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COVID-19 and its Impact on Nursing Care Facility Business Operations: A Phenomenological Inquiry

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Walden University

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Walden University

College of Management and Human Potential

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Lashonda Bonsu

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Walden University
2023

Abstract

COVID-19 and its Impact on Nursing Care Facility Business Operations:

A Phenomenological Inquiry

by

Lashonda Bonsu

MBA, Strayer University, 2012

BS, Elizabeth City State University, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

February 2023

Abstract

The research problem was the lack of knowledge regarding how nursing care facility leaders sustained business operations within the climate of adversity created by the COVID-19 pandemic. The purpose was to explore and understand the essence of nursing care facility leaders' perceptions and experiences in maintaining business operations during the COVID-19 pandemic. The conceptual framework was based on resiliency theory. The central research question and subquestion for this qualitative transcendental, phenomenological study focused on what strategies nursing care facility leaders use to sustain business operations during the COVID-19 pandemic, as well as their perceptions and experiences regarding their response to the pandemic. A purposive sample of 10 nursing care administrators in North Carolina participated in semi-structured interviews. The modified Van Kaam method of data analysis was also utilized to create a textural-structural description of the participants' lived experiences, and three themes were revealed. The participants experienced challenges in all areas of business resilience in nursing care facilities, developed diverse strategies to maintain each type of business resilience in response to the pandemic, and perceived that these strategies resulted in improved organizational resilience. The study's findings can promote positive social change by helping other managers and administrators understand and improve organizational resilience in future crises. Managers and administrators at other healthcare organizations can use insights from this study to support disaster planning and management efforts, which benefit society through improved healthcare outcomes resulting from increased strength and resilience.

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Dedication

First, I would like to give thanks to my Lord and Savior, Jesus Christ, without whom all of this would not be possible. I dedicate this dissertation to my husband, Kisseih Bonsu, for always believing in me and encouraging me to never give up. Your constant love and support allowed me to finally see the light at the end of the tunnel, and for that, I am forever grateful. I also dedicate this dissertation to my son, Kevin Bonsu, for pushing me; your existence made it difficult for me to quit. I would like to give a special thanks to my mom, dad, and sister for always being there and never wavering, even through the tough times. Without all your love, support, and constant prayers, this journey would not have been possible.

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Table of Contents

List of Tables	v
List of Figures	vi
Chapter 1: Introduction to the Study.....	1
Background of the Study	2
Problem Statement	6
Purpose of the Study	6
Research Questions	7
Conceptual Framework.....	7
Nature of the Study	9
Definitions.....	11
Assumptions.....	12
Scope and Delimitations	13
Limitations	15
Significance of the Study	16
Significance to Practice.....	16
Significance to Theory	18
Significance to Social Change	18
Summary and Transition.....	19
Chapter 2: Literature Review	21
Literature Search Strategy.....	22
Conceptual Framework.....	23

Literature Review.....	29
A Timeline of the COVID-19 Pandemic	29
The Impacts of COVID-19	34
Organizational Resilience	49
Summary	58
Chapter 3: Research Method.....	61
Research Design and Rationale	62
Role of the Researcher	64
Methodology.....	66
Participant Selection Logic	66
Instrumentation	69
Procedures for Recruitment, Participation, and Data Collection	72
Data Analysis Plan.....	74
Issues of Trustworthiness.....	77
Credibility	77
Transferability.....	78
Dependability	79
Confirmability.....	79
Ethical Procedures	80
Summary	81
Chapter 4: Results	83
Pilot Study.....	84

Research Setting.....	85
Demographics	86
Data Collection	87
Data Analysis	89
Evidence of Trustworthiness.....	94
Credibility	94
Transferability.....	95
Dependability	95
Confirmability.....	95
Study Results	96
Theme 1	96
Theme 2	102
Theme 3	112
Answering the Research Questions	118
Composite Textural-Structural Description.....	118
Central Research Question.....	121
Subquestion.....	122
Summary	123
Chapter 5: Discussion, Conclusions, and Recommendations.....	125
Interpretation of Findings	127
Theme 1	127
Theme 2	129

Theme 3	131
Limitations of the Study.....	133
Recommendations.....	134
Implications.....	138
Implications for Individuals	138
Implications for Organizations	140
Societal Implications.....	141
Conclusions.....	142
References.....	144
Appendix A: Interview Guide.....	171

List of Tables

Table 1. Barasa et al.'s Resilience Categories	28
Table 2. Examples From the Master List of Participant Comments.....	91
Table 3. Cluster Code Examples.....	93
Table 4. Participant Support for Theme 1.....	98
Table 5. Participant Support for Theme 2.....	106
Table 6. Participant Support for Theme 3.....	114
Table 7. Thematic Results.....	118

List of Figures

Figure 1. The Current Study's Conceptual Model.....	9
Figure 2. Morse et al.'s Resilience Framework	26

Chapter 1: Introduction to the Study

The COVID-19 pandemic has drawn the attention of healthcare providers and scholars since its identification in Wuhan, China, on December 31, 2019 (Dosa et al., 2020; Kaye et al., 2020). The COVID-19 pandemic caused major disruption on a global scale, presenting significant challenges for governments, businesses, and healthcare providers (Abodunrin et al., 2020; Vitenu-Sackey & Barfi, 2021; World Bank, 2020). Many scholars focused on the effects of the COVID-19 pandemic, but the pandemic's effects on healthcare providers in the nursing care industry required further investigation (Hao et al., 2020; Muruganandam et al., 2020; Neto et al., 2020; Spoorthy, 2020; Wang et al., 2020). Scholars specifically noted that COVID-19 put the nursing care industry in crisis because the lack of effective coronavirus treatments were devastating for nursing care residents (McMichael et al., 2020; Ouslander & Grabowski, 2020; Telford et al., 2020).

Increased cases of COVID-19 stunted the developmental growth of nursing care facilities and reduced economic productivity (Kaye et al., 2020; Ouslander & Grabowski, 2020). The lack of research on nursing care facility leaders' perceptions and experiences using strategies to respond and adapt to COVID-19 to sustain business operations demonstrated a gap in the literature. This phenomenological study filled that gap. The study was significant to social change because the findings were used to address the effective implementation of strategies to provide quality care, prevent high-risk exposures within facilities, and maintain business viability during pandemic outbreaks. In Chapter 1, I present the study's background, problem statement, purpose, research

question, theoretical framework, nature, definitions, assumptions, scope and delimitations, limitations, and significance before concluding with a summary.

Background of the Study

Research on the COVID-19 pandemic indicates that the pandemic's effects were both severe and wide-ranging. COVID-19 developed late in 2019 and quickly spread globally (Katella, 2021). Since the beginning of the pandemic, millions of people have been infected with COVID-19 and died (Carvalho et al., 2021). In addition to the dramatic health consequences, the COVID-19 pandemic resulted in adverse outcomes for individuals, businesses, and the global economy (Aday & Aday, 2020; The World Bank, 2020). Venkatesh (2020) predicted that COVID-19's various impacts on healthcare, the economy, the labor market, supply chains, and work and home life would be long-lasting.

COVID-19 disrupted business operations in various ways, with some organizations experiencing technological work-from-home challenges, while others faced material shortages (Aday & Aday, 2020; Paul & Chowdhury, 2021). Manufacturers experienced supply chain disruptions and difficulties obtaining essential resources (Paul & Chowdhury, 2021). Industries that employed essential workers experienced staffing shortages, and employee morale suffered because front-line employees faced continuous health risks (Aday & Aday, 2020; Paul & Chowdhury, 2021). These business disruptions resulted in economic problems in many countries (Abodunrin et al., 2020). The pandemic even disrupted supply and demand in the global economy (The World Bank, 2020).

Various scholars highlighted the economic consequences of the COVID-19 pandemic throughout the body of literature (Jayakumar et al., 2020; Michel & Burton,

2020; Nicola et al., 2020). Nicola et al. (2020) studied COVID-19's effect on the world economy, focusing on (a) primary sectors and the extraction of raw materials, (b) secondary sectors and the production of finished products, and (c) tertiary sectors and all service provision industries. Jayakumar et al. (2020) cited the importance of limiting the spread of the COVID-19 virus to prevent a global recession. Jayakumar et al. concluded that direct aid from state and local governments was essential to mitigate the impact of the coronavirus shock. The U.S. government allocated \$500 billion to back loans and assistance to larger companies, as well as \$340 billion to support state and local governments (Jayakumar et al., 2020).

The healthcare industry was among the industries hit hardest by the COVID-19 pandemic (Aday & Aday, 2020; Larrañeta et al., 2020; Min & Jianwen, 2020). COVID-19 presented a significant challenge to healthcare professionals, who were exposed to high risks because of the scarcity of personal protective equipment (Larrañeta et al., 2020). Additionally, healthcare facilities experienced interruptions in health services as infection rates increased beyond capacity (Siriwardhana et al., 2021). Scholars acknowledged the need to develop new business operation strategies to provide healthcare services in the face of the pandemic, but no universal models have yet been developed (Siriwardhana et al., 2021).

Within the healthcare sector, nursing care facilities experienced disproportionate challenges as they serviced a vulnerable population while also experiencing equipment shortages and increased health risks for their employees (Fallon et al., 2020; Larrañeta et al., 2020; Siriwardhana et al., 2021). Nursing care facilities provide care services to older

patients and those with chronic medical conditions; so, their populations were more vulnerable to the COVID-19 virus (Bianchetti et al., 2020; Davidson & Szanton, 2020). Thompson et al. (2020) studied COVID-19's effects on nursing care facility residents, care workers, and visitors in several different countries, noting that France, Spain, Belgium, Canada, and the United States reported significant death totals associated with COVID-19 infections in nursing homes. Thompson et al. also cited the number of positive COVID-19 cases and deaths in long-term care facilities, reporting that nursing care facilities had the highest transmission rate of infectious diseases in the healthcare sector because of their low preparedness for infection control. In another study, Fallon et al. (2020) examined nursing care facility infection control protocols and noted high infection and death rates among residents. Thompson et al. further suggested that management complexities increased in long-term care facilities because of patients' complex care requirements and factors specific to business management in the healthcare industry.

Several researchers have focused on resilience as a factor when facing crises associated with natural disasters and global pandemics (Iflaifel et al., 2020; Morse et al., 2021; Ree et al., 2021). In one study, Fisher et al. (2016) provided information on individual resilience and its effect on entrepreneurial success. Fisher et al. studied resilience in a sample of 215 entrepreneurs, using regression analysis to examine the relationship between resilience and entrepreneurial success. Fisher et al. found that resilience does indeed predict entrepreneurial success. The information in Fisher et al.'s study demonstrated the importance of resilience in managing and overcoming adverse

business circumstances; however, it did not address the specific factors associated with the COVID-19 pandemic, nor did it focus on business strategies employed by nursing care facility leaders.

The literature on COVID-19 demonstrated that the pandemic's health and economic consequences were severe (Carvalho et al., 2021; Katella, 2021; Nicola et al., 2020). Several studies highlighted the unique challenges nursing care facilities face because of their vulnerable patient populations and specific business circumstances (Fallon et al., 2020; Lau-Ng et al., 2020). However, no studies have focused on nursing care facility leaders' strategies to maintain business operations. As such, the lack of research highlighting the role of resilience in nursing care facilities during the COVID-19 pandemic made it unclear which strategies were most effective in maintaining business stability during the crisis. The current study was designed to address that gap in the literature.

The current study was needed because the explored lived experiences of nursing care facility leaders provided critical insight into crisis management and resilience at the facilities treating the most vulnerable patients. Nursing care facilities treat high-risk patients, and the ability to provide adequate care directly affects patients' mortality (Panagiotou et al., 2021). Further research on the resilience of nursing care facilities has the potential to improve business operations within this area of the healthcare industry and increase the quality of patient care (Thompson et al., 2020).

Problem Statement

The coronavirus, known as COVID-19, had a major impact on the U.S. healthcare industry (Dosa et al., 2020; Lau-Ng et al., 2020). Nursing care facilities faced unique challenges as COVID-19 presented greater risks to elderly populations, as evidenced by nursing care facility death rates (Davidson & Szanton, 2020; Ioannidis, 2020). Nursing care facility leaders faced challenges sustaining business operations in response to COVID-19 that extended beyond financial, logistical, reputational, and long-term solvency considerations (Fallon et al., 2020). Whereas researchers have investigated the impacts of COVID-19 on healthcare organizations, little or no research has addressed nursing care facility leaders' lived experiences responding to COVID-19 challenges and sustaining business operations within the COVID-19 environment. The general problem addressed by the current study was that increased cases of COVID-19 reduced productivity and negatively impacted nursing care facilities' economic growth. The specific research problem addressed through this study was the lack of knowledge regarding how nursing care facility leaders sustained business operations within the climate of adversity created by COVID-19.

Purpose of the Study

The purpose of this qualitative transcendental phenomenological study was to explore and understand the perceptions and experiences of a purposive sample of 10 nursing care facility leaders regarding the strategies used to sustain business operations in response to the challenges presented by the COVID-19 pandemic. The study's findings could inform business leaders in the nursing care industry about effective management

practices, enabling them to develop and use techniques to provide quality care, prevent high-risk exposures within facilities, and maintain business viability during pandemic outbreaks. Exploring these healthcare professionals' perceptions and lived experiences addressed the research problem and answered the study's research questions presented below.

Research Questions

This study addressed one central research question and one subquestion, allowing me to explore, understand, and describe the essence of nursing care facility leaders' perceptions and experiences during the COVID-19 pandemic.

Central Research Question: What strategies did nursing care facility leaders use to sustain business operations during the COVID-19 pandemic?

Subquestion: What are nursing care facility leaders' perceptions and experiences regarding their response to the COVID-19 pandemic?

Conceptual Framework

Resiliency theory served as a foundation for the study's conceptual framework. Resiliency theory has been used to guide a broad spectrum of academic disciplines with a premise centered on exploring and understanding how one person or organization can persevere in the face of adversity, while another is overcome by it (Ayala & Manzano, 2014; Gulbrandsen & Walsh, 2015; Welsh, 2014). Resiliency theory was a good fit for the current study because building the resilience of healthcare systems reduces vulnerability to a crisis by ensuring that healthcare providers are better prepared to

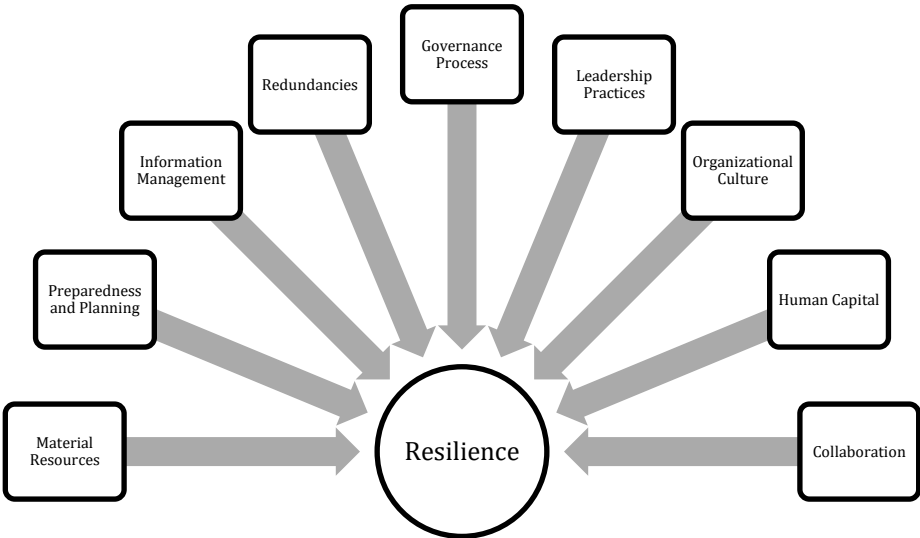
effectively respond to events like a global pandemic (Barasa et al., 2018). Furthermore, effective crisis responses ensure minimal disruption of services (Barasa et al., 2018).

Specifically, Barasa et al.'s (2018) 9-category resilience model was used to create the current study's conceptual framework. Barasa et al. argued that nine categories could be used to determine whether an organization was resilient: (a) material resources, (b) preparedness and planning, (c) information management, (d) collateral pathways and redundancy, (e) governance process, (f) leadership practices, (g) organizational culture, (h) human capital, and (j) social networks and collaboration. Barasa et al. suggested that evaluating an organization based on these nine categories would help the organization's managers and leaders improve resilience. Figure 1 presented the researcher-developed conceptual framework for the current study.

A qualitative mode of inquiry was suitable to explore and understand how nursing care facility leaders used strategies to sustain business operations in the face of adversity associated with COVID-19. Resilience theory was appropriate to explore the phenomenon of interest because understanding how nursing care facility leaders sustained business operations under adverse circumstances was primary to the research purpose. In understanding COVID-19 and its impact on nursing care facilities, business leaders may be able to develop and implement strategies, which could strengthen their health systems and sustain business operations.

Figure 1

The Current Study's Conceptual Model



Nature of the Study

The current qualitative study involved an approach that included a phenomenological design. This approach was based on the work of Leedy and Ormrod (2019), Moustakas (1994), and Neubauer et al. (2019). A transcendental phenomenological approach was used to explore the essence of participant experiences and perceptions concerning strategies used to sustain business operations in nursing care facilities during the COVID-19 pandemic. Transcendental phenomenology focuses on consciousness and intentionality as critical aspects of participants' lived experiences (Yee, 2018).

Interviews served as the primary source of data. Ravitch and Carl (2016) stated that interviews form the core of many qualitative studies because they provide deep, individualized, and conceptualized data. Data were gathered via qualitative, semi-structured, in-depth interviews with nursing care facility leaders who had been in business or a leadership position for 2 years or more. An interview guide consisting of open-ended questions were developed and used as a data collection instrument. In addition to interview data, archival data were examined to enable data triangulation during the analysis phase. Archival data included documents published by the U.S. Department of Health and Human Services, the Centers for Disease Control and Prevention (CDC), the U.S. Department of Labor, the U.S. Bureau of Labor Statistics, the Small Business Administration, and the Centers for Medicare and Medicaid Services.

The study's population included nursing care facility leaders working in the United States. The United States has approximately 15,600 such facilities (CDC, 2022). A sample frame was selected to further narrow the focus of the study. The state of North Carolina was chosen as a sample frame. North Carolina has a total of 423 nursing care facilities (North Carolina Division of Health Service Regulation, 2021). Each facility had at least one leader or administrator.

Purposive sampling was used to select participants. The sampling process continued until data saturation was reached. The use of purposive sampling and data saturation as a method for determining sample size followed recommendations by Saunders et al. (2018). Vasileiou et al. (2018) argued that little new information is generated after interviewing 20 people, regardless of a researcher's experience level.

Purposive sampling was used to select participants because this method ensured that the participants' responses addressed the research questions (Saunders et al., 2018). Criteria were used to ensure that selected participants were congruent with the research purpose.

Once data were collected, I transcribed and analyzed the data using Moustakas' (1994) 7-step analysis method, resulting in textural and structural descriptions of the phenomenon. Coding identified themes and concepts related to COVID-19 and its impact on nursing care facility business operations. Triangulation was further used to generate data, gain an increased understanding of the phenomenon, and assess the data's completeness (Abdalla et al., 2018).

Definitions

Barasa et al.'s (2018) model of resilience. A conceptual model that can be used to determine if an organization is resilient. Barasa et al.'s model contains nine categories: (a) material resources, (b) preparedness and planning, (c) information management, (d) collateral pathways and redundancy, (e) governance process, (f) leadership practices, (g) organizational culture, (h) human capital, and (j) social networks and collaboration.

Business operations: An important discipline that uses scientific methods to improve businesses (Manikas et al., 2020). In the current study, business operations refer to management-related business expectations and outcomes (Bartik et al., 2020).

Coronavirus (COVID-19): One of the most infectious diseases, which mainly occurs after a human has been contaminated with a rigorous, acute syndrome of respiratory issues (Hasanat et al., 2020). COVID-19 is a health crisis because of its extensive global spread (Evans & Dromey, 2020; Hasanat et al., 2020).

Nursing care facilities: Facilities providing care services to some of the most vulnerable populations in society, including older people and those with chronic medical conditions (Davidson & Szanton, 2020).

Resilience: A dynamic system's ability to adapt successfully to disturbances that threaten system function, viability, or development (Masten, 2018). Resilience can be measured in many ways, including by examining resource allocation, organizational leadership, and asset management (Barasa et al., 2018).

Sustainability: A concept where an organization voluntarily gives back to society (Mukherjee, 2020). Sustainability can take any form of development, which includes the betterment of an organization's customers, community, and environment (Mukherjee, 2020).

Assumptions

The first assumption of this study was that participants would participate voluntarily and provide accurate and honest answers to the interview questions. Because participation was voluntary, the nursing care facility leaders interviewed for the study had no incentive to fabricate or exaggerate their responses to interview questions. De la Croix et al. (2018) noted that researchers were more likely to receive honest answers when they ask participants to answer honestly; so, that request was incorporated into the recruitment materials to support the assumption of honesty.

The second assumption was that the participants were qualified to discuss COVID-19 and its impact on nursing care facility business operations. Participants' qualifications could vary because the selection criterion only filtered out participants who

had been in business or leadership positions for less than 2 years. Focusing only on a minimum experience level meant that experience levels within the sample might differ significantly, but a sample with diverse experience levels enriched the study's findings.

The third assumption was that purposive sampling would be an appropriate method of selecting participants (Ravitch & Carl, 2016; Saunders et al., 2018).

Participants were purposely chosen due to their experience and knowledge of the phenomenon (Saunders et al., 2018). Purposive sampling allows for detailed data concerning specific locations and populations to be gathered (Ravitch & Carl, 2016).

The fourth and final assumption was that determining data saturation would result in the appropriate number of participants (Saunders et al., 2018). Researchers have reported various results when using data saturation to determine sample size. Hennink et al. (2017) indicated that when examining 25 in-depth interviews, data saturation was achieved after nine interviews. Other scholars have noted that data saturation occurred only when using larger samples (Saunders et al., 2018). The final assumption was supported by researchers' frequent characterization of data saturation as the best method of determining sample size (Saunders et al., 2018). In the current study, I verified that data saturation occurred after the 10th interview.

Scope and Delimitations

The scope of the research was confined to the lived experiences of business leaders regarding COVID-19, and the pandemic's impact on nursing care facility business operations. Nursing care facilities in the United States were the study's target population because these organizations were disproportionately affected by the COVID-

19 pandemic (Fallon et al., 2020; Lau-Ng et al., 2020; Thompson et al., 2020). Nursing care facilities provide care services to older patients and those with chronic medical conditions, so their populations are more vulnerable to the COVID-19 virus (Bianchetti et al., 2020; Davidson & Szanton, 2020). The study included business leaders working at nursing care facilities in North Carolina, but it excluded business leaders and care providers working at other healthcare organizations to focus on the most vulnerable populations. North Carolina has a total of 423 nursing care facilities (North Carolina Division of Health Service Regulation, 2021).

The research focused on resilience in the context of business operations. Many scholars focused on COVID-19's impact on patients in the wake of the pandemic (Ahmed et al., 2020; Rajkumar, 2020). However, COVID-19 was not only a health problem; nursing care facilities also faced challenges associated with business operations resulting from the pandemic (Barnett Hu et al., 2020). Purposive sampling was used to recruit participants with business knowledge and ensure that the participants' lived experiences were congruent with the research topic (Etikan et al., 2016). To ensure that the research questions could be answered, the following criteria were used to select participants: (a) individuals must be in a business or leadership position, and (b) individuals must have worked for a nursing care facility for at least 2 years. The study included a sample size of 10 participants, at which point data saturation was reached. Suen et al. (2014) indicated that sample size is determined by data saturation.

Business scholars have used many theories and frameworks to study the effects of the COVID-19 virus on business operations, including social exchange theory,

stakeholder theory, and crisis-based business model theories (Cortez & Johnston, 2020; Jones & Comfort, 2020; Ritter & Pedersen, 2020). Because the study focused on the effects of the COVID-19 pandemic on business operations, resiliency theory was selected as a conceptual framework. Resiliency reduces crisis vulnerability by ensuring that business leaders are better prepared to effectively respond to events like a global pandemic (Barasa et al., 2018). Resiliency theory fit well with the study's aims, and the selection of Barasa et al.'s (2018) 9-category resilience model helped focus the investigation on how nursing care facility leaders used (a) material resources, (b) preparedness and planning, (c) information management, (d) collateral pathways and redundancy, (e) governance process, (f) leadership practices, (g) organizational culture, (h) human capital, and (j) social networks and collaboration to persevere during the COVID-19 pandemic.

Limitations

Leedy and Ormrod (2019) defined limitations as weaknesses that might cast shadows of doubt on research results and conclusions. Limitations are typically outside a researcher's control (Ndimande et al., 2016). A possible limitation or weakness for this study was selecting data from a small research sample. While qualitative studies typically do not have large sample sizes, the ability to generalize research findings from small samples is usually limited (Vasileiou et al., 2018). Data saturation was used to minimize the limitation of a small sample size. Data saturation occurs when no new information is obtained by interviewing additional participants (Hennink et al., 2017).

Another significant limitation of this study was that personal or religious beliefs might influence participants' perceptions of resilience and recovery. Relying on participants' personal perceptions and lived experiences could result in subjective themes that do not represent the lived experiences of all nursing care facility leaders. Such factors might also lead to researcher bias and impair the trustworthiness of a study, which would constitute another limitation (Yin, 2017). Triangulation was used to minimize the likelihood of bias-related challenges and bolster the study's trustworthiness (Abdalla et al., 2018). To further limit the subjectivity of the participants' responses, interview questions were predetermined, and each participant was asked the same set of questions. All data were analyzed to ensure that the interviews were related to the theme and to determine the accuracy of the findings. I used bracketing, member checking, and an audit trail to minimize the potential impact of researcher bias. Chapter 3 includes a more extended discussion of these measures.

Significance of the Study

The current study has the potential to be significant in several ways. My goal was for the study to be significant to nursing care practitioners, scholars studying the effects of the COVID-19 pandemic on business management, and wider society by supporting positive social change. The following subsections describe how the study could significantly benefit these individuals.

Significance to Practice

The study was significant because it offered insight into the experiences and perceptions of nursing care facility leaders as they sustained business operations in

response to COVID-19. Specifically, the study focused on the strategies that nursing care facility leaders used to navigate the challenges associated with the COVID-19 pandemic. The COVID-19 pandemic has led to a dramatic crisis for healthcare facilities worldwide, and COVID-19 has been the highest cause of death reported among older individuals (Bianchetti et al., 2020). As a result, the pandemic has disproportionately affected nursing care facilities (Bianchetti et al., 2020). Researchers have determined that not enough is known about the true impact of COVID-19 in this environment (Thompson et al., 2020). Studying how nursing care facility leaders' experiences and perceptions influenced their business management strategies could help these facilities continue to provide essential services.

Resilience describes the capacity of a health system to absorb, adapt, and transform when exposed to a shock and still retain control over its functions (Blanchet et al., 2017). Nursing care facility leaders must prepare to absorb shocks and challenges associated with pandemics and global disruptions in healthcare services. Examining aspects of resilience within these facilities helps other organizations adapt to challenges like disruptions in supply chains and changes to medical protocols described by McKibbin and Fernando (2020), Siriwardhana et al. (2021), and Venkatesh (2020). Scholars have noted that the COVID-19 pandemic has changed how organizations do business (Byers, 2020; Conger, 2020; Khetarpal, 2020). Thus, it was critical to explore nursing care facility leaders' perceptions and lived experiences using strategies to sustain business operations. The study can be a reference tool for nursing care facilities to use to maintain business operations and economic growth during a pandemic.

Significance to Theory

The study added to the body of social science literature by addressing nursing care facility leaders' perceptions and lived experiences surviving in a climate of uncertainty. Scholars in many different disciplines and contexts have studied resilience (Iflaifel et al., 2020; Morse et al., 2021; Ree et al., 2021; Ruiz-Martin et al., 2018; van Breda, 2018); however, debate still exists regarding the definition and use of resilience as a research construct.

Barasa et al.'s (2018) model of resilience provided a conceptual model for the current study. The results of the current study contributed to that theory through my exploration of Barasa et al.'s nine facets of resilience: (a) material resources, (b) preparedness and planning, (c) information management, (d) collateral pathways and redundancy, (e) governance process, (f) leadership practices, (g) organizational culture, (h) human capital, and (j) social networks and collaboration in the context of nursing care facilities. Prior to the present study, scholars have not explored Barasa et al.'s model of resilience in the context of the COVID-19 pandemic or crisis management in nursing care facilities. Thus, the results of the current study provided additional insights into how resilience affects emergency preparedness and planning in the healthcare sector described by Aruru et al. (2021), healthcare redundancy described by Cobiauchi et al. (2020), and allocation of PPE described by Barnett Hu et al. (2020).

Significance to Social Change

The current study contributed to significant social change, in addition to supporting nursing care practitioners and scholars focused on resiliency theory. COVID-

19 has severely affected society by changing social interaction, education, politics, and human security (Abodunrin et al., 2020). From a patient perspective, since the pandemic, patient stress levels have increased due to the COVID-19 lockdown measures. Patients were at increased risk of developing mental health problems because of family separation, shelter-in-place orders, boredom, food and supply shortages, and inadequate information regarding COVID-19 (Ahmed et al., 2020; Rajkumar, 2020). These hardships have caused patients to experience anger, confusion, and post-traumatic stress symptoms (Brooks et al., 2020). Identifying successful strategies for addressing the COVID-19 pandemic in nursing care facilities would improve human and social conditions by promoting human dignity, as well as individual and organizational development.

Studying resilience also had a social benefit. During crises, alliances and network connections between businesses and governments strengthen local responses (Koonin, 2020). Strengthening collaborations between industry and government can be especially important if businesses produce and deliver critical services or products (Koonin, 2020). Exploring community resources for response and recovery during a pandemic could possibly benefit employees, businesses, social supports, and health services.

Summary and Transition

Chapter 1 began with background information on the current study. The emergence of the COVID-19 pandemic resulted in severe health and economic consequences (Carvalho et al., 2021; Katella, 2021; Nicola et al., 2020). Research indicated that nursing care facilities faced unique challenges because of their vulnerable

patient populations and specific business models (Fallon et al., 2020; Lau-Ng et al., 2020). However, researchers had not previously focused on nursing care facility leaders' strategies to maintain business operations. The lack of research highlighted the role of resilience in nursing care facilities during the COVID-19 pandemic, making it unclear which strategies were most effective in maintaining business stability during the crisis.

The purpose of this qualitative transcendental phenomenological study was to explore and understand the essence of the perceptions and experiences of nursing care facility leaders, particularly regarding the strategies used to sustain business operations in response to the challenges presented by the COVID-19 pandemic. Resiliency theory served as a foundation for the current study's conceptual framework, and a qualitative, phenomenological approach was selected as the best way to answer the study's research questions. Chapter 1 included a description of the study's assumptions, scope, delimitations, and limitations, and the study's significance to practice, theory, and social change. Chapter 1 provided a foundational understanding of the topic, and Chapter 2 contains a detailed review of the extant literature on COVID-19 and business resilience in the face of a crisis.

Chapter 2: Literature Review

The COVID-19 pandemic severely affected nursing care facilities in the United States and put vulnerable populations at risk; however, little research has focused on how these healthcare facilities faced pandemic-related challenges sustaining business operations. This qualitative transcendental phenomenological study addressed nursing care facilities' resilience during the COVID-19 pandemic. Further research to address the gap in the resilience literature regarding nursing care facilities could improve business operations within the healthcare industry and increase the quality of patient care in future crises (Thompson et al., 2020).

Chapter 2 includes a review of the literature related to COVID-19, the impact of global pandemics on businesses, and the effects COVID-19 had on healthcare organizations such as nursing care facilities. Chapter 2 begins with a detailed explanation of the search strategy used to identify and select relevant, peer-reviewed articles and scholarly sources for the review. Next, resilience theory and other crisis management theories are evaluated concerning the study's conceptual framework. An extensive literature review follows the discussion of resilience theory. The focus of the literature review is on a timeline of the COVID-19 pandemic; the ways COVID-19 affected patients, healthcare workers, and organizations; and elements associated with Barasa et al.'s model of resilience. Chapter 2 concludes with a summary of the findings and a brief description of how the literature review informed the study's methodology presented in Chapter 3.

Literature Search Strategy

An extensive literature search strategy was utilized to identify suitable peer-reviewed articles for this study. The literature search began by identifying a time range for articles that focused on recent research. The goal of the literature review was to focus exclusively on articles published in the last 5 to 7 years with the exception of seminal sources. Limiting the literature review to recent sources ensured that the study's foundation would be based on the most recent scholarly consensus on resilience, organizational practices, disaster management, global pandemics, and healthcare management.

A range of journals and databases were searched to locate relevant articles. Searches of the Walden University Library's PubMed and EBSCO databases, along with the use of search engines like Google Scholar, identified many relevant journal sources for this literature review. Examples of the peer-reviewed journals searched included *The Journal of Health Management*, *The Journal of Business Research*, *The Academy of Management Journal*, *The Journal of International Business Studies*, *The Journal of Hospital Management and Health Policy*, *The Journal of Management*, *The International Journal of Health Policy and Management*, *JAMA*, *American Journal of Public Health*, *The American Journal of Managed Care*, and *Health Services Research*.

Keyword searches were used to filter out and identify applicable articles when searching journals and databases. Examples of the keywords used to search for articles included *healthcare management*, *pandemic*, *COVID-19*, *coronavirus*, *crisis planning*, *resilience*, *nursing homes*, and *business operations*. The keywords were used in various

combinations to achieve the best search results. Keyword combinations were used exhaustively until no new articles emerged from the various searches. After articles were identified, they were then evaluated based on their content to ensure (a) they were applicable to the topic, (b) they advanced the discussion of resilience in the healthcare sector, and (c) they were either published in the last 7 years or were considered seminal to the topic. The selected articles were then read and analyzed to create the literature review later in the chapter.

Conceptual Framework

Resilience theory served as the study's conceptual framework. Scholars in a broad spectrum of academic disciplines have used the concept of resilience to explore and understand how individuals and organizations overcome adversity (Ayala & Manzano, 2014; Gulbrandsen & Walsh, 2015; Welsh, 2014). Van Breda (2018) noted that despite being the subject of scholarly discussion for decades, resiliency theory is often viewed as a recent trend, in part, because scholarly definitions of the concept vary widely. Despite the wide-ranging definitions of resilience, interest in resilience theory and its use in healthcare contexts seems to be increasing (Barasa et al., 2018; Morse et al., 2021). Morse et al. (2021) observed that one of the benefits of resilience theory in healthcare research was the focus on recovery after adversity.

The COVID-19 pandemic presented a significant challenge to individuals and organizations in the context of healthcare. Thus, resilience theory provided a suitable framework to investigate the strategies nursing care facility leaders used to sustain business operations when faced with COVID-19-related adversities. The study of

resilience was especially critical as building resilience into healthcare systems reduces organizational vulnerability during crises (Barasa et al., 2018). Organizations that are better prepared to respond to unexpected events can offer shorter service disruptions (Barasa et al., 2018).

Scholars such as Barasa et al. (2018), Brown et al. (2017), and Morse et al. (2021) have all developed models or frameworks for examining and explaining resilience. Each of these frameworks and models attempts to explain the resiliency process used to overcome adversity. The various models and frameworks have strengths and weaknesses, and steps were taken to ensure that an appropriate model was used to serve as the current study's conceptual framework.

Brown et al. (2017) conducted a systematic literature review to explore disaster/crisis resilience in the hotel sector. Their review was useful as it focused on disaster/crisis preparedness. One strength of Brown et al.'s review was their acknowledgement that resilience is a nuanced construct, interpreted differently in different disciplines. Brown et al. argued that as a universal definition of resilience is not possible, researchers must first define whose resilience is being studied and the source of the adversity.

Brown et al. (2017) categorized resilience into four general categories: systems resilience, organizational resilience, economic resilience, and community resilience. System resilience addressed a system's ability to respond to change and was linked to flexibility. Organizational resilience focused on how well organizational structures can be adapted in a crisis; capacity building and planning were major factors in organizational

resilience. Economic resilience was associated with events that resulted in financial challenges, and community resilience was concerned with the ability of various stakeholders to overcome the crisis or disaster. The main limitation of Brown et al.'s model of resilience was that it was designed to address resilience specifically in the tourism industry. As the focus of the current study was the healthcare industry, Brown et al.'s model of resilience was reviewed, but not selected as a conceptual framework.

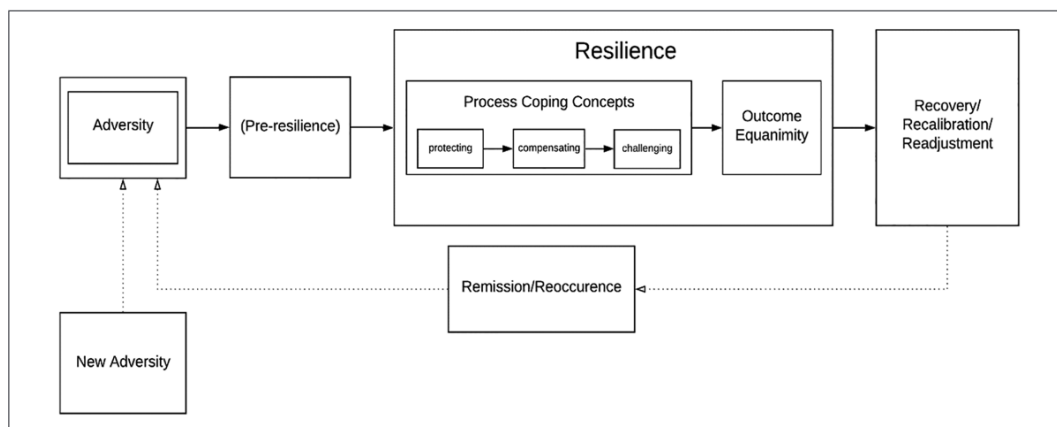
Morse et al. (2021) developed a resilience framework for nursing and healthcare. Like Brown et al. (2017), Morse et al. (2021) conducted an extensive literature review and noted the lack of consensus regarding the use of resilience theory and the absence of a universal definition of resilience as a construct. Morse et al. also noted that the literature defined resilience as a state and as a process, but in each case, the resilience construct was conceptualized as a strength. Using a 7-step research process that involved identifying common problems and coping strategies, Morse et al. developed a framework that described both the state and the process of resilience. Figure 2 presents Morse et al.'s framework.

Morse et al.'s (2021) framework identifies a cyclical process in which individuals face adversity and pre-resilience, go through a coping process, and achieve a state of recovery. Morse et al.'s framework was more relevant to the current study as it was designed specifically for healthcare settings; however, the main weakness of the framework is that it was designed to focus on resilience in the face of individual illnesses or healthcare challenges such as episodic illnesses, mental illnesses, chronic pain, or trauma. The focus of Morse et al.'s resilience framework was also on individuals rather

than organizations; so for this reason, the framework was not chosen as a conceptual model in the current study.

Figure 2

Morse et al. 's Resilience Framework



Note. From “Developing the Resilience Framework for Nursing and Healthcare,” by J. M. Morse, J. Kent-Marvick, L. A., Barry, J. Harvey, E. N. Okang, E. A. Rudd, C.-Y. Wang, and M. R. Williams, 2021, *Ethics, Global Qualitative Nursing Research*, 8, p. 12 (<https://doi.org/10.1177%2F23333936211005475>). Copyright 2021 by Sage.

Like Brown et al. (2017), Barasa et al. (2018) developed their model of resilience after conducting a systematic literature review of papers, research studies, and articles. Barasa et al. focused primarily on organizational resilience, and they aimed to develop an understanding of how resilience was conceptualized. They noted that healthcare organizations could use such an understanding during crises or disease outbreaks to increase resilience and provide better healthcare service to patients. While Barasa et al. did not create a date range to determine whether studies should be included, they noted that research on organizational resilience in healthcare is more recent than research in other sectors. As a result of their review, Barasa et al. developed a general definition of

resilience as “a system’s ability to continue to meet its objectives in the face of challenges” (p. 496). Table 1 presents the categories and the general concerns associated with each dimension of resilience.

A major strength of Barasa et al.’s (2018) literature review was that they included articles from various locations, disciplines, and types of challenges/crises. Barasa et al. included studies published in 19 countries, including the United States, the United Kingdom, Germany, Sweden, Jordan, and New Zealand. They examined research on different industries, including healthcare, insurance, aviation, waste management, food services, and transportation.

Examples of the types of challenges and crises Barasa et al. (2018) studied included natural disasters, environmental changes, economic crises, disease outbreaks, terrorism, and man-made disasters. Barasa et al.’s examination of such wide-ranging countries, sectors, and challenges/crises provided both depth and breadth to their study. Barasa et al. identified nine categories that healthcare organizations could use to determine or strengthen their level of resilience. Barasa et al.’s model was chosen as the conceptual framework for the current study because it was developed specifically to address healthcare organizations’ resilience in the face of a crisis. Barasa et al.’s model and the nine categories are discussed in more detail later in the literature review.

Table 1*Barasa et al. 's Resilience Categories*

Category	General Concerns
Material resources	Does an organization have the necessary resources to function? Material resources can include supplies, money, and knowledge. Material resources allow organizations to overcome disruption.
Preparedness and planning	Has an organization adequately prepared for disruption, and do they have a crisis management plan? Training is a main aspect of disaster preparedness, and organizations that engage in crisis planning are more resilient.
Information management	Is an organization aware of information management concerns during a crisis? Organizational resilience is highly dependent on effective information management.
Collateral pathways and redundancy	Does an organization have system redundancy? The use of collateral pathways can improve resilience in the face of a disaster or crisis.
Governance process	What type of governance structures does the organization have? Governance affects organizational resilience. Decentralization, non-linear planning, and deliberate democracy are governance approaches that promote resilience.
Leadership practices	What type of leaders does an organization have? Resilient organizations have leaders that are dedicated, have a clear vision, and engage in inclusive decision-making.
Organizational culture	What is the organization's culture like? Resilient organizations view challenges as opportunities and support creativity and learning.
Human capital	Does an organization have adequate levels of human capital? Human capital can refer to numbers of employees and employees' skills and knowledge.
Social networks and collaboration	Does an organization effectively leverage connections? Collaboration with network partners can improve resilience through knowledge sharing and better access to resources.

Literature Review

The following literature review presents material relevant to the COVID-19 pandemic, COVID-19's impact on various stakeholders, and the scholarly concept of organizational resilience. The purpose of this literature review is to identify and summarize the main themes in the body of knowledge in support of the current study. The literature review begins with a timeline of the COVID-19 pandemic. Next, the literature review provides information on COVID-19's impact on various stakeholders, including patients, healthcare workers, and healthcare organizations. The final section of the literature review contains information on organizational resilience.

A Timeline of the COVID-19 Pandemic

In late 2019, doctors began to document the spread of a new pneumonia-like illness in Wuhan, China (Katella, 2021). The illness, labeled COVID-19, spread rapidly and became a global pandemic, eventually infecting more than 100 million people worldwide (Katella, 2021). The effects of the COVID-19 pandemic have been wide-ranging (Abodunrin et al., 2020; Carvalho et al., 2021; Katella, 2021). The following paragraphs provide a timeline of the progression of the pandemic.

On December 31, 2019, the World Health Organization (WHO) Office in China was notified of an array of pneumonia-like cases in Wuhan (Carvalho et al., 2021). On January 1, 2020, the WHO (2020b) developed an incident management support team to lead communities through this challenging time across the world. Three days later, the WHO (2020b) reported several pneumonia cases in Wuhan, but no deaths were reported.

On January 5, 2020, the WHO (2020b) published its first disease outbreak news on the virus. This publication contained a risk assessment, advice, and a report on information China provided about the country's response to the pneumonia cases and the status of the patients (WHO, 2020b). On January 10, 2020, the first genome of the novel coronavirus that was thought to be responsible for these cases was publicly announced (Carvalho et al., 2021).

In addition to identifying the disease's genome, the WHO (2020b) issued comprehensive technical guidance on detecting, testing, and managing potential cases based on known facts about the virus at the time. Infection and prevention control guidance were also published to protect health workers. The WHO recommended droplet and contact precautions when caring for patients.

On January 13, 2020, the first recorded COVID-19 case outside of China was reported in Thailand (WHO, 2020b). An early description of COVID-19 was developed on January 24, 2020, when 41 patients began showing symptoms of the disease that included fever, cough, myalgia, and fatigue (Huang et al., 2020). All patients developed pneumonia; 13 required treatment in an intensive care unit, and six patients died (Huang et al., 2020). The virus was later named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2; Carvalho et al., 2021). On January 30, 2020, the WHO (2020a) declared the SARS-CoV-2 outbreak a public health emergency of international concern.

From January 20, 2021, to January 21, 2021, experts from the WHO's regional offices in China conducted a brief field visit to Wuhan (WHO, 2020b). The agency then issued a statement acknowledging evidence of human-to-human transmission in Wuhan

(WHO, 2020b); however, more investigation was needed to understand the virus's transmission. The WHO's (2020b) director summoned an emergency committee under the International Health Regulations to assess whether the outbreak constituted a public health concern, but a consensus was not immediately reached. The emergency committee requested more information and asked to be summoned within 10 days after receiving new data.

On January 28, 2020, a senior WHO (2020b) delegation traveled to Beijing to meet China's leadership. While in Beijing, the WHO agreed with the Chinese government that an international team of leading scientists would travel to China on a mission to better understand the context and response of the virus and exchange information and experience. On January 30, 2020, just 2 days after the emergency committee asked to be reconvened, the WHO characterized the outbreak as a public health emergency of international concern (WHO, 2020b).

In addition to designating SARS-COV-2 a public health emergency of international concern, the WHO (2020b) reported 7, 818 confirmed cases worldwide. Most of these cases were in China, but 82 cases were reported in 18 other countries (WHO, 2020b). At this point, another disturbing characteristic of COVID-19 appeared when evidence showed that SARS-CoV-2 could be transmitted from person-to-person without showing symptoms (WHO, 2020a).

Chan et al. (2020) studied a family gathering in Shenzhen, China and reported that five infected individuals who had recently returned from Wuhan infected a sixth family member who had not traveled to the affected area. Chan et al. noted that family

members exhibited different symptom levels, with some members requiring clinical care and hospitalization while others were asymptomatic. Chan et al. noted that the family had not had contact with animals, but one family member made frequent visits to the wet market in Wuhan.

The first symptomatic patient was a German businessman who had met with a business partner from Shanghai, China, indicating that individuals who were not yet showing symptoms could infect others (Rothe et al., 2020). On February 11, 2020, the WHO announced COVID-19 as the new name for the SARS-CoV-2 infection (Carvalho et al., 2021). Angiotensin-converting enzyme (ACE2) was identified as the human cell entry receptor for SARS-CoV-2 (Zhou et al., 2020). One month later, the WHO (2020a) declared COVID-19 a pandemic. Carvalho et al. (2021) established three key features that set COVID-19 apart from previous outbreaks: (a) the virus could be transmitted from person to person, (b) people could transmit the virus without showing any symptoms, and (c) the virus had a long incubation period (i.e., 5.7 days). By the end of February 2020, there were 83,652 confirmed cases of COVID-19 globally (WHO, 2020a).

The first clinical trial phase of a COVID-19 vaccine began on March 16, 2020. Moderna (2020a) and the National Institute of Health designed an mRNA vaccine targeting spike proteins. Blanco-Melo et al. (2020) compared transcriptional responses to SARS-CoV-2 in ferrets, and patient responses were compared to other respiratory viruses. Blanco-Melo et al. determined that the host immune response to SARS-CoV-2 failed to establish a robust Type I and Type III interferon response, causing the host immune response to induce high levels of chemokines and pro-inflammatory cytokines.

On March 26, 2020, neurological symptoms began to be associated with COVID-19 (Giacomelli et al., 2020). Physicians in Milan, Italy, reported that 20 of 59 patients hospitalized with COVID-19 experienced a loss of taste or smell (Giacomelli et al., 2020). Later that same month, researchers found that SARS-CoV-2 could replicate in several species of laboratory and domesticated animals, including cats and ferrets (Muñoz-Fontela et al., 2020; Shi et al., 2020).

In May 2020, autopsy results indicated that patients with severe COVID-19 had evidence of vascular damage (Wichmann et al., 2020). On May 5, 2020, Pfizer and BioNTech (2020b) announced the start of a Phase I/II trial of four mRNA-based COVID-19 vaccines. The Phase I clinical trial for Moderna's mRNA-1273 indicated that the Moderna vaccine was safe and immunogenic (Moderna, 2020b).

On May 14, 2020, Grifoni et al. (2020) reported that 30-50% of people had pre-existing cross-reactive T cell responses to SARS-CoV-2. Responses in unexposed individuals were lower than responses in individuals who were exposed to the virus (Grifoni et al., 2020). Children infected with SARS-CoV-2 were thought to have only mild or asymptomatic features (Grifoni et al., 2020). However, studies began to show that some children who recovered from the SARS-CoV-2 infection experienced severe Kawasaki disease, with reports emerging from the United Kingdom (Riphagen et al., 2020; Whittaker et al., 2020), Italy (Verdoni et al., 2020), and the United States (Cheung et al., 2020).

Scholars also began to report a small number of reinfections (To et al., 2020). The first confirmed reinfection was reported in Hong Kong (To et al., 2020). Researchers did

not know whether infection could protect from reinfection. In August 2020, Lumley et al. (2021) confirmed that antibodies from a prior infection did correlate with protection against reinfection. Additionally, several studies showed that the antibody response was normal and long-lasting (Crawford et al., 2021; Isho et al., 2020; Rodda et al., 2021; Wajnberg et al., 2020).

In November of 2020, Pfizer and BioNTech (2020a) announced that their vaccine was 90% effective, and Moderna (2020c) reported a 94.5% efficacy rate for their vaccine. In December 2020, Pfizer, Moderna, and AstraZeneca vaccines were authorized for use in the United States, the United Kingdom, Europe, and elsewhere (Carvalho et al., 2021). In January 2021, Johnson & Johnson's single-dose vaccine showed a 66% efficacy rate, and results from the Novavax vaccine Phase III trial showed an 89.3 % efficacy rate in the United Kingdom (Novavax, 2021).

The Impacts of COVID-19

As the coronavirus spread worldwide, scholars predicted that mortality and morbidity rates would increase (McKibbin & Fernando, 2020). Some COVID-19 patients died from the transmission of the disease, and others were prohibited from working for lengthy periods (McKibbin & Fernando, 2020). Interruptions to production and global supply chains impacted businesses the most (McKibbin & Fernando, 2020). Because of the high transmission rates, transportation became limited and sometimes restricted between countries, slowing global economic activity and production (McKibbin & Fernando, 2020).

COVID-19's impacts on healthcare, the economy, the labor market, supply chains, and work and home life are expected to be long-lasting (Venkatesh, 2020). Even after the pandemic ends, organizations and individuals will experience permanent changes, affecting how many companies do business (Byers, 2020; Conger, 2020; Khetarpal, 2020). The pandemic caused havoc worldwide, throwing many economies into recession or economic depression (Barua, 2020).

Working from home and having online meetings became standard practice during the pandemic (Aday & Aday, 2020). However, some individuals (e.g., front-line and essential workers) did not have the option to work from home, and these employees were expected to maintain regular work routines (Nicola et al., 2020). Every industry in the world was affected by COVID-19, with the manufacturing, healthcare, and food industries experiencing some of the most significant impacts (Aday & Aday, 2020).

COVID-19 severely affected manufacturing supply chains, and some manufacturers have experienced difficulties obtaining essential resources (Paul & Chowdhury, 2021). An Australian hand sanitizer manufacturing company faced a significant supply and demand disruption just a few months after the start of the pandemic, resulting in substantial amounts of revenue loss (Paul & Chowdhury, 2021). In response to the pandemic, the company expanded its productivity by increasing employee work and overtime hours (Paul & Chowdhury, 2021). Shortly after increasing its capacity, the company began facing shortages of raw materials such as alcohol, bottles, caps, labels, and other ingredients (Paul & Chowdhury, 2021). Due to the shortages of thickening agents, the company had to stop production (Paul & Chowdhury, 2021).

The coronavirus has affected manufacturing industries in China, the United States, and Germany (Min & Jianwen, 2020). The National Bureau of Statistics reported that China's manufacturing purchasing managers' index (PMI) decreased from 35.7% to 14.3% within just 1 month (Min & Jianwen, 2020). Flash U.S. manufacturing PMI dropped to 49.2%, registering as the sharpest drop since 2009, and Germany's PMI dropped to 45.7% (Min & Jianwen, 2020).

Min and Jianwen (2020) reported that the coronavirus caused two phases of the initial impact on manufacturing supply chains. During Phase 1, production was forced to halt in China, causing a delay in exporting raw materials. During Phase 2, the supply and demand in manufacturing supply chains were severely impacted by the continued spread of COVID-19 globally. Min and Jianwen predicted further manufacturing supply chains problems in the auto, electronics, and pharmaceutical industries, leading to the temporary closure of major plants (Min & Jianwen, 2020).

The food industry is a critical sector of the economy as food products are essential for daily life (Aday & Aday, 2020). If one factory closes, the employees who work at the factory are affected directly, but when food processors and distributors are infected, all of society is affected (Staniforth, 2020). Food supply chains are challenging to maintain when food and agricultural commodities can be interrupted at any stage of the process because of an outbreak (Aday & Aday, 2020).

During the COVID-19 pandemic, food security was associated with people's access to food rather than food availability (OECD, 2020b). COVID-19 restrictions and restaurant closings mean that most people began to prepare meals at home (Aday &

Aday, 2020). Many people were hesitant to go to restaurants and grocery stores for fear of catching COVID-19 (Food and Agriculture Organization of the United Nations, 2020b). As a result, consumer demand for food increased, and store shelves were temporarily emptied, causing some consumers to hoard essential products (Aday & Aday, 2020).

Many food-processing plants were affected by COVID-19 in the United States. Douglas (2020) reported that COVID-19 affected 462 meat packaging, 257 food-processing plants, 93 farm and production facilities. In the United States, in 2020, more than 54,000 food industry workers tested positive for COVID-19, and 230 workers died (Douglas, 2020). Employees became reluctant to work at food-processing plants when coworkers tested positive for COVID-19 because they feared they would become sick at work (Aday & Aday, 2020).

Food supply chains entail a robust logistic system in which all processes and stages are connected, so a slight delay in production can trigger major consequences (Food and Agriculture Organization of the United Nations, 2020a). With food plants closing, producers were forced to euthanize farm animals and destroy products due to COVID-19 restrictions (Aday & Aday, 2020). Grocery stores struggled to keep food on their shelves, and a decrease in supply caused meat prices to rise (Aday & Aday, 2020). Stores set occupancy rates and limited purchase quantities of some products (Aday & Aday, 2020). Store adjusted their hours, and governments enforced travel restrictions on the transportation of goods (Aday & Aday, 2020; Nicola et al., 2020).

Employees in the healthcare sector also experienced hardships. Millions of healthcare professionals worked unprotected during the COVID-19 pandemic due to high demand and limited medical devices and personal protective equipment (Larrañeta et al., 2020). Some healthcare facilities experienced interruptions in health services as a result of the shortages (Siriwardhana et al., 2021). The spread of COVID-19 required healthcare providers to quickly develop new ways to provide healthcare services (Siriwardhana et al., 2021).

Technological advancements like 5G communications helped healthcare organizations overcome the challenges associated with COVID-19 (Siriwardhana et al., 2021). 5G technologies can be used to provide telehealth services (Siriwardhana et al., 2021). These services include remote clinical healthcare options like telemedicine, telenursing, telepharmacy, and telesurgery (Siriwardhana et al., 2021).

Teleservices were attractive during the pandemic because of resource scarcity and overburdened healthcare facilities (Siriwardhana et al., 2021). Manufacturing plants could not maintain regular production of raw materials and respond to the increased demand for N95 masks, hand sanitizers, and medicines (Siriwardhana et al., 2021). Product shipments were also delayed because of COVID-19 transmission and physical contact restrictions (Siriwardhana et al., 2021).

Entrepreneurs and small and medium enterprises (SMEs) struggled with the decline in demand for goods and services (Syriopoulos, 2020). Business activity slowed during the pandemic, and businesses were financially burdened as a result of the decline (Syriopoulos, 2020). Many SMEs could not service their clientele, pay employees, or

afford supplies because of pandemic-related changes (Syriopoulos, 2020). SMEs faced additional problems associated with a lack of funds and liquidity, ill or absent employees, fewer customers, and changing technology demands (Syriopoulos, 2020). Syriopoulos (2020) predicted that many SMEs would go out of business because of COVID-19.

Juergensen et al. (2020) noted that the COVID-19 pandemic challenged many European manufacturing SMEs. SMEs are the backbone of the European economy, making up 99.8% of enterprises and 58% of employment (Muller, Julius et al., 2017; Muller, Robin et al., 2019) European manufacturing SMEs are innovative but struggle with profitability and liquidity, making them vulnerable to external shocks (Muller et al., 2019). Crises like the COVID-19 pandemic are likely to affect SMEs more adversely than large enterprises because SMEs have limited human, financial, and technical resources (Laufs & Schwens, 2014; Martin et al., 2019).

The pandemic represented an external shock of unprecedented magnitude, affecting the supply and demand of European SMEs (Juergensen et al., 2020). In May 2020, 41% of UK SMEs had stopped their operations, and 35% feared they would not reopen (FSB, 2020). In Germany, 50% of SMEs expected a negative effect from the crisis, with one-third expecting a decline in revenues (FSB, 2020). More than 70% of Italian SMEs indicated they were directly affected by the crisis (Juergensen et al., 2020).

COVID-19's Impact as a Global Pandemic

COVID-19 has caused a significant setback to economic growth and development globally (Abodunrin et al., 2020; Chudik et al., 2020; Kaye et al., 2020; Vitenu-Sackey & Barfi, 2021). COVID has also affected social interaction, education, politics, and human

security (Abodunrin et al., 2020). COVID-19 caused the loss of skilled workers, reduced the labor supply, increased poverty, and reduced productivity (Abodunrin et al., 2020).

The U.S. stock and credit markets fell by 35%, just 15 days into the pandemic, but other countries were equally affected (Abodunrin et al., 2020). Italy, a country with strong ties to China, experienced significant effects from the pandemic (Abodunrin et al., 2020). The Italian government shut down its retail economy, quarantining the entire country. Only pharmacies and grocery stores were allowed to remain open. People were instructed to stay at home except for essential shopping and commuting to work. Public and private debt obligations such as housing rents and interest payments were suspended in Italy and other countries (Abodunrin et al., 2020).

In Germany, the government implemented short-time working allowances and granted credit assistance and tax deferrals to distressed companies (Abodunrin et al., 2020). Public events across the country were canceled, and children remained at home rather than attending school. Similarly, Austrian schools, universities, and most businesses were closed (Abodunrin et al., 2020). France and Spain also shuttered schools, restaurants, and businesses (Abodunrin et al., 2020). Germany, Austria, Denmark, Poland, and the Czech Republic all closed their borders with Italy to stem the spread of COVID-19 (Abodunrin et al., 2020).

Limiting the spread of COVID-19 by prohibiting travel adversely affected economic activity globally (World Bank, 2020). The pandemic also disrupted both supply and demand in the global economy. COVID-19's toll on world economies has been demonstrated in many ways, including decreased productivity and international trade and

deteriorating health and human conditions (World Bank, 2020). Loss of income and layoffs resulted from quarantines and the reduced economic demand that the quarantines created. Morbidity, unemployment, investment rates, and household consumption worsened due to decreasing economic prospects (Chudik et al., 2020). The spread of COVID-19 disrupted labor productivity and supply chains, and the restrictions imposed on mobility, social distancing requirements, and business closures further disrupted the supply of goods and services (Vitenu-Sackey & Barfi, 2021).

Many preventive social measures were put in place globally to shorten the spread of COVID (Gautam & Hens, 2020; Gautam & Trivedi, 2020; Sarkodie & Owusu, 2020). These measures included travel and movement restrictions, quarantines, lockdowns, social distancing protocols, and moratoriums on public events. While these measures were intended to reduce rising infection rates, they adversely affected economic development and environmental sustainability (Gautam & Hens, 2020; Gautam & Trivedi, 2020; Sarkodie & Owusu, 2020). Some scholars expressed concerns that these strict preventive social measures could impair human development through the loss of jobs, education, health, and income (Vitenu-Sackey & Barfi, 2021).

The collapse of businesses and rising unemployment also negatively affect human development and social cohesion, as these factors affect health, education, job creation, and poverty rates (Vitenu-Sackey & Barfi, 2021). The World Bank (2020) predicted that the pandemic would leave an indelible mark on the global economy by destroying human capital through lost schooling and work, reduced investment, and the disintegration of global supply and trade links. The pandemic was not only a health issue but a socio-

economic issue suppressing the sustainability of global development (Nicola et al., 2020; Pirouz, 2020).

Global healthcare systems face significant financial challenges related to the COVID-19 pandemic (Kaye et al., 2020). The American Hospital Association estimated that the pandemic resulted in \$202.6 billion in lost revenue for hospitals and healthcare systems in the United States (Kaye et al., 2020). However, the pandemic's effects on healthcare were not only financial. COVID-19 also affected the quality of patient care, the availability of surgeries, and surgical outcomes in the United States (Vitenu-Sackey & Barfi, 2021).

In addition to financial costs, healthcare infrastructures have suffered tremendously from the COVID-19 pandemic (Vitenu-Sackey & Barfi, 2021). Healthcare providers faced a dilemma when deciding which patients to treat, as the shortage of hospital beds often meant some patients would not survive (Vitenu-Sackey & Barfi, 2021). Low-income communities and poor people have been severely impacted, and around 4 billion people globally have lacked access to essential healthcare during the pandemic (Liu et al., 2020).

The pandemic also affected technology use and global connectivity. COVID-19 created a digital world, as people and businesses turned to technology as a way to interact during quarantine and stay-at-home orders (Azam et al., 2020). Unfortunately, technology could not address all the economic and social consequences of COVID-19. The global economy suffered from decreased production, disrupted supply chains and markets, and financial instability (Azam et al., 2020). China is the largest exporter of

intermediate goods, and manufacturers of automobiles, food products, electronic equipment, textiles, petrochemicals, iron, and steel have had their production and profitability impacted by material shortages (Azam et al., 2020). Additionally, 80% of ingredients for antibiotics and medical drugs are developed in China. Thus, suspension of operations and disruptions in the supply chain have resulted in substantial revenue loss for healthcare providers and impaired health outcomes for many patients (Azam et al., 2020).

COVID-19's Impact on Patients

Since the pandemic, patients' stress levels have increased because of COVID-19 lockdown measures. The risk of patients developing mental health problems has increased due to family separation, shelter-in-place orders, boredom, food and supply shortages, and inadequate information about COVID-19 (Ahmed et al., 2020; Rajkumar, 2020). Such strain has led to anger, confusion, and post-traumatic stress symptoms (Brooks et al., 2020).

Individuals with COVID-19, front-line health workers, and the general public have been the primary focus of COVID-19 research (Neto et al., 2020; Spoorthy, 2020; Wang et al., 2020). However, patients with mental illnesses were left unaddressed. Researchers have noted that pre-existing psychiatric illness is a risk factor for developing post-traumatic stress disorder, depression, and anxiety after a disaster (Goldmann & Galea, 2014; Jeong et al., 2016).

The National Institute of Mental Health defined *severe mental illness* as a mental, behavioral, or emotional disorder resulting in severe functional impairment that interferes

with major life activities (Muruganandam et al., 2020). Patients who have been diagnosed with severe mental illness have been deprived of their medication, rehabilitation, and healthcare in psychiatric hospitals due to COVID-19 (Lima et al., 2020). China reported that 300 psychiatric patients tested positive for COVID-19, and these patients were at high risk of transmitting the virus by not following strict safety measures (Xiang et al., 2020).

Hao et al. (2020) conducted a study and concluded that psychiatric patients were at high risk of experiencing a higher level of PTSD, depression, anxiety, stress, insomnia, anger, irritability, and suicidal ideation. Around 30 % of patients who were stable before lockdown had a relapse (Muruganandam et al., 2020). Additionally, patients who consulted with mental health professionals during the lockdown showed high stress awareness, indicating that psychiatric treatment directly correlated with improved health outcomes (Muruganandam et al., 2020).

COVID-19's Impact on Healthcare Organizations

COVID-19 quickly drew the attention of healthcare providers worldwide (Dosa et al., 2020). The virus has spread to over 1,000 countries, including the United States. Just 3 months after its appearance, over 105,000 known cases and 3,500 deaths were reported (Dosa et al., 2020). COVID-19 was a major concern for nursing care facilities due to their congregate settings and vulnerable populations. Residents living in nursing care facilities are at a higher risk for morbidity and mortality due to older age and underlying medical conditions (McMichael et al., 2020; Telford et al., 2020).

The Center for Disease Control examined nursing care facilities from May 25, 2020, through November 22, 2020 (Bagchi et al., 2020). Nursing care facilities were required to account for the number of beds occupied and routine reporting of COVID-19 cases among residents and staff members weekly in the United States, the District of Columbia, Guam, and Puerto Rico in response to a federal mandate. A total of 572,135 COVID-19 cases were reported, with 296,762 occurring among residents and 275,373 among staff (Bagchi et al., 2020).

Bagchi et al. (2020) reported an increase of COVID-19 cases among nursing home residents during June and July 2020, reaching 11.5 cases per 1,000 residents. Rates declined to 6.3 cases per 1,000 residents in mid-September before increasing again by late November to 23.2 cases per 1,000 residents. Bagchi et al. also reported an increase among nursing home staff members in June and July 2020, reaching 10.9 cases per 1,000 residents, before declining to 6.3 cases per 1,000 residents in August and September and increasing again to 21.3 cases per 1,000 residents by late November. Surrounding communities followed similar trends. Bagchi et al. suggested that increased community rates of COVID-19 might be associated with increases in nursing facilities. Bagchi et al. advised that nursing care facility strategies should include comprehensive plans to monitor COVID-19 transmission and minimize high-risk exposures within facilities.

Many COVID-19 deaths have occurred in nursing care facilities. As of May 28, 2020, 26 states had 50% or more of their registered COVID-19 deaths in nursing care facilities (Lau-Ng et al., 2020). The role of nursing care facilities is to provide care to older adults with physical and cognitive impairments (Miller, 2020). Care can include

assistance with basic daily activities such as eating, bathing, and toileting. Over 2 million people in the United States reside in nursing care facilities. While 2 million people is a small percentage of the total U.S. population, nursing care residents constituted 42% of all COVID-19 deaths (Miller, 2020).

Healthcare professionals globally have neglected research in recruitment, quality improvement, pandemic preparedness, and infection control in the nursing care sector, but Fallon et al. (2020) focused on such factors in the first critical study of COVID-19 in a nursing home. Fallon et al. studied an institution with 50 residents. Nearly two-thirds of residents were infected over 3-weeks, resulting in a death rate of 33% (Fallon et al., 2020). Some scholars suggested that the reported number of COVID-19 deaths is severely underestimated due to the undercounting of deaths and the delay in receipt of death certificates (Lau-Ng et al., 2020).

Studies show that adults between the ages of 60-65 are at a higher risk for disease progression, such as COVID-19 (Thompson et al., 2020). Existing health conditions like diabetes, cardiovascular disease, chronic respiratory disease, cerebrovascular disease, malignancy, and dementia were proven to increase the risk of COVID-19 progression, severe outcomes, and death (Thompson et al., 2020). Studies also showed that most COVID-19 outbreaks could be explained by the large number of residents that share the same environment, sources of water, food, air, and the fact that a limited number of care workers are responsible for numerous residents (Thompson et al., 2020).

Ouslander and Grabowski (2020) reported that on March 19, 2020, a Connecticut nursing facility with limited testing capability had 12 residents on one wing with possible

COVID-19 symptoms. Only one out of the 12 tested positive. On April 17, 2020, less than a month later, the virus had spread to two wings, with 47 symptomatic residents, 11 positive tests, and 30 suspected COVID-19-related deaths (Ouslander & Grabowski, 2020). Preventing the virus from entering nursing care facilities has been challenging for facilities with double rooms and other space constraints. For some, it is not possible to isolate or create quarantine areas for residents with COVID-19 symptoms, residents with positive tests, and those admitted from the hospital, especially as most isolation and quarantine periods require 10 to 14 days (Ouslander & Grabowski, 2020).

Infection control programs are ineffective in keeping COVID-19 out of most long-term care facilities (Lau-Ng et al., 2020). As of May 29, 2020, 349 of the 389 nursing care facilities in Massachusetts had at least one case of COVID-19 (Lau-Ng et al., 2020). Lau-Ng et al. (2020) reported three specific causes of COVID-19 transmission: (a) asymptomatic carriers who travel from nursing home to nursing home and have direct contact with residents, (b) dementia patients who wander facilitates transmitting the virus to others, and (c) certified nursing assistants who often hold multiple caregiver roles. Such conditions increased the risk of COVID-19 transmission among residents and other staff.

Another challenge that nursing care facilities faced was the high cost of implementing infection control, viral testing, personal protective equipment, and other emergency preparedness equipment (Barnett Hu et al., 2020). The federal government allocated over 15 billion dollars to assist nursing care facilities (Ouslander & Grabowski, 2020). However, while some financial support was provided by Medicare and Medicaid,

industry experts say much more support will be needed for ongoing COVID-19 testing, adequate personal protective equipment, and staffing shortages (Ouslander & Grabowski, 2020). Such financial challenges will lead to short-stay Medicare-related admissions and a high number of deaths among long-stay residents on Medicaid (Ouslander & Grabowski, 2020). As the country reopens, relatives, co-workers, and visitors have the potential to spread the COVID-19 virus to patients and nursing home residents as they regularly go in and out of these facilities.

COVID-19 has had a devastating financial impact on the nursing care industry. Quigley et al. (2020) reported that nursing care facilities face financial impacts from increased supply costs, increased employee hours, and fewer admissions. Employee fear affects call-ins and the ability to replace staff on the floor, resulting in increased overtime (Quigley et al., 2020). Additionally, social distancing requirements meant more time and staff were needed to serve meals, and surgical procedures were postponed, resulting in fewer rehabilitation admissions (Quigley et al., 2020). The American Hospital Association reported that hospitals and health care facilities lost an estimated \$50.7 billion of monthly revenue because of the COVID-19 pandemic (Kaye et al., 2020). This financial burden will influence patient care, surgeries, and surgical outcomes (Kaye et al., 2020).

Adamo et al. (2020) reported that a health professional's behavior must change to mitigate the rapid spread of the COVID-19 virus. Professionals must behave as if the virus can be contracted without contact because individuals can be infected without showing symptoms. Nursing care facilities changed their day-to-day operations,

prohibiting visitors, dining room usage, and group activities and reducing vital sign and temperature checks, staff screenings, and evaluations (Adamo et al., 2020). The CDC (2020) also recommended frequent hand washing for 20 seconds with soap or alcohol-based antiseptic after contact with resident/patient or surface that could harbor the virus (e.g., doorknobs, stairway handrails, restaurant menus, elevator buttons, and common-use computers). Social distancing was highly recommended to limit the spread of the COVID-19 virus (Adamo et al., 2020). Healthcare professionals must also determine the appropriate management approach based on the organization's current circumstances. For example, professionals may have to decide whether the facility is prepared to test and manage residents in the facility versus transferring them to an acute care facility (Adamo et al., 2020).

Organizational Resilience

The concept of resilience typically refers to the ability to overcome adversity (Williams et al., 2017). Resilience has been studied in many different disciplines and contexts, and there has been extensive scholarly debate about the definition and use of resilience as a research construct (Iflaifel et al., 2020; Morse et al., 2021; Ree et al., 2021; Ruiz-Martin et al., 2018; van Breda, 2018). The wide-ranging perspectives on resilience have led to various understandings about the concept in the literature (Andersson et al., 2019; Brown et al., 2017; Ruiz-Martin et al., 2018). Andersson et al. (2019) suggested that balanced organizations demonstrate greater resilience than unbalanced organizations, and wider power distributions make organizations more versatile when facing unexpected change. Brown et al. (2017) reviewed the extant literature on resilience and identified

four types of resilience: systems resilience, organizational resilience, economic resilience, and community resilience.

Of Brown et al.'s (2017) four types of resilience, organizational resilience was the most applicable to the current study. Brown defined organizational resilience as the ability to overcome adversity by using an organization's physical assets, internal structures, and unique capabilities. In similar research, Ruiz-Martin et al. (2018) noted that organizational influence is based on the resilience of individuals associated with the organization and the resilience of the organization's supply chain, systems, and infrastructure. In turn, organizational resilience supports and influences societal, socio-ecological, community, and economic resilience. The following subsections identify how elements of organizational resilience are reflected in the context of disaster management and Barasa et al.'s (2018) model of resilience.

Business Operations and Disaster Management

Nursing care facilities often face business operations challenges during times of crisis. Fallon et al. (2020) argued that one of the tragic legacies of Hurricane Katrina was the unnecessary loss of life among nursing home residents. Fallon et al. (2020) stated that such losses resulted from a lack of preparation and infection control in the nursing home sector. Crises like COVID-19 pose urgent questions regarding whether healthcare systems have learned from past disaster experiences. The current study aims to examine business operations and disaster management in nursing care facilities to address this gap.

COVID-19 disrupted business operations in many business settings. Jayakumar et al. (2020) reported that the spread of the coronavirus had triggered a global recession

causing a supply and demand shock. Jayakumar et al. noted that adopting poorly designed policies can be costly for businesses. The COVID-19 pandemic increased and decreased demand for specific products, making customer demand more difficult and more urgent to address. Ahmad et al. (2020) reported that organizations must identify risks and redesign supply chains to deal with challenges brought on by unprecedented times. Ahmad et al. suggested that organizations focus on building supply chain resilience and social and environmental sustainability.

Koonin (2020) argued that organizations should prioritize disaster planning because it is not possible to predict with certainty when a pandemic will emerge. Once a pandemic arises, it may not be possible to acquire needed materials, formulate policies and plans, or execute them. A pandemic can cause many interrelated challenges that compromise business operations, such as absenteeism, risk of illness for employees and customers in the workplace, supply shortages and supply chain interruptions, transportation disruptions, increased expenses, and reduction or elimination of services (Koonin, 2020). Businesses must continue to deliver critical goods and services such as healthcare, utilities, food, transportation, and financial services if they want to remain operational (Koonin, 2020).

Koonin (2020) reported that pandemic planning is essential for businesses that operate globally because when borders close, resources become unavailable. Pandemic planning helps reduce viral transmission, decreasing the number of people who get sick and die. Pandemic plans should include mild-to-moderate severity strategies and greater severity strategies. Koonin (2020) identified four domains of business pandemic

preparedness: planning for continuity, protecting crew, protecting customers, and engagement with the community.

Koonin's (2020) first domain was planning for continuity. Many businesses have specific business continuity plans for natural disasters, but few have updated pandemic plans (Koonin, 2020). Koonin (2020) outlined the steps in developing a pandemic continuity plan. The first step in developing a pandemic continuity plan is to construct an emergency preparedness team and appoint a pandemic coordinator to administer the plan. Next, the roles and responsibilities of team members must be identified, and goals and objectives should be established. Finally, routine meetings should be scheduled to regularly discuss progress and challenges and to test plans. Additional planning issues should also be included, such as responding to high absenteeism. Absenteeism during a pandemic typically ranges from 20% to 40% at the peak of an outbreak due to employee illness and quarantine, family care responsibilities, school closures, travel restrictions, and fear of infection (Koonin, 2020). Staff should be cross trained to ensure that more than one person can execute vital roles.

Koonin's (2020) second domain was protecting the work crew. A pandemic significantly impacts an organization's employees more than its physical infrastructure (Koonin, 2020). The CDC (2020) recommended that organizations implement strategies to protect their employees from contracting the virus while ensuring continuity of operations. Such precautions prevent the virus from spreading and increase the likelihood of employees returning to work, allowing facilities to remain open. Organizations must immediately isolate sick persons and quarantine those exposed when an outbreak arises.

Employees who are sick must remain at home and away from the workplace to prevent transmission of infection to others. Sick people are most contagious when experiencing the most symptoms (CDC, 2020).

Social distancing should be implemented in the workplace, crowding should be reduced, and all meetings and travel should be postponed, reducing possible exposures (CDC, 2020). Teleworking, teleconferencing, video conferencing, and flexible work hours are practical ways of creating social distancing and reducing the number of people in the workplace. Organizations should also promote infection control precautions by providing workers with available resources such as touchless trash cans, disinfectants, hand soaps, disposable towels, hand sanitizer, and tissue to clean their workspaces and frequently touched surfaces such as railings, door handles, elevator buttons, and shared workspaces to minimize disease transmission (Koonin, 2020).

Finally, establishing an emergency communication plan to provide people with clear and accurate information is essential to pandemic planning (Koonin, 2020). Businesses should educate workers about the pandemic and continue to provide healthcare guidance. Leaders must communicate with employees about how the organization plans to keep them safe while keeping the business operating. Staff should remain updated via telephone, text, and or email.

Koonin (2020) identified the third domain as the need to protect customers. It is imperative that business settings where customers must enter to receive services or goods enforce infection control procedures to help minimize exposure during a pandemic. Businesses can ask ill customers to avoid coming into the establishment by posting signs

and social media messages. Sick employees can be asked to remain at home. Companies can use alternative methods to deliver services and products during a pandemic. Products can be delivered to the home, and services can be delivered via telephone, video, or web (Koonin, 2020).

The fourth and final domain Koonin (2020) identified was community engagement. Businesses need to establish relationships with other organizations in the community to assist with emergency management. These relationships provide businesses with a connection point for accurate information during a pandemic. Creating alliances and networks with other businesses and levels of government can strengthen local responses, especially if such businesses produce and deliver critical services or products (Koonin, 2020). Exploring community resources for response and recovery could benefit employees and businesses, particularly social supports and mental health services.

The cost of being unprepared can be incalculable (Koonin, 2020). Such costs go beyond absenteeism and the inability to serve customers and protect employees. Being unprepared can diminish an organization's brand and reputation, resulting in business closures. In addition to preparedness, resilience is also a useful metric to measure a business's ability to survive a pandemic. The following section presents Barasa et al.'s (2018) model of resilience.

Barasa et al.'s Model of Resilience

Barasa et al.'s (2018) model of resilience provided a conceptual model for the current study. Barasa et al. conducted a systematic literature review and identified nine

categories of importance when determining whether an organization was resilient: (a) material resources, (b) preparedness and planning, (c) information management, (d) collateral pathways and redundancy, (e) governance process, (f) leadership practices, (g) organizational culture, (h) human capital, and (j) social networks and collaboration.

Barasa et al. suggested that using these categories to evaluate an organization, managers and top decision-makers could improve organizational resilience.

When evaluating material resources, Barasa et al. (2018) suggested that managers and decision-makers needed to determine whether an organization had enough of the resources needed to deal with crises or disruptions. The global COVID-19 pandemic disrupted supply chains, and PPE became scarce, causing some healthcare organizations to struggle to keep healthcare workers and patients safe (Barnett Hu et al., 2020; Ouslander & Grabowski, 2020). During the COVID-19 global pandemic, some healthcare providers faced a dilemma when deciding which patients to treat, as the shortage of hospital beds often meant some patients would not survive (Vitenu-Sackey & Barfi, 2021). Having adequate material resources when facing a crisis helps organizations maintain resilience without impairing their ability to provide services (Barasa et al., 2018).

Preparedness and planning was another category Barasa et al. (2018) noted when evaluating organizational resilience. Significant aspects of preparedness and planning included training and disaster planning (Barasa et al., 2018). Healthcare workers are often trained for disaster scenarios, but challenges often remain even when disaster plans and training are provided (Aruru et al., 2021). For this reason, further examination of

preparedness and planning in relation to healthcare organizations' resilience is still needed (Aruru et al., 2021).

Information management was the third category of organizational resilience cited by Barasa et al. (2018). Information management refers to how efficiently an organization manages technology and information exchange (Barasa et al., 2018). Ahmad et al. (2020) suggested that some healthcare organizations lack technological readiness. Ahmad et al. suggested that organizations improve their information management systems to address this deficiency.

Collateral pathways and redundancy constituted the fourth category of organizational resilience in Barasa et al.'s (2018) model. Barasa et al. explained that redundancies and collateral pathways improved organizational resilience because if one pathway was disrupted, the redundancy ensured that services were still provided. Cobianchi et al. (2020) noted that the concept of redundancy is difficult in the healthcare sector because redundancy can be mistaken for waste. However, Cobianchi et al. also noted that healthcare organizations without adequate levels of redundancy were forced to terminate some procedures when COVID-19 disrupted normal operations.

Barasa et al. (2018) cited governance processes as the fifth category of organizational resilience. Organizations have varying types of governance structures, but Barasa et al. noted that decentralized governance structures that incorporate democratic decision-making processes and non-linear planning are more resilient. Sharma et al. (2021) contradicted Barasa et al. (2018) when noting that centralized governance structures are more closely related to reactive healthcare strategies. This contradiction in

the literature indicates that more research is needed to determine how governance processes related to organizational resilience in healthcare settings.

Leadership practices served as another category in Barasa et al.'s (2018) model of resilience. Barasa et al. noted that dedicated leaders who communicate a clear vision and promote inclusive decision-making increase organizational resilience. Haque (2021) echoed Barasa et al.'s (2018) assessment by advocating for the use of responsible leadership. Responsible leadership focuses on organizational sustainability and employee well-being, and Haque (2021) suggested responsible leadership was a way for healthcare organizations to address the leadership challenges caused by the COVID-19 global pandemic.

Barasa et al. (2018) identified organizational culture as the seventh category of organizational resilience. Organizational culture refers to how organizational leaders perceive adversity. Organizations that view challenges as opportunities are more resilient (Barasa et al., 2018). In the context of healthcare, organizational culture is largely reflected by whether organizations are willing to look for creative solutions to staffing or PPE shortages. One example of creativity in addressing these shortages was the development of new decontamination processes for respirators developed by Perkins et al. (2020).

Human capital was the eighth way Barasa et al. (2018) recommended organizational resilience be evaluated. Organizations need adequate numbers of employees to maintain service levels during a crisis or emergency (Barasa et al., 2018). Staffing shortages were a common occurrence in healthcare organizations as a result of

the COVID-19 pandemic (Ouslander & Grabowski, 2020). Healthcare organizations that want to remain resilient in the face of a pandemic need to balance staffing requirements (Barasa et al., 2018).

The final category of organizational resilience in Barasa et al.'s (2018) model of resilience included social networks and collaboration. This final category addressed an organization's ability to leverage partnerships, social networks, and professional connections for support and collaboration. In the context of the COVID-19 global pandemic, healthcare researchers from around the globe collaborated to find ways to combat the virus and create treatment protocols. Resilient healthcare organizations such as nursing care facilities might use their social networking skills to help keep patients' families informed of COVID-19 protocols.

Together Barasa et al.'s (2018) nine categories served to guide the development of the study. The literature review also informed the choice of methodology and the development of the interview guide used to collect data. The details of the methodology and the interview guide questions are presented in Chapter 3.

Summary

The literature review presented in Chapter 2 indicated that scholars have conducted extensive research on the COVID-19 pandemic despite the recent emergence of the disease. COVID-19 developed quickly and soon became a global pandemic affecting all aspects of life, including health, mortality, business, the economy, travel, leisure, education, and politics (Abodunrin et al., 2020). Even as the body of COVID-19 research grows, much remains unknown, and a gap exists in the literature regarding the

resiliency of health care facilities during the pandemic (Barasa et al., 2018; Fallon et al., 2020; Lau-Ng et al., 2020; Thompson et al., 2020).

The literature review indicated that COVID-19 disrupted business operations in various ways (Aday & Aday, 2020; Paul & Chowdhury, 2021). Some organizations faced work-from-home challenges, while others faced material shortages (Aday & Aday, 2020). Industries that employed essential workers experienced staffing shortages, and employee morale suffered because of the risks employees faced (Aday & Aday, 2020; Paul & Chowdhury, 2021). Nursing care facilities faced disproportionate challenges as they serviced a vulnerable population while experiencing equipment shortages and increased health risks for their employees (Fallon et al., 2020; Larrañeta et al., 2020; Siriwardhana et al., 2021). Scholars acknowledged the need to develop new business operation strategies to provide healthcare services in the face of the pandemic, but no universal models have yet been developed (Siriwardhana et al., 2021).

Some researchers focused on resilience as a factor when facing crises associated with natural disasters and global pandemics (Iflaifel et al., 2020; Morse et al., 2021; Ree et al., 2021). However, wide-ranging perspectives on resilience have resulted in a lack of consensus on the topic (Andersson et al., 2019; Brown et al., 2017; Ruiz-Martin et al., 2018). The current study focused on organizational resilience to determine how business operations were affected during disasters and crises, and Barasa et al.'s (2018) model of resilience served as the study's conceptual framework. The current study filled a gap in the literature by being the first study with the application of Barasa et al.'s model to explore nursing care facilities' business operations in a COVID-19 context. The literature

review informed the study's methodology, and elements of Barasa et al.'s resiliency model supported interview guide development. Chapter 3 presents a detailed description of the study's methodology.

Chapter 3: Research Method

The purpose of this qualitative transcendental phenomenological study was to explore and understand the essence of the perceptions and experiences of nursing care facility leaders, specifically regarding the strategies used to sustain business operations in response to the challenges presented by the COVID-19 pandemic. The objective was to describe nursing care facility leaders' lived experiences, and study business operations in these healthcare facilities during a global pandemic. Poor understanding of standardized guidelines, discrepancies between sectors, underfunding, and other irregularities have created challenges for nursing care facilities since the beginning of the COVID-19 pandemic (Thompson et al., 2020). Understanding the perspectives of healthcare professionals and identifying effective management and pandemic preparedness practices might help healthcare providers improve patient and business outcomes. The study's findings may also identify strengths and weaknesses in nursing care facility preparedness plans.

Chapter 3 provides a detailed explanation of the methods used to conduct this qualitative phenomenological study. The chapter begins with a discussion of the transcendental phenomenological research design and the rationale supporting that design. The role of the research is described next. Following the role of the research, the chapter includes details of the study's methodology. This section of the chapter contains information on participant selection logic; instrumentation; the pilot study conducted to test the researcher-designed interview guide; procedures for recruitment, participation, and data collection; and a data analysis plan. The description of the methodology is

followed by a discussion of issues of trustworthiness, focusing on credibility, transferability, dependability, confirmability, and ethical procedures. The chapter ends with a summary.

Research Design and Rationale

The data from the study addressed a central research question and a subquestion. The central research question was as follows: what strategies did nursing care facility leaders use to sustain business operations during the COVID-19 pandemic? The subquestion was as follows: what are nursing care facility leaders' perceptions and experiences regarding their response to the COVID-19 pandemic? The goal of these questions was to understand the COVID-19 pandemic through the lived experiences of nursing care facility leaders. By exploring the perceptions and experiences of nursing care facility leaders, as well as by identifying the strategies used to sustain business operations during the COVID-19 pandemic, this study provides critical insights into disaster preparedness and business management in a struggling segment of the healthcare sector.

Several research traditions were considered but rejected as inappropriate for the study. Rejected traditions included case study, ethnography, and grounded theory research. Case studies require a particular individual, program, or event to be studied in-depth for a defined period (Leedy & Ormrod, 2019). A case study design was not chosen for this research because the goal was not to examine how a single nursing care facility navigated the challenges associated with the COVID-19 pandemic. Instead, the focus was

on individual perceptions and experiences of the wider population of nursing care facility leaders working in the United States. Thus, a case study was not appropriate.

Ethnography was another research tradition considered but rejected for the current study. Ethnographic researchers look at a group of individuals that share a common culture (Leedy & Ormrod, 2019). Researchers have noted that nursing care facilities faced unique challenges from COVID-19 (Fallon et al., 2020; Lau-Ng et al., 2020); however, nursing care facilities are not culturally different from other healthcare providers in the United States. Further, the goal was not to explore cultural differences in pandemic responses. Rather, the goal was to develop an understanding of the lived experiences of nursing care facility leaders in the United States, regardless of their personal differences or unique cultural backgrounds. Thus, an ethnographic study research design was inappropriate for the current study.

The third and final research tradition considered but rejected was grounded theory. Grounded theory research focuses on developing a theory to explain an event or phenomenon. A grounded theory study focuses on developing a theory to explain individuals' actions, inactions, or interactions (Leedy & Ormrod, 2019). The goal in the current study was not to seek or develop a new theory. Thus, a grounded theory research design was inappropriate.

After reviewing several different research traditions, a transcendental phenomenological research design was chosen as the most appropriate option for the study. In a transcendental phenomenological study, a researcher attempts to understand people's perceptions and perspectives relative to a particular situation (Leedy & Ormrod,

2019). Phenomenological research helps researchers gain a better understanding of the experiences of others by generating insights based on the lived experiences of individuals affected by the phenomenon. Transcendental phenomenology focuses on consciousness and intentionality within participants' lived experiences (Yee, 2018). Transcendental phenomenology was the most appropriate tradition for the current study because the research questions focused on a specific phenomenon viewed through a specific population's perspectives and lived experiences. The phenomenon of interest is the COVID-19 pandemic and its effects on nursing care facilities' business management practices. As the study focused on participants' responses to the COVID-19 pandemic, consciousness and intentionality were critical to understanding the phenomenon.

The study's underlying research paradigm supported the suitability of a transcendental phenomenological research tradition. The study involved applying a constructivist research paradigm. Constructivism is a paradigm used by researchers seeking to understand the meaning of a phenomenon based on social perspectives (Bogna et al., 2020). Thus, constructivism aligned very well with the transcendental phenomenological research tradition.

Role of the Researcher

The researcher is the key instrument in social and educational research (Zhang & Liu, 2018). It is very important that researchers build trust and develop relationships with participants, as positive rapport between researchers and participants can significantly improve the research process (Zhang & Liu, 2018). Open-ended interview questions were used as the data collection method, and a strong rapport with participants encouraged

them to share their experiences more openly. In facilitating the interviews, my primary role was an observer. I was responsible for recording participants' responses and my observations of their tones of voice and facial expressions during the interviews. To ensure clarity in the data, I remained alert and asked follow-up questions when necessary.

As the researcher, I had 10 years of experience in leadership and management. I also had 10 years of experience working in the mental health field. During this time, I worked closely with mental health facilities, hospitals, and nursing homes. I understand standardized guidelines, discrepancies between healthcare sectors, challenges associated with underfunding, and many other concerns that nursing care facility leaders might experience. While I do not have direct experience working in nursing care facilities, I understand healthcare service provision and effective management practices related to pandemic preparedness. My experience was all an asset to my understanding of the topic; however, I realized that I must avoid letting my experiences influence my role as the researcher.

Because my role as the researcher involved identifying meaning in the participants' lived experiences, I needed to minimize the potential impact of bias. Phenomenological researchers engage in a process called *epoche*, which involves bracketing preconceptions or personal experiences that may influence a researcher's interpretation of data about a phenomenon (Roberts, 2019). I set aside my preconceptions and personal experiences and sought to understand the participants' lived experiences from their perspectives. I also reduced potential bias by using techniques that improved research credibility and trustworthiness, such as member checking, triangulation, and the

development of an audit trail. These techniques are described in greater detail later in this chapter.

I did not include any participants in the study with whom I shared personal or professional relationships. Excluding individuals with whom I had a preexisting relationship from the sample reduced the potential for bias and conflict of interest. I did not put pressure on any individual to participate in the study, and there was no financial inducement to participate. Participation was entirely voluntary to avoid the potential for undue influence or power dynamics within the study.

Methodology

This section describes the methods used to conduct the study. The following subsections provide information on participant selection, the instrument used to collect the data, recruitment and data collection procedures, and a data analysis plan. The goal of the following description is to provide an audit trail and make it possible for other researchers to replicate the study.

Participant Selection Logic

The population of interest in this study consisted of nursing care facility leaders in the United States. The United States has approximately 15,600 nursing care facilities (CDC, 2022). Nursing care facilities provide care services to high-risk and vulnerable patients. Patients in these facilities are typically older or have chronic medical conditions that require extended care, so their populations are more vulnerable to the COVID-19 virus (Bianchetti et al., 2020; Davidson & Szanton, 2020). During the COVID-19 pandemic, nursing care facilities experienced higher mortality rates than other healthcare

organizations (Thompson et al., 2020). Additionally, researchers posited that management complexities increased in long-term care facilities because of patients' complex care requirements and factors specific to business management in the healthcare industry (Fallon et al., 2020; Lau-Ng et al., 2020; Thompson et al., 2020).

COVID-19 exacerbated business concerns for many healthcare organizations. Nursing care facility leaders faced unique challenges sustaining business operations in response to COVID-19 that extended beyond financial, logistical, reputational, and long-term solvency considerations (Fallon et al., 2020). Researchers have investigated COVID-19's impact on other types of healthcare organizations; however, no published research reflected nursing care facility leaders' lived experiences responding to COVID-19 challenges and sustaining business operations within the COVID-19 environment.

Purposive sampling was used to select participants who were nursing care facility business leaders. Purposive sampling was the most appropriate sampling strategy because it allowed me to intentionally select participants who had rich experiences to share regarding the chosen phenomenon (Shaheen et al., 2019). Specifically, I focused on a type of purposive sampling called intensity sampling. Intensity sampling focuses on cases that are considered "information-rich" (Shaheen et al., 2019, p. 30).

I used inclusion and exclusion criteria to ensure the study's participants fit the needs of the study. The inclusion criteria were as follows:

- Participants needed to be over the age of 18.

- Participants needed to work for a nursing care facility in North Carolina at the time of the study. North Carolina was chosen as the location where I would facilitate face-to-face interviews when possible.
- Participants needed to hold a leadership position in their organization and have held the position for a minimum of 2 years. A minimum requirement of 2 years was chosen to ensure that participants would have enough leadership experience to provide knowledgeable answers about their organization's resilience and how COVID-19 affected business operations.

In addition to inclusion criteria, exclusion criteria were also used to guide the sampling process. The exclusion criteria used to filter out ineligible individuals were as follows:

- Individuals 17 years old or younger were ineligible to participate in the study. The purpose of excluding individuals younger than the age of 18 was to ensure participants had achieved a leadership role, which would be unlikely before the age of 18. No maximum age limit was set.
- Individuals who were unemployed or working part-time were ineligible to participate. This exclusion criterion was included to ensure that participants could share recent experiences working full time as business leaders during the COVID-19 pandemic.
- Individuals with less than 2 years of experience working in a leadership role within a nursing care facility were ineligible to participate in the study. This exclusion criterion was designed to ensure that participants would have a

minimum level of expertise and knowledge regarding their organization's business operations and how the organization overcame challenges during the COVID-19 pandemic.

After I obtained IRB approval, potential participants were screened during the sampling process. Individuals interested in the study were asked screening questions based on the inclusion and exclusion criteria to determine their eligibility before obtaining informed consent and scheduling an interview. The initial sample included 10 nursing care facility leaders that worked in North Carolina. Qualitative sample sizes are frequently debated as there is a lack of consensus regarding the appropriate sample size for different qualitative studies (Flynn & Korcuska, 2018); however, a sample size of 10 participants aligns with some researchers' recommendations (Sim et al., 2018). Data saturation was used to determine the final sample of 10 participants. The use of data saturation as a final determinant of sample size aligns with standard qualitative research practices (Hennink et al., 2017; Merriam & Grenier, 2019).

Instrumentation

The primary data source for the study included interview data collected during semi-structured interviews. The interviews were audio-recorded and transcribed. A researcher-developed interview guide provided structure during the interviews and helped target the respondents' answers so they could be used to answer the research questions and fulfill the research purpose. The interview guide was developed based on the literature review and scholarly work on resilience theory published by Barasa et al. (2018).

Barasa et al. (2018) identified nine resilience categories that could be used to measure an organization's resilience. Instrument development was guided by elements from the current study's research design, the research questions, resilience theory, and Barasa et al.'s model of resilience. Content validity was established by conducting a pilot study. The following subsections present the interview guide, and then describe the pilot study used to establish the credibility of the interview guide.

Interview Guide

As previously noted, the researcher-developed interview guide was created based on the literature review. The instrument drew heavily from Barasa et al.'s (2018) model of resilience and was designed specifically to answer the study's research questions. The interview guide was divided into 11 sections covering personal information, material resources, preparedness and planning, information management, collateral pathways and redundancy, governance process, leadership practices, organizational culture, human capital, social networks and collaboration, and overall perspectives. Appendix A contains the interview guide used during the semi-structured interviews.

Pilot Study

A pilot study was necessary to test the researcher-designed interview guide presented in the previous section. The pilot study's purpose was to demonstrate that the interview guide had content validity and could answer the research questions. The pilot study also helped refine the instrument to improve question order, alignment, wording, and clarity. The pilot study took place after final IRB approval was obtained so that the revised version of the interview guide could be submitted with the approval request.

Because of this, the data obtained as part of the pilot study were not used in the main study.

After developing the initial interview guide, feedback was solicited from a research design specialist and a business leader I knew who worked in a nursing care facility. Neither individual was an ideal candidate for inclusion in the main study. The research design specialist possessed the skills and knowledge to provide helpful feedback regarding the instrument's composition but did not have a nursing care facility administration background. The business leader and I had a personal friendship, so the potential for bias and conflict of interest excluded them from the participant pool.

Once I was ready to begin the pilot study, I contacted the two individuals I hoped to interview as pilot study participants. I informed them about the main study and my need for pilot study participants. I explained that the pilot study is an opportunity to practice the interview process and test the interview guide. I informed each individual that their data would not be included in the study and that they would remain anonymous in the final research report, listed only as pilot study participants. I explained that the interviews would last approximately 1 hour and requested feedback on the flow and clarity of the interview questions and my demeanor as an interviewer. I informed them that I would be using the pilot study interviews as practice sessions for the main interviews and request feedback on potential improvements. I also informed them that I would be testing my recording equipment during the pilot study interviews to reduce the likelihood of malfunctions once the main interviews began. The pilot study did not result in any changes to the interview guide questions.

Procedures for Recruitment, Participation, and Data Collection

In defining recruitment, participation, and data collection procedures, the first place to start was with recruitment. As the researcher, I was responsible for recruiting participants. I began recruitment by compiling a list of nursing care facilities in North Carolina and identified individuals in leadership positions in those organizations. North Carolina has a total of 423 nursing care facilities (North Carolina Division of Health Service Regulation, 2021). I selected nursing care facilities that would contribute to a rich understanding of the phenomenon. Purposive sampling allowed me to select facilities and participants with valuable information to share regarding the phenomenon of interest.

I forwarded an information packet about the study to all nursing care facilities that agreed to pass the study information along to their staff. The information packet included my recruitment materials and an informed consent document. Individuals could reply via email with the statement “I Consent” if they were interested in participating in the study. The recruitment materials included information about the study’s purpose and significance, the study’s inclusion and exclusion criteria, and the expected time needed to complete the interviews. The informed consent document outlined participants’ rights, the voluntary nature of the study, and a guarantee that participation was anonymous. Sampling and data collection ran concurrently, allowing me to monitor data saturation and ensure that the sample had enough participants to achieve saturation.

Participants’ identities were kept confidential within the limits of the law. I was only allowed to share the participants’ identities or contact info as needed with Walden University supervisors (who are also required to protect the participants’ privacy), or with

authorities if court-ordered (which is very rare). The participants' personal information was not used for any purposes outside of the research project. Also, the participants' names and other identifying data were not included. If I were to share this dataset with another researcher in the future, the dataset would contain no identifiers; so this would not involve another round of obtaining informed consent. Data were stored on an encrypted hard drive throughout the study. Participants received pseudonyms, and all data remained confidential. I removed any personally identifying information from the interview transcripts and avoided including any facts in the final report that might be used to identify a participant.

As the researcher, I collected all the interview data. Once individuals agreed to participate and indicated their consent in a return email, I scheduled face-to-face or Zoom interviews at times convenient to the participants. In-person interviews took place in locations that provided privacy and were convenient to the participant. It was important to limit interruptions, so private offices were used as meeting rooms.

I provided the participants with an interview guide prior to the interview to review the questions. I conducted one interview with each participant, and the interviews lasted 20 minutes to 80 minutes. Interviews were audio-recorded, and the recordings were transcribed so participants' responses could be analyzed. Participants were asked to review a Word file containing their interview transcripts to verify the accuracy of the transcripts once they were completed. The transcript review occurred virtually; the participants received copies of their transcripts via email. Participants were invited to make any changes they felt were necessary when reading the transcripts, but they were

not expected to complete a follow-up interview. Participants provided feedback by returning the transcript document with clarifications or corrections. The member-checking process was expected to take approximately 10 minutes. No participants replied to the member checking request with any request to clarify their initial responses. As a result, no changes were made to the original transcriptions, and no additional data were received following the completion of the interviews.

I thanked the participants for their time after the initial interview and again after reviewing their transcripts. Following the transcript review, I informed the participants of the study's expected completion timeline and asked them if they would like to receive a copy of the final dissertation. If they requested one, I informed them that I would send it upon completion. If not, there was no further need for involvement between the participants and me.

Data Analysis Plan

A data analysis plan was designed and approved before collecting or reviewing any data. The data analysis process followed the modified van Kaam method, as proposed by Moustakas (1994). Moustakas's modified method included seven steps for analyzing interview transcripts. The following steps were completed using Microsoft Word and Excel.

Step 1

The first step of the data analysis process involved reviewing the transcripts to identify every comment that described a relevant experience related to the phenomenon (Moustakas, 1994). Once the comments were identified, a master list was created, and the

comments were divided into preliminary groupings. Through a process called *horizontalization*, equal emphasis was given to all of the comments identified as relevant to the phenomenon (Moustakas, 1994).

Step 2

Step 2 of the data analysis process involved reviewing the list created in Step 1 and eliminating comments deemed unimportant or irrelevant to the analysis (Moustakas, 1994). The process resulted in the identification of invariant constituents. Invariant constituents are considered the main units of meaning within the data (Moustakas, 1994). Invariant constituents are also sometimes called horizons.

Step 3

Step 3 involved clustering the invariant constituents and developing themes (Moustakas, 1994). Similar invariant constituents were grouped together in clusters, and thematic labels for the clusters were developed (Moustakas, 1994). The thematic labels were meant to represent the core of the participants' experiences.

Step 4

Once the thematic labels were created, they were then compared to the invariant constituents in Step 4 (Moustakas, 1994). The purpose of the comparison was to make sure that the thematic labels were compatible with the invariant constituents and that the themes explicitly reflect their meaning. Thematic labels that were poorly supported should be discarded, and invariant constituents that did not directly support a thematic label were set aside (Moustakas, 1994).

Step 5

Step 5 involved constructing textural descriptions of each participant's lived experience using the validated invariant constituents (Moustakas, 1994). Textural descriptions described the fundamental elements of the phenomenon or *what* the participants experienced (Moustakas, 1994). Each participant's textural description generally included the thematic codes (developed in Step 4) that were relevant to the participant's lived experiences with the phenomenon.

Step 6

Step 6 involved constructing structural descriptions of each participant's lived experience (Moustakas, 1994). Structural descriptions described *how* a phenomenon was experienced and related to universal structural themes like time, space, bodily concerns, materiality, causality, relation to self, and relation to others (Moustakas, 1994). The structural descriptions were based on universal structures and the participants' textural descriptions.

Step 7

The final step, Step 7, involved constructing a textural-structural description of the phenomenon based on the collective lived experiences of the participants (Moustakas, 1994). The textural-structural description focused on the essence of a phenomenon (Moustakas, 1994). The textural-structural description of the phenomenon included all the relevant themes identified in the earlier steps of the data analysis process.

Issues of Trustworthiness

Trustworthiness is a critical concern for researchers. Qualitative researchers have specific responsibilities to ensure that their results are meaningful and unbiased. The following sections address credibility, transferability, dependability, confirmability, ethical procedures, and the measures taken to alleviate those concerns. The quality of the study was improved by following standard practices and guidelines to ensure scholarly rigor and trustworthiness.

Credibility

Several measures were taken to support the study's credibility, including triangulation, member checking, saturation, and reflexivity. Triangulation refers to the use of multiple sources of data when identifying a theme or finding (Carter et al., 2014). I engaged in triangulation by interviewing 10 different participants with unique experiences of the phenomenon. I also used interview data combined with my observations of participants' tone of voice and facial expressions to determine emphasis during the interviews.

Member checking is another way researchers can promote credibility (Vagle & Hofsess, 2016). Member checking occurs when participants review their interview transcripts for accuracy. Each participant received a transcript of their interview and was asked to verify that their statements were accurately represented. They were then asked to correct and or clarify any statements they felt were unclear or inaccurately described their lived experiences.

Saturation occurs when no new information is added after interviewing additional participants. Saturation is a standard method of determining sample size in qualitative studies (Merriam & Grenier, 2019). I remained alert for data saturation during the analysis process. If necessary, I planned to interview additional participants if saturation was not reached after interviewing 10 participants. Saturation was confirmed after conducting the 10th interview, so I did not conduct additional interviews.

Finally, reflexivity refers to how a researcher views socially constructed meaning (Vagle & Hofsess, 2016). Reflexivity is critical in phenomenology, as the goal is to describe how universal structures contribute to understanding a phenomenon (Moustakas, 1994; Vagle & Hofsess, 2016). I engaged in reflexivity through the phenomenological practice of epoche, where I set aside my personal experiences and expectations and focused on the participants' descriptions of their experiences (Roberts, 2019). Together, these measures improved the study's credibility.

Transferability

Transferability was another concern related to trustworthiness in qualitative research. Transferability can be supported by thick, rich descriptions and purposive sampling. I used probing questions as part of the interview process and asked for an explanation when I felt participants could provide more detailed descriptions of their lived experiences. Additionally, during the study's participant recruitment and selection phases, I engaged in purposive sampling.

Shaheen et al. (2019) noted that information-rich samples obtained through purposive sampling provide a deeper understanding of the phenomenon. Many types of

purposive sampling focus on providing a rich sample with targeted information related to a phenomenon, including deviant case sampling, intensity sampling, maximum variation sampling, stratified purposive sampling, and critical case sampling (Shaheen et al., 2019). I focused on intensity sampling, which focuses on cases that include vast amounts of information rather than unusual information (Shaheen et al., 2019).

Dependability

Dependability refers to whether a study follows best practices and can be replicated if necessary (Ramsook, 2018). I supported the dependability of this study by creating an audit trail, using triangulation of sources, and engaging in member checking. Documenting each step of the research process from obtaining IRB approval until the findings were reported allowed reviewers or future researchers to replicate my methods. The use of triangulation meant that data from one source were supported by data from other sources, making the findings more robust and dependable. Finally, providing participants the opportunity to verify their responses accurately reflects the described lived experiences.

Confirmability

In the context of phenomenology, confirmability refers to whether a study reflects the essential meaning of the participants' perspectives and whether another study would produce similar results (Ramsook, 2018). The main measures that support confirmability for this study include reflexivity through epoche and member checking. By setting aside my preconceived expectations about the phenomenon, I avoided projecting my expectations and assumptions onto the data, and I focused on how the participants

constructed meaning from their lived experiences. Additionally, participants' verification that the transcripts and my interpretations of their meaning were accurate confirmed that the findings were not the result of researcher bias.

Ethical Procedures

I followed standard research protocol and obtained approval from Walden's Institutional Review Board (IRB) for all interactions with human participants. As part of the IRB process, I detailed all my procedures for soliciting, contacting, and interacting with participants and provided all my contact and recruitment information before notifying potential respondents about the study. I only needed to seek institutional permission from Walden University as I was not focusing on specific nursing care facilities. Nor was I seeking any private or proprietary data that might be sensitive.

The main recruitment-related ethical concern was that I have a formal plan for contacting and selecting participants. All participants were treated fairly and equally, and the recruitment materials and processes for determining participant selection was identical. I informed participants about their rights as human subjects. These rights ensured that their participation was voluntary, and they had a right to refuse or terminate their participation at any time. The informed consent document provided participants with this information. The research did not rely on the collection of sensitive or personal data, so there should only be minimal risk to participants. However, I informed participants of their freedom to terminate their involvement in the study at any time without repercussions.

Another ethical consideration addressed the storage and disposal of data. All participant data were securely stored on an encrypted hard drive throughout the study. Participants received pseudonyms, and all data remained confidential. I removed any personally identifying information from the interview transcripts and avoided including any facts in the final report that might be used to identify a participant. These measures protected participants' rights to privacy and encouraged open sharing of information during the interview process. Throughout the study, I was the only person accessing the participants' contact information, audio recordings, and transcripts other than the participants themselves. Once the study was completed, I stored all the electronic study data on an encrypted external hard drive that was locked securely away to prevent anyone else from accessing it. Any hard copy data was also locked in a safe. The data will be kept for 5 years, after which time, it will be destroyed following standard data disposal practices and Walden University IRB's guidelines.

A final ethical consideration was the potential for conflict of interest. No participant had a prior personal or working relationship with me. Prohibiting personal or working relationships between the participants and me prevented potential conflicts of interest and power imbalances. All participants needed to exercise autonomy when participating in the study.

Summary

Chapter 3 detailed the study's methodology. The chapter began with information on the study's transcendental phenomenological research design and the rationale supporting that design choice. Next, the role of the research was discussed, highlighting

my experience as a novice researcher and professional and my responsibility to minimize bias and conduct ethical research. A detailed description of the study's methodology followed the discussion of my role as a researcher.

The methodology section addressed the decision to use purposive sampling as a method of participant selection. The section also introduced the interview guide used for data collection during the semi-structured interviews. The interview guide was pilot tested, and the details of that pilot test were also provided. Following the description of the pilot study, the procedures for recruitment, participation, and data collection in the study were described. The final aspect of the methodology section addressed the data analysis plan, which was based on Moustakas's (1994) modification of the Van Kaam method. The 7-step process involved the creation of textural, structural, and textural-structural descriptions that captured the essence of participants' lived experiences operating nursing care facilities during the COVID-19 pandemic.

The final part of Chapter 3 addressed issues of trustworthiness. The section focused on measures to improve the study's credibility, transferability, dependability, and confirmability. The trustworthiness section also addressed the procedures taken to ensure the research was conducted ethically. While Chapter 3 detailed the methods used to collect and process data, Chapter 4 presents the data analysis results and the study's findings.

Chapter 4: Results

This qualitative transcendental phenomenological study addressed nursing care facility leaders' perceptions and experiences sustaining business operations in response to the COVID-19 pandemic. The COVID-19 pandemic adversely affected the healthcare industry, and nursing care facilities faced some of the greatest challenges because these facilities primarily serve elderly and immune-compromised patients (Davidson & Szanton, 2020; Dosa et al., 2020; Ioannidis, 2020; Lau-Ng et al., 2020). This study addressed nursing care facility leaders' perceptions and experiences sustaining business operations through the lens of nine categories of importance that influence organizational resilience: (a) material resources, (b) preparedness and planning, (c) information management, (d) collateral pathways and redundancy, (e) governance process, (f) leadership practices, (g) organizational culture, (h) human capital, and (j) social networks and collaboration. A central research question and one subquestion guided the study. The central research question was, what strategies did nursing care facility leaders use to sustain business operations during the COVID-19 pandemic? The subquestion was, what are nursing care facility leaders' perceptions and experiences regarding their response to the COVID-19 pandemic?

Chapter 4 presents the results of the modified van Kaam method of phenomenological analysis. The chapter begins with an introduction. Next, a section provides details of the pilot study used to test the interview guide. The pilot study information is followed by a description of the research setting and details of the participants' demographics. The chapter then briefly recounts data collection procedures,

the steps of the data analysis process, and evidence of trustworthiness. The remainder of the chapter reports the study's results and a chapter summary.

Pilot Study

I conducted a pilot study prior to the primary data collection. The pilot study demonstrated that the interview guide had content validity, and I could use participants' responses to answer the research questions. The pilot study consisted of initial interviews with two professionals that fit the study's target population but were ill-suited for participation in the main study because of their prior acquaintance with me. The pilot study took place after final IRB approval (#06-21-22-0433311) was obtained. The data obtained during the pilot study were not used in the main study. The individuals who participated in the pilot study had the same rights as the primary study's participants and retained their rights to confidentiality and privacy.

In addition to testing the interview guide, the pilot study served as practice for the main round of data collection. I provided each pilot study participant with informed consent documents and practiced all stages of the interview process, from scheduling to data transcription. The pilot study interviews were recorded using the same techniques as the main study. The pilot study participants worked in healthcare positions that would have made them eligible for the target population; however, I knew the pilot study participants personally, which disqualified them from participating in the actual study.

The pilot study participants' roles as experienced healthcare professionals working in nursing care facilities during the COVID-19 pandemic ensured they had the relevant experience to provide high-quality feedback on the clarity and interview guide.

Both pilot study participants indicated that the interview questions were clear and easy to understand, and they made no recommendations for changes to the interview guide.

Research Setting

The research setting focused on nursing care facilities in the aftermath of the first waves of the COVID-19 pandemic. Participants worked in nursing care facilities in the state of North Carolina. The research setting of nursing care facilities was intentional because these facilities faced extreme challenges both during and after the onset of the COVID-19 pandemic. The pandemic disproportionately affected nursing care facilities (Fallon et al., 2020; Lau-Ng et al., 2020; Thompson et al., 2020). These facilities typically care for older patients and patients with chronic medical conditions, so their patient populations are more vulnerable to the COVID-19 virus (Bianchetti et al., 2020; Davidson & Szanton, 2020). Nursing care facilities were required to account for the number of beds occupied and routine reporting of COVID-19 cases among residents and staff members weekly in the United States, the District of Columbia, Guam, and Puerto Rico in response to a federal mandate (Bagchi et al., 2020).

North Carolina has 423 nursing care facilities (North Carolina Division of Health Service Regulation, 2021). During the pandemic, healthcare organizations faced challenges associated with resource scarcity (Larrañeta et al., 2020; Siriwardhana et al., 2021), staffing and personnel shortages (Ouslander & Grabowski, 2020), and changes to work processes (Siriwardhana et al., 2021). The decision to explore nursing care facilities was intentional because the study's purpose was to explore how the COVID-19 pandemic

affected organizational resilience in the context of nine resilience categories (see Figure 1, p. 9).

Demographics

This section presents demographic information on the sample. Individual participant descriptions are not provided to ensure that participants cannot be identified based on their demographic information; however, aggregated demographic information describes the sample groups' characteristics. The 10 participants worked at different nursing care facilities throughout North Carolina. Each facility was in a different county within the state. On average, participants' facilities had 94 available beds, with the highest number of beds being 170, and the lowest number of beds being 40. Participants' work experience ranged from a minimum of 2 years to a maximum of 32 years. The sample group had an average of 10.5 years of work experience in nursing care facilities. Most of the participants held the job title of administrator; notably, the sample did include individuals with the job titles of social services director, executive director, and director of operations.

As part of their administrative duties, participants were responsible for various tasks. Some participants indicated they oversaw patient-related services like psychological evaluations, discharges, contact with doctors and families, and day-to-day assisted living care. Other participants described their responsibilities related to business management tasks like accounts payable and receivable, regulatory compliance, and equipment and supply acquisition. All 10 participants indicated they were responsible for overall operations management within their respective organizations.

Data Collection

Interview data were collected from 10 participants. Participants were selected based on their employment at a nursing care facility registered with the state of North Carolina. I used a purposeful sampling strategy to select nursing care facilities that contributed to a rich understanding of the phenomenon. Each participant received a recruitment packet with information on the study's aims, participants' rights, and an informed consent document. Interested individuals were asked to reply via email with the statement "I Consent" to demonstrate their agreement to participate in the study. Once I received a consent email from a participant, I contacted them by phone or email to set up an interview appointment.

Sampling and data collection occurred concurrently to ensure that the sample size was adequate to achieve data saturation. Saturation is a standard method of determining sample size in qualitative studies (Merriam & Grenier, 2019); it occurs when interviewing new participants does not result in new information (Hennink et al., 2017; Merriam & Grenier, 2019). I suspected that I had reached saturation after the ninth interview, and I used the 10th interview to confirm that saturation had occurred, as Participant 10 provided no new information on the phenomenon. Determining that saturation had been achieved lent credibility to the study because the analysis considered all the relevant data that participants could provide.

I offered participants the option of conducting their interviews face-to-face at a location of their choosing, or over the web-conferencing software program Zoom. Eight of the participants chose to be interviewed face-to-face, and two participants chose to be

interviewed via Zoom. Zoom was convenient because it allowed the participants to be interviewed in the privacy of their homes and offices at times that were most convenient to them without the need for travel or the potential for COVID-19 exposure. Potential COVID-19 exposure was a primary concern for several participants because of their work with vulnerable patient populations.

All 10 interviews were audio recorded, and the recordings were transcribed so that I could analyze them more efficiently during the study's data analysis phase. All participants gave their consent to have their responses recorded. The interviews lasted between 20 and 80 minutes, and each participant responded to predetermined, open-ended interview questions. A single interview guide was used during all 10 interviews, with occasional probing questions to clarify participants' statements. The probing questions consisted of requests for participants to elaborate on their statements to clarify my understanding of their experiences. Using the interview guide in all 10 interviews ensured that the data would be consistent, enabling me to compare responses across the sample to understand the participants' lived experiences from a group perspective. I used audio recording equipment to record the two face-to-face interviews and Zoom's recording function to record the online interviews.

Participants were only interviewed a single time; however, once the interviews were transcribed, participants received a copy of their interviews to review them for accuracy. This process is known as member checking (Vagle & Hofsess, 2016). The purpose of member checking is to promote credibility within a study (Vagle & Hofsess, 2016). Participants received a Microsoft Word file with the transcript of their interview

responses via email. The email asked participants to review their transcripts to ensure that their responses accurately reflected their experiences and intentions when answering the interview questions. Member checking was only expected to take 10 minutes. No participants replied to the member checking request with a request to clarify their initial responses. As a result, no changes were made to the original transcriptions, and no additional data were received following the completion of the interviews. I thanked participants for their time and effort twice, once after the initial interview and again after the member-checking process was complete. I also offered to provide each participant with a copy of the final dissertation once it was complete.

Data Analysis

The data analysis plan followed the modified van Kaam method proposed by Moustakas (1994). Moustakas's modified method included seven steps for analyzing interview data. The first step of the data analysis process involved reviewing the transcripts to identify every comment that described a relevant experience related to the phenomenon (Moustakas, 1994). As part of Step 1 of the data analysis, a master list of relevant comments was created, and the comments were divided into preliminary groupings. Moustakas (1994) referred to this process as horizontalization.

The list compiled in Step 1 included statements from all participants. The preliminary groupings consisted of categories defined by the study's interview guide. Table 2 presents examples from the list of relevant comments identified by participants and preliminary groupings.

The second step in Moustakas's (1994) analysis method was to review the list of all the participants' relevant comments. During Step 2, I eliminated all the unimportant or irrelevant comments as per Moustakas's (1994) instructions. Step 2 led to the identification of invariant constituents, which were considered the main units of meaning within the data (Moustakas, 1994). Invariant constituents are also called horizons (Moustakas, 1994).

After eliminating all the irrelevant comments and identifying the invariant constituents in the data, I moved on to Step 3 of the analysis process. Step 3 involved clustering the invariant constituents together. The purpose of creating clusters of invariant constituents was to develop initial thematic labels representative of participants' lived experiences (Moustakas, 1994). Clusters were created for each resiliency category and labeled with a code phrase to help with grouping and theme development. Table 3 presents examples of cluster code phrases developed during Step 3 of the analysis process.

Step 3 resulted in 19 initial theme labels that I then compared to the invariant constituents in Step 4. Step 4 required me to verify that the invariant constituents supported the thematic labels (Moustakas, 1994). I discarded or modified thematic labels that were not sufficiently supported. I also set aside invariant constituents that did not directly support a thematic label per Moustakas's (1994) guidance. The result of Step 4 was to condense, combine, and modify elements of the initial 19 theme labels into the three themes presented in the results section of this chapter.

Table 2*Examples From the Master List of Participant Comments*

P#	Comment
Material resources	
P1	Masks, gloves, especially gloves, hand sanitizer. We had to wear the tie back suits at one point.
P5	We had to have a lot more supplies of course: masks, N95, gloves, isolation gowns, goggles, and of course tests.
Preparedness and planning	
P3	We received guidance from our corporate office.
P8	We adapted as the days when on, but there was no change in our current emergency preparedness.
Information management	
P4	I think our organization did a good job with managing information.
P7	I am a firm believer that you cannot over communicate.
Collateral pathways and redundancy	
P6	We have sister facilities that we would lean on should we need additional staffing.
P10	The challenges came when staff were sick and had to quarantine.
Governance process	
P2	Our company obtained obviously any new regulations and new guidance from the CDC.
P7	It was a lot, and you just had to basically stay on top of all of the different agencies and updates as they sent them out.
Leadership practices	
P4	Well, leadership is important.
P10	As an organization, we try to train leaders and have good plans as far as succession planning.
Organizational culture	
P3	The organization's culture supports sustainable business operations.
P6	I think very open-door policy, always being available, and just being very supportive.
Human capital	
P3	The organization's biggest human capital strengths are its employees.
P9	I think we have a lot of long-term employees here.
Social networks and collaboration	
P4	We certainly collaborate with outside staffing agencies.
P5	Weekly, all of our North Carolina administrators meet for an hour or two.

Step 5 of the data analysis process involved constructing textural descriptions of the participants' lived experiences using the invariant constituents. These descriptions focused on *what* the participants experienced (Moustakas, 1994). The thematic labels (developed in Step 4) relevant to each participant's experience were identified and tracked using a Microsoft Excel spreadsheet.

Step 6 of the data analysis involved constructing the structural descriptions of the participants' lived experiences. Structural descriptions focused on *how* the participants experienced the themes that emerged from the data analysis (Moustakas, 1994). Barasa et al.'s (2018) nine categories of resilience served as the universal structures underlying the analysis of how participants experienced the COVID-19 pandemic. As with Step 5, a Microsoft Excel spreadsheet was used to track participants' experiences relevant to the universal structures.

Step 7 was the final step in the data analysis process. Step 7 involved the creation of a textural-structural description of the phenomenon based on participants' lived experiences. As part of Step 7, participant quotes highlight how textural and structural elements combined to answer the study's research questions. The results of Step 7 are presented following the evidence of trustworthiness section.

Table 3*Cluster Code Examples*

Resilience Category	Cluster Codes
Material resources	Increased demand for resources, PPE shortages, alternate resource channels, rising cost.
Preparedness and planning	Communication, distributed/delegated responsibility, evolutionary process, chain of command, strong preparedness background, resource management is important, education and training.
Information management	Communication, well-managed, information was key/knowledge is power, information overload, CDC guidance was critical, designated teams to manage information, investment/cost.
Collateral pathways and redundancy	Redundancy was necessary, timing helps, staff sharing, sister facilities, back-up systems in place, bonus pay, overtime, turnover/burnout, challenges did not compromise care.
Governance process	CDC guidance, flexibility, state guidelines, specialized experts, chain of command, effective responses to change, constantly changing guidelines, increased paperwork.
Leadership practices	Organizational structure, trust, institutional structures, shared knowledge, experienced leadership, lead by example, communication, continuity, hierarchy, positivity.
Organizational culture	Communication, servant-oriented culture, sustainability, shortages, recognition/rewards, people-focused, emotional toll, changes, practical challenges, bonuses/agency workers.
Human capital	Cross-work, positivity, bonuses, employee commitment, facility-level decision-making, more recognition now, prizes/praise
Social networks and collaboration	Existing networks were helpful, regional assistance, locate support resources, communicate with the community, we're in this together, new connections.
Overall perspectives	Changed the healthcare industry, very resilient, sustainable, COVID was challenging, but they persevered.

Evidence of Trustworthiness

Credibility

Credibility was established using several strategies, including triangulation, member checking, saturation, and reflexivity. Triangulation was achieved by interviewing 10 participants with unique experiences with the phenomenon. Participants worked at nursing care facilities in different counties throughout North Carolina. These unique experiences were evaluated individually and collectively with triangulation in mind to identify an overall description of the phenomenon. Additionally, I used triangulation of data sources by including participants' comments and observed facial expressions and vocal tones to understand the emphasis of specific comments.

I also supported the study's credibility through member checking. As previously described, participants reviewed their interview transcripts to ensure the accuracy and representation of the transcribed data. No participants offered feedback on the transcripts, indicating that they were accurate representations of participants' experiences with COVID-19.

I used data saturation to bolster the study's credibility. I continued sampling participants until no new data emerged during the interviews. Saturation is a standard method of determining sample size in qualitative studies (Merriam & Grenier, 2019). Thus, using saturation to determine sample size increased this study's credibility.

Finally, I supported the study's credibility by engaging in reflexivity. Reflexivity requires researchers to set aside their personal expectations about a phenomenon or

experience (Roberts, 2019). By engaging in reflexivity, I reduced the potential for bias in the research and improved the study's credibility.

Transferability

I supported the study's transferability through purposive sampling; thick, rich description; and probing questions. Information-rich samples provide a deeper understanding of a phenomenon (Shaheen et al., 2019). I purposely selected participants that would offer a range of information on the experiences of nursing care facility leaders throughout the state of North Carolina. During the interviews, I encouraged participants to share freely, and when necessary, I asked probing questions to clarify participants' statements or elicit more detailed responses. These methods supported the study's transferability (Shaheen et al., 2019).

Dependability

I documented my procedures carefully to support dependability. Dependability refers to whether a study follows best practices and can be replicated if necessary (Ramsook, 2018). Using an audit trail supported the study's dependability because it provided a framework I could use to structure the process of documenting my methods and analysis process, including Moustakas's (1994) modified van Kaam method.

Confirmability

Ramsook (2018) noted that in phenomenological studies, confirmability refers to whether a study identifies the essence of a phenomenon and whether similar results would be achieved if the study were recreated. The main methods used to establish confirmability were member checking and epoche. Having participants verify the

accuracy of the transcripts and setting aside my preconceptions reduced the potential for bias in the analysis.

Study Results

The data analysis yielded three themes addressing the study's central research question and subquestion. The results of the data analysis are presented in this section according to each theme. Relevant participant quotes are included to illustrate participants' perceptions and experiences and form a basis for a textural-structural description of the phenomenon. Once the themes are presented, they are used to support a textural-structural description of the phenomenon and answer the research questions.

Theme 1

The first theme that emerged from the data analysis focused on what the participants experienced when dealing with the COVID-19 pandemic. Theme 1 stated that the COVID-19 pandemic presented challenges to all areas of business resilience in nursing care facilities. Data from all of the participants supported the generation of Theme 1. Table 4 illustrates how participants' responses supported the development of Theme 1.

As indicated in Table 4, all participants acknowledged that the COVID-19 pandemic presented many challenges to organizational resilience. While each participant's organization differed, the data indicated that general challenges were associated with each resilience category. The main challenge associated with material resources was that increased demand for materials like personal protective equipment (PPE) and other nursing supplies caused resource shortages.

P1 explained how the shortages started. “In the beginning, you had to wear the gowns and all of that stuff, and we had to find places to get that from, and with everybody having to do the same thing, everybody was out of it.” P2 shared a similar experience: “We did experience supplies being on back order.” P6 noted, “We were not able to get any PPE in the beginning.” P10 described a similar experience, “Initially, of course, everybody was suffering from a severe shortage of gowns, gloves, and N95 masks.”

Supply challenges were also a challenge that emerged for preparedness and planning, but participants noted that their organizations also faced challenges related to fear and uncertainty over disease progression. P2, P3, P8, and P9 noted that developing preparedness plans for such an unprecedented event was challenging. P4 highlighted the fear.

People were afraid of COVID. They were afraid of being exposed to COVID and feeling that coming to work created a potential threat or risk to their families. So, that’s one of the areas that we really had to work through. (P4)

P6 noted that the progression of the disease differed from other illnesses. P6 explained, “Once we realized that COVID was spreading a lot faster than flu was, then we were having to make alternations and changes almost weekly if not every day.”

Table 3*Participant Support for Theme 1*

Resilience category	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Material resources	X	X	X	X	X	X	X	X	X	X
Preparedness and planning		X	X	X	X	X	X	X	X	X
Information management	X	X	X	X	X	X	X	X	X	X
Collateral pathways and redundancy	X	X	X	X	X	X	X	X	X	X
Governance processes	X	X	X	X	X	X	X	X	X	X
Leadership practices	X	X	X	X	X	X	X	X	X	X
Organizational culture	X	X	X	X	X	X	X	X	X	X
Human capital	X	X	X	X	X	X	X	X	X	X
Social networks and collaboration	X	X	X	X	X	X	X	X	X	X

Note. Theme 1: The COVID-19 pandemic presented challenges to all areas of business resilience in nursing care facilities.

Uncertainty over a new disease, high volumes of data, and conflicting guidelines posed challenges to an organization's information management. P5 noted that the CDC "gave us so much information that it was hard to absorb." P5 stated that information overload left employees "overwhelmed." However, some participants noted that their organizations tried to manage the high volume of information proactively. P2 stated that her company "did an excellent job sending out updates weekly, having conference calls weekly, sending policies out weekly." When discussing information management, P9 stated that her company had to complete more audits and work harder to "notify families and staff" every time there was a new COVID-19 exposure.

In another resilience category, participants agreed that staffing shortages reduced redundancy. P7 and P8 both noted that staffing difficulties reduced redundancy in their workforce. P7 explained, "We had a ton of turnover amongst staff, and we've lost a lot of staff." P8 linked the staffing crisis to fear, which other participants linked to information management. P8 initially described the lack of redundancy, stating, "At the end of 2020 into 2021, there was a crisis with healthcare staffing." P8 continued, "People were afraid. Staff were afraid of COVID when it first hit." P10 noted that their organization required a "provisional plan for staffing," but P10 acknowledged that such a plan is almost impossible "when there are no people there."

Governance process challenges cited by participants included unclear requirements, conflicting guidelines, and rapidly changing practice advice. P3 cited "the constant changing of the CDC guidelines" as a significant governance challenge during the pandemic. P6 agreed, stating, "I think it was just the constant changes and the

unknown.” P7 elaborated, “It was very confusing because you had North Carolina making changes and putting in place restrictions, and then you had CMS [Centers for Medicare & Medicaid Services] putting their restrictions, and then the CDC.” P8 suggested that governance problems existed because “the government was not prepared for a pandemic.” Finally, P10 noted that governance challenges were a significant part of the COVID-19 experience because organizations were accountable for many different processes. P10 recounted, “The frequency of the changes, how long people were supposed to quarantine, how long staff had to remain out of work, testing requirements, the frequency of testing staff, all those things have been challenging.”

Leadership processes, organizational culture, and human capital challenges were all interrelated. Leadership challenges included the unprecedented nature of the COVID-19 pandemic and the chaos caused by fear and uncertainty. Organizational culture challenges were associated with fear and the need to bolster employee morale, and the main human capital challenge was that staff felt overwhelmed. Most participants indicated that COVID-19 increased the complexity of leadership, but P7 noted that her organization’s focus on top-down leadership helped.

We had such a strong team from the top down, across the board. We didn’t lose as many staff as I thought we were going to when we had to put some restrictions in place. It was really hard when we had to tell the staff that they couldn’t work more than one job. There was already a loyalty there, so I think that made the transition for putting those restrictions into place a lot easier because they felt like they knew us and where we were coming from. (P7)

Discussing organizational culture, P6 stated, “I think employee morale was probably one of the hardest things to overcome.” P6 continued.

I think just the pure length of COVID and the amount of information that was given to everybody and constantly changing and having to be so adaptive it was just very draining to everybody, to every department on every level. So, I think employee morale is what suffered the most. (P6)

Participants also noted other factors that negatively affected employee morale, with P9 citing grief from patient and family deaths resulting from COVID-19, P5 citing burnout, P9 citing vaccination requirements, and P10 citing fear.

Human capital challenges emerged because staff felt burnt out and overburdened, which required organizations to boost morale. P7 stated, “COVID caused so much turnover with administrative and nursing staff.” P7 elaborated.

I think a lot of it had to deal with the restrictions and the constant changing of regulations, it was just hard to keep up with and it was exhausting. I know that the community worked so hard to keep COVID out, and then it still gets in. It was very deceiving, and it still is. We still have to test some staff every week. If someone tests positive, it throws everyone back into emergency mode again, and it takes a toll. (P7)

Morale got so low for some workers that people were leaving the workforce. P9 stated, “COVID-19 has kind of changed everything. People have gotten out of nursing careers from COVID.”

The final resilience category was social networks and collaboration. Participants noted that the COVID-19 pandemic resulted in a need to develop more robust networking and collaboration processes to address patient needs effectively. Several of the participants noted that they faced a greater need to collaborate and expand their networks during the COVID-19 pandemic. P4 stated, “We certainly collaborated with outside staffing agencies that the organization hadn’t utilized in the past.” P1 concurred, “If we didn’t have something before, we would never have gone outside [the organization]. Now, it’s like hey, can we borrow, we need to borrow something from another facility.” P2, P3, P6, and P10 each noted that networking and collaboration were essential when organizations needed to share information and resources.

A review of the nine resilience categories demonstrated that nursing care facilities experienced challenges in each area. While participants acknowledged these challenges, they also identified strategies to overcome those challenges. Participants’ strategies developed to overcome COVID-19 challenges formed the basis of Theme 2.

Theme 2

The second theme focused on how participants perceived the challenges identified in Theme 1 affected their organizations and their specific experiences in developing strategies to address these challenges. Theme 2 indicated that nursing care facility managers developed diverse strategies to maintain each type of business resilience in response to the COVID-19 pandemic. As with Theme 1, responses from each participant supported the development of Theme 2. Table 5 shows the areas where each participant indicated their organization developed strategies to remain resilient.

Table 5 shows that all participants had some strategies to support business resilience. Some participants (e.g., P2, P5, P6, P9, and P10) developed strategies to support business resilience in all nine categories identified by Barasa et al. (2018). Other participants developed fewer strategies, but over half of the participants developed strategies in each resilience category.

The main strategies to address material resource challenges included rationing and reusing scarce materials, developing alternate channels for obtaining equipment, and improving resource management. P5 described how her organization rationed and reused scarce PPE.

With the gowns, the N95s, we used them for what we called a “crisis” situation. What that means is that. Say that I am on working on an isolation unit. There would be one gown for each patient during that shift. I would put that gown on. It was on the inside of their door. I would always use fresh gloves, but I would wear my masks for the entire shift into each room. Before I left that patient’s room that was on isolation, I would take the gown off and hang it back on the door, and I was the only one using that gown. Like if I was the nurse, it would be a gown for the nurse. There was a gown for housekeeping. We ended up putting temporary hooks across the back of the door. One for housekeeping, one for therapy, one for the nurses, and one for the CNAs. (P5)

P6’s and P8’s organizations also reused gowns, but their strategies differed. P6 described their early resource policies, “In the beginning, we were reusing cloth gowns instead of using disposable isolation gowns.” P8 offered a similar description.

Initially, it was all very different than it is now. When it came to PPE, we reused N95 masks, we purchased washable gowns, washable jumpsuits because I could not get my hands on disposable. So, we adapted to the situation by buying items that we could reuse. (P8)

P6 and P8 also discussed their use of alternate product sources. P6 explained that they received donations from the local community, “We were taking donations of any sort of PPE that we could kind of get our hands on, gloves, face shields. We were having to wash and reuse that kind of stuff.” P8 described the alternate sources she used for equipment.

I used any local stores that I could get. North Carolina has a coalition, and we were able to get PPE through the coalition as well as through [the organization’s parent company] eventually. The coalition was established in every state, but in North Carolina, it was a shipping place from government supply. We could call the coalition and get whatever they had available, whether it be gloves, gowns, masks, booties, hair nets, things like that, that we needed. They could send us what was available to them at the time. (P8)

P9 also used the coalition as a source for materials, “We borrowed from our sister facility, called the county’s coalition to see if they could help us and put their hands on extra supplies that might be available.” Participants’ third and final material resources strategy included improving the organization’s resource management systems. P4 noted that addressing material resource shortages often required careful management.

We had to develop a system of inventory and calculating what we call a burn rate on how quickly we were going through various supplies and be proactive in how we ordered as well as how we tapped into resources where we could get supplies from, specifically PPE and then later as tests where available and at times were sparse as far as being able to get your hands on testing and screening supplies. But as time went on, the systems and resources became a little more efficient, and things became a little more available without having such a concern about running out before you could get your next order or delivery in. (P4)

P2's organization ran equipment sourcing through a central office serving several facilities. Describing the situation at her organization, P2 stated, "We were kept fully informed on a weekly basis as to what the challenges were [obtaining equipment] and how the company was working through those challenges and keeping us fully stocked." The various strategies allowed organizations to maintain minimum standards of care, even when faced with supply shortages.

Participants indicated that their organizations focused on communication and training, chain of command, and resource management to deal with preparedness and planning challenges. P3 explained how her organization handled preparedness and planning, "We received guidance from our corporate office, and then the staff were trained on the material." Several participants indicated that their organization had a formal emergency preparedness plan that covered situations like COVID-19 (e.g., P6-P10).

Table 5*Participant Support for Theme 2*

Resilience category	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Material resources	X	X		X	X	X		X	X	X
Preparedness and planning		X	X	X	X	X	X	X	X	X
Information management	X	X	X	X	X	X	X	X	X	X
Collateral pathways and redundancy	X	X	X		X	X	X	X	X	X
Governance processes		X		X	X	X		X	X	X
Leadership practices	X	X	X	X	X	X	X	X	X	X
Organizational culture	X	X	X	X	X	X	X	X	X	X
Human capital	X	X	X	X	X	X	X	X	X	X
Social networks and collaboration		X	X	X	X	X	X		X	X

Note. Theme 2: Nursing care facilities developed diverse strategies to maintain each type of business resilience in response to the COVID-19 pandemic.

Several participants noted that such a plan was mandatory. P10 stated, “CMS requires that we have an emergency preparedness plan and policies and procedures in place.” P6 proudly stated, “We have a very extensive emergency procedure manual that has pretty much anything that you would need to prepare for, a tornado, evacuation, a storm.” Using these strategies, nursing care facilities do their best to prepare for the unexpected.

When asked about information management challenges, participants indicated that their organizations focused on developing coordinated strategies for managing the large amounts of data they needed to process. Many participants specifically mentioned the CDC when asked about information management. P1 stated, “We only did CDC. We stuck to what the CDC rules were governing us.” P6 concurred, “We relied heavily on CMS and the CDC and their recommendations.”

Other participants focused on technological strategies to help with information management. P5 mentioned Zoom, while P7 and P9 discussed using a specialized healthcare system that could disseminate information quickly to all employees. Participants’ final information management strategy was using a communication hub within their organization. P5 stated that her company “had a team of people at the corporate level that did nothing but [manage information].” P10 shared a similar experience, “All of the information was filtered through one nurse at the corporate office who worked closely, not just with the CDC, but with our state... infection control authority.” Regardless of the strategies participants’ organizations used, they all agreed that information management was critical to business sustainability during the pandemic.

The main issues participants cited with collateral pathways and redundancy was having too few workers to cover all the patient needs and lacking employee redundancy. Participants addressed this problem by hiring agency workers, sharing staff, asking employees to do fill-in work, and paying overtime. P1 explained that staff members “worked overtime like crazy just to make sure that the residents were taken care of.” P5 shared a similar experience. P5 recounted that her organization allowed staff to work if they had tested positive for COVID-19 but were feeling better. These employees were then allowed to work in the designated COVID-19 unit within the facility. P5 observed, “We had a lot more staff pitch in and step up than I thought they would.”

Other participants indicated they used outside staff to help fill gaps when employees became sick. P6 used staff from sister facilities, and P7, P8, and P10 each discussed using agency staff. However, P10 noted that even agency staff was scarce at times, “We have used travel staff and contract agencies as they are available, but those numbers are really limited as far as people available to fill those roles.” Participants indicated that they all maintained sufficient redundancy to continue providing quality patient care.

Governance process strategies mirrored some of the strategies used to address information management challenges. The main strategies for dealing with governance process challenges included using designated administrative teams, focusing on the chain of command, and prioritizing needs. Many participants discussed the need for organizations to adapt and stay flexible. P4 explained, “As the guidelines changed, we had to adapt to those regulatory changes and find ways to be successful.” Similarly, to the

information management challenges, P5 and P10 each mentioned the respective corporate team responsible for managing CDC guidelines and the employee in the corporate office overseeing changes to CDC recommendations. All the participants took governance requirements very seriously both because their organizations were bound by federal regulations and because they were committed to their patients' wellbeing.

As with Theme 1, the strategies organizations used to deal with leadership practices, organizational culture, and human capital shared many similarities. When asked about leadership challenges, participants indicated that their organizations supported staff through positive leadership. P4 offered the following explanation.

Well, leadership is important, and we have been blessed here in this facility to have some talented leadership throughout. So, the ability for team members and leadership to work cooperatively and as a team has a lot to do with just leadership practices within itself. And that coordination of services, coordination of care, and teamwork is what really makes us resilient and able to keep getting through whatever tough times we have at the moment and be successful. (P4)

P5 described positive leadership at her organization.

Just being positive, doing stuff for the residents. We try to do more stuff for the staff like staff lunches, monitoring the building more closely to make sure there are compliance. Most of all, just being encouraging to the staff because they are tired. (P5)

P6 noted that her organizational leaders focused on “having a lot more understanding, forgiveness, and empathy for what everybody was going through.” All the participants talked glowingly about leaders’ efforts during the pandemic.

When discussing organizational culture challenges, participants used organizational support and recognition for staff efforts as strategies to support business resilience. P2 noted, “It started with our managers and the leadership at the facility, and then they would go out there and meet with our line staff and direct care staff.” P3 observed that “the organization’s culture supports sustainable business operations.” P6 described elements of the supportive culture at her organization, including an “open-door policy, always being available, and just being very supportive.” P10 summarized her organization’s supportive culture: “So, again, our mission, vision, and values state that our most important asset is the people who work here.” These comments illustrate the importance and benefits of a supportive organizational culture when employees face burnout and uncertainty.

Supporting employees and rewarding good performance were also human capital strategies. P1 stated, “We praise our employees a whole lot more now. Try to keep morale up because everybody was depressed.” P2 noted that her organization tried hard to “stay positive and communicate with employees.” P2’s organization also offered employees COVID bonuses. P5’s and P6’s organizations also recognized performance through pay increases. P5’s organization called the financial incentive a “hero’s bonus,” providing both monetary and emotional recognition of employees’ efforts.

The final resilience category was social networks and collaboration. To address problems in this category, participants networked within their organization, used social media to interact with patients and their families, and collaborated with other healthcare organizations. P5 and P9 talked about networking with sister facilities.

Yes, we collaborated with one another. Like I said, they did reach out. I sent some of my staff. So I knew that there were other facilities that could have helped us if we needed it. So, I knew it was available. I was just thankful that I didn't need it.

(P5)

P9 stated, "During COVID, collaboration became much more important, and it's always been important because the CMS regulations change all the time."

Some participants used social media to communicate with patients' families. P2 noted that COVID-19 made visitation impossible, so members of her organization found new ways to communicate, and one of those was through social media and technology. "We then found a way to communicate with our families... We incorporated a piece on how our residents that were here locked down with us were going to communicate with their families." However, P4 did caution that social media could pose some dangers because of the "false information about COVID" on the Internet. For this reason, P4 felt that "being able to use [social media] to help provide education and understanding was important."

Finally, some participants focused on collaboration with other healthcare organizations. P2 and P3 both mentioned networking with other healthcare organizations. P3 stated, "We partnered with our local hospital. The hospital helped assist our

organization with testing the residents for COVID-19.” P10 focused on the importance of networking and collaboration, “Just being in connection with other people just to generate ideas on how they dealt with challenges.”

The strategies highlighted in Theme 2 illustrated how resourceful nursing care facilities were. Just as the findings from Theme 1 led to the generation of Theme 2, Theme 2 supported the generation of Theme 3 because the strategies highlighted by the organizations resulted in increased organizational resilience, which was the focus of Theme 3.

Theme 3

The third theme highlighted participants’ experiences with the effects of the COVID-19 pandemic on nursing care facilities. Theme 3 reflected participants’ experiences and perceptions that the challenges posed by COVID-19 resulted in improved resilience in nursing care facilities. Each participant provided feedback that supported Theme 3, though the participants all recognized different ways in which their organization’s resilience improved. Table 6 indicates which categories participants cited when discussing improved resilience within their organizations.

Table 6 shows that all participants recognized increased resilience in multiple categories. Following the onset of COVID-19, P1’s organization became more resilient in material resources, preparedness planning, information management, and collateral pathways and redundancy. P1 noted that COVID-19 “came out of nowhere,” so her organization was not prepared. However, P1 noted that the organization “played it by ear

in the beginning until we could get a plan.” Describing the organization’s current level of resilience, P1 stated:

We are now prepared. We have a stock of PPE that we have that we don’t use on a daily basis. We have it just for if it comes back or if any pandemic comes back. We have a book now of ‘this is what you do, CDC says this.’ Everything that we need to do in case it comes back around again. We now have in place, in order to be out and get paid, you have to be fully vaccinated with your booster shot. We are more prepared now. (P1)

P2 felt her organization demonstrated overall improvement following the pandemic. However, she noted that the facility was more resilient in material resources, leadership practices, and social networks and collaboration.

Personally, I believe that my organization has done well during the pandemic as it slowly brought us kind of back to normal. We handled it very well. Our families were very happy on our communication because we started communicating immediately once we locked down with our families each week so that they would be updated on how the residents were doing. So, I think looking back, now we are finally kind of getting back to normal. We were very successful in all of the different transitions that we had to do. (P2)

P3 stated that her organization was “much more prepared” because of the COVID-19 pandemic. P3 cited several areas of improved resilience. Referencing information management, P3 stated, “We were able to train the employees on the information that was passed down to us from the corporate office.”

Table 6*Participant Support for Theme 3*

Resilience category	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Material resources	X	X		X		X	X	X		X
Preparedness and planning	X		X							X
Information management	X									
Collateral pathways and redundancy	X									
Governance processes			X		X					
Leadership practices		X		X						
Organizational culture				X	X					
Human capital		X		X		X	X	X	X	
Social networks and collaboration		X	X	X	X	X	X	X		X
Overall improvement								X	X	

Note. Theme 3: The challenges posed by COVID-19 resulted in improved resilience in nursing care facilities.

P3 also noted that “the organization respects its staff more,” suggesting improved human capital resilience. Finally, noting improvements in collaboration, P3 explained, “We have a stronger relationship with the local hospital since COVID-19.”

When asked about resilience at her organization, P4 stated, “I feel very resilient.” P4 gave several examples. Referencing social networking and collaboration, P4 said, “I think the need has always been there, but I think we just learned to use it more and capitalize on the abilities within social media and social networking to help us with what we were doing.” P4 also noted improvements in leadership practices. “We had a good system that was developed between our facility, leadership, members, and the roles in which they had in conjunction with our corporate team and the various roles that they had.” P4 concluded with a general view of her organization’s growth and resilience due to the pandemic.

I feel at the beginning of this pandemic, we were a good nursing home that were comfortable with the norm and the usual operating circumstances, and then suddenly, we were faced with finding ways to be stronger and better in so many different areas. Managing costs in an environment where costs are out of control, developing our staffing resources and human resources to support providing care. We had to go well beyond things that we were accustomed to—step out of our comfort zones and be very creative at times in order to be successful. But, we have been and are more knowledgeable and stronger for that. (P4)

P5 felt that her organization gained resilience in governance processes, organizational culture, and social networks and collaboration. P5 described her

organization as “very resilient,” and she emphasized the improvement stating, “all of our facilities are thriving.” P5 gave specific examples of ways her organization increased its resilience, including developing in-house testing capabilities, creatively allocating staff, and increasing collaboration with other professionals and organizations to share information.

P6 also cited improved resilience in collaboration when discussing the effects of the COVID-19 pandemic on organizational resilience. “We definitely have a closer relationship with the facilities near me now.” P6 explained that her organization improved human capital resilience by addressing staffing shortages differently. P6’s organization changed from primarily hiring individuals to fill positions to building human capital within the organization through training and helping existing staff become more qualified.

P7 noted that her organization faces many challenges as a result of business competition, and as a result, resilience and quality care have always been essential concepts. “There are two other nursing homes and two hospitals [nearby]. Lots of healthcare around us, so we already have to compete with a lot of different organizations.” P7 noted that her organization is “very good at adapting” because of those challenges.

Describing her organization’s overall resilience, P8 stated, “Never ever that I would imagine a company would have handled COVID the way mine did. They spared zero expense. I cannot say enough good. I can’t say anything negative about the way the company handled this pandemic.” P8 specifically cited improved collaboration as one

growth area where her organization improved during the pandemic. “Before COVID [collaboration was] not a good idea. During COVID, yes, we absolutely networked for sure.”

Discussing resilience, P9 focused on the level of disruption caused by the COVID-19 pandemic. “From where we were back in the beginning of 2020 to where we are now, it has just been a journey in long-term care, and it has really changed the face of healthcare for sure.” P9 continued, “COVID-19 has kind of changed everything...I think the whole nursing industry has changed because of COVID.” P9 felt her organization had changed for the better, with the less committed individuals leaving nursing for other types of work.

P10 offered a statement that seemed to summarize all participants’ experiences. “We are still standing, so we must be pretty resilient.” P10 continued. “After what we’ve been through... we certainly stood that test.” Concrete examples of improved resilience at P10’s organization included improved emergency and preparedness plans, better allocation of material resources, and expanded collaboration networks.

The participants’ feedback regarding resilience demonstrated that each organization responded to COVID-19 challenges in unique ways. However, the common thread in all the participants’ experiences was that these challenges made the organizations stronger, and the strategies used to address the challenges increased organizational resilience. The following two subsections address how the study’s themes apply to the research questions.

Answering the Research Questions

Following the identification of the themes, a textural-structural description of the phenomenon was developed to reflect participants' perceptions and lived experiences with the phenomenon. The textural-structural description and the themes were then applied to answer the research questions. Table 7 presents the three themes and illustrates how they apply to the study's research questions. The following subsections present the textural-structural description of the phenomenon and the application of the themes to answer the research questions.

Table 7

Thematic Results

Theme	Theme description	Research question
1	The COVID-19 pandemic presented challenges to all areas of business resilience in nursing care facilities.	Subquestion
2	Leaders of nursing care facilities developed diverse strategies to maintain each type of business resilience in response to the COVID-19 pandemic.	Central research question
3	The challenges posed by COVID-19 resulted in improved resilience in nursing care facilities.	Subquestion

Composite Textural-Structural Description

The purpose of the composite textural-structural description of participants' lived experiences is to represent the essence of a phenomenon (Moustakas, 1994). A textural-structural description includes textural elements based on emergent themes that describe what individuals experience in relation to a phenomenon and structural elements that describe how the phenomenon is experienced (Moustakas, 1994). While individuals may

experience a phenomenon slightly differently, the composite textural-structural description is intended to represent a population's collective lived experiences.

The study's three themes corresponded to the textural aspect of the textural-structural description. Participants' lived experiences sustaining business operations during the COVID-19 pandemic involved (a) experiencing challenges to all areas of business resilience as a result of the pandemic, (b) developing strategies to overcome those challenges, and (c) recognizing perceived improvements in resilience levels within their organizations. These three textural structures constituted *what* participants experienced, and the universal structural themes of time, space, bodily concerns, materiality, causality, relation to self, and relation to others defined *how* the phenomenon was experienced.

In many ways, the essence of participants' lived experiences maintaining business operations during the COVID-19 pandemic resulted in a challenge-response-outcome process. For example, participants described experiencing material resource shortages that created concerns about personal health and safety (e.g., bodily concerns), access to necessary PPE (e.g., materiality), and potential chains of infection (e.g., causality). Participants then developed strategies to address these concerns through rationing and identifying new sources for scarce materials. Once the new material sources were identified, the participants' organizations benefitted from greater organizational resilience.

Preparedness and planning challenges included the uncertainty associated with COVID-19 (e.g., bodily concerns) and difficulties managing high volumes of data from

multiple sources (e.g., time and relation to others). Information management challenges were associated with similar structural themes. As part of their lived experiences, participants expressed challenges related to staffing (e.g., relation to others) and access to material resources (e.g., bodily concerns). In many cases participants sacrificed their own time, which is also a universal structural theme.

Governance process challenges included managing updates from the CDC and state regulatory agencies and dealing with testing requirements. The participants experienced these challenges via the universal structures of time and relation to others as the regulations guided how administrators managed their patient care and processing. Leadership practice challenges also were experienced through the lens of the universal structure of relation to others. Administrators had to carefully manage staff needs, show appreciation for staff efforts, and work to build strong bonds with high-quality staff. Similar structural themes were relevant when dealing with organizational culture and human capital challenges.

The final resilience category of challenges included social networks and collaboration. Relation to others was the main structural theme associated with these challenges. However, time was also applicable. Networking specifically addresses relations to others, and often these networking relationships, saved administrators time and frustration when attempting to solve problems. Considering the composite textural-structural description of the phenomenon, I then used the three themes to answer the study's research questions. The discussion of the themes in relation to the central research question and subquestion are presented in the following sections.

Central Research Question

The study's central research question was, what strategies did nursing care facility leaders use to sustain business operations during the COVID-19 pandemic? This question was primarily answered by Theme 2, which was based on participants' perceptions and experiences working in nursing care facilities during the COVID-19 pandemic.

Participants indicated that diverse strategies were developed to maintain each type of business resilience in response to the COVID-19 pandemic. Addressing material resources, several participants (P1, P2, P4-P6, and P8-P10) noted that supplies could be found through alternate channels. Facilities focused on communication and training, chain of command, and resource management to improve preparedness and planning resilience (P2-P10). All of the participants developed coordinated strategies for managing information.

When discussing redundancy, nine participants indicated that their organizations addressed staff shortages using agency work, staff sharing, fill-in work, and overtime (P1-P3 and P5-P10). P1, P4-P6, and P8-P10 dealt with changing guidelines by creating designated administrative teams, focusing on the chain of command, and prioritizing needs. All 10 participants supported staff through positive leadership, emphasized organizational support, and recognized staff efforts to bolster resilience in leadership practices, organizational culture, and human capital. Finally, P1-P7, P9, and P10 developed strategies related to social networks and collaboration that improved communication within their organizations, with other healthcare facilities, and with

patients and their families. Participants considered these strategies instrumental in their organizations' survivability during the COVID-19 pandemic.

Subquestion

The study's subquestion was, what are nursing care facility leaders' perceptions and experiences regarding their response to the COVID-19 pandemic? Themes 1 and 3 combined to answer the subquestion based on participants' perceptions and experiences working in nursing care facilities during the COVID-19 pandemic. Participants perceived that the COVID-19 pandemic presented challenges to all areas of business resilience in nursing care facilities (Theme 1). However, participants reported that in their lived experience, responses to the challenges posed by COVID-19 resulted in improved resilience in these organizations (Theme 3).

The first step in answering the subquestion was to explore participants' perceptions and experiences related to the nine categories of resilience. Participants indicated that the main challenge associated with material resources was that increased demand caused resource shortages. Participants cited the main challenges to preparedness and planning as supply shortages and uncertainty over disease progression. Participants acknowledged that staffing shortages were the primary challenge associated with collateral pathways and redundancy, whereas governance process challenges included unclear requirements, conflicting guidelines, and rapidly changing practice advice. Unprecedented events and chaos caused by fear and uncertainty posed leadership challenges, and from an organizational culture perspective, fear caused a need to bolster

morale. The biggest human capital challenge was overburdened staff, and emerging social network and collaboration needs also challenged nursing care facilities.

While the challenges highlighted in Theme 1 formed part of participants' perceptions and experiences, Theme 3 also reflected important perceptions and experiences. In Theme 3, participants acknowledged how their organizations became more resilient during the COVID-19 pandemic. Most of these ways were discussed as part of the presentation of Theme 3. However, the critical consideration when answering the study's subquestion was that nursing care facilities became more resilient in response to the challenges posed by the COVID-19 pandemic.

Summary

Chapter 4 presented the study's results. The chapter began with an introduction recapitulating the study's purpose and research questions. Next, the chapter described the pilot study conducted prior to the primary data collection and analysis. A pilot study ensured the validity and internal consistency of the interview guide used to collect data. Descriptions of the research setting and the participants' demographics followed the pilot study section. Next, Chapter 4 revisited the data collection and analysis procedures and presented evidence of trustworthiness. The main portion of the chapter presented the study's results, which included a textural-structural description of the participants' collective lived experiences and the three themes that directly related to the central research question and subquestion.

The study's central research question was, what strategies did nursing care facility leaders use to sustain business operations during the COVID-19 pandemic? This question

was answered by Theme 2, which was based on participants' perceptions and experiences working in nursing care facilities during the COVID-19 pandemic. Theme 2 indicated that nursing care facility managers developed diverse strategies to maintain each type of business resilience in response to the COVID-19 pandemic. These strategies included finding supplies through alternate channels; developing coordinated strategies for managing information; addressing staff shortages through agency work, staff sharing, fill-in work, and overtime; having designated administrative teams to deal with changing treatment and practice guidelines; engaging in positive leadership practices, emphasizing organizational support, recognizing employee efforts, and collaborating with various stakeholders.

The study's subquestion was, what are nursing care facility leaders' perceptions and experiences regarding their response to the COVID-19 pandemic? Theme 1 and Theme 3 directly answered the subquestion. Theme 1 acknowledged participants' lived experiences that the COVID-19 pandemic presented challenges to all areas of business resilience in nursing care facilities. Theme 3 demonstrated that, based on their lived experiences, participants perceived that the challenges posed by COVID-19 resulted in improved resilience in the participants' organizations. The focus of Chapter 5 is on discussing the study's results in greater detail, interpreting the findings, and providing recommendations for practice and future research based on the findings.

Chapter 5: Discussion, Conclusions, and Recommendations

This qualitative transcendental phenomenological study focused on the effects of the COVID-19 pandemic, which began in Wuhan, China, in December 2019 (Dosa et al., 2020; Kaye et al., 2020). The effects of the COVID-19 pandemic were severe and wide-ranging, affecting individuals, families, organizations, and nations the world over (Aday & Aday, 2020; Carvalho et al., 2021; Venkatesh, 2020). COVID-19 disrupted business operations, shut down world economies, and resulted in the deaths of millions of people (Aday & Aday, 2020; Miller, 2020; Nicola et al., 2020; Paul & Chowdhury, 2021; Thompson et al., 2020). The healthcare industry was among the industries hit hardest by the COVID-19 pandemic (Aday & Aday, 2020; Larrañeta et al., 2020; Min & Jianwen, 2020). The pandemic disproportionately affected nursing care facilities because of their vulnerable patient populations (Bianchetti et al., 2020; Fallon et al., 2020; Lau-Ng et al., 2020; Thompson et al., 2020). Thus, this study specifically addressed nursing care facility leaders' perceptions and experiences sustaining business operations during the COVID-19 pandemic.

This study involved applying a qualitative transcendental phenomenological research design to answer a central research question and a subquestion. The central research question was, what strategies did nursing care facility leaders use to sustain business operations during the COVID-19 pandemic? The subquestion was, what are nursing care facility leaders' perceptions and experiences regarding their response to the COVID-19 pandemic? This study involved collecting and analyzing data from semi-structured interviews to explore nursing care facility administrators' perceptions of nine

categories of organizational resilience: (a) material resources, (b) preparedness and planning, (c) information management, (d) collateral pathways and redundancy, (e) governance process, (f) leadership practices, (g) organizational culture, (h) human capital, and (j) social networks and collaboration. The research resulted in three themes that aligned with the research questions. Theme 1 indicated that the COVID-19 pandemic presented challenges to all areas of business resilience in nursing care facilities. Theme 2 indicated that nursing care facilities developed diverse strategies to maintain each type of business resilience in response to the COVID-19 pandemic. Theme 3 indicated that the challenges posed by COVID-19 resulted in improved resilience in nursing care facilities.

Chapter 5 includes a discussion of the textural-structural description of the participants' collective lived experiences, as reflected by the study's three themes, conclusions about how those themes can be applied in practical situations, and recommendations for future research and practice. The chapter consists of five additional sections. The first section is an interpretation of the findings within the context of existing peer-reviewed literature. This interpretation focuses on how the findings confirm and extend the scholarly knowledge regarding organizational resilience. Next, the study's limitations are described to help assess the study's trustworthiness. After discussing the study's limitations, recommendations are made for future research. The study's practical implications are presented next, with descriptions of the study's social significance to individuals, families, organizations, and broader society and the potential to bring about positive social change. Finally, a conclusion summarizes the study's overall contribution

to the scholarly understanding of nursing care facilities' organizational resilience following the COVID-19 pandemic.

Interpretation of Findings

This study's findings included three main themes used to answer the study's central research question and subquestion. These themes were based on a textual-structural description presented in Chapter 4 that was based on participants' perceptions and lived experiences managing nursing care facilities during the COVID-19 pandemic. Theme 1 addressed the study's subquestion by highlighting participants' perceptions of the COVID-19 pandemic's effects on business resilience in nursing care facilities. Theme 2 addressed the study's central research question by identifying participants' experiences developing diverse strategies to maintain business resilience in nursing care facilities during the COVID-19 pandemic. Theme 3 addressed the subquestion by noting participants' perceptions of the resulting improvements in organizational resilience because of the COVID-19 pandemic. The interpretation of the study's findings is organized and discussed by theme in the following subsections.

Theme 1

Theme 1 indicated that the COVID-19 pandemic presented challenges to all areas of business resilience in nursing care facilities. Theme 1 was based on participants' perceptions and lived experiences as nursing care facility managers. Participants recounted various ways the COVID-19 pandemic challenged their organizations, and their responses supported the selection of the study's conceptual framework based on Barasa et al.'s (2018) model of organizational resilience. The scholarly literature on

resilience and disaster management includes diverse models and frameworks organizational leaders can use to navigate crises (Barasa et al., 2018; Brown et al., 2017; Koonin, 2020; Ruiz-Martin et al., 2018). Model diversity is primarily driven by a lack of consensus in different disciplines and contexts regarding the definition of resilience (Iflaifel et al., 2020; Morse et al., 2021; Ree et al., 2021; Ruiz-Martin et al., 2018; van Breda, 2018). For this reason, choosing a model applicable in healthcare settings was critical when exploring the perceived effects of the COVID-19 pandemic on nursing care facilities. Participants' lived experiences during the COVID-19 pandemic aligned with the categories of resilience Barasa et al. (2018) highlighted, confirming that this model was a good fit for the analysis.

Nine participants shared experiences related to every resilience category, and the 10th participant noted experiences with 8 out of 9 resilience categories. The main challenge associated with material resources was increased demand for materials like personal protective equipment (PPE) and other nursing supplies caused resource shortages. Preparedness and planning challenges primarily focused on supply challenges, whereas changing CDC guidelines posed challenges to information management resilience. Staffing shortages reduced redundancy and collateral pathway resilience. Governance process challenges included unclear requirements, conflicting guidelines, and rapidly changing practice advice. Leadership processes, organizational culture, and human capital challenges were all interrelated. Leadership challenges included the unprecedented nature of the COVID-19 pandemic and the chaos caused by fear and uncertainty. Organizational culture challenges were associated with fear and the need to

bolster employee morale, and the main human capital challenge was that staff felt overwhelmed. The main collaboration challenge was the increased need for networking during the pandemic. The fact that the participants all experienced similar resiliency challenges associated with the COVID-19 pandemic indicated a shared phenomenon within the sample. Furthermore, Theme 1 supposed Barasa et al.'s (2018) resilience categories and suggests that this resilience model can be applied in healthcare settings.

Theme 2

Theme 2 indicated that nursing care facilities developed diverse strategies to maintain each type of business resilience in response to the COVID-19 pandemic. As with Theme 1, Theme 2 also highlighted common experiences within the sample regarding nursing care facilities' responses to the COVID-19 pandemic. These shared experiences identified the most common strategies used by participants' organizations to overcome management challenges and supported Barasa et al.'s (2018) resilience model as this study's conceptual framework.

At least half the participants noted each resilience category when discussing strategies to overcome pandemic-related challenges. All the participants recounted strategies related to information management, leadership practices, organizational culture, and human capital. Participants' reports of scarce resources aligned with findings reported by Barnett Hu et al. (2020) and Ouslander and Grabowski (2020). Participants used rationing and reuse strategies to help stretch out their stores of scarce materials. They also developed alternate channels for obtaining equipment and improved their resource management systems. Participants focused on communication and training,

chain of command, and resource management to deal with preparedness and planning challenges. Participants dealt with information management challenges by using technology, creating communication hubs, and developing coordinated strategies for processing large amounts of data. These strategies aligned with research by Ahmad et al. (2020), who noted that technological readiness was an area of concern for many healthcare organizations, and that information management systems could help with this.

Staffing redundancy challenges were addressed by hiring agency workers, sharing staff, asking employees to do fill-in work, and paying overtime. Cobianchi et al. (2020) noted that staffing redundancy was difficult for healthcare organizations and that challenges could result in limited care options, but the current study's participants did not report experiencing major disruptions in service. The main strategies for dealing with governance process challenges included using designated administrative teams, focusing on the chain of command, and prioritizing needs. Organizations used positive leadership, organizational support, and performance rewards to address leadership, organizational culture, and human capital challenges. These strategies echoed the advice by Haque (2021) to engage in responsible leadership practices to address COVID-19 challenges. Finally, participants described their efforts to address collaboration and networking challenges by strengthening their working relationships with other healthcare organizations.

Participants' accounts of the various strategies developed to address diverse resilience category challenges again supported Barasa et al.'s (2018) resilience model. Theme 2 also confirmed assertions by Adamo et al. (2020), who noted that health

professionals' behaviors must change to mitigate the spread of the COVID-19 virus.

Participants' lived experiences demonstrated that nursing care facilities and their staff were resourceful and committed to providing high-quality care for patients despite the challenges associated with the COVID-19 pandemic. These strategies also illustrated the process organizations used to become more resilient, which resulted in the generation of Theme 3.

Theme 3

Theme 3 indicated that the challenges posed by COVID-19 resulted in improved resilience in nursing care facilities. Theme 3 was based on participants' perceptions and lived experiences. All participants perceived that their organizations were stronger due to the efforts made to meet pandemic-related challenges. While participants' responses in support of Themes 1 and 2 shared many similarities, the responses supporting Theme 3 showed the most diversity. Each resilience category was highlighted as an area of improvement for multiple participants; however, most participants only experienced increased resilience in a few areas rather than improved resilience across all categories. One potential explanation for the more targeted discussion of resilience was that participants may have focused on the areas where their organizations improved most. For example, P1 noted improvements in material resources, preparedness planning, information management, and collateral pathways and redundancy, whereas P2 focused on improved resiliency in material resources, leadership practices, human capital, and social networks and collaboration. Table 6 (see p. 114) illustrates the areas where each participant felt their organization improved most.

As with Themes 1 and 2, Theme 3 supported using Barasa et al.'s (2018) resilience model when exploring healthcare organizations, as participants' responses collectively related to each of the nine resilience categories. The responses related to Theme 3 also aligned with the work of Brown et al. (2017), defining organizational resilience as the use of an organization's physical assets, internal structures, and unique capabilities to overcome adversity. Participants' lived experiences developing strategies to find new equipment sources aligned with Ahmad et al.'s (2020) recommendations for improving organizational resilience. By focusing on preparedness planning, the participants' organizational behaviors aligned with advice from Koonin (2020) to prioritize disaster planning. Many participants perceived that the pandemic had improved their future disaster planning and crisis management practices. Aruru et al. (2021) observed that healthcare workers are often trained to deal with disaster scenarios, but it is not always possible to train for every eventuality. Participants' responses related to Theme 3 supported Aruru et al.'s observations.

Williams et al. (2017) noted that resilience is ultimately based on a cycle of challenge, response, and an eventual successful outcome. The three themes identified during the data analysis process echo that cycle. With Theme 1, participants identified the most significant challenges associated with each resilience category in Barasa et al.'s (2018) model. Theme 2 identified the strategies participants developed to respond to the challenges from Theme 1. Then, finally, in Theme 3, participants described the successful outcomes they noted based on their lived experiences navigating the COVID-19

pandemic. The following section identifies the study's limitations and discusses the impact those limitations have on the study's trustworthiness.

Limitations of the Study

This study's primary limitation was the selection of a small sample from a single state in the United States. The study specifically focused on nursing care facilities in the state of North Carolina, and the sample consisted of only 10 participants. The United States has approximately 15,600 nursing care facilities (CDC, 2022), and North Carolina has 423 nursing care facilities (North Carolina Division of Health Service Regulation, 2021). While quantitative research often focuses on small sample sizes, the current study's results cannot be considered generalizable to all nursing care facilities in the United States or North Carolina. Generalizability is not typically an aim of qualitative research (Vasileiou et al., 2018). Instead, the goal was to distill the essence of the participants' experiences with the phenomenon so that the study's findings could be carefully applied in similar situations. Thus, the study's findings should not be carelessly generalized to all nursing care facilities. Rather, administrators and organizational leaders that feel their organizations could benefit from the perspectives shared by the participants can use and adapt the study's implications on a case-by-case basis.

A secondary limitation was the potential influence participants' personal and religious beliefs had on the concepts of resilience and recovery. The COVID-19 pandemic was a trying time that caused most of the study's participants to feel stressed, anxious, and overwhelmed. These intense feelings might have influenced participants' perspectives and impressions of their experiences. The subjective nature of the study

relied on the participants' subjective interpretations of their experiences, and the subjective nature of the study could have biased the findings to some extent (Yin, 2017). However, triangulation and reflexivity and the attempt to obtain information-rich data reduced the possibility of such bias (Abdalla et al., 2018; Shaheen et al., 2019; Vagle & Hofsess, 2016).

Recommendations

Future research should continue to explore the effects of the COVID-19 pandemic on the healthcare industry. Many studies have illustrated how dire the effects of the pandemic were within the healthcare industry (Kaye et al., 2020; Larrañeta et al., 2020; Siriwardhana et al., 2021; Vitenu-Sackey & Barfi, 2021). However, many of these studies only reported the pandemic's negative impacts rather than organizational strategies to overcome pandemic-based challenges. Based on the current study's results and the identification of strategies to overcome the challenges identified in Theme 1, future research should focus on organizational management practices that allow healthcare organizations to maintain high levels of care effectively.

Participants' feedback concerning Barasa et al.'s (2018) resilience model provides a practical roadmap for future research recommendations. Specific recommendations can be made in each of the resilience categories. Researchers can focus on material resource resilience by examining case studies where organizations developed alternate supply chains for scarce resources as described by some of the participants. Another suggestion for future research would be to compare the effectiveness and efficiency of different supply chain management systems during stressful times. Some participants noted that

COVID-19 challenges were different from other crises they had experienced, and different systems may have varying vulnerabilities. A quantitative study to evaluate the scale of differences when using different systems could provide valuable data that would allow organizations to optimize resource management.

A mixed-methods approach could be used to compare preparedness and planning resilience. Researchers could focus on the differences in preparedness and planning in different areas of the United States or regions of the world. Researchers could examine how different healthcare organizations address similar preparedness and planning issues. The participants' experiences and perceptions indicated that members of management in different organizations used slightly different approaches to preparedness and planning. Studies comparing these different approaches would improve disaster planning and crisis management.

Communication research could be conducted to address information management resilience, which participants highlighted as a concern. Qualitative studies to explore user attitudes toward information management system adoption would benefit organizations because systems cannot be effective if users refuse to accept them. It could be challenging to examine system implementation in crisis settings. However, understanding general attitudes toward information management system adoption would also be useful because healthcare organizations often lag in technological readiness (Ahmad et al., 2020).

Research comparing staffing alternatives would provide important insights into collateral pathways and redundancy resilience. Staffing shortages were a common

occurrence in healthcare organizations due to the COVID-19 pandemic (Ouslander & Grabowski, 2020). Participants noted that leaders of their organizations developed several different strategies to address staffing shortages. Identifying the advantages and disadvantages of each strategy would allow administrators to make informed decisions when facing a staffing crisis.

A recommendation to improve governance process resilience would be to examine various stakeholders at a large healthcare organization to document how they handled the rapid changes in policy guidelines from the CDC during the COVID-19 pandemic. Several participants noted experiencing changing guidelines as a critical challenge. In contrast to Barasa et al.'s (2018) recommendations, Sharma et al. (2021) argued that a centralized governance structure was more closely related to reactive healthcare strategies. Examining a large organization with a centralized hub to deal with policy governance would help answer critical questions about the benefits of centralized versus decentralized organizations.

Volumes of organizational management research have addressed leadership practices. Future research on organizational resilience could focus on identifying the strengths and weaknesses of different leadership styles. Many participants noted that leaders of their organizations focused on positive leadership practices, which echoed Haque's (2021) recommendations. However, future research could focus specifically on comparisons of multiple leadership styles to determine which styles are most effective in crises (e.g., authoritarian, transformational, or transactional).

Like leadership style, organizational culture has also been a well-research topic within organizational management literature. Organizational culture refers to how leaders perceive adversity, and organizations that view challenges as opportunities are more resilient (Barasa et al., 2018). Participants' perceptions and experiences supported the importance of organizational culture in the context of organizational resilience. Research comparing healthcare organizations in different regions would provide insights into how culture influences disaster response and crisis management.

Future research on human capital resilience should focus on voluntary turnover. Many participants indicated that their organizations experienced high turnover rates. Staffing shortages were common in healthcare organizations due to the COVID-19 pandemic for various reasons, including burnout, fear, and health risks (Ouslander & Grabowski, 2020). Participants experienced and perceived staffing shortages as a significant challenge to maintaining business operations. Conducting a quantitative analysis on voluntary turnover would provide insights into the factors most closely associated with employee retention versus turnover.

The final recommendation is related to social networks and collaboration resilience. Researchers could examine social media's positive and negative impacts on healthcare workers, patients, and families during the COVID-19 pandemic. While social media can be an effective communication tool, participants noted that misinformation could spread inadvertently through social media. Thus, it would be good to understand the good and bad consequences of healthcare organizations expanding their use of social media networks.

Implications

The study had significant implications for various individual, organizational, and societal stakeholders. Stakeholders can include patients, staff, and family members when evaluating the study's contribution to positive social change at the individual level. At the organizational level, the study's implications can benefit nursing care facilities and other healthcare organizations. Finally, at the societal level, the study's findings illustrate how resilience is a beneficial and self-perpetuating characteristic. The following subsections identify how the study's findings can foster positive social change at each stakeholder level.

Implications for Individuals

This study had positive implications for social change affecting several individual stakeholders. The study's results provide positive suggestions for strategies facility administrators can use to overcome challenges associated with disaster management. Participants' strategies could benefit managers in other circumstances or settings. Improved procurement strategies can help prevent critical shortages of medicines and equipment, alleviating the need for rationing care and health-related services. Vitenu-Sackey and Barfi (2021) noted that in some instances, shortages during COVID-19 meant some patients did not receive life-saving treatments. Many participants mentioned the stress they experienced in ensuring that patients received the same level of care regardless of the challenges the pandemic presented. Identifying crisis strategies that work enables managers to proactively plan for future disasters, and seeing that these

organizations achieved greater resilience may boost morale among nursing care facility administrators who feel temporarily overwhelmed by a similar crisis.

Several of the strategies participants described have positive implications for social change at the individual level for healthcare workers and lower-level employees. For example, Haque (2021) noted that adopting responsible leadership practices is a productive way to improve challenging management situations. Haque noted that responsible leadership focuses on sustainability and employee well-being. Participants perceived that their leadership strategies improved employee morale, lessened burnout, and ensured that employees felt valued. These outcomes all represent positive social change at the individual level.

A third way that the study's findings represent positive social change at the individual level is that many of the strategies highlighted by participants to overcome COVID-19 challenges supported improvements in patient care or interventions to prevent declines in care quality. Cobianchi et al. (2020) noted that redundancy was a typical weak point for many healthcare organizations, and Ouslander and Grabowski (2020) noted that staffing shortages were common in healthcare organizations during COVID-19. However, all of the participants perceived that leaders in their organizations did everything necessary to ensure they had adequate staff to prevent the quality of care from declining.

Some organizations even developed new skills to improve patient care and management. For example, strategies to use social media to improve communication with patients and families helped alleviate some of the fear and stress created by COVID-19

isolation requirements. The technological improvements many nursing care facilities made to ensure patients and their families stayed informed can also be used after the pandemic. Ahmad et al. (2020) noted that many healthcare organizations have inadequate technological readiness, so improving information management represents a positive social change that affects various individual stakeholders.

Implications for Organizations

Nursing care facilities serve vulnerable populations facing increased risk from the COVID-19 pandemic (Fallon et al., 2020; Lau-Ng et al., 2020; Thompson et al., 2020). However, the pandemic severely impacted the entire healthcare industry (Aday & Aday, 2020; Larrañeta et al., 2020; Min & Jianwen, 2020). Thus, the current study's findings have critical implications for many healthcare organizations. The study's findings were significant to positive social change at the organizational level because administrators of nursing care facilities and other healthcare organizations serving vulnerable populations can use insights derived from participants' experiences to improve organizational resilience. All 10 participants perceived that their organizations became more resilient due to the challenges associated with the COVID-19 pandemic. Furthermore, in each case, the participants felt their organization was resilient. The participants' perspectives illustrated that despite the many challenges their organizations faced, resilience was high, and most organizations performed exceptionally in the face of extreme challenges.

The study's findings highlighted tools and strategies nursing care facilities used to achieve operational goals and provide high-quality care even in the most challenging phases of the pandemic. The participants' experiences can be used in other organizations

to develop and implement effective strategies to provide quality care, prevent high-risk exposure within facilities, and maintain business viability during pandemic outbreaks, natural disasters, or other emergencies. Scholars noted that many nursing care facilities struggled in these areas during the pandemic (Fallon et al., 2020; Lau-Ng et al., 2020; Miller, 2020). The study's insights are not limited to COVID-19 outbreaks or other pandemic situations. Resilience is a critical trait that benefits organizations in various circumstances, and learning to become resilient at the organizational level aids a wide range of stakeholders.

Administrators can also use the study's findings to assess their organizations' resilience levels and determine whether their resources and strategies are balanced. Andersson et al. (2019) noted that balanced organizations exhibit greater resilience than unbalanced organizations. Administrators seeking to assess their organizations' balance, preparedness, and resilience can compare their experiences and perceptions dealing with the COVID-19 pandemic with those shared by the participants to determine where their organizations may need to focus improvement efforts.

Societal Implications

The study offers some critical societal implications for positive social change. Policymakers bearing the brunt of responsibility for governance and oversight can use the study's findings to improve disaster response protocols. Governments all over the world struggled to respond effectively to the COVID-19 pandemic (Abodunrin et al., 2020; Thompson et al., 2020). The participants offered feedback on the challenges they experienced and perceived dealing with ever-changing policies and regulations.

Governing agencies should review how their approach to pandemic management affects different types of healthcare organizations rather than creating a universal approach that may not be equally applicable in diverse healthcare settings. Recent studies have shown that mental and physical health outcomes have suffered following the pandemic.

The results of the current study illustrated how employees of nursing care facilities struggled to follow constantly changing CDC guidelines and how those guidelines affected the organization, staff, patients, and families. Participants experienced the effects of those changes as overwhelming, and the confusion created by poor communication and the lack of transparency sometimes caused frustration among staff, patients, and families. Improving communication at the policy level would improve crisis management during pandemic events, and social outcomes would be better for all stakeholders affected by the event. Sharma et al. (2021) noted that centralized governance structures are more closely related to reactive healthcare strategies. However, the participants experienced that often the CDC guidance conflicted with state guidance or imposed crippling restrictions in nursing care facilities. For this reason, more research is needed regarding effective governance strategies during pandemics and other disasters.

Conclusions

This chapter included a contextual discussion of the findings from the current qualitative transcendental phenomenological study. Chapter 5 contained an evaluation of the findings reported in Chapter 4 and a discussion of the study's overall impact. The chapter began with a recapitulation of the study's purpose, research questions, and findings. The chapter focus then shifted to an interpretation of the findings in the context

of the extant literature on organizational resilience and the COVID-19 pandemic. A critical evaluation of the study's unavoidable limitations and their impact on the trustworthiness of the findings followed. Next, recommendations were made for future research, and the study's overall implications were discussed, highlighting the study's value to individuals, organizations, and broader society.

The COVID-19 pandemic caused major disruption on a global scale, presenting significant challenges for governments, businesses, and healthcare providers (Abodunrin et al., 2020; Vitenu-Sackey & Barfi, 2021; World Bank, 2020). The healthcare industry was among the industries hit hardest by the COVID-19 pandemic (Aday & Aday, 2020; Larrañeta et al., 2020; Min & Jianwen, 2020), and administrators at nursing care facilities face disproportionate challenges as they serve vulnerable populations (Fallon et al., 2020; Larrañeta et al., 2020; Siriwardhana et al., 2021). Understanding how administrators at these organizations faced an extreme crisis and documenting the strategies they used to maintain business operations offers important insights into the resilience and strength of U.S. nursing care facilities. Managers and administrators at other healthcare organizations can use insights from this study to support disaster planning and management efforts, which benefit society through improved healthcare outcomes resulting from increased strength and resilience.

References

- Abdalla, M. M., Oliveira, L. G., Azevedo, C. E., & Gonzalez, R. K. (2018). Quality in qualitative organizational research: Types of triangulation as a methodological alternative. *Administration: Teaching and Research*, *19*(1), 66-98.
<https://doi.org/10.13058/raep.2018.v19n1.578>
- Abodunrin, O., Oloye, G., & Adesola, B. (2020). Coronavirus pandemic and its implication on global economy. *International Journal of Arts, Language and Business Studies*, *4*(3), 13-23. <https://tinyurl.com/4m88py26>
- Adamo, H. D., Yoshikawa, T., & Ouslander, J. G. (2020). Coronavirus disease 2019 in geriatrics and long-term care: The ABCDs of COVID-19. *The American Geriatrics Society*, *68*, 912-917. <https://doi.org/10.1111/jgs.16445>
- Aday, S., & Aday, M. S. (2020). Impact of COVID-19 on the food supply chain. *Food Quality and Safety*, *4*(4), 167-180. <https://doi.org/10.1093/fqsafe/fyaa024>
- Ahmad, T., Haroon, H., Baig, M., & Hui, J. (2020). Coronavirus disease 2019 (COVID-19) pandemic and economic impact. *Pakistan Journal of Medical Sciences*, *36* (COVID19-S4), 73-78. <https://doi.org/10.12669/pjms.36.COVID19-S4.2638>
- Ahmed, M. Z., Ahmed, O., Aibao, Z., Hanbin, S., Siyu, L., & Ahmad, A. (2020). Epidemic of COVID-19 in China and associated psychological problems. *Asian Journal Psychiatry*, *51*(6), Article 102092.
<https://doi.org/10.1016/j.ajp.2020.102092>
- Andersson, T., Cäker, M., Tengblad, S., & Wickelgren, M. (2019). Building traits for organizational resilience through balancing organizational structures.

Scandinavian Journal of Management, 35(1), 36-45.

<https://doi.org/10.1016/j.scaman.2019.01.001>

Aruru, M., Truong, H. A., & Clark, S. (2021). Pharmacy emergency preparedness and response (PEPR): A proposed framework for expanding pharmacy professionals' roles and contributions to emergency preparedness and response during the COVID-19 pandemic and beyond. *Research in Social and Administrative Pharmacy*, 17(1), 1967-1977. <https://doi.org/10.1016/j.sapharm.2020.04.002>

Ayala, J.-C., & Manzano, G. (2014). The resilience of the entrepreneur. Influence on the success of the business. A longitudinal analysis. *Journal of Economic Psychology*, 42(6), 126-135. <https://doi.org/10.1016/j.joep.2014.02.004>

Azam, T., Mohsin, M., Naseem, S., Nilofar, M., Zia-Ur-Rehman, M., Nelofer, S., Khan, S., & SongJiang, W. (2020). Economic growth vulnerability amid the COVID-19 epidemic: A systematic review of different sectors of Pakistan. *Revista Argentina de Clínica Psicológica*, 29(4), 705-713. <https://pesquisa.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/resource/en/covidwho-908430>

Bagchi, S., Mak, J., Li, Q., Sheriff, E., Mungai, E., Anttila, A., Minn, M., Edwards, J., Benin, A., Polluck, D., Shulman, E., Ling, S., Moody-Williams, J., Fleisher, L., Srinivasan, A., & Bell, J. (2020). Rates of COVID-19 among residents and staff members in nursing homes—United States, May 25–November 22, 2020.

Morbidity and Mortality Weekly Report, 70(2), 52-55.

<http://dx.doi.org/10.15585/mmwr.mm7002e2>

- Barasa, E., Mbau, R., & Gilson, L. (2018). What is resilience and how can it be nurtured? A systematic review of empirical literature on organizational resilience. *International Journal of Health Policy and Management*, 7(6), 491–503. <https://dx.doi.org/10.15171/ijhpm.2018.06>
- Barnett, M. L., Hu, L., Martin, T., & Grabowski, D. C. (2020). Mortality, admissions, and patient census at SNFs in 3 US cities during the COVID-19 pandemic. *Journal of the American Medical Association*, 324(5), 507-509. <https://doi.org/10.1001/jama.2020.11642>
- Bartik, A. W., Bertrand, M., Cullen, Z., Glaeser, E. L., Luca, M., & Stanton, C. (2020). The impact of COVID-19 on small business outcomes and expectations. *Proceedings of the National Academy of Sciences of the United States of America*, 117(30), 17656-17666. <https://doi.org/10.1073/pnas.2006991117>
- Barua, S. (2020). *Understanding coronanomics: The economic implications of the coronavirus (COVID-19) pandemic*. Munich Personal RePEc Archive Paper No. 99693. <https://mpra.ub.uni-muenchen.de/99693/>
- Bianchetti, A., Bellelli, G., Guerini, F., Marengoni, A., Padovani, A., Rozzini, R., & Trabucchi, M. (2020). Improving the care of older patients during the COVID-19 pandemic. *Aging Clinical and Experimental Research*, 32, 1883–1888. <https://doi.org/10.1007/s40520-020-01641-w>
- Blanchet, K., Nam, S. L., Ramalingam, B., & Pozo-Martin, F. (2017). Governance and capacity to manage resilience of health systems: Towards a new conceptual

- framework. *International Journal of Health Policy and Management*, 6(8), 431-435. <https://dx.doi.org/10.15171/ijhpm.2017.36>
- Blanco-Melo, D., Nilsson-Payant, B., Liu, W., Uhl, S., Hoagland, D., Moller, R., Jordan, T., Oishi, K., Panis, M., Sachs, D., Wang, T., Schwartz, R., Lim, J., Albrecht, R., & tenOever, B. R. (2020). Imbalanced host response to SARS-CoV-2 drives development of COVID-19. *Cell*, 181(5), 1036–1045. <https://doi.org/10.1016/j.cell.2020.04.026>
- Bogna, F., Raineri, A., & Dell, G. (2020). Critical realism and constructivism: Merging research paradigms for a deeper qualitative study. *Qualitative Research in Organizations and Management*, 15(4), 461–484. <https://doi.org/10.1108/QROM-06-2019-1778>
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912–920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Brown, N. A., Rovins, J. E., Feldmann-Jensen, S., Orchiston, C., & Johnston, D. (2017). Exploring disaster resilience within the hotel sector: A systematic review of literature. *International Journal of Disaster Risk Reduction*, 22(6), 362-370. <https://doi.org/10.1016/j.ijdrr.2017.02.005>
- Byers, D. (2020). *Twitter employees can work from home forever, CEO says*. <https://www.nbcnews.com/tech/tech-news/twitter-employees-can-work-home-forever-ceo-says-n1205346>

- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Methods & Meanings, 41*(5), 545–547.
<https://doi.org/10.1188/14.ONF.545-547>
- Carvalho, T., Krammer, F., & Iwasaki, A. (2021). The first 12 months of COVID-19: A timeline of immunological insights. *Immunology, 21*, 245-256.
<https://doi.org/10.1038/s41577-021-00522-1>
- Centers for Disease Control and Prevention (CDC). (2020). *Coronavirus disease 2019 (COVID-19)*. <https://www.cdc.gov/coronavirus/2019-ncov/index.html>
- Centers for Disease Control and Prevention (CDC). (2022, January 21). *Nursing home care*. <https://www.cdc.gov/nchs/fastats/nursing-home-care.htm>
- Chan, J., Yuan, S., Kok, K., To, K., Liu, J., Yip, C., Poon, R., Tsoi, H., Lo, S., Chan, K., Poon, V., Chan, W., Ip, J., Cai, J., Cheng, V., Chen, H., Hui, C., & Yuen, K. (2020). A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: A study of a family cluster. *The Lancet, 395*(10223), 514–523. [https://doi.org/10.1016/S0140-6736\(20\)30154-9](https://doi.org/10.1016/S0140-6736(20)30154-9)
- Cheung, E. W., Zachariah, P., Gorelik, M., Boneparth, A., Kernie, S. G., Orange, J. S., & Milner, J. D. (2020). Multisystem inflammatory syndrome related to COVID-19 in previously healthy children and adolescents in New York City. *Journal of the American Medical Association, 324*(3), 294–296.
<https://doi.org/10.1001/jama.2020.10374>

Chudik, A., Mohaddes, K., Pesaran, M. K., Raissi, M., & Rebucci, A. (2020). *Economic consequences of Covid-19: A counterfactual multi-country analysis*.

<https://cepr.org/voxeu/columns/economic-consequences-covid-19-counterfactual-multi-country-analysis>

Cobianchi, L., Dal Mas, F., Peloso, A., Pugliese, L., Massaro, M., Bagnoli, C., & Angelos, P. (2020). Planning the full recovery phase: An antifragile perspective on surgery after COVID-19. *Annals of Surgery*, 272(6), e296-e299.

<https://doi.org/10.1097/SLA.0000000000004489>

Conger, K. (2020, May 21). *Facebook starts planning for permanent remote workers*.

<https://www.nytimes.com/2020/05/21/technology/facebook-remote-work-coronavirus.html>

Cortez, R. M., & Johnston, W. J. (2020). The coronavirus crisis in B2B settings: Crisis uniqueness and managerial implications based on social exchange theory.

Industrial Marketing Management, 88(7), 125–135.

<https://doi.org/10.1016/j.indmarman.2020.05.004>

Crawford, K. H. D., Dingens, A. S., Eguia, R., Wolf, C. R., Wilcox, N., Logue, J. K., Shuey, K., Casto, A. M., Fiala, B., Wrenn, S., Pettie, D., King, N. P., Greninger, A. L., Chu, H. Y., & Bloom, J. D. (2021). Dynamics of neutralizing antibody titers in the months after severe acute respiratory syndrome coronavirus 2

infection. *Journal of Infectious Diseases*, 223(2), 197–205.

<https://doi.org/10.1093/infdis/jiaa618>

Davidson, P., & Szanton, S. (2020). Nursing homes and COVID-19: We can and should do better. *Journal of Clinical Nursing*, 29(15-16), 2758-2759.

<https://doi.org/10.1111/jocn.15297>

de la Croix, A., Barrett, A., & Stenfors, T. (2018). How to do research interviews in different ways. *The Clinical Teacher*, 15(6), 451-456.

<https://doi.org/10.1111/tct.12953>

Dosa, D., Jump, R. L. P., LaPlante, K., & Gravenstein, S. (2020). Long-term care facilities and the coronavirus epidemic: Practical guidelines for a population at highest risk. *The Journal of Post-Acute and Long-Term Care Medicine*, 21(5),

569-571. <https://doi.org/10.1016/j.jamda.2020.03.004>

Douglas, L. (2020). *Mapping Covid-19 outbreaks in the food system, food & environment reporting network*. [https://thefern.org/2020/04/mapping-covid-19-in-meat-and-](https://thefern.org/2020/04/mapping-covid-19-in-meat-and-food-processing-plants/)

[food-processing-plants/](https://thefern.org/2020/04/mapping-covid-19-in-meat-and-food-processing-plants/)

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*,

5(1), 1-4. <http://dx.doi.org/10.11648/j.ajtas.20160501.11>

Evans, S., & Dromey, J. (2020, November 4). *Coronavirus and the labor market: Impacts and challenges*. Learning and Work Institute.

<https://learningandwork.org.uk/resources/research-and-reports/1913/>

Fallon, A., Dukelow, T., Kennelly, S. P., & O'Neill, D. (2020). COVID-19 in nursing homes. *QJM: An International Journal of Medicine*, 113(6), 391-392.

<https://tinyurl.com/4phndex2>

- Fisher, R., Maritz, A., & Lobo, A. (2016). Does individual resilience influence entrepreneurial success? *Academy of Entrepreneurship Journal*, 22(2), 39-53.
<https://tinyurl.com/2p97rkpj>
- Flynn, S. V., & Korcuska, J. S. (2018). Credible phenomenological research: A mixed-methods study. *Counselor Education and Supervision*, 57(1), 34–50.
<https://doi.org/10.1002/ceas.12092>
- Food and Agriculture Organization of the United Nations. (2020a, April 4). *Responding to the impact of the COVID-19 outbreak on food value chains through efficient logistics*. <https://www.fao.org/3/ca8466en/CA8466EN.pdf>
- Food and Agriculture Organization of the United Nations. (2020b, April 7). *COVID-19 and food safety: Guidance for food businesses: Interim guidance*.
<https://www.fao.org/3/ca8660en/CA8660EN.pdf>
- FSB. (2020). *One in three closed small firms fear they'll never reopen amid widespread redundancy plans*. <https://www.fsb.org.uk/resou%20rces-page/one-in-three-closed-small-frms-fear-they-ll-never-reopen-amid-widespread-redundancy%20-plans.html>
- Gautam, S., & Hens, L. (2020). *SARS-CoV-2 pandemic in India: What might we expect?* Springer.
- Gautam, S., & Trivedi, U. (2020). Global implications of bio-aerosol in pandemic. *Environment, Development and Sustainability*, 22(5), 3861–3865.
<https://doi.org/10.1007/s10668-020-00704-2>

- Giacomelli, A., Pezzati, L., Conti, F., Bernacchia, D., Siano, M., Oreni, L., Rusconi, S., Gervasoni, C., Ridolfo, A. L., Rizzardini, G., Antinori, S., & Galli, M. (2020). Self-reported olfactory and taste disorders in patients with severe acute respiratory coronavirus 2 infection: A cross-sectional study. *Clinical Infectious Diseases*, *71*, 889–890. <https://doi.org/10.1093/cid/ciaa330>
- Goldmann, E., & Galea, S. (2014). Mental health consequences of disasters. *Annual Review of Public Health*, *35*, 169–183. <https://doi.org/10.1146/annurev-publhealth-032013-182435>
- Grifoni, A., Weiskopf, D., Ramirez, S., Mateus, J., Dan, J. M., Moderbacher, C. R., Rawlings, S. A., Sutherland, A., Premkumar, L., Jadi, R. S., Marrama, D., de Silva, A. M., Frazier, A., Carlin, A. F., Greenbaum, J. A., Peters, B., Krammer, F., Smith, D. M., & Sette, A. (2020). Targets of T cell responses to SARS-CoV-2 coronavirus in humans with COVID-19 disease and unexposed individuals. *Cell*, *181*, 1489–1501. <https://doi.org/10.1016/j.cell.2020.05.015>
- Gulbrandsen, C. L., & Walsh, C. (2015). Aging and resilience: Older women's responses to change and adversity. *Societies*, *5*(4), 760-777. <https://doi.org/10.1016/j.joep.2014.02.004>
- Hao, F., Tan, W., Jiang, L., Zhang, L., Zhao, X., Zou, Y., Hu, Y., Luo, X., Jiang, X., McIntyre, R. S., Tran, B., Sun, J., Zhang, Z., Ho, R., Ho, C., & Tam, W. (2020). Do psychiatric patients experience more psychiatric symptoms during COVID-19 pandemic and lockdown? A case-control study with service and research

implications for immunopsychiatry. *Brain, Behavior, and Immunity*, 87(7), 100-106. <https://doi.org/10.1016/j.bbi.2020.04.069>

Haque, A. (2021). The COVID-19 pandemic and the role of responsible leadership in health care: Thinking beyond employee well-being and organizational sustainability. *Leadership in Health Services*, 34(1), 52-68. <https://doi.org/10.1108/LHS-09-2020-0071>

Hasanat, M. W., Hoque, A., Shikha, A. F., Anwar, H., Hamid, A. B., & Tat, H. H. (2020). The impact of coronavirus (Covid-19) on e-business in Malaysia. *Asian Journal of Multidisciplinary Studies*, 3(1), 85-90. <https://asianjournal.org/online/index.php/ajms/article/view/219/100>

Hennink, M., Kaiser, B., & Marconi, V. (2017). Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research*, 27(4), 591–608. <https://doi.org/10.1177/1049732316665344>

Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., Zhang, L., Fan, G., Xu, J., Gu, X., Cheng, Z., Yu, T., Xia, J., Wei, Y., Wu, W., Xie, X., Yin, W., Li, H., Liu, M., ... Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, 395(10223), 497–506. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5)

Iflaifel, M., Lim, R. H., Ryan, K., & Crowley, C. (2020). Resilient health care: A systematic review of conceptualizations, study methods and factors that develop resilience. *BMC Health Services Research*, 20, Article 324. <https://doi.org/10.1186/s12913-020-05208-3>

- Ioannidis, J. P. A. (2020). Coronavirus disease 2019: The harms of exaggerated information and non-evidence-based measures. *European Journal of Clinical Investigation*, 50(4), e13222. <https://doi.org/10.1111%2Feci.13222>
- Isho, B., Abe, K. T., Zuo, M., Jamal, A. J., Rathod, B., Wang, J. H., Li, Z., Chao, G., Rojas, O. L., Bang, Y. M., Pu, A., Christie-Holmes, N., Gervais, C., Ceccarelli, D., Samavarachi-Tehrani, P., Guvenc, F., Budyłowski, P., Li, A., Paterson, A., ... Yue, F. Y. (2020). Persistence of serum and saliva antibody responses to SARS-CoV-2 spike antigens in COVID-19 patients. *Science Immunology*, 5(52), 1-14. <https://doi.org/10.1126/sciimmunol.abe5511>
- Jayakumar, P., Brohi, S. N., & Zaman, N. (2020). *Top 7 lessons learned from COVID-19 pandemic*. <https://tinyurl.com/3hnaauch>
- Jeong, H., Yim, H. W., Song, Y. J., Ki, M., & Min, J. A. (2016). Mental health status of people isolated due to Middle East Respiratory Syndrome. *Epidemiology and Health*, 38, e2016048. <https://doi.org/10.4178/epih.e2016048>
- Johnson & Johnson. (2021). *Johnson & Johnson announces single-shot Janssen COVID-19 vaccine candidate met primary endpoints in interim analysis of its phase 3 ENSEMBLE trial*. <https://tinyurl.com/bde7za5y>
- Jones, P., & Comfort, D. (2020). The COVID-19 crisis and sustainability in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 32(10), 3037–3050. <https://doi.org/10.1108/IJCHM-04-2020-0357>

- Juergensen, J., Guimón, J., & Narula, R. (2020). European SMEs amidst the COVID-19 crisis: Assessing impact and policy responses. *Journal of Industrial and Business Economics*, 47, 499-510. <https://doi.org/10.1007/s40812-020-00169-4>
- Katella, K. (2021, March 9). *Our pandemic year—A COVID-19 timeline*. <https://www.yalemedicine.org/news/covid-timeline>
- Kaye, A. D., Okeagu, C. N., Pham, A. D., Silva, R. A., Arron, B. L., Safraz, N., Lee, H. N., Ghali, G. E., Gamble, J. W., Liu, H., Urman, R. D., & Cornett, E. M. (2020). Economic impact of COVID-19 pandemic on healthcare facilities and systems: International perspectives. *Best Practice & Research Clinical Anesthesiology*, 35(3), 293-306. <https://doi.org/10.1016/j.bpa.2020.11.009>
- Khetarpal, S. (2020, April 25). *Post-COVID, 75% of 4.5 lakh TCS employees to permanently work from home by '25: From 20%*. <https://tinyurl.com/yjp5r7sc>
- Koonin, L. M. (2020). Novel coronavirus disease (COVID-19) outbreak: Now is the time to refresh pandemic plans. *Journal of Business Continuity & Emergency Planning*, 13(4), 298-312. <https://pubmed.ncbi.nlm.nih.gov/32438951/>
- Larrañeta, E., Dominguez-Robles, J., & Lamprou, D. A. (2020). Additive manufacturing can assist in the fight against COVID-19 and other pandemics and impact on the global supply chain. *3D Printing and Additive Manufacturing*, 7(3), 100-103. <https://doi.org/10.1089/3dp.2020.0106>
- Laufs, K., & Schwens, C. (2014). Foreign market entry mode choice of small and medium-sized enterprises: A systematic review and future research agenda.

International Business Review, 23(6), 1109–1126.

<https://doi.org/10.1016/j.ibusrev.2014.03.006>

Lau-Ng, R., Caruso, L. B., & Perls, T. T. (2020). COVID-19 deaths in long-term care facilities: A critical piece of the pandemic puzzle. *Journal of the American Geriatrics Society*, 68(9), 1895-1898.

<https://doi.org/10.1111/jgs.16669>

Leedy, P. D., & Ormrod, J. E. (2019). *Practical research: Planning and design* (12th ed.). Pearson.

Lima, C. K. T., de Carvalho, P. M. M., de Lima, I. A. A. S., de Nunes, J. V. A. O., & Saraiva, J. S. (2020). The emotional impact of Coronavirus 2019-nCoV (new Coronavirus disease). *Psychiatry Research*, 287(5), Article 112915.

<https://doi.org/10.1016/j.psychres.2020.112915>

Liu, Y., Amin, A., Rasool, S. F., & Zaman, Q. U. (2020). The role of agriculture and foreign remittances in mitigating rural poverty: Empirical evidence from Pakistan.

Risk Management and Healthcare Policy, 13, 13-26.

<https://doi.org/10.2147/RMHP.S235580>

Lumley, S. F., O'Donnell, D., Stoesser, N. E., Matthews, P. C., Howarth, A., Hatch, S.

B., Marsden, B. D., Cox, S., James, T., Warren, F., Peck, L. J., Ritter, T. G.,

Toledo, Z., Warren, L., Axten, D., Cornall, R. J., Jones, Y. E., Stuart, D. I.,

Screaton, G., ... Ebner, D. (2021). Antibody status and incidence of SARS-CoV-2

infection in health care workers. *The New England Journal of Medicine*, 384(6),

533–540. <https://doi.org/10.1056/NEJMoa2034545>

- Manikas, A., Boyd, L., Guan, J. J., & Hoskins, K. (2020). A review of operations management literature: A data-driven approach. *International Journal of Production Research*, 58(5), 1442-1461.
<https://doi.org/10.1080/00207543.2019.1651459>
- Martin, D., Romero, I., & Wegner, D. (2019). Individual, organizational, and institutional determinants of formal and informal inter-firm cooperation in SMEs. *Journal of Small Business Management*, 57(4), 1698–1711.
<https://doi.org/10.1111/jsbm.12445>
- Masten, A. (2018). Resilience theory and research on children and families: Past, present, and promise. *Journal of Family Theory & Review*, 10(1), 12-31.
<https://doi.org/10.1111/jftr.12255>
- McKibbin, W., & Fernando, R. (2020). *Economics in the time of COVID-19*. CEPR Press.
- McMichael, T. M., Currie, D. W., Clark, S., Pogosjans, S., Kay, M., Schwartz, N. G., Lewis, J., Baer, A., Kawakami, V., Lukoff, M. D., Ferro, J., Brostrom-Smith, C., Rea, T. D., Sayrem, M. R., Riedo, F. X., Russell, D., Hiatt, B., Montgomery, P., Rao, A. K., ... Chow, E. J. (2020). Epidemiology of Covid-19 in a long-term care facility in King County, Washington. *The New England Journal of Medicine*, 382, 2005-2011. <https://doi.org/10.1056/NEJMoa2005412>
- Merriam, S. B., & Grenier, R. S. (Eds.). (2019). *Qualitative research in practice: Examples for discussion and analysis*. John Wiley & Sons

- Michel, N. J., & Burton, D. R. (2020). The cost of coronavirus shutdown orders. *Backgrounder*, 2020, Article 3489. <http://report.heritage.org/bg3489>
- Miller, E. A. (2020). Protecting and improving the lives of older adults in the COVID-19 era. *Journal of Aging & Social Policy*, 32(4-5), 297-309. <https://doi.org/10.1080/08959420.2020.1780104>
- Min, C., & Jianwen, L. (2020). Influence of COVID-19 on manufacturing industry and corresponding countermeasures for supply chain perspective. *Journal of Shanghai Jiaotong University Science*, 25, 409-416. <https://doi.org/10.1007/s12204-020-2206-z>
- Moderna. (2020a). *Moderna announces first participant dosed in NIH-led phase 1 study of mRNA vaccine (mRNA-1273) against novel coronavirus.* <https://tinyurl.com/yw54xwnu>
- Moderna. (2020b). *Moderna announces positive interim phase 1 data for its mRNA vaccine (mRNA-1273) against novel coronavirus.* <https://tinyurl.com/ycdve8cj>
- Moderna. (2020c). *Moderna's COVID-19 vaccine candidate meets its primary efficacy endpoint in the first interim analysis of the phase 3 COVE study.* <https://tinyurl.com/4fzu5ssf>
- Morse, J. M., Kent-Marvick, J., Barry, L. A., Harvey, J., Okang, E. N., Rudd, E. A., Wang, C.-Y., & Williams, M. R. (2021). Developing the resilience framework for nursing and healthcare. *Global Qualitative Nursing Research*, 8, 1-8. <https://doi.org/10.1177/23333936211005475>
- Moustakas, C. E. (1994). *Phenomenological research methods*. Sage.

Mukherjee, A. (2020). Leadership for creating sustainability within the organization: An empirical study. *IUP Journal of Organizational Behavior*, 19(3), 7-17.

<https://ssrn.com/abstract=3810555>

Muller, P., Julius, J., Herr, D., Koch, L., Psycheva, V., & McKlernan, S. (2017). Annual report on European SMEs 2016/2017. Focus on self-employment. Publications Office of the European Union. [https://op.europa.eu/en/publication-detail/-](https://op.europa.eu/en/publication-detail/-/publication/0b7b64b6-ca80-11e7-8e69-01aa75ed71a1)

[/publication/0b7b64b6-ca80-11e7-8e69-01aa75ed71a1](https://op.europa.eu/en/publication-detail/-/publication/0b7b64b6-ca80-11e7-8e69-01aa75ed71a1)

Muller, P., Robin, N., Schroder, J., Braun, H., Becker, L. S., Farrenkopf, J., Caboz, S., Ivanova, M., Lange, A., Lonkeu, O. K., Muhlschlegel, T., & Pedersen, B. (2019). *Annual Report on European SMEs 2018/2019. Research and Development and Innovation by SMEs*. Publications Office of the European Union.

<https://op.europa.eu/en/publication-detail/-/publication/cadb8188-35b4-11ea-ba6e-01aa75ed71a1/language-en>

Muñoz-Fontela, C., Dowling, W. E., Funnell, S. G. P., Gsell, P.-S., Riveros-Balta, A. X., Albrecht, R. A., Andersen, H., Baric, R. S., Carroll, M. W., Cavaleri, M., Qin, C., Crozier, I., Dallmeier, K., de Waal, L., de Wit, E., Delang, L., Dohm, E., Duprex, W. P., Falzarano, D., ... Barouch, D. H. (2020). Animal models for COVID-19.

Nature, 586, 509–515. <https://doi.org/10.1038/s41586-020-2787-6>

Muruganandam, P., Neelamegama, S., Menonb, V., Alexander, J., & Chaturvedic, S. L. (2020). COVID-19 and severe mental illness: Impact on patients and its relation with their awareness about COVID-19. *Psychiatry Research*, 291, Article 113265.

<https://doi.org/10.1016/j.psychres.2020.113265>

- Ndimande, A. M., Chisoro, C., & Karodia, A. M. (2016). Investigating the internal factors affecting the training and development of sugar engineers: A case study of Tongaat Hulett sugar (South Africa). *Arabian Journal of Business Management Review*, 5(12), 101-143. <http://dx.doi.org/10.12816/0028284>
- Neto, M. L. R., Almeida, H. G., Esmeraldo, J. D., Nobre, C. B., Pinheiro, W. R., & de Oliveira, C. R. T. (2020). When health professionals look death in the eye: The mental health of professionals who deal daily with the 2019 coronavirus outbreak. *Psychiatry Research*, 288, Article 112972. <https://doi.org/10.1016/j.psychres.2020.112972>
- Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(2), 90-97. <https://doi.org/10.1007/s40037-019-0509-2>
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, 78(6), 185-193. <https://doi.org/10.1016/j.ijsu.2020.04.018>
- North Carolina Division of Health Service Regulation. (2021, December 16). *Nursing facilities*. https://info.ncdhhs.gov/dhsr/data/nhlist_a.pdf
- Novavax. (2021). *Novavax COVID-19 vaccine demonstrates 89.3% efficacy in UK phase 3 trial*. <https://tinyurl.com/yw8tzzf4>
- Organization for Economic Co-operation and Development (OECD). (2020b). *Food supply chains and COVID-19: Impacts and policy lessons*.

<http://www.oecd.org/coronavirus/policy-responses/food-supply-chains-and-covid-19-impacts-and-policy-lessons-71b57aea/>

Ouslander, J. G., & Grabowski, D. C. (2020). COVID-19 in nursing homes: Calming the perfect storm. *The American Geriatrics Society*, 68(10), 2153-2162.

<https://doi.org/10.1111/jgs.16784>

Panagiotou, O. A., Kosar, C. M., White, E. M., Bantis, L. E., Yang, X., Santostefano, C. M., Reifer, R. A., Blackman, C., Rudolph, J. L., Gravenstein, S., & Mor, V. (2021). Risk factors associated with all-cause 30-day mortality in nursing home residents with COVID-19. *JAMA Internal Medicine*, 181(4), 439–448.

<https://dx.doi.org/10.1001/jamainternmed.2020.7968>

Paul, S. K., & Chowdhury, P. (2021). A production recovery plan in manufacturing supply chains for a high-demand item during COVID-19. *International Journal of Physical Distribution & Logistics Management*, 51(2), 104-125.

<https://doi.org/10.1108/IJPDLM-04-2020-0127>

Perkins, D. J., Villescas, S., Wu, T. H., Muller, T., Bradfute, S., Hurwitz, I., Cheng, Q., Wilcox, H., Weiss, M., Bartlett, C., Langsjoen, J., & Seidenberg, P. (2020). COVID-19 global pandemic planning: Decontamination and reuse processes for N95 respirators. *Experimental Biology and Medicine*, 245(11), 933-939.

<https://doi.org/10.1177/1535370220925768>

Pfizer and BioNTech. (2020a). *Pfizer and BioNTech announce vaccine candidate against COVID-19 achieved success in first interim analysis from phase 3 study.*

<https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-announce-vaccine-candidate-against>

Pfizer and BioNTech. (2020b). *Pfizer and BioNTech dose first participants in the U.S. as part of global COVID-19 mRNA vaccine development program.*

<https://tinyurl.com/53v5sk8y>

Pirouz, B. (2020). Investigating a serious challenge in the sustainable development process: Analysis of confirmed cases of COVID-19 (New Type of Coronavirus) through a binary classification using artificial intelligence and regression analysis. *Sustainability*, 12(6), Article 2427. <https://doi.org/10.3390/su12062427>

Quigley, D. D., Dick, A., Agarwal, M., & Jones, K. M. (2020). COVID-19 preparedness in nursing homes in the midst of the pandemic. *The American Geriatrics Society*, 68(6), 1164-1166. <https://doi.org/10.1111/jgs.16520>

Rajkumar, R. P. (2020). COVID-19 and mental health: A review of the existing literature. *Asian Journal Psychiatry*, 52(8), Article 102066. <https://doi.org/10.1016/j.ajp.2020.102066>

Ramsook, L. (2018). A methodological approach to hermeneutic phenomenology. *International Journal of Humanities and Social Sciences*, 10(1), 14–24. <https://ijhss.net/index.php/ijhss/>

Ravitch, S. M., & Carl, N. M. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological.* Sage.

Ree, E., Ellis, L. A., & Wiig, S. (2021). Managers' role in supporting resilience in healthcare: A proposed model of how managers contribute to a healthcare

system's overall resilience. *International Journal of Health Governance*, 26(3), 266-280. <https://doi.org/10.1108/IJHG-11-2020-0129>

- Riphagen, S., Gomez, X., Gonzalez-Martinez, C., Wilkinson, N., & Theocharis, P. (2020). Hyperinflammatory shock in children during COVID-19 pandemic. *The Lancet*, 395(10237), 1607–1608. [https://doi.org/10.1016/S0140-6736\(20\)31094-1](https://doi.org/10.1016/S0140-6736(20)31094-1)
- Ritter, T., & Pedersen, C. L. (2020). Analyzing the impact of the coronavirus crisis on business models. *Industrial Marketing Management*, 88(7), 214–224. <https://doi.org/10.1016/j.indmarman.2020.05.014>
- Roberts, B. E. (2019). Husserl's epoche and the way of the sword: Exploring pathways into phenomenological inquiry. *Qualitative Research Journal*, 19(4), 391–402. <https://doi.org/10.1108/QRJ-02-2019-0022>
- Rodda, L. B., Netland, J., Shehata, L., Pruner, K. B., Morawski, P. A., Thouvenel, C. D., Takehara, K. K., Eggenberger, J., Hemann, E. A., Waterman, H. R., Fahning, M. L., Chen, Y., Hale, M., Rathe, J., Stokes, C., Wrenn, S., Fiala, B., Carter, L., & Pepper, M. (2021). Functional SARS-CoV-2-specific immune memory persists after mild COVID-19. *Cell*, 184(1), 169–183. <https://doi.org/10.1016/j.cell.2020.11.029>
- Rothe, C., Schunk, M., Sothmann, P., Bretzel, G., Froeschl, G., Wallrauch, C., Zimmer, T., Thiel, V., Janke, C., Guggemos, W., Seilmaier, M., München-Schwabing, K., Drosten, C., Berlin, C. U., Vollmar, P., Zwirgmaier, K., Wölfel, R., & Hoelscher, M. (2020). Transmission of 2019-nCoV infection from an asymptomatic contact

in Germany. *The New England Journal of Medicine*, 382, 970–971.

<https://doi.org/10.1056/NEJMc2001468>

Ruiz-Martin, C., López-Paredes, A., & Wainer, G. (2018). What we know and do not know about organizational resilience. *International Journal of Production Management and Engineering*, 6(1), 11-28.

<https://doi.org/10.4995/ijpme.2018.7898>

Sarkodie, S. A., & Owusu, P. A. (2020). Global assessment of environment, health, and economic impact of the novel coronavirus (COVID-19). *Environment, Development and Sustainability*, 23(4), 5005-5015.

<https://doi.org/10.1007%2Fs10668-020-00801-2>

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality & Quantity*, 52, 1893-1907.

<https://doi.org/10.1007/s11135-017-0574-8>

Shaheen, M., Pradhan, S., & Ranajee. (2019). Sampling in qualitative research. In M. Gupta, M. Shaheen, & K. Prathap Reddy (Eds.), *Qualitative techniques for workplace data analysis* (pp. 25–51). IGI Global. <https://doi.org/10.4018/978-1-5225-5366-3.ch002>

Sharma, A., Borah, S. B., & Moses, A. C. (2021). Responses to COVID-19: The role of governance, healthcare infrastructure, and learning from past pandemics. *Journal of Business Research*, 122(1), 597-607.

<https://doi.org/10.1016/j.jbusres.2020.09.011>

- Shi, J., Wen, Z., Zhong, G., Yang, H., Wang, C., Huang, B., Liu, R., He, X., Shuai, L., Sun, Z., Zhao, Y., Liu, P., Liang, L., Cui, P., Wang, J., Zhang, X., Guan, Y., Tan, W., Wu, G., ... Bu, Z. (2020). Susceptibility of ferrets, cats, dogs, and other domesticated animals to SARS–coronavirus 2. *Science*, *368*(6494), 1016-1020.
<https://doi.org/10.1126/science.abb7015>
- Sim, J., Saunders, B., Waterfield, J., & Kingstone, T. (2018). Can sample size in qualitative research be determined a priori? *International Journal of Social Research Methodology*, *21*(5), 619–634.
<https://doi.org/10.1080/13645579.2018.1454643>
- Siriwardhana, Y., Gürb, G., Ylianttilaa, M., & Madhusanka, L. (2021). The role of 5G for digital healthcare against COVID-19 pandemic: Opportunities and challenges. *ICT Express*, *7*(2), 244-252. <https://doi.org/10.1016/j.icte.2020.10.002>
- Spoorthy, M. S. (2020). Mental health problems faced by healthcare workers due to the COVID-19 pandemic–A review. *Asian Journal, Psychiatry*, *51*, Article 102119.
<https://doi.org/10.1016/j.ajp.2020.102119>
- Staniforth, J. (2020). *COVID-19 update: Worker health, absenteeism present largest risks to U.S. food supply chain*. <https://www.foodqualityandsafety.com/article/covid-19-update-worker-health-and-absenteeism-present-largest-risk-to-u-s-food-supply-chain/>
- Suen, L. J., Huang, H. M., Lee, H. H., & Zhi, H. L. (2014). A comparison of convenience sampling and purposive sampling. *The Journal of Nursing*, *61*(3), 105-111.
<https://doi.org/10.6224/jn.61.3.105>

Syriopoulos, K. (2020). The impact of COVID-19 on entrepreneurship and SMES.

Journal of the International Academy for Case Studies, 26(2), 1.

<https://www.abacademies.org/articles/the-impact-of-covid19-on-entrepreneurship-and-smes-9188.html>

Telford, C. T., Onwubiko, U., Holland, D. P., Turner, K., Prieto, J., Smith, S., Yoon, J.,

Brown, W., Chamberlain, A., Gandhi, N., Williams, S., Khan, F., & Shah, S.

(2020). Preventing COVID-19 outbreaks in long-term care facilities through

preemptive testing of residents and staff members—Fulton County, Georgia,

March–May 2020. *Morbidity and Mortality Weekly Report*, 69(37), 1296–1299.

<http://dx.doi.org/10.15585/mmwr.mm6937a4>

Thompson, D. C., Barbu, M. G., Beiu, C., Popa, L. G., Mihai, M. M., Berteanu, M., &

Popescu, M. N. (2020). The impact of COVID-19 pandemic on long-term care

facilities worldwide: An overview on international issues. *BioMed Research*

International, 2020, Article 8870249. <https://doi.org/10.1155/2020/8870249>

To, K. K. W., Hung, I. F. N., Ip, J. D., Chu, A. W. H., Chan, W. M., Tam, A. R., Fong, C.

H. Y., Yuan, S., Tsoi, H. W., Ng, A. C. K., Lee, L. L. Y., Wan, P., Tso, E. Y. K.,

To, W. K., Tsang, D. N. C., Chan, K.-H., Huang, J. D., Kok, K. H., Cheng, V. C.

C., & Yuen, K. Y. (2020). Coronavirus disease 2019 (COVID-19) re-infection by

a phylogenetically distinct severe acute respiratory syndrome coronavirus 2 strain

confirmed by whole genome sequencing. *Clinical Infectious Diseases*, 73(9),

e2946-e2951. <https://doi.org/10.1093/cid/ciaa1275>

- Vagle, M. D., & Hofsess, B. A. (2016). Entangling a post-reflexivity through post-intentional phenomenology. *Qualitative Inquiry*, 22(5), 334–344.
<https://doi.org/10.1177%2F1077800415615617>
- van Breda, A. D. (2018). A critical review of resilience theory and its relevance for social work. *Social Work*, 54(1), 1-18. <https://doi.org/10.15270/54-1-611>
- Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterizing and justifying sample size sufficiency in interview-based studies: Systematic analysis of qualitative health research over a 15-year period. *BMC Medical Research Methodology*, 18, Article 148. <https://doi.org/10.1186/s12874-018-0594-7>
- Venkatesh, V. (2020). Impacts of COVID-19: A research agenda to support people in their fight. *International Journal of Information Management*, 55(12), Article 102197. <https://doi.org/10.1016/j.ijinfomgt.2020.102197>
- Verdoni, L., Mazza, A., Gervasoni, A., Martelli, L., Ruggeri, M., Ciuffreda, M., Bonanomi, E., & D'Antiga, L. (2020). An outbreak of severe Kawasaki-like disease at the Italian epicentre of the SARS-CoV-2 epidemic: An observational cohort study. *The Lancet*, 395(10239), 1771–1778. [https://doi.org/10.1016/S0140-6736\(20\)31103-X](https://doi.org/10.1016/S0140-6736(20)31103-X)
- Vitenu-Sackey, P. A., & Barfi, R. (2021). The impact of COVID-19 pandemic on the global economy: Emphasis on poverty alleviation and economic growth. *The Economics and Finance Letters*, 8(1), 32-43.
<https://doi.org/10.18488/journal.29.2021.81.32.43>

- Wajnberg, A., Amanat, F., Firpo, A., Altman, D. R., Bailey, M. J., Mansour, M., McMahon, M., Meade, P., Mendu, D. R., Muellers, K., Stadlbauer, D., Stone, K., Strohmeier, S., Simon, V., Aberg, J., Reich, D. L., Krammer, F., & Cordon-Cardo, C. (2020). Robust neutralizing antibodies to SARS-CoV-2 infection persist for months. *Science*, *370*(6521), 1227-1230.
<https://doi.org/10.1126/science.abd7728>
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., McIntyre, R., Choo, F., Tran, B., Ho, R., Sharma, V., & Ho, C. (2020). A longitudinal study on the mental health of general population during the COVID-19 epidemic in China. *Brain, Behavior, Immunity*, *87*(7), 40-48. <https://doi.org/10.1016/j.bbi.2020.04.028>
- Welsh, M. (2014). Resilience and responsibility: Governing uncertainty in a complex world. *The Geographical Journal*, *180*(1), 15-26.
<https://doi.org/10.1111/geoj.12012>
- Whittaker, E., Bamford, A., Kenny, J., Kaforou, M., Jones, C. E., Shah, P., Ramnarayan, P., Fraise, A., Miller, O., Davies, P., Kucera, F., Brierley, J., McDougall, M., Carter, M., Tremoulet, A., Shimizu, C., Herberg, J., Burns, J. C., Lyall, H., & Levin, M. (2020). Clinical characteristics of 58 children with a pediatric inflammatory multisystem syndrome temporally associated with SARS-CoV-2. *Journal of the American Medical Association*, *324*(3), 259–269.
<https://doi.org/10.1001/jama.2020.10369>
- Wichmann, D., Sperhake, J. P., Lutgehetmann, M., Steurer, S., Edler, C., Heinemann, A., Heinrich, F., Mushumba, H., Kniep, I., Schroder, A. S., Burdeiski, C., Heer, G.,

- Bredereke-Wiedling, H., Weerth, A., Paschen, H. R., Bokemeyer, C., Addo, M. M., Aepfelbacher, M., & Puschel, K. (2020). Autopsy findings and venous thromboembolism in patients with COVID-19. *Annals of Internal Medicine*, *173*, 268–277. <https://doi.org/10.7326/M20-2003>
- Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management*, *11*(2), 733-769. <https://doi.org/10.5465/annals.2015.0134>
- World Bank. (2020). *The global economic outlook during the COVID-19 Pandemic: A changed world*. <https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world>
- World Health Organization (WHO). (2020a, February 28). *Coronavirus disease 2019 (COVID-19): Situation report – 39*. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200228-sitrep-39-covid-19.pdf?sfvrsn=5bbf3e7d_4
- World Health Organization (WHO). (2020b, April 27). *Archived: WHO timeline- COVID-19*. <https://www.who.int/news/item/27-04-2020-who-timeline---covid-19>
- Xiang, Y. T., Zhao, Y. J., Liu, Z. H., Li, X. H., Zhao, N., Cheung, T., & Ng, C. H. (2020). The COVID-19 outbreak and psychiatric hospitals in China: Managing challenges through mental health service reform. *International Journal of Biology Sciences*, *16*, 1741–1744. <https://doi.org/10.7150/ijbs.45072>

- Yee, S. F. (2018). The framework of transcendental phenomenology. In *A phenomenology inquiry into science teachers' case method learning* (pp. 1-21). Springer. https://doi.org/10.1007/978-981-13-2679-0_1
- Yin, R. K. (2017). *Case study research: Design and methods* (6th ed.). Sage.
- Zhang, L., & Liu, Z. (2018). Ethical issues in research processes: Informed consent, the role of the researcher, access to research sites and research subjects. *Advances in Social Science, Education and Humanities Research*, 205, 505-508.
<https://dx.doi.org/10.2991/iccese-18.2018.117>
- Zhou, P., Yang, X. L., Wang, X. G., Hu, B., Zhang, L., Zhang, W., Si, H. R., Zhu, Y., Li, B., Huang, C. L., Chen, H.-D., Chen, J., Luo, Y., Guo, H., Jiang, R. D., Liu, M. Q., Chen, Y., Shen, X. R., Wang, X., ... Shi, Z.-L. (2020). A pneumonia outbreak associated with a new coronavirus of probable bat origin. *Nature*, 579, 270–273.
<https://doi.org/10.1038/s41586-020-2012-7>

Appendix A: Interview Guide

Personal information.

1. How long have you worked for your organization, and what is your current title?
2. How would you describe your primary responsibilities at your organization?

Material resources.

3. How did COVID-19 affect your organization's material resources?
4. How did your organization use material resources to address challenges associated with COVID19?

Preparedness and planning.

5. Can you describe your organization's approach to preparedness and planning?
6. How did COVID-19 affect your organization's approach to preparedness and planning?

Information management.

7. How effectively did your organization manage information during the COVID-19 pandemic?
8. What strategies did your organization use to improve information management or overcome challenges associated with COVID-19?

Collateral pathways and redundancy.

9. How much redundancy does your organization have regarding staffing and the provision of services?

10. Did your organization face any challenges providing quality patient care due to staffing shortages? If so, how did you overcome those challenges?

Governance process.

11. How did your organization deal with changing COVID-19 guidelines?

12. What was the most challenging aspect of COVID-19 from a governance standpoint?

Leadership practices.

13. How well do your leadership practices support organizational resilience?

14. What leadership practices did you develop during the COVID-19 pandemic that helped you sustain business operations?

Organizational culture.

15. In what ways does your organizational culture support resilient business operations?

16. What were the biggest challenges of COVID-19 from an organizational culture perspective? How did you overcome those challenges?

Human capital.

17. What were your biggest human capital strengths during the COVID-19 pandemic?

18. Has COVID-19 changed how your organization views human capital? If so, how?

Social networks and collaboration.

19. How does your organization view the role of social networks and collaboration?
20. In what ways did COVID-19 change your organization's use of social networks and collaboration?

Overall perspectives.

21. How resilient would you consider your organization to be?
22. Is there anything you would like to add or feel I should have asked about concerning COVID-19 and organizational resilience?