight times. Examples of the theme of purpose is provided below.

1. “It is working and I feel purpose with this role. We have been able to increase the compliance rate, hopefully reducing the spread. The recommendations some of the students have had truly helped the decision makers make real time adjustments to the app and to protocols. This is why I love the work I get to do.”
2. “I do feel proud that we might have helped to keep the campus safe, but I am running out of staff.”

3. “I am grateful for the chance to help, share what I know and make a difference. It goes without saying that I am fearful, I need to be interacting with lots of students in this program and that is all potential exposure. Joining the meeting to plan for this effort was interesting, a peek behind the curtain of how these meetings were running, how decisions were made and who was at the table.”

4. “I was asked to attend a “return to campus” subcommittee meeting and was asked about outreach with the peers and what it would take to organize a compliance team to ensure community members were completing the COVID-19 self-checker that was being launched. I found it challenging to be a part of a consultation for a service that was already decided, so I could be a part of it and organize it in a way my training and education is reinforced or step back. I wanted it to be successful, so I said yes.”

5. “With this data, we were able to make changes to the compliance policies in real time. This was powerful to make immediate changes and empowering for students to see how they could help change something that wasn’t working.”

**Figure 8** is an image created using the NVivo (released March 2020) software during data analysis. This image shows the connection of how purpose (help) is discussed in the self-interview journal. It is evident viewing this image that purpose was connected to fear, pain, hurting, and
gratitude throughout the reflexive self-interview process. Of particular interest, two comments that are distinct in the image is “something I could do to help” and “when I feel called to help” shares the very personal connection with the role held within the organization and the feeling of making a difference and having a purpose. Without this image, it might not be as clearly understood in the narrative or other description of the study findings.

![Text Search Query - Results Preview](image)

*Figure 8. Text search results within NVivo (released March 2020).*

Purpose finding provides a connection between the organization members and the organization itself. When purpose is tied to the role a member has with the organization, motivation is increased, and members feel valued as contributing members of the greater effort. Purpose finding can be a powerful experience for organization members during a time that fear and burnout
is a dominating feeling expressed. Where organizations leaders can provide opportunities for organization members to develop and experience purpose in their role could aid in increased resilience, perceived or real.

Reflection

The theme of reflection was constructed through the systematic process of thematic analysis. Reflection is defined as the ability to think critically about an event, how it happened, how it felt, how it impacted this researcher. Reflection was discussed 66 times throughout the self-interviews collected. Quotes selected from the self-interview journals and notes that represent the theme of reflection are provided below.

1. “It is difficult to sit back and wait with no plan of action and people in China dying.”
2. “Running out of steam. I was thinking that this would be a temporary program, but it is not sustainable without enough staff.”
3. “This is another place where politics impacting health is evident, feeling a tug of war between what might keep people safe and having to follow the policy.”
4. “The different hats I wear are beginning to topple as I try to square being a health educator and an administrator.”

As discussed in the literature review, the concept of reflection is often a personal experience. Reflection can be used in various roles an individual has, as a leader, a caregiver, and an employee. Reflection can also be defined by the environment or situation one is in or referring to. To comprehend the definition in the context of how reflection was used in this study, the self-interview responses provide insight to how people were experiencing a life-threatening pandemic. To further
deepen the understanding of the theme of reflection a text search was conducted through the NVivo (released March 2020) software.

Figure 9: Text search query results for the theme of reflection.

The text search query (Figure 9) developed with NVivo (released March 2020) software, shared in the image above illustrates the complex connection the theme of reflection was found throughout the participant interviews and organization documents. The significance of the text search image is that one can better understand the context in which the concept of reflection is discussed. Researchers and practitioners can use this image to further investigate how interconnected risk, fear, problem solving, organization change are connected to this theme further supporting the need for structured reflection.
The theme of reflection emphasizes the process of trying to understand what is happening around you. Understanding and providing meaning to what is happening is significant because the pandemic was something that most people alive today had never experienced before. People had to find meaning around their various roles they held, as parents, employees, caregivers, and reflection allowed people to find meaning during COVID-19.

**Fear**

The theme of fear was discovered through thematic analysis from the self-interview responses. Fear is described within the context of this study, as a feeling of worry that negative consequences or outcomes may happen to us or loved ones. Fear was commented on ninety-three times throughout the self-interview data analysis. Fear surrounding COVID-19 was connected to the threat of illness, death, loss of loved ones, potential loss of income and security. Fear was also surrounding other simultaneous stressors like political unrest and racial tensions. Quotes from the self-interview data analysis are shared in the next section.

1. “This is when I truly had real fear in what would happen to my family. I had terrible images of the black death as it was portrayed in books and films. I immediately was concerned for my children, ages seven and nine, and how I would be able to protect them.”

2. The plus side is I am alone, so I feel safe from the virus, but creeped out being alone in the office. I know my employees are grateful they do not have to come in.”

3. “What a surreal time, sending my children back to school where they will be put in harm’s way. I am fearful that they will get sick, but fearful that they will not be able to sustain this at home.”
4. “The response from those around me is fear, fear that we aren’t ready, fear that cases will spike and fear there is no back up plan should we need to pivot again.”

![Text Search Query - Results Preview](image)

Figure 10: Text search query results for the theme of fear.

The text search query within NVivo (released March 2020) software aids in further inspecting the data for each theme. The text search query investigating the theme of fear (Figure 10) that was conducted using NVivo (released March 2020) software is shared above to provide a deeper understanding of how the theme was established. Fear is connected in this study’s context to spikes in COVID-19 cases, readiness to return to work and school after the quarantine, and what the impact on our children and families have been after experiencing a deadly pandemic.

The theme of fear is significant in these findings because the feeling of fear can inhibit resilience. Experiencing fear puts a person in high alert, using their fight, flight, or freeze nervous system responses. The state of high alert is not sustainable and can cause exhaustion and burn out. Fear can interfere with decision making, executive functioning and overall well-being (Navarro-
Soria et al., 2021). It is important to make sense of this fear in order to continue to process and reflect on what is needed during the critical event.

**Communication**

The theme of communication was constructed through the process of thematic analysis. The theme of communication was found one hundred and ten times through the self-interview data analysis. Communication is described through the self-interview as information shared through meetings, email communications, announcements from government agencies, health experts, the organization and between organization members. Some communication was shared automatically by agencies and organizations, some had to be sought out, or researched through trusted sources like the World Health Organization. Examples of the communication theme are shared below.

1. “Knowledge is power! I have been waiting to see this information. I think it just so helpful to better understand what will cause further action answering, what has to happen for a change to occur? It is also reassuring that there is a standard for which leaders will act. One question that I did not see directly answered by these triggers was, how will offices function should staffing is impacted.”

2. “I understand why this information is being shared, the organization is trying to prepare us, prepare for a ‘back to normal’ approach for the organization. The response from those around me is fear, fear that we aren’t ready, fear that cases will spike and fear there is no back up plan should we need to pivot again. As a leader, it is hard to hear updates without any other resources to guide my team.”
Communication is an important theme because during COVID-19 people need to know what is going on to protect themselves and others. Through this communication people were able to make decisions that could reduce the risk of the virus spreading, where hotspots of the virus were identified, where hospitals and health facilities were open for testing and/or treatment and what stores were open to get groceries and supplies. Communication was important within the organization so organization members could learn policy, understand when and how they were to get their jobs done, and learn how the organization is responding. How information is share is also significant during the pandemic. Organizations had to understand how their organization members were able to receive information and potential adjust communication strategies so all organization members can access important information and instructions.

Subtheme: Prediction

Prediction is a theme discovered through the process of thematic analysis. Prediction is a subtheme of the communication theme. Prediction is described in the context of the COVID-19 pandemic as the ability to anticipate needs of organization and members within the organization. Prediction is identified as a subtheme of communication because important information must be provided to people in order for them to anticipate and act. If organization leaders do not have the information, they need to make decisions about resource allocation, staffing needs and risk reduction, the capacity to plan and adapt is lacking. If The concept of prediction was commented on 84 times throughout the self-interview data analysis. Examples of the theme prediction is discussed below.

1. “Looking at my staff, spread out in our lobby, syncing laptops for remote work, they were scared. They were looking for answers, reassurance, a
promise that things would be ok, safety. I keep saying, the plan is to return in two weeks just do your best… and we walked out the door.”

2. “I am grateful for the chance to help, share what I know and make a difference. It goes without saying that I am fearful, I need to be interacting with lots of students in this program and that is all potential exposure. Joining the meeting to plan for this effort was interesting, a peek behind the curtain of how these meetings were running, how decisions were made and who was at the table.”

Figure 11: Text search query results for the theme of prediction.

The text search query focused on the theme of prediction (Figure 11) through the NVivo (released March 2020) software includes concepts like plan, safety, action, pivot, and mitigating risk. These concepts are connected to the theme of prediction as it illustrates the perception of how the organization was using prediction to prepare the organization and reduce negative outcomes. Further, the organization could use this information to determine how to communicate how they use prediction throughout the response to the critical event, potentially reducing fear among organization members.
Organization Values

The theme of organization values was uncovered through the process of thematic analysis of the self-interview data collected. The theme of organization values was mentioned 58 times throughout the self-interview documents. The concept of organization values is described as how organizations communicated that their stakeholders are valuable or considered when developing policy and programs. Examples of the organization values theme are numbered below.

1. “This is how I imagine the book War of the Worlds… just Armageddon and lack of care for others.”

2. “It is clear that the need of the people at the organization is great, shifting our efforts to ensure those trying to care for students are cared for too.”

Figure 12: Text search query results for the theme of organization values.

A text search query (Figure 12) was conducted to further investigate the constructed theme of organization values. Through the initial steps of the thematic analysis process in reviewing the participant interview transcripts, organization documents, and self-interview, one word that continuously came up, “care.” Care demonstrates the organization values because in this context shown in Figure 12, it connects with terms like barriers, urgency, and how people feel cared for. While care or the theme of organization values could feel subjective, if was a sentiment that was discovered in the data repeatedly, increasing its significance in the study findings.
During COVID-19, a time of particular stress and worry about health risks and company closures, organization members were needing to know where they “stand” within the organization. Feeling connected to the organization based on the core values, where the employee is cared for, expressed by the organization leadership could be comforting during this worrisome time. Further, those communicated values of care must be sustained throughout the critical event for organization members to trust that the organization cares for their members.

Lastly, it is important to highlight the overlap in findings between the two research questions through the various ways data was collected (Wang & Ran, 2021). The importance of communication was expressed in all three of the data collection methods: interviews, self-interviews, and organizational documents. Communication was mentioned in relation to the speed the organization needed to act, the relationships between organizational members and the training that occurred. Communication was then connected to how health promotion was connected to the organization itself. This connection is shown by the increase in health promotion influence on decisions, access to critical information and the larger effort to inform the campus community on how to protect themselves and what efforts were being done to protect the community.

A thematic analysis matrix is provided in Table 10 to further understand how the themes were distributed throughout the individual interviews and organization documents. This table not only shows all the discovered themes through data collection, but also depicts where there is overlapping themes between the data collection methods. Utilizing a matrix can aid in understanding how prevalent themes were found across participant interviews, organization documents, and self-interviews. Additionally, the matrix allows readers to understand why the three sources of data collection were used in this study, to aid in creating a more well-rounded investigation into organization resilience. Figure 13 illustrates the relationship between the data
collection methods and overlapping themes with communication as the center and where an organization can focus resources to increase organizational resilience.
Table 10: Thematic analysis matrix.

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Theme</th>
<th>Preparation</th>
<th>Acceptance</th>
<th>Reflection &amp; Debriefing</th>
<th>Resource</th>
<th>Power &amp; Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview 1</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Interview 2</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Interview 3</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Interview 4</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
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<tr>
<td>Interview 5</td>
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<td>X</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Interview 6</td>
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<td>X</td>
<td></td>
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<tr>
<td>Interview 7</td>
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<td>X</td>
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<td></td>
<td>X</td>
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<tr>
<td>Interview 8</td>
<td></td>
<td>X</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Interview 9</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-Interviews</th>
<th>Accepting (Organization Values)</th>
<th>Reflection &amp; Debriefing</th>
<th>Fear</th>
<th>Purpose</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preparation</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<td>X</td>
</tr>
<tr>
<td>Data Source</td>
<td>Preparation</td>
<td>Acceptance</td>
<td>Reflection &amp; Resource Debriefing</td>
<td>Power &amp; Responsibility</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
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<td>------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Organization Documents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emails from Human Resources, Provost Office, President’s Office, Vice President of Student Affairs, Associate Vice President of Student Affairs, Executive Director, Recreation and Wellness Center</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal email. Distributed by Associate Vice President, Student Health Services.</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Report by Federal Drug Administration (FDA) linked from Student Health Services COVID-19 webpage.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Florida Gov. DeSantis suspends all remaining COVID restrictions: “We are no longer in a state of emergency”</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
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</tr>
<tr>
<td>Tallahassee Update 2021 Legislative Session (1-4)</td>
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<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State of Florida: Office of the Governor Executive Order Number 21-102</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>State of Florida Department of Health Public Health Advisory University Pandemic Response Plan</td>
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<td>X</td>
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<tr>
<td>Emergency COVID-19 Campus Policy EP 20-1.8</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Return to Normal Operations, June 17, 2021</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Managing with Compassion During COVID-19, January 6, 2022</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* This thematic matrix identifies which themes were discovered in which of the collected data.
Figure 13: Relationship between the themes and the data collection method.
CHAPTER SIX: DISCUSSION

Significance of Findings

The findings outlined in this chapter connect organizational resilience and the delivery of health promotion services to potential action steps for organizational leaders. Overall, the findings reveal organizational resilience was impacted by five factors: (1) the length of time a critical event impacts the organization, (2) the relationships and communication between the members of the organization, (3) amount of training provided for mid-level managers, (4) political influence, and (5) the use of reflection to learn and make improvements. Additionally, Findings are connected to literature and the theoretical framework of organizational resilience by Duchek (2020). Based on these findings, a set of recommendations are provided, study limitations are discussed, and future areas of research are also outlined in this chapter.

In addition to the five factors influencing the resilience of this organization, it is important to examine why fear, purpose, and communication were not themes found in the participant interviews. One such thought of why fear was a theme discovered in the self-interview could be the reflexive nature of the self-interviews. There is a sense of freedom in providing the information in a personal journal versus a semi-structured, professional setting. Another opinion could be that in that professional setting, even with their identity protected with the use of the pseudonym, participants could still feel judgement. In this case, there could be fear of a perception that there is weakness, and the weakness of fear could indicate other faults like not being prepared.
In addition to fear, the theme of purpose also did not overlap with the constructed themes from the participant interviews. It is possible that purpose as defined in this study, as a reason people feel like they are making a difference and are valued in the work they do, was not felt as strongly by the interview participants. Perhaps the interview participants saw their roles during the pandemic as barriers or obstacles to their true purpose within the organization. Many interview participants were asked to perform job functions, they may have never imagined needing to do. Whereas responding to a health crisis is a part of the core role of a health educator within this organization and provided an opportunity to experience purpose.

While communication as a theme was not discovered as a theme identified through the participant interview analysis, it was connected to the relationship theme. Relationships and communication, as concepts, were interwoven throughout the interview responses. One interpretation of this finding could be that the interview participants were leaders within the organization, a part of high-level meetings and had access to information because they were communicating regularly. Whereas this researcher experienced fewer communications because of their role within the organization. These are unanswered questions and could be opportunities to schedule follow-up interviews.

Organization Resilience Implications

There are clear implications of this study’s findings for colleges and universities within each phase of emergency management, mitigating the impacts of the critical event on the organization, preparing for future events, responding in an adequate and timely manner, and recovering (FEMA, n.d.). As discussed in the literature review, one model organizations could
adopt to increase resiliency is the organizational resilience conceptualization (anticipation, accepting, and adaptation) developed by Duchek (2020).

The study findings indicate that creating organizational resilience needs to not only include all three parts of Duchek’s (2020) conceptualization, but to reimagine it as a cyclic process. Additionally, health promotion theory and practice must be involved in the critical incident strategy. The findings show that the combination of a cyclic process and health promotion professionals in the critical incident response improves organization resilience.

In connection with the theoretical framework, Duchek’s three components of organizational resilience needs to be linked and continuously applied, even during times of stability. Modifying Duchek’s (2020) concept as a cyclical process, underscores resilience as a repetitive process instead of a linear effort. **Figure 14** shows how Duchek’s (2020) model is re-conceptualized as a cyclic process. This re-conceptualization to a cyclic process aligns well with the four phases of emergency management: mitigation, preparedness, response, and recovery (FEMA, n.d.) as shown in **Figure 14**. Relating the three components in this manner creates the opportunity for adaptability and innovation and encourages the organization to continuously evolve to ensure it is prepared for a future critical event (Doerfel, et al., 2013, Duchek, 2020). Each of the findings and implications are discussed in detail below.

Figure 14. Re-conceptualization of Duchek’s Model of Organizational Resilience Conceptualization.

Figure 15. Four phase emergency management process.
Length of Time a Critical Event Impacts the Organization

We are still learning how a multiple year pandemic has changed organizations. The length of time individuals and organizations experience continuous stressors, and the fluctuating levels of risk that necessitates long-term resource management, have contributed to response fatigue (Kakemam, et al., 2021). That fatigue or what might be referred to as “burnout,” impacts the ability of an organization to continue to respond at the level required to address ongoing as well as by future critical events. This fatigue can also be impacted by resource depletion as needed supply shortages, increased prices, and reduced staffing (Carroll, 2021). How the length of time impacts resilience and burnout has been studied in various emergency response professions such as nursing, police, and fire/medical services (Burnett, 2017).

Relationships and communication between members of the organization

While there remain many unknowns while the pandemic continues, what can be gleaned from this study is the importance of relationship and communication strategies organizations can implement to increase organizational resilience. Research on how communities and organizations have responded to past crises in the field of public administration can illuminate lessons for current and future crisis response and resilience (Robinson & Wehde, 2021). Relationships between people within the organization are important within regular business operations and could be viewed as exponentially more important during critical events (Kapucu & Garayev, 2013, 2016). Prior to a critical event occurring, organizations should find ways to create new relationships and strengthen existing relationships (Duchek, 2020). In turn, these relationships foster communication flow across the organization (Ansell & Gash, 2018).

This study found that participating in emergency management planning meetings with individuals that were familiar with each other is a means to facilitate the diffusion of important
communications. This is particularly important when members of the organization are stressed and are required to work remotely, both of which have resulted from the pandemic (Wardman, 2020). Having these relationships established also lessens the need for understanding how each person’s position has a role in the emergency response, thus increasing communications efficiency (Capano et al., 2020). These relationships should be intra-organizational and include members in various formal positions and roles (Kapucu & Garayev, 2016). In addition, as more organization members have access to the emergency management plans, protocols and information, members can make quick decisions to mitigate the effects from critical events (Kapucu & Garayev, 2016). A greater understanding of what is happening and why, leads to greater buy-in among staff, thereby increasing adaptive resilience (Yang & Maxwell, 2011).

Adaptive resilience can be further increased by creating communication standards within the organization that include timing, sustained compassion, and feedback opportunities. Communicating how the organization is responding, outlining the responsibilities of individuals (e.g., staff, unit or other responsible agents), and distributing policies in a timely manner are essential during critical events (Kapucu, 2008). While members of the organization have varying needs for information, making information available at regular intervals, provided by trusted organization officials in a manner easy to understand for all consumers, and kept in a regular location that is easily accessible are also essential strategies during a critical event (Kaufhold et al., 2020).

Additionally, based on these findings of this study, regular communications must also include sustained compassion. Compassionate communication generally consists of acknowledgment of the reality of the difficult situation, validating the stress response of the organization members, offer of flexibility for organization members, and sincere care for
organization members’ well-being. This compassionate communication can aid in reducing burnout and increase connectedness to the organization (Wee & Fehr, 2021). While communicating out to the members of the organization is important, collecting information from members is equally valuable. Responses must be timely and accurate and should tie back into additional training (Misra et al., 2020).

Training for mid-level managers

Emergency management leaders and administrators can expand organization preparation by including mid-level managers in training (Li et al., 2022). Training should include members of the organization that are likely to be involved in directly responding to the event. Findings from this study support the idea that if organization members are called to participate in emergency response, the emergency management system utilized should be generally familiar. Training should include a foundation of knowledge about key organization units and teams such as EICRT would be beneficial. This training lifts the veil on what can seem mysterious for organization members who are not a regular part of the emergency planning process.

Political Influence

Political influence or public policy can impact the resilience of an organization (Bryce et al., 2020). As a result of political influence, organizations may have less autonomy in creating the response to an event, in this case COVID019, that they would prefer. There are governing bodies for higher education institutions such as, board of trustees and, board of governors that can shape university budgets and influence how the university responds. A significant implication of these external factors is the necessity for organization leaders to comply with political pressures instead of how they prefer to (or should) respond. Participants of the study
reported that increased feelings of support from those with political interest and influence would have increased their ability to make decisions faster. To address these challenges, relevant governing bodies should review response and mitigation plans on a regular basis in preparation for future unexpected critical events.

*Use Of Reflection to Learn*

Reflection that allows members of the organization to learn and develop institutional knowledge could be a useful strategy to build greater resilience. These reflections can aid in policy development for current situations, as well as for future critical events that may arise. Although critical events can motivate organizations to react quickly, leaders must provide time to reflect critically on what is going well, where the gaps are, and what could help an organization build adaptive resilience, during and after the critical event. Duchek (2020) considers it is important to identify organizational gaps to develop action steps for increased resilience. In this study, the organization could improve the adaptation stage by dedicating time, funding, and expertise on reflection and learning.

*Health Promotion Implications*

The three themes that were reported to impact the organization’s health promotion efforts during the COVID-19 pandemic include purpose, communication, and compliance. During the COVID-19 pandemic, the role of health promotion shifted dramatically, it impacted how professionals were trained, how leaders communicated, and how students were educated. These radical shifts impact the profession and the role it has within emergency management and critical incident response. As a result, health promotion professionals should take action to join
emergency management professional organizations, connect with researchers, and build relationships with emergency management leaders on campuses.

In addition to the implications of these factors on organizational resilience and health promotion, it is important to note the importance of the theme communication that emerged throughout the data analysis. Communication, as it relates to relationships and trust allows organizations to adapt based on the needs of the organization members and the needs of other stakeholders regardless of the critical event (Pradies et al., 2021). Further, compassionate communication can enhance organizational resilience (Pradies et al., 2021). Sustained compassionate communication should be at the core of any response plan.

Lastly, it is critical to connect health promotion professionals with emergency management professionals. There should be cross training of the core theories, professional roles within the organization, professional organizations, and benefits of both professions to increase understanding and use of the expertise. These findings indicate that the integration of health promotion experts with emergency management professionals increases organizational resilience.

Limitations

While these findings provide insight into how COVID-19 has impacted higher education and health promotion, there are limitations addressed within this study. Bias within research has been described as “any systematic error in the design, conduct, or analysis of a study” (Althubaiti, 2016, p.211). Biases experienced in this study include organizational bias, positional bias, sampling bias, and recall bias. Moreover, there is evidence that fear played a role in
possible biases in the participant responses of interview participants. Attempts to mitigate each limitation are described below.

Organizational bias may be one of the greatest risks to any organization study (Henriksen & Dayton, 2006). Akin to social desirability bias, leaders within organizations could have a “we are the greatest” culture within the organization (Henriksen & Dayton, 2006). This culture can skew research findings in two ways: (1) invalid responses by participants and (2) only reporting findings that support the desired outcome by organizational leaders (Henriksen & Daytona, 2006). Compounding organizational bias is positional bias, where the individual has a unique perspective based the role they have within the organization (Rosaldo, 1993, Reyna, 2016). Organizational and positional biases are important to investigate because when reflexive and self-report approaches are used, these biases could impact both the researcher and the participants (Boyle & Parry, 2007).

Organizational bias was addressed within this study by incorporating external documents within the content analysis and relying on nationally and globally respected data sources, including the Center for Disease Control and Prevention and the World Health Organization. Additionally, participants with differing reporting structures within the organization were interviewed using standardized interview questions. Moreover, the participants were kept anonymous, utilizing pseudonyms throughout to reduce the likelihood responses could be linked to the individual person in the organization.

The concept of positional bias can be compared to confirmation bias. Confirmation bias is defined as data collection that only supports previously held beliefs causing researchers to distort the interpretation of the data (Strassheim, 2021). The professional role played by this researcher within the organization, the education and training received along with experience
within the health promotion profession, may cause bias in the study findings. As a staff member within the study organization, I hold various roles within the organization including a director of a department, a health educator, and a liaison to multiple committees that make decision on a wide range of policy and programs. To further mitigate positional bias, a structured process of coding data for thematic analysis was used which reduces subjectivity (Terry et al., 2017).

Another potential bias influencing the study findings is sampling bias. Sampling bias is defined as systematic errors in the sampling strategy that could cause more of the desired population to be included or excluded (Henry, 2009). Convenience sampling is defined as a non-probability sampling strategy that is used when the sample is drawn from one part of the population (Henry, 2009). In this case, university leaders involved in the COVID-19 response were used as the convenience sample. While convenience samples do not provide results that you can generalize, it can provide detailed information on the subject being studied (Henry, 2009). While attempts to reduce the impact of convenience sampling were used by selecting people across the university in different roles and ranks, the potential for this bias to emerge needs to be acknowledged.

Lastly, because this study requires the participants and this researcher to recall past information recollection or recall bias may also impact the results of this study. Recollection or recall bias is described as the use of study participants’ memory to answer questions (Wixted et al., 2018). Depending on participants’ memory, errors could occur, even unintentionally by the participant (Althubaiti, 2016). Adjustments were made to address recall bias while interviewing participants and with the self-interview. During the interview process, participants were reminded they could access notes, calendars, and meeting summaries to answer questions. Some participants had notes with them and asked to use them, but most did not rely on those notes. It
was also stated by many participants that if they remembered something differently or had more information to contribute, they could contact this researcher to make edits and/or additions.

Regarding the self-interview, daily journal was kept during the data collection to complete the self-interview questions. In addition to the journal, emails, calendars, and meeting notes were utilized to reduce recollection bias. Finally, triangulation was utilized to mitigate recall bias utilizing participant interviews, self-interview, and multiple secondary data sources to validate responses (Althubaiti, 2016).

Recommendations

Based on the findings this study there are five primary recommendations for the organization to consider that may positively increase organizational resilience and adaptive capacity. The recommendations are directly connected to the factors revealed in this study’s findings. These recommendations include (1) further investigating how the length of time a critical event lingers, impacts the organization, (2) the relationships and communication between the members of the organization, (3) enhanced training for mid-level managers, (4) political influence and, (5) the use of reflection to learn and make improvements. Lastly, while not connected to the resilience factors inclusion of health promotion professionals to emergency response teams and updating pandemic emergency response plans are also important action steps for organizations preparing for future critical events.

The first recommendation is connected to the length of time this critical event has impacted this study’s focus organization. The recommendation focuses on investigating how the length of the pandemic stressed resource allocation, the organization workforce, communication
pathways and flow, and the ripple effect on stakeholders. Based on these observations, the critical response teams can update their emergency response plans.

Moreover, as the length of time the pandemic has impacted the organization, this recommendation also includes updating the pandemic response plans. The impacts of COVID-19 on the nature of work are wide ranging (Cleland et al., 2020), and universities and colleges are certainly no immune to how services were provided to an intended population. As this study demonstrates, institutions of higher education provide a unique setting to understand the implications of a critical event on how an organization responds to continue providing services. The subject university of this study responded to COVID-19 with plans that allow staff and faculty to work remotely and invested in technology capacity that enables students to continue to receive services, i.e., remote instruction, health and well-being services, student engagement, and support services typically available when in person. The university responded with policy and procedural downgrading communication plans and include short-term and long-term action timelines. These updated response plans then need to be used to train and practice to ensure response teams are prepared.

The second recommendation involves the resilience factor of relationships and communication between organization members. This recommendation starts well before the next critical event threatens the organization. The idea is simple, the organization members need to ask; who did we know, who did we need, and how did we share information? Through the experience of responding to the COVID-19 pandemic, organization members have acquired an understanding of needed strategic relationships that would benefit putting into place prior to an emergency. Lastly, it is recommended to continue to support these strategic relationships, a
communication method needs to be selected and deciding on pathway for information flow between organization members.

The third recommendation, enhanced training, is based on the need to provide education and training opportunities for staff throughout the hierarchy of an organization (leadership roles, midlevel managers, and frontline workers). Mid-level managers are a key position in the organization; they receive information from those at the top of the organization hierarchy and are responsible for sending the information “downward” to staff in the organization. However, those responsible for implementation, i.e., the frontline workers and those in lower positions within the organization hierarchy, are also critical, and as such, they should be considered when training is developed and delivered throughout the organization.

Of particular importance is training organization employees in the emergency management process. This will increase transparency in how decisions are made in the context of critical events or emergencies. Moreover, it will build more trusting relationships, which this study suggests, is important for, resilience (Dohaney et al., 2020). This training should provide overviews of what the emergency management team(s) does when planning for a potential event and what implementation of policies and plans “looks like.” Training focused on critical event processes will have the added benefit of producing staff “buy-in,” reduce employee stress, and increase the effectiveness of response efforts (Kossek et al., 2013).

The fourth recommendation is centered around the political influence the organization may experience during critical events. This recommendation would include involvement from the organization’s Board of Trustees and Board of Governors in the emergency management planning process. As one interview participant indicated, “Having the board’s support would have been helpful, they had never taken that much of a direct role in how we did things, but they
were getting pressure from the legislature and governor” (Participant 6). These findings suggest that feedback and involvement in the organization response after the fact slowed action, it would indicate that involvement earlier in the process would limit the potential negative consequences of a slowed response.

The impacts of COVID-19 necessitate structured reflection throughout the current (and future) critical incidents. The concept of structured reflection points to a built-in process as a concrete part of the emergency management response plan. This structured reflection is as opposed to reflection and debriefing at the conclusion (either perceived or real) of a critical event, this should occur as the event is unfolding. This process should include staff throughout the organization rather than including only those in leadership positions.

Dirani et al. (2020) describes what they refer to as “reflection into action plan” that moves the ideas and concepts that emerge from reflection into action steps the organization can take, both immediately and for future critical events that increase capacity, that will lead to more effective emergency response. Findings from this study suggest that setting time intervals, perhaps that are determined by specific triggers, could aid in continuous learning and increased resilience. Moreover, taking the time for structured reflection throughout the event could prevent loss of important data that could aid the organization in future critical events.

While these recommendations are connected to the factors of resilience found in this study, another important recommendation to consider involves health promotion. The incorporation of health promotion professionals in the emergency management process. There is a public health connection to critical events, no matter the setting or organization (WHO, 2018). Including health promotion professionals provides an opportunity for organizations to orient planning and response efforts toward aspects of “well-being” that may be overlooked by other
members of the response team. A stronger orientation toward well-being, provided by health promotion professionals in the development of a response plan, even during normal business practices (Kossek et al., 2013). Health promotion professionals can also aid in crafting communications that educate those affected early in the process. Streamlining health communications can decrease response times and reduce organizations needing to backtrack any instructions (Sellnow et al., 2008).

**Future Research**

Research on resilience within the public administration discipline has grown in the past decade, particularly at the intersection with emergency management (Brousselle et al., 2020). However, further research related to this study includes the intersection of emergency management and higher education institutions and specific responses to endemics and pandemics (Lemoine & Richardson, 2020). The length of time a critical event impacts an organization is nuanced area of study with COVID-19 as a potential case study for future research. An additional area of potential research includes health promotion communication during a prolonged critical event as it relates to continued engagement to encourage action.

Research on this subject has been limited because of the rarity of cases or incidents (Boin & Lodge, 2016). Nonetheless, as this study suggests, much can be learned from organization response to critical events, including those that are not of the same scale or significance of COVID-19. For example, much like how COVID-19 caused higher education to face multi-level governance issues around conflicts between government officials, medical experts, and local officials (Janssen & van der Voort, 2020), future events may generate similar conflict.
A unique aspect of COVID-19 is what might be described as its “rolling” impacts. In other words, different places are at different points in the recovery phase. Unlike a natural disaster, such as a hurricane or tornado where the end of the event is relatively clear, COVID-19 (and its variants) continues to disrupt communities. In the absence of a clear recovery phase, how can organizations continue to engage the members of the organization. Compounding this question is the larger context; a COVID-19 occurred while other major events were unfolding in the U.S., including but certainly not limited to racial violence, political unrest, and mass resignation in the workforce?

With the idea of “rolling” impacts and multiple critical issues occurring simultaneously, it would be beneficial to investigate how organizations communicate these different messages. Communication was an important theme throughout the data analysis for this study and indicates the need for the organization to create a streamlined, systematic, comprehensive communication system. How these multiple messages are distributed throughout the organization and how they are welcomed by the organization members are questions for future researchers.

Additional research on how the length of critical events impact organizations is also needed. Future studies could start with understanding the usefulness of structured and periodic reflection during more regularly occurring critical events, such as hurricanes. A study that compares a process of reflection during an event with a process of reflection occurring at the conclusion of the even would be particularly important. After a hurricane for example, the recovery process often begins with clearing roads, restoring power and a return to “normal” operations. During this recovery period, reflection helps organizations and communities learn and adjust what could be implemented in future to become more prepared, adaptable, and efficient to reduce the loss of property, life and reduce response time. However, what happens
when the critical event continues for weeks, months and even years? Perhaps this prolonged critical event and need for reflection further supports a re-conceptualization of Duchek’s (2020) organizational resilience framework to include a cyclic process.

Moreover, when considering organizational resilience, there could be value in investigating the impact of health promotion within the organization to aid in the recovery phase of emergency management. Do organizations that initiate health promoting policy and programs improve resilience? Further, do resilient organizations promote a culture that includes a health environment and health promoting behaviors, and norms? Lastly, since COVID-19, have organizations implemented health promoting policies and/or programs that have positively impacted resilience?

In summary, there is still so much to learn about how COVID-19 impacted organizations, policy, and health promotion education. There are opportunities to expand the knowledge base for critical incident response and higher education institutions. There is a great opportunity for researcher and practitioners alike to share what is learned with one another.
CHAPTER SEVEN: CONCLUSION

This qualitative study focuses on two overarching research questions. First, how did a public university located in the southeast of the United States develop and enact resilience during the Coronavirus (COVID-19) pandemic? Second, how were the university’s health promotion activities impacted by COVID, and subsequently, how did the delivery of health promotion within the organization change during this time? This study utilizes three data sources including individual interviews of leaders at the organization, collection of organization documents, and self-interview notes and journal entries. The study uses thematic analysis to determine common themes through the collected data to provide insight into how the COVID-19 pandemic impacted this chosen organization, an institution of higher education.

Universities and colleges are a useful organizational setting to explore resilience. While the roles of a university are wide ranging, education and learning remain as focal points in their mission. Traditional face-to-face instruction, on-line learning, or a combination of these and other modalities are often delivered by universities. Learning environments undoubtedly vary from university to university, but colleges and universities provide a setting that enable, and actively promote, students to attend social and sporting events and different education forums. Moreover, the physical aspects of universities, such as library facilities, gathering spaces, food courts and other shared spaces create opportunities for social interactions. These are all part of the “college experience.”

Starting in January 2020, however, the college experience abruptly changed. The university is a massive organization and with each decision made, careful thought had to be taken to understand how that might impact workers, visitors, vendors, and students. The COVID-
19 pandemic changed every aspect of operations, staffing, and the delivery of education and services. Each detail had to be thought out from landscaping crews maintaining the campus to developing online courses. The university had to stay true to the mission of ensuring students would have access to education, services, and some version of the college experience.

Organizational resilience continues to grow as an area of research within public administration and is of particular interest during the COVID-19 pandemic. Organization resilience in the context of this study has been defined as “ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events” (National Research Council, 2012). This study provides additional information for researchers and practitioners working toward promising practices related to resilience and emergency management.

To understand how one university managed the impacts of COVID on its students, staff, and faculty, and to explain whether it demonstrated resilience, this study utilized a unique data collection and analytical strategy. Data was collected and analyzed over a nineteen-month period, from January 2020 through August 2021. This time frame is important for multiple reasons. By January 2020, health experts and government leaders began sharing information with the public about the risks of COVID-19. During this time period, the infection rate was climbing as was the death toll. COVID-19 was dominating the news and organizations needed to act.

This study taps into three sources of data. The first source is interviews, conducted by the researcher, of 9 individuals with varying departments and administrative levels within the university. A second source is the personal journal and notes of the researcher. This log included personal reflections of work-related items, email correspondence, and a daily “self-interview”. The third source of data is university documents. These items ranged from human resource
policies that provided guidance on how to manage requests for staff leave or remote work, to formal decision-making processes on when, where, and how student learning will take place.

An advantage of this data collection strategy, compared to a study that relies on only quantitative data, is the opportunity to tease out underlying nuances of the data. While a survey, of for example students, can potentially yield important information for many observations, the time period of this study can be characterized as disruptive at least. Soliciting information via a survey would have been impractical; students and staff received emails and other correspondence, often multiple times throughout the day, related to COVID. As this study documented in Chapter Six, a “fatigue” set in, and a survey of students or staff would have likely fell victim to this fatigue and resulted in a low response rate and unusable data. Moreover, although open ended survey questions do provide a means to collect this “nuance”, they often have a much lower response rate than short and closed-ended questions.

The research strategy employed for this study enables a process of triangulation. Triangulation is a common methodological approach for qualitative research studies where it is beneficial to collect multiple types of evidence that often includes documents, interviews, and observations (Tomaszewski et al., 2020). Cunningham and Jones (2005), Chang (2007) and Ellis (2009) state triangulation is particularly useful with autoethnographic studies because it allows the author to verify or confirm data to reduce bias.

Thematic analysis was conducted using NVivo (released in March 2020) software revealing multiple themes. The themes uncovered through the thematic analysis support the selected theoretical framework for an adaptive resilient organization. The study discussed limitations as well as implications for public administration leaders, higher education, and
emergency management professionals. Lastly, future areas of research are discussed to continue to explore this concept of organization resilience.

This study was conducted during the COVID-19 pandemic, while communities were experiencing full lockdowns, businesses were closed, and hundreds of thousands of people are dying around the world. In that the COVID-19 pandemic is the longest critical health event in a century, all information that can be collected to better understand the impact of the pandemic is critical for continued learning. Of particular importance is personal experiences and reflections of individuals in leadership roles within an institution of higher education.

Through thematic analysis themes were revealed from the individual interviews and organization documents. Those themes include preparation, accepting, reflecting, resources, and power and responsibility. The same thematic analysis method was conducted with the daily journaling and self-interview process. The themes identified in the self-interview include purpose, communication, compliance, and the subtheme of planning. Next, the themes that were identified in both thematic analysis “data groups” (interviews/documents and self-interview) processes were compared to uncover themes that overlap. The purpose of this comparison is to provide a deeper understanding how information is shared throughout an organization at different levels.

Through this comparison of data groups commonalities emerged (Guest et al., 2014). The common themes include reflection, preparing, and accepting/organization values. This is a significant finding because the primary ways organizations learn and adapt are through the first two themes: reflection and preparing as expressed in the literature review (Boin, 2005). Organization values was the primary takeaway from the interviews and organization documents,
sustained care and concern. These findings are invaluable because these learning opportunities are not replicable.

**Reflection: Built into the Process**

The use of reflection in the emergency management response should be built into the response process throughout the critical incident. Wise (2006) shares that as networks share information, discussing the problem, encouraging imagination, adaptability and effective operational management is the outcome. As information is shared about what has been learned can improve the organization’s response. Building reflection into the process provides the environment for discussing what went well and what needed improvement without an organization member having to initiate the discussion.

**Preparation:**

Is it better to be prepared or adapt? A question considered by emergency management researchers. One such study stated that preparedness is a product of complex political and administrative interactions (Waugh & Streib, 2006). In this same study, Waugh and Streib (2006) go on to state that emergency managers must be able to adapt, innovate and improvise to be able to respond wholistically. This adaptive management style could be used by leaders to learn how to infuse innovation and improvisation into emergency management plans (Johnson & Murray, 2021). A study by Wise (2006) goes on to explain how the organization needs to learn to adapt to the current evolving nature of crises faced by organizations. Both the crises and organizations are evolving therefore prediction systems, training, and organization responses need to evolve with them.
Accepting/Organization Values

To grasp the significance of these findings and the primary take away of sustained care and compassion, there are studies that address this concept in health care settings and with first responders including: Coombs, Simpson et al., and Lui et al. W.T. Coombs (1999) studied the use of compassion along with the information shared during a crisis and found that compassion can aid in creating socially responsible reputations, particularly to victims of the crisis. Furthermore, Coombs (1999) found that the use of compassion helped to improve the dissemination of important information. Moreover, Simpson, Clegg and Pina e Cunha (2013, p.115) “compassion is almost universally acknowledged as an important issue in the crisis management literature.” However, the concept of sustained care and concern throughout organizations, particularly higher education institutions, is less integrated in literature.

In fact, due to COVID-19, the body of knowledge around higher education institutions expressing care and compassion has begun to increase. One such study, discusses action steps for higher education leaders to take now and not wait for another crisis, to increase communication of shared values including the concept of “ethics of care” (Lui et al., 2021). The findings in this study supports this concept of the expression of shared values with one participant even stating, “we need to show our values all the time, not just during a crisis.” A white paper by Lilius et al. (2012) supports the findings of this study, outlining expressions of care and compassion by business. The white paper provides rationale for providing care and compassion and provides action steps for leaders to take, however it has not been studied.

What happens when the organization members are the victims of the crisis, like in the case of the COVID-19 pandemic, where literally the entire world’s population is impacted. Although I could not remove the stressors associated with illness, financial insecurity, job loss,
and changes to daily family life; I could promote a virtual work environment that encourages support and self-care. Establishing this “new normal” while creating new and innovative ways for our teams to connect with each other and care for their families during a time of uncertainty was essential as a leader in a pandemic to guard against burnout. While these actions were important, I had to learn more than just the technology needed to keep the services available for students.

As a leader, I have learned a number of lessons during the COVID-19 pandemic. As the director of a health promotion focused service for a higher education institution, I was not a part of the health education preparation for any critical health event. I learned that because the department I lead focuses on risks reduction skill building our students are most susceptible to (in this case, stress, sexual health, alcohol use, and nutrition, we miss the larger risk reduction conversations.

I learned as a manager of full time and student staff that slowing down in the day-to-day work to express empathy, concern, and compassion for each staff member was critical. Staff members had to share very personal parts of their lives because of the potential increased risk they and their families have due to current chronic health conditions that they might not have normally shared. They had to make themselves vulnerable, they had to trust me and they worried what they shared would negatively impact them. I had to listen to these worries and address them transparently through both lenses, as a person who is also worried and as an administrator of an institution.

As a leader I had to make decisions about other people’s well-being and these were things I never anticipated having to do and never experienced any training on such a topic at the organization or in any professional organizations I am a part of. While I have learned so much
from this experience, to be honest, I am still processing some of it and plan to bring these topics to other professionals to ensure we continue to learn.

I learned that organization managers have not been trained to care about their teams but have been taught how to keep their services moving. What professionals in higher education were discussing in organizations I am a member of were asking each other how they can help staff avoid burnout and what this tells us as a profession is that the environment is not designed for care to be automatically a part of the organization system, it is a reactionary process and not a preventative one. All of this work to prepare the environment for sustained care must occur prior to any crisis, then staff will feel they are cared for and valued all the time and not just during a crisis. Hopefully, while we can anticipate future critical events and future health crises, this exact situation will not happen the same way again. Each critical event is a unique opportunity for organizations to learn and increase resilience.

An important part of the methodology selected is the reflection provided in the self-interview. The self-interview provides the sensemaking during a truly unique experience and perspective. The sensemaking qualitative approach provides an opportunity for the reach to find similarities in the human experience and potentially learn how someone different from them experienced the COVID-19 pandemic. That intimate look into someone else’s experience is why we are drawn to the aforementioned historical perspective provided in the literature review (Pandemic of 1918, Hurricane Katrina and September 11th). Considering the contributions to the literature by virtue of the findings discussed in this study, the reflective personal contribution deepens the understanding and provides richness for others to learn from.
What Is Next?

Completing this study aids in opening the door for continued interest in how resilience is impacted by long-term critical health events. This is a unique, albeit upsetting, opportunity for a worldwide case study examining what happens when the entire world is responding to a deadly virus for more than two years. Public administration leaders, higher education administrators, health promotion professionals, and emergency management authorities can learn from this event in ways that critical events like severe weather, terrorist threats or other types of disasters have not provided. The COVID-19 pandemic creates an opportunity for creating new collaborations, enhance network development, and fine tune promising practices across multiple fields to more wholistically respond to disasters. While this is an example of a macro view of next steps, there are smaller steps that organizations can take to increase resilience.

The specific steps this organization could take includes training, updating emergency response plans, and professional debriefing. This is an opening for the organization to put a comprehensive plan addressing critical medical emergencies with the benefit of the learning that the COVID-19 pandemic has provided. Training for staff and faculty at all levels throughout the organization should include components of emergency response, what an EICRT team is and who those representatives are within the organization, and how policy is developed.

The organization should update the emergency response plans and continuity of operations plans for each department. The plans must include technology and the systems that have been developed as a result of the COVID-19. With the updates completed to the plans, organization members should be trained on the adaptations to the response plans.

This specific organization could coordinate a professional debriefing session for various subpopulations within the organization. The debriefing session should be led by professionals
trained in Critical Incident Stress Debriefing, as to reduce any re-traumatization of participants (Kowalski, 2019). These debriefing sessions should contain individuals from across the organization, holding various positions in order to create an opportunity for organization members to understand the experience of others within the organization. This debriefing offers an opportunity to heal as an organization, increase empathy across the organization, and learn ways to increase adaptive organization resilience.

Future Research

While resilience research within public administration has grown in the past decade, there are many topics that intersect with resilience including emergency management and critical incidents that warrant further investigation (Brousselle et al., 2020). Areas of continued research include the impact of a pandemic, the length of a critical event, the use of self-interview during critical events, and the inclusion of health promotion professionals to critical incident response planning. Additionally, further research should include the intersections of emergency management and higher education institutions, specifically responses to endemics and pandemics (Lemoine & Richardson, 2020).

The intersectionality of research focused on emergency management and health promotion education during a pandemic has been limited because of the rarity of cases (Boin & Lodge, 2016). Potentially even more compelling for researchers is to study a pandemic lasting more than two years. COVID-19 caused higher education to face multi-level governance issues that occasionally conflicted between government officials, medical experts, and local officials (Janssen & van der Voort, 2020), while Boin and Lodge (2016) argue for the need for research of coordinated multi-level governance during large scale, critical events like pandemics.
Additional areas of research include how to downgrade processes like response hotlines (ex. University COVID-19 Hotline) when there is no clear recovery phase. With no clear recovery phase, because the pandemic is still happening, how can we continue to provide compassion and care expressed in organization value systems? When is it safe to downgrade while keeping organization and community members engaged in risk reduction behaviors? Lastly, how does an organization manage multiple major issues at once like the pandemic, racial violence, political unrest, and mass resignation?

After experiencing a pandemic, potential future research topics are numerous. Future areas of research are connected to the choice of methodology, the pandemic, and the selected population. Considering future autoethnographic research, there is value in collecting the stories of those impacted by COVID-19 before the stories are lost, especially stories of those less likely to be represented. In addition to the collecting stories around this crisis, additional topics include how to use this learned information in preparation for future pandemics or major health crises, how resilience is cultivated in organizations, and how educational institutions can leverage wellness and health promotion to increase organization resilience capacity. Lastly, how political influence impacts emergency response would be an additional area of interest for future research.

Burkle et al., (2014) tells us that devastating health and humanitarian crises will continue to threaten in the future. This risk is assessed by the anticipation of the severity of an event and the level of precaution or action is calibrated to the perceived risk (Doshi, 2011). Further, it is argued that an influenza pandemic must be redefined so the potential severity of future pandemics can be assessed appropriately (Doshi, 2011). Adaptive resilience could be used as a framework to continue to analyze how organizations can better prepare for and rise from future pandemics.
Another potential area for future research includes different types of ethnography, specifically, comparative ethnography as it can help remove subjective bias therefore increasing confidence of the method (Vesa & Vaara, 2014). Additionally, the pivot to remote work, virtual classes and online social interactions, as elevated virtual ethnography or ethnographic research that occurs online to the forefront. Virtual ethnography could in fact, be the future of this qualitative research, challenging the organizational boundaries (Vesa & Vaara, 2014). As a result of completing a self-interview process, it became clear that an area of future research could include an alternative methodology, autoethnography. Autoethnography can be used to collected powerful personal stories to teach future emergency response teams, higher education, and health promotion professionals.

As previously stated, additional research on how the length of critical events impact organizations is needed. These studies could start with the investigation of structured and periodic reflection during more regularly occurring critical events, such as hurricanes and mass shooting events, where reflection typically occurs immediately following the conclusion of the event and expand from there. After a hurricane has passed for example, the recovery process begins with clearing roads, restoring power and a return to “normal” everyday life occurs. During this recovery period, reflection helps organizations and communities learn and adjust what could be implemented in futures critical events. However, what happens when the critical event continues for weeks, months and even years? Perhaps this prolonged critical event and need for reflection further supports future studies that include the cyclic nature of Duchek’s (2020) organizational resilience framework.

Moreover, when considering organizational resilience, there is value in investigating the impact of health promotion within the organization to aid in the recovery phase of emergency
management. Do organizations that initiate health promoting policy and programs improve resilience? Further, do resilience organizations promote a culture that includes health promoting behaviors, environment, and norms? Lastly, since COVID-19, have organizations implemented health promoting policies and/or programs that have positively impacted resilience? The list of perspective research topics could go on and on as we have only touched the tip of what we have experienced due to COVID-19.

When considering the political influence of external stakeholders on organization resilience during a critical incident, for future research should incorporate concepts of power, trust, transparency, and goal alignment within networks (Barasa et al., 2018). In this study, political influence impacted the speed at which decisions were made, potentially delaying the organization’s response. The inability to act on decisions is connected to power and trust of the organization’s leaders. Additionally, the transparency of decisions made by external political stakeholders and the means through which decisions are communicated to leaders of the organization, affect trust. Lastly, the extent to which the political philosophies of the organization’s leaders and those of external stakeholders (and often external political stakeholders) are aligned could also impact the support the organization receives, potentially negatively impacting the resilience of the organization.

**Conclusion**

In summary, it must be stressed that the COVID-19 pandemic is not yet over, we continue to experience newly formed variants, deaths, increased infection rates, long term health conditions and impacts to employment, economic concerns and drains on resources. We have only begun to understand the impact of COVID-19 on organizations, institutions, and the global
community. As we continue to uncover ways public administrators can learn to adapt and interweave health promotion, emergency management, policy and governance communities and organizations improve resilience strategies. We must continue to investigate how lengthy critical events, like a multiple year pandemic, impact resilience and consequently how we, as people continue to survive and thrive. This need to understand drives curiosity.
APPENDIX IRB APPROVAL
EXEMPTION DETERMINATION

September 23, 2021

Dear Maureen Hawkins:

On 9/23/2021, the IRB determined the following submission to be human subjects research that is exempt from regulation:

<table>
<thead>
<tr>
<th>Type of Review:</th>
<th>Initial Study, Category 2(ii)</th>
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<tbody>
<tr>
<td>Title:</td>
<td>Impact of COVID-19 on Health Promotion within Higher Education: Exploring Organizational Resilience</td>
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<tr>
<td>Investigator:</td>
<td>Maureen Hawkins</td>
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<tr>
<td>IRB ID:</td>
<td>STUDY00003391</td>
</tr>
<tr>
<td>Funding:</td>
<td>None</td>
</tr>
<tr>
<td>Grant ID:</td>
<td>None</td>
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<tr>
<td>Documents Reviewed:</td>
<td>• Faculty Advisor Approval, Category: Faculty Research Approval; • Explanation of Research, Category: Consent Form; • Protocol, Category: Other; • Recruitment Email, Category: Recruitment Materials; • Request for Exemption, Category: IRB Protocol</td>
</tr>
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</table>

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please submit a modification request to the IRB. Guidance on submitting Modifications and Administrative Check-in are detailed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Katie Kilgore
Designated Reviewer
APPENDIX CODEBOOK
<table>
<thead>
<tr>
<th>Deductive Code</th>
<th>Theme</th>
<th>Definition</th>
<th>Quote</th>
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</thead>
<tbody>
<tr>
<td>Anticipation/Preparation</td>
<td>Preparation</td>
<td>To anticipate and plan for potential risks.</td>
<td>“Even though EICRT, we were establishing that group. I was working with a board member to work through what this committee would look like. We showed in February, we had to come together in March, so there really wasn’t any time to train people in emerging issues.”</td>
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<td>“We need to communicate the plan, and that was often shifting.”</td>
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<td>“We knew we had to prepare for a pandemic, that was bound to happen, but did didn’t know it would last two years.”</td>
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<td>“We've had a pandemic plan on the books since 2013 I wanna say and we've exercised West Nile virus zika virus H1N1 avian flu things like that so we've over the years exercise that quite often in fact and maybe I'm getting into the weeds here we had a pandemic exercise schedule so we do a three year training calendar and we call it our multiyear training exercise program.”</td>
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<td>“So the natural progression of things in the amount of people that were involved solely expanded as we move down right and I guess early on and we build relationships with UCF global and UCF abroad because they were so deeply impacted.”</td>
</tr>
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</table>
“We had to stand up a number of things. We reconfigured every single classroom, we had to order cleaning devices, what are the chemicals, we had to train people and then we had to tell the story. You’ve seen the videos of people cleaning.”

“I did not have time and luxury to sit around and worry. I had to push that aside, I had a job to do.”

“Accepting/Coping Accepting/Organization Values
The capability to act quickly using varied coping strategies including sustained care during the emergency.

“I would also say the town halls that were done at the beginning of the pandemic, transparent and really helped explain what the university was going through.”

“I was working from 8am to 8 at night, nonstop for a couple of months.”

“There has to be a balance, you cannot be so caring that you cripple your organization.”

“Demonstrating in our community that we care. Acknowledge that you are going through a lot, we are going through a lot. We felt it was very important to community the commitment that we are putting things in place to create the safest environment as we could.”

“Throughout this I have tried to put our staff first and foremost. You know at times it wasn't always possible like I said before, though there was care and compassion, I don’t think that was always felt by some of the staff. I still don’t think they feel that care and compassion or that some of the things that happened were in their best interest.”
“Really stress when our values are because I think that when you're in times of crisis you need to rely on your values and when things are kind of going along you know things are OK but you have to rely on your values in a time of crisis and I think we need to really be focused on living our values all the time not just during times of crisis. The caring for each other, the being kind and being giving people grace I think we need to focus on.”

“So there was not only keeping the lights on and managing the crisis but also new things like when they asked me to be on the committee for the app and I started laughing saying, what do I know about an app, programming an application and they were like, no, you’re going to help write the words and you know what the policies are so we need you and I was like okay and never in my life was I like was I like so proud.”

“People were doing things that weren’t their normal job, and that was ok it was this feeling of we are all in this together and we were and we are and I think we had to at times prop each other up and we had some who had parents that died, some because of COVID and some not. So, we really had to be there for each other as a family.”

“At the time there was more and more pressure and more and more was being asked of them.”

| Reflecting & Learning | Reflecting & Learning | The ability to think critically about | “There is not exactly a right or wrong answer sometimes,” |
decisions to be innovative and adapt. someone else thinks a different option is better, that should be included.”

“I don’t think there was any time or moment did we stop and say did we do this right? There might have not been space for us to do that.”

“Because things continued to change and we needed to change with it. Priority on saving money, cleanliness and health or employee wellbeing and safety.”

“The time to reflect was after the deadline, there might not be time to fully navigate through the problem.”

“No one in upper leadership ever asked me. Yes, I got my work done, could I have done better, I am sure I could have. I don’t think the university knows how people were resilient. How does that resilience translate to the individual?”

“No one in upper leadership ever asked me. Yes, I got my work done, could I have done better, I am sure I could have. I don’t think the university knows how people were resilient. How does that resilience translate to the individual?”

<table>
<thead>
<tr>
<th>Resource Availability/ Social Resources</th>
<th>Resources</th>
<th>The physical, social, and financial resources available to the organization.</th>
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<tbody>
<tr>
<td></td>
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<td>“Being able to work remotely with the proper technology was a blessing and a curse, there was a lot of supplies we needed that was not ready.”</td>
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<tr>
<td></td>
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<td>“Being able to participate with all you young people on this</td>
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</table>
technology endeavor is really exciting. And they laughed and the said, well we need you because we need your knowledge and I was like ok and I really felt like I was contributing and never experienced.”

“We had to a lot of tracking so I think the most important relationships were with my own team, that they trusted me and they trusted each other and relied on each other to get the work time.”

“There was just a lot of change going on in the areas. There were times where I had conversations maybe a little deeper within those departments because there were people were uncomfortable or didn’t understand what was happening. I did find myself talking more with different levels within some of the departments I didn't really know (X-organization member) before the pandemic. I feel like we’ve developed a pretty strong relationship and she is someone I didn’t really know prior to.”

“Calls early on were with leaders from Disney and Lockheed Martin, everyone was sharing practices they were going to put into place to bring their workforce back in place. Sharing lessons learned and what everyone was doing or not doing.”

“One community relationship that has continued throughout, the orange county public health department.”
Power & Responsibility | Power & Responsibility | The ability, authority, or duty to make a change within the organization.

“I think Yes, the players on EICRT. IT was an unknown committee going in. Honestly, I still can’t tell you who was on and who was on to listen or make decisions. I would have liked to have stronger relationships with them prior to the pandemic.”

“If I was not clear on who had final responsibility on something, that peeked out a few times, but recognized that and stopped it, clarified it.”

“That there needed to be more for the students and that was tough for me to have to convey to those employees, like when I said everyone else is sitting in the comfort of their home and making these demands of these employees. So, it wasn't really my decision to do that but I was the one who basically had to convey that decision.”

“I was literally helping to write new policy, but in the moment and I didn’t have prior knowledge on the topic. I gave my recommendation and sometimes they took it and sometimes they didn’t.”

“There are some significant political overtones involved, from community and political directions from the state and board of governors. We’ve had to be successful win that political framework. And at times that was the most challenging aspect.”
REFERENCES


https://www.jhsph.edu/covid-19/articles/re-opening-how-families-can-reassess.html


https://www.ncbi.nlm.nih.gov/books/NBK464149/


172

Davidson, D. J. (2010). The applicability of the concept of resilience to social systems: some sources of optimism and nagging doubts. Society and natural resources, 23(12), 1135-1149.


https://www.dhs.gov/creation-department-homeland-security


A cross-sectional online survey among nurses. *Journal of Nursing Management*, doi.org/10.1111/jonm.13359


Misra, S., Roberts, P., & Rhodes, M. (2020). The ecology of emergency management work in the


Morse, J. (2010). Procedures and practice of mixed method design: Maintaining control, rigor,
and complexity. SAGE handbook of mixed methods in social & behavioral research (p.

Murphy, B.L. (2007). Locating social capital in resilient community-level emergency
management. Natural Hazards, 41, 297-315.

Workforce Development Partnership. Community College Journal of Research and
Practice, 1-15.

Nadworny, E. (2021). More colleges say they’ll require students to have COVID-19 vaccines for
require-covid-19-vaccines-for-fall-more-campuses-are-saying-yes

Language Teaching Research, 19(2), 129-132.

https://www.nationalacademies.org/resilient-america/about


https://doi.org/10.1177/0895904809339165


https://www.acf.hhs.gov/oro/priorities/covid-19-resources-human-services-leaders

oTranscribe. (2021). A free web app to take the pain out of transcribing recorded interviews.

https://otranscribe.com/


https://www.apa.org/topics/resilience#:~:text=Psychologists%20define%20resilience%20as%20the%20role%20of%20resilience


doi: 10.1080/15387216.2020.1762103


https://doi.org/10.7759/cureus.7541


https://doi.org/10.1016/j.vaccine.2020.10.059


https://doi.org/10.1016/j.psychres.2020.113429


https://doi.org/10.1123/tsp.12.4.363


https://www.uschamberfoundation.org/reports/covid-19-impact-childcare


https://www.phe.gov/Preparedness/planning/abc/Pages/community-resilience.aspx


[https://www.who.int/health-topics/plague#tab=tab_1](https://www.who.int/health-topics/plague#tab=tab_1)


