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The Lived Experience of Older, Independent Residents During the COVID-19 Pandemic

Karen Graeb Stanley
Walden University

Walden University

College of Psychology and Community Services

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Karen Graeb Stanley

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Review Committee
Dr. Leann Stadtlander, Committee Chairperson, Psychology Faculty
Dr. Debra Wilson, Committee Member, Psychology Faculty
Dr. Karine Clay, University Reviewer, Psychology Faculty

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Sue Subocz, Ph.D.

Walden University
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Abstract

The Lived Experience of Older, Independent Residents During the COVID-19 Pandemic

by

Karen Graeb Stanley

MS, Virginia Commonwealth University, 1993

BA, University of Hawaii, 1969

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

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Abstract

The growing older population confronting the risks of the COVID-19 pandemic have a story to tell of their experiences that may influence the way society confronts future pandemics. Little research has been done on older adults in independent living communities and their experiences with the COVID-19 pandemic. This study aimed to fill that gap using the biopsychosocial model as a framework to guide the exploration of the research question addressing the lived experiences of older, independent residents during the COVID-19 pandemic. Using a basic qualitative analysis design, a purposive sample of 10 participants from a continuing care retirement community were recruited by flyer for telephone interviews. Participant inclusion criteria were they must be 65 years old or older, lived at the facility since the onset of the COVID-19 pandemic, display no self-reported cognitive disability, and be fluent in English. The interview questions were developed from the literature review, theoretical framework, and pilot tests. Each interview was transcribed verbatim, coded in vivo, and sorted by codes before being analyzed thematically. Results indicated that participants were resilient and grateful while at the same time suffering from loneliness and grief. A surprising result was that the majority of participants responded in the negative to questions about depression and anxiety, known as the positivity effect. The implications for positive social change are twofold; the findings can be used (a) for the prospective development of marketing applications in health that take advantage of the positivity effect evidenced by older adults and (b) to develop a greater understanding of the older adult and improve communication with this cohort.

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Dedication

This study is dedicated to my husband, Claude, without whose support in so many ways would not have made this dissertation possible. From meals cooked, groceries shopped, dishes cleaned, and general factotum, he made life much simpler and less stressful. And not to be forgotten is the financial support his has given me through this whole process while he has worked his fingers to the bone. I love you sweetheart! And I dedicate a least a portion of this endeavor to my late mother for her encouragement and who taught me that reading is fun – thanks Mom.

Acknowledgments

I would like to offer my thanks and sincere appreciation to my committee chair, Dr. Leann Stadtlander, for her enduring patience with my many questions, her ultra-fast turnaround in providing feedback, constructive comments and edits that made me think. It has been a rewarding collaboration throughout this journey. To Dr. Debra Rose Wilson, thank you for providing your expertise and feedback, it was gently received and promptly remedied. I would also like to thank Dr. Karin Clay for serving as the University Research Reviewer. An unheralded job perhaps but a critical one in my dissertation progress.

I would like to thank all my friends who volunteered for practice and pilot tests, my success is yours. A special thanks goes out to everyone who participated in the study's interviews – volunteers are the lifeblood of research.

I would like to give a special thanks to my sister, Susan. She has been with me throughout the dissertation process and has been unfailing in her support. I could always call if I just needed to vent about some stressful event and she would listen. Thanks, Suzy!

And last, but certainly not least, I thank my two daughters and granddaughter for whom education is paramount. They worked hard to get their degrees and can appreciate the effort it has taken me to attain this distinction. Thank you Tracy, Jennifer, and Olivia, you are whom I live for.

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Chapter 1: Introduction to the Study

The year 2020 saw the arrival of the coronavirus, COVID-19, in the United States with the first reported case (Patel & Jernigan, 2020). At the time, little did Americans know how long and how deeply affected they were going to be by this virus. The horrors of steeply mounting death tolls in nursing homes and among older adults made securing the safety of this population a societal priority (Harden et al., 2020; Leaman & Azios, 2021). A number of studies (i.e., Fischer et al., 2020; Machielse & Duyndam, 2020; Plagg et al., 2020) have addressed the issues of older adult exposure to COVID-19 in the venue of nursing homes and assisted living facilities. However, to my knowledge, little or no research attention has been paid to the older adult living independently in a retirement facility (see Ayalon, 2016a). Believing that this cohort of older adults has quite different needs and behaviors, in this study I investigated their experiences with the COVID-19 pandemic. The aim was to learn from these experiences and then strategize interventions that could be applied in future endemics and pandemics to relieve suffering and pain.

It is important to note here what term I used to describe the age grouping under study. In a seminal article, Neugarten (1974) termed those aged 55–74 years old as the young-old, and those aged 75 and older as the old-old. Over time, the practice became to label individuals 65–74 as the young-old, not the 55–74 range as Neugarten had grouped them (Binstock, 2002). Because I interviewed people from both the young-old and the old-old groupings, I chose to use the term older adults to define the sample population, thus spanning all the 65 and older age groups.

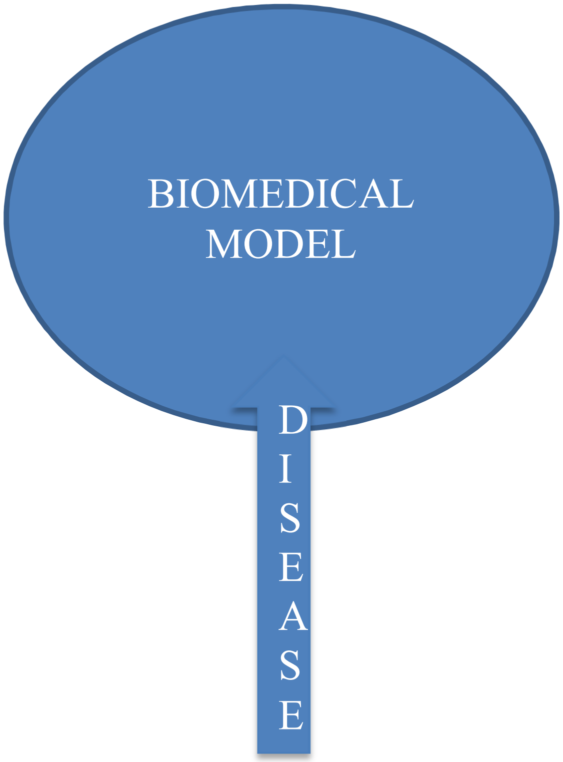
In this chapter, I provide introductory material and a background section in which I briefly summarize the literature search in Chapter 2, identify the gap in knowledge to be addressed, and discuss why the study was needed. Next follows the problem statement, the purpose of the study, the research question, and the theoretical foundation for the study. The chapter also includes a discussion of the nature of the study, definitions, assumptions, scope and delimitations, limitations, and significance before concluding with a summary of the chapter and transition to Chapter 2.

Background

In summarizing the research literature relevant to this study, I start with an historical examination of the biomedical model (see Figure 1). Engel (1977/1992) proposed this model, disposing with his earlier biopsychosocial (BPS) model. The biomedical model has a long history and is still in predominate use in many medical offices today. Additionally, the biomedical model is a good fit to the disease model that is used in much of medicine; however, times change, and the disease model is no longer sovereign. Chronic disease cannot be resolved by using the biomedical model; hence, the use of the BPS model, which was developed around the idea that an individual's health is the result of biological, psychological, and social factors and not just disease, is becoming more common (Haslam et al., 2019; Johnson, 2013). In short, the biomedical model was reductionistic (i.e., disease was defined solely as a biologic defect), exclusionary (i.e., did not consider anything not explained by this biologic defect), and fostered a mind-body dualism in which somatic processes were separate to mental processes (Johnson, 2013; Renn & Feliciano, 2017).

Figure 1

Biomedical Model

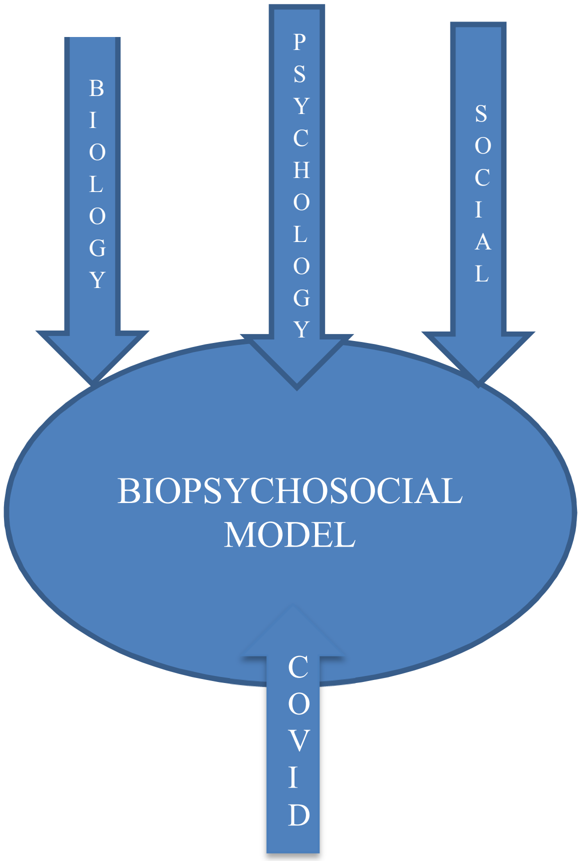


In a description of the BPS model, Engel (1980) gave credit to the writings of von Bertalanffy (1968) in the development of the model. In Chapter 2, I will briefly examine the contribution Bertalanffy's general systems theory made to Engel's (1977/1992) BPS model. Some relevant topics from general systems theory that were applied to the BPS model were those of hierarchy, every system being influenced by its environment, and one cannot characterize a system without identifying the larger system(s) of which it was a part.

The BPS model as promulgated by Engel (1977/1992; see Figure 2) is a model of health that encompasses the three factors of biological, psychological, and social as requirements. In other words, the model is a multifactorial approach to the fight against disease and illness. In this study, I examined the efficacy of the BPS model in the approach to combatting COVID-19 as experienced by older adults in independent living communities.

Figure 2

Biopsychosocial Model



Problem Statement

The dawning of the 21st century has seen many older adults moving into retirement communities (Brecht et al., 2009; Shinan-Altman et al., 2020). Living in close proximity to others presented opportunities for COVID-19 and other viruses to spread amongst these older adults (Ayalon, 2018; Fischer et al., 2020). The COVID-19 pandemic, subsequent lockdowns, social distancing, and masking resulted in decreased interaction with family, friends, and community relationships (Kotwal et al., 2020). There are reports of many older adults experiencing loneliness, depression, anxiety, pain, and even death (Harden et al., 2020). These are significant public health concerns for older individuals in ordinary times, while the restrictions imposed by COVID-19 may have made them devastating (Ishikawa, 2020).

The gap in knowledge that this study addressed was the experiences of older adults living in independent retirement facilities. This is a group that does not appear to have been thoroughly studied, and there are significant differences between independent living adults and adults residing in assisted living or nursing homes. These differences segue into differences in experiences with COVID-19. The older adult population is growing rapidly in the United States (National Institutes of Health, 2016), and COVID-19 has struck this population especially hard. If interventions can be developed that will save lives and defeat sickness through examining the experiences of older adults with COVID-19, , then that is a worthy endeavor.

Purpose of the Study

The purpose of this qualitative study was to examine the experiences of older adults in independent living communities with the COVID-19 pandemic.

Research Question

How do older independent adults experience living during COVID-19?

Theoretical Framework for the Study

The theory or model that provided the foundation for this study was Engel's (1977/1992) BPS model of health and illness. In this model, Engel stated that the determination of health and disease depends on the interaction of three determinants: biological, psychological, and social factors. Engel's theory is used throughout health care and especially in health psychology. In this study, the BPS model provided the framework with which to examine the experiences of older adults during the COVID-19 pandemic. Using the BPS model was an appropriate choice for this study because the model explains the biological, psychological, and social conditions that can be influenced be COVID-19. It was those conditions or experiences that I sought to examine and identify as unifying themes amongst the various participants. After these themes are identified, interventions can be developed to forestall the ravages of future pandemics.

In the BPS model, Engel (1977/1992) put forth a comprehensive model that would counteract the reductionist biomedical model then dominant in medicine. In the model, Engel proclaimed that there should not be a separation of somatic and psychic disorders in the practice of medicine and that the mind-body dualism as practiced by the biomedical model was not sufficient patient care. Engel laid out a list of six traits that he expected the new model to adhere to but admitted that his list was not complete. Among the points on this list was the idea that the doctor-patient relationship greatly influenced the patient’s outcome, that the new model must observe the rigor of the interview process, and that in recovery a patient’s status may be sustained mainly through factors other than the biological. Engel (1977/1992) felt that the BPS model explained why some people felt ill, while others experienced “problems of living” (p. 324).

Engel’s (1977/1992) proposed new model suffered from a lack of concreteness and general guidelines for medical practitioners to follow (McHugh, 1992). Others claimed it was too good for the day (Herman, 1989/2005). Engel (1980) attempted to address some of these criticisms in later writings by providing a concrete example of the treatment of an actual patient using the biomedical and BPS models. In Engel’s telling, the BPS model won overwhelmingly. I will discuss the model in greater detail in Chapter 2.

Erikson’s (1950/1993) psychosocial stages of development is a theory that also has applicability to this study. Erikson’s eight stages of development throughout the lifespan culminating in the mature age stage illustrated the epigenetic principle that the human personality grows throughout the lifespan and there is order to the steps of development. In Chapter 2, I will also cover aspects of this theory in more detail.

The BPS model is related to the research question by the artificial construct of COVID-19 being considered the “disease;” adults in independent living communities older adults being the “patients;” and a select number of biological, psychological, and social factors interacting on the disease-patient dyad. It is through examining the older adults' experiences through the lens of this model that I hoped to gain some measure of the complexity of those experiences and determine if there were any shared themes that developed amongst this group of participants. By the very nature of examining experiences, a qualitative approach had to be employed in the study.

Nature of the Study

In this study, I used the basic qualitative design research tradition (see Merriam & Tisdell, 2016). This is a common form of qualitative research collecting data through interviews and observations. This approach is practical and flexible in addressing field problems. What is asked of interviewees depends in large part on the theoretical framework of the study. The key concept being investigated was the experiences older adults in independent living communities with the COVID-19 pandemic.

I recruited participants for this study from a local continuing care retirement community (CCRC) using a flyer disbursed in independent living areas at the CCRC. Inclusion criteria were that participants had to have lived at the CCRC since January 1, 2020, be 65 years old or older, have no self-reported cognitive disability, and be able to read and speak English. Any individual who answered the flyer and volunteered was sent an informed consent form to read and sign. They then gave consent verbally over the phone when a date and time for a telephone interview was established.

Definitions

Assisted living: Those apartments in a CCRC that includes all group residential programs not licensed as nursing homes that provide personal care in activities of daily living and can respond to unscheduled needs for assistance (Zimmerman & Sloane, 2007).

CCRC: A living complex where the resident is given a private apartment whose maintenance is the responsibility of management. Different kinds of dwellings (e.g., independent, assisted living, and nursing care) are provided for residents with different levels of dependency. Prospective CCRC residents must meet the community's independent living health standards at the time of entry to the CCRC. Assisted living and nursing care units are reserved for those whose health has declined after their move to the CCRC (Green & Ayalon, 2019).

Exclusionary: An approach to health fostered by the biomedical model that did not consider anything not explained by the biologic defect that defined the disease (Renn & Feliciano, 2017).

Independent living: The lowest level of care in a CCRC at which the resident must have their functional and cognitive abilities. Because of the high fees involved, this level of care is usually catered to individuals of higher socioeconomic status. This level provides many services based on residents' requests but are not imposed (e.g., classes, social activities, or the gym). The same approach is applied to food and laundry services (Ayalon, 2016b).

Lockdown: Policy measure that mandated that people stay at home, shutting businesses or working from home, and avoiding physical contact with others during the height of the COVID-19 pandemic (Sibley et al., 2020).

Masking: A recommendation from the Centers for Disease Control and Prevention (CDC) (2021c). If an individual is not fully vaccinated for COVID-19 and aged 2 or older, they recommended the person should wear a mask in indoor public places. The recommendations are further detailed depending on the individual's personal health history.

Mind-body dualism: An approach to health fostered by the biomedical model in which somatic processes were separate to mental processes (Renn & Feliciano, 2017).

Nursing care: The highest level of care at a CCRC where a resident moves when they are in functional decline. These facilities provide a wide range of health and personal care services, focusing more on medical care than assisted living. Rehabilitation services are also available. Some people stay in such a facility for a short time after being in the hospital; however, most residents live there permanently because they have ongoing conditions that require constant care and supervision (National Institutes of Health, 2022).

Reductionist: An approach to health that was fostered by the biomedical model in which disease was defined solely as a biologic defect (Johnson, 2013).

Social distancing: Staying at least 6 feet (about 2 arms' length) from other people. Keeping distance from others was especially important for those at higher risk at getting sick (CDC, 2021c).

Assumptions

I assumed that all participants who were recruited by advertisement or word-of-mouth were honest with regards to the inclusion criteria. It was also assumed that the participants were representative of their population, and they answered the interview questions in an honest and willing manner. Another assumption was that in the study site CCRC at least 15 willing individuals would volunteer to participate in the study.

Additionally, because I employed a qualitative paradigm, certain assumptions were critical to the study. The ontological assumption that reality is subjective and multiple as seen by the study participants was necessary in the context of this study. Study participants had to be able to view their experiences personally and from many points of view. The epistemological assumption that I interacted with what is being researched again was a necessary assumption in this study context. I was the instrument of data collection and interacted individually with each participant. However, there are some assumptions that are more difficult to perceive yet were critical to the meaning of the study. The axiological assumption on the role of values assumes that the data was value laden and biased. This must be taken as an act of faith, and it was the reason that I journaled reflexively throughout the study. I also used the concept of bracketing to set aside my biases, assumptions, vested interests, and cultural factors from the data (see Fischer, 2009). Another assumption that was difficult to demonstrate was the methodological assumption of inductive process where the researcher builds from the data to broad themes.

Scope and Delimitations

The focus of this study was the independent living unit of a retirement community located in a metropolitan city in the south-central United States. The study site retirement community was the largest such community in the area, and my hope was that this size would provide a diverse group of participants for this study. The reasons for this specific focus were a personal interest of mine, a lack of research of independent living adults, and the immediacy and threat of COVID-19.

Because of the venue of the study site, the population studied was the older adult, which I defined as anyone 65 years old and older. It was necessary that the participant had been a community resident throughout the lockdown period and beyond; therefore, I had an inclusion criterion that the participant must have been a community resident since January 1, 2020. For the purpose of reading and consenting to informed consent and for conducting a telephone interview in English, I had a requirement that participants be able to speak and read English. The final requirement was that any independent living resident that self-identified as having a cognitive deficit be excluded from consideration as a participant. This was admittedly hard to monitor, but the facility did a pretty thorough job of doing this and such individuals were usually moved to another level of care.

Regarding transferability, this study was directed at a very specific site and population, but there was no reason that the findings cannot be applied to other settings or groups. The questions being asked were not site specific, with the true test being that the findings provide rich, detailed descriptions of the context and the people being studied. It will then be up to the reader to determine if the original research has applicability to the new study.

Limitations

I identified several limitations of the study, many of which concern the fact that conducting research in a retirement community will inevitably focus on individuals at the upper end of the socioeconomic scale and who are a primarily White population. In addition, it was the nature of the demographics of aging that the population was predominately female. Attempts were made to recruit widely from the independent living unit and choose diverse individuals as study participants. Another limitation was that because of the COVID-19 pandemic, I chose to conduct the interviews by telephone. Face-to-face interviews provide more subjective data than telephone interviews, but by noting observations after the telephone interviews I captured some of that data.

Researcher bias is a consideration that must be constantly addressed by keeping a daily journal and an active audit trail. I am an older female, which afforded me a level of empathy and understanding with the research participants. However, if carried too far, that level of empathy and understand could also have swayed my thinking and bias my emotional approach to the data. I needed to be vigilant and alert to these possibilities and remember to let the data talk to me, not the other way around.

Significance

Results from this study revealed what concerns older adults when confronted with an ongoing pandemic, including what things they think about, what things become important to them; what things cause them distress and problems, and what they have learned from the experience. The significance of learning this knowledge is having a better understanding of the older adult population, which is a growing cohort in the United States. Through knowing what caused the older adult distress and problems in the pandemic, interventions can be devised to address these issues. Prognostications predict that there will be more pandemics in the future, and it behooves society to plan for their coming. For an example, the policy issue of whether lockdowns are the most effective way to treat the virus might be answered by this study. The findings of this study can also be used to better communicate with the older adult population and provide opportunities to offset the effects of future pandemics with new knowledge.

Summary

I opened this chapter with a discussion of an existing problem facing older adults in independent living communities experiencing the COVID-19 pandemic. After a brief discussion of this virus, a summary of the literature in Chapter 2 followed, highlighting a gap in knowledge that the study addressed. That gap in the literature was that older adults in independent living communities have not had their experiences with the COVID-19 pandemic studied. The problem statement, purpose, and research question were then described. I then described the theoretical framework, the BPS model, and the nature of the study. A section of definitions was followed by a presentation of assumptions. A discussion of the scope and delimitations and limitations identifying the boundaries of the study was followed by an explanation of the significance of the study where positive social change was defined. Chapter 2 contains a review of literature relevant to the topic of the study.

Chapter 2: Literature Review

On January 21, 2020, the first person in the United States was reported to be infected with the novel coronavirus, COVID-19 (Patel & Jernigan, 2020). With the onset of the COVID-19 pandemic in 2020, numerous proactive measures were taken in the United States to control the spread of the virus, such as lockdowns, social distancing, and masking. As an increasing number of Americans were growing older and retiring to retirement communities, the question arose as to the health of these older adults in independent living communities (Garcia-Portilla et al., 2020) and whether depression, loneliness, or some other behavior become predominant amongst them during the COVID-19 pandemic (Plagg et al., 2020). The purpose of this qualitative study was to examine the experiences of older adults in independent living communities as a result of the COVID-19 pandemic. The purpose of this chapter was to synthesize the literature regarding older adults living in retirement communities exposed to COVID-19 through a theoretical perspective.

In the literature review, I establish the relevance of the problem being studied through focusing on the factors comprising the BPS model: the biological, psychological, and social components. When applying the model in this study, I used COVID-19 as the outcome. Within the biological factor, I explored past research on multimorbidity, age, and sleep. For the psychological factor, a discussion of various psychological elements, such as mental health, grief, and loneliness, takes place. Additionally, for the social factor, I consider some of the social concerns that impact the individual, such as social support and isolation. In this review, I establish the centrality of the BPS model to examine an individual’s experiences living through a pandemic.

This chapter opens with a review of the theoretical lens and discussion of several theories that were germane to this study. Of principal importance was Engel’s (1977/1992) BPS model, which was used as the conceptual framework for the study. To understand this model, I provide a brief history of the biomedical model from which the BPS was developed to better.. Engel’s BPS model was built on the general systems theory of von Bertalanffy (1968), so a brief discussion of this theory is included as an introduction to Engel’s work. Finally, Erikson’s (1980) psychosocial stages of development are discussed as they apply to this study. The chapter is then devoted to an in-depth exploration of the components of the BPS model: the biological, psychological, and social factors.

Literature Search Strategy

I used Google Scholar, Academic Search Complete, SocIndex, PsycArticles, PsycInfo, CINAHL, Medline, Taylor & Francis Online, Walden dissertations, and SAGE Research Methods databases and search engines to search for literature for this review. Most of the articles retrieved were published less than 5 years ago and virtually all were peer reviewed. Those references published more than 5 years ago tended to be historical documents or contained other information that was germane and of use to the current study. In addition, I retrieved several relevant books from booksellers and found articles by searching the reference sections of other articles.

The following keyword search terms were used: *elderly, elderly and retirement community, independent living, elderly and COVID-19, elderly and isolation, elderly and loneliness, elderly and mental health, gerontology, COVID-19, COVID-19 and review, COVID-19 and pandemic, biopsychosocial model theory, biopsychosocial model history, biopsychosocial model and elderly, George L. Engel, biomedical model theory, biomedical model history, brief history of medicine, Von Bertalanffy general systems theory, Erik Erikson stages of development, basic qualitative research, thematic analysis, United States or America or USA or United States of America, 2021, psychological, social, sleep, resilience, lived experience, grief, emotions, telemedicine, telehealth, multimorbidity, stressors, coping strategies, bereavement, environment, fear, cabin fever, agoraphobia,* and *social support.*

Theoretical and Conceptual Framework

The principal theory that undergirded this study was Engel's (1977/1992) BPS model as derived from Von Bertalanffy's (1968) general systems theory. In this section, I also present the biomedical model as a counterweight to the BPS model and discuss Erikson's (1980) psychosocial stages of development with particular attention paid to Stage 8: old age. This section closes with an explanation of my rationale for choosing the BPS model as the conceptual framework for the study.

Biomedical Model

The history of the biomedical model has spanned Western medicine since the wide acceptance of Pasteur's (1822–1895) germ theory of disease (Johnson, 2013). Louis Pasteur was widely considered to be the father of modern germ theory (Bynum, 2008).

Pasteur's discoveries of infectious bacteria and the treatment for smallpox and rabies opened a new period in medicine in the 19th century, one which some have called the Romantic era (Bynum, 2008; Decker, 2016). This era was characterized by a stress on feelings, emotion, and intuition, with people searching for answers to life's core questions and an emphasis on psychological treatment.

The germ theory of disease led to great advances in sanitation; the development of antibiotics and insulin; and a decline in infectious diseases, such as tuberculosis, pneumonia, influenza, and diarrheal diseases (Bynum, 2008; Johnson, 2013). Because the biomedical model was in place at the time of these disease eradications, they are no longer primary causes of death in the developed world (Johnson, 2013). These advances show the major impact that the biomedical model and its emphasis on biology and disease have had on the U.S. health care system.

However, the biomedical model of health was both reductionistic and exclusionary and has fostered a mind-body dualism in which somatic processes were separate to mental processes (Johnson, 2013; Renn & Feliciano, 2017). It was reductionistic in that disease was defined as solely a biologic defect, and exclusionary in not considering anything not explained by this biologic defect. This model paid little attention to social, political, or moral factors (Hatala, 2013). By the end of the 20th century, the limitations of this model were becoming more apparent. First, the leading causes of death in this United States were no longer infectious diseases but rather chronic diseases, which the biomedical model was less successful in managing (Haslam et al., 2019; Johnson, 2013). Second, U.S. health care costs continued to rise, perhaps enhanced by this model’s emphasis on diagnostic tests and biologic interventions (Johnson, 2013). Third, the role of behavior in disease etiology, prevention, and management had become increasingly dominant, and the biomedical model did not measure up (Johnson, 2013). Fourth, there was a failure to address the mental health care concerns facing the United States by relying on an antiquated system, separating physical and mental health issues (Johnson, 2013).

Engel (1977/1992) found the biomedical model lacking because it failed to systematically consider these biological, psychological, and social factors as well as their interactions in explaining health, illness, and the health care system. Engel acknowledged that while the biomedical model, which focused on disease, had provided clear guidelines for the management of infectious diseases, it had inadequate significance concerning chronic conditions for which no immediate remedy existed. Other critics faulted the model for an overemphasis on technology, specializing too much in contemporary medicine, and a limited concept of disease that could be understood by the physician (Fava & Sonino, 2017; Suls et al., 2019). These faults were captured in the enigma pointed out by Engel, of patients who felt sick but were told they were well because all the lab tests came back normal.

Despite these critiques, the model is still persistent in the medical and health care community. One physician, Weston (2005) noted that the biomedical approach was easy to implement because it “demands uniformity and comprehensiveness” (p. 387). To avoid being overwhelmed, physicians may focus their attention on the biological context of illness to the exclusion of psychological and social aspects of illness. Another reason for not changing from the biomedical model was, although health care providers recognize the difficulties with the current system, they prefer it to something new and unknown (Wade & Halligan, 2017).

Engel's BPS Model

The Early Years

As pointed out earlier, the biomedical model was no longer meeting the requirements of 20th century medicine. Engel (1977/1992) chose to challenge this model with a new formulation. This idea was not entirely new though because in the 1850s, Virchow, the father of cell theory, had recognized the importance of social conditions in fighting disease and had declared medicine was a social science, far distant from the reductionistic biomedical approach common among German doctors at the time (Suls et al., 2013). Up until the 1970s, Engel was hard at work and much in demand as a speaker and lecturer. The audience for Engel's ideas regarding a psychosomatic orientation to medicine had been large and growing, but suddenly in the 1970s the audience for Engel's clinical and scientific work shrank significantly. Textbooks disavowed that emotional problems could be the cause of disease; animal models and bench research took over an ever-larger portion of the field. Research papers were becoming narrower and more reductionist. That was the situation in 1977 when Engel began an appeal for a comprehensive BPS model as an alternative to the reductionism of the biomedical model that had become dominant in medicine.

Engel's 1977 Paper

In the paper introducing the BPS model, Engel (1977/1992) averred that “all medicine is in crisis” (p. 317). That was a strong statement to make to medical colleagues, but Engel’s follow-up critique of the biomedical model was even more forceful. Engel proceeded to explain the requirements for a new medical model, specifically one that treated a mental disease, schizophrenia, and a somatic disease, diabetes. Beginning this thesis, Engel first asked if psychiatry and medicine should adhere to two different models: medicine to the medical model of disease and psychiatry to a model limited to behavioral disorders resulting from brain dysfunction. This was an issue that was paramount at the time, and Engel presented it at the very beginning of the paper. Remarking that the biomedical model embraced reductionism, exclusionism, and mind-body dualism, Engel said that this separated the somatic from the psychic. Engel then proceeded to itemize some of the advantages of the BPS model. First, the biomedical model did not account for a patient and their cultural context, which required the BPS model. Second, the boundaries between illness and wellness were not clear, they were dispersed by psychological, social, and cultural considerations. Third, a BPS model explained why some people experienced an “illness,” while others experienced “problems of living” (p. 324).

Engel’s 1980 Paper

Engel (1980) opened this paper with a brief discussion of the problems of the biomedical model. Proponents of the biomedical model claimed that, in time, all its failings would be overcome by advances in scientific research. Critics responded that such dependence on science was at the expense of the human being. Fundamentally, Engel explained that the major flaw in the biomedical model was that it did not include the patient as a person or as a human being (p. 536).

Integration of BPS Factors

I will cover this integration in more detail later in the review, but for now my objective is to briefly survey the role of the biological, psychological, and social factors in the BPS model. Engel (1977/1992) identified psychological, social, and cultural factors, in addition to other biological factors, as requirements of the new BPS model. Chigangaidze (2021) described these factors in greater depth; for example, subordinating the biological factor into aging, physical exercises, nutrition, and sex. These are not encompassing divisions but are significant comorbidities. For psychological factors related to COVID-19, the author explored anxiety; suicidal ideation; suicides related to COVID-19; behavior change; and hygiene compliance, which included such items as mask wearing, hand washing, and social distancing. Finally, for social factors that aggravate the spread of COVID-19, the author considered stigma and discrimination, homelessness and overcrowding, occupational and ergonomic issues, and global social policy and universal health coverage. It was apparent that COVID-19 was beyond the scope of the biomedical model and required the multifactorial approach of the BPS model in the fight against this pandemic.

Another perspective, but similar, on the makeup of the model factors came from Ali Jadoo (2020). This author considered the biological component to be COVID-19’s causative agent, the coronavirus SARS-CoV-2. The psychological entity consisting of thoughts, emotions, and behaviors was identified as fear, anxiety, stress, panic, depression, angry, suicide attempts, etc., while the social factor was those aspects that influenced peoples' health as individuals, groups, and communities, such as economic and cultural factors, domestic violence, isolation, elderly poverty, etc.

There was some overlap in these two authors' descriptions of the factors, but there were also some significant differences. These overlaps and differences highlight that because the model was dealing with human beings, there was some fluidity in the parts that constitute the whole.

Advantages and Disadvantages of the New BPS Model

Numerous authors and researchers through the years have touted the advantages of the BPS model. In a seminal article, Engel (1977/1992) said that it would require a BPS model to untangle a patient's social context and the system that society had devised to deal with illness. Chigangaidze (2020) pointed out that this model could help explain why people with the same diagnosis could respond to treatment differently because of their varying biological, psychological, and social contexts. The U.S. Patient Protection and Affordable Care Act implemented in 2010 was consistent with the ideas of patient-centered care and the framework of the BPS model (Johnson, 2013). A close look at many of the criticisms of the BPS model may help to clarify its many advantages.

Yet, even with this progress, Haslam et al. (2019) identified three shortcomings of the model. First, Engel envisioned equal weight being given to the biological, psychological, and social factors of the BPS model, but many researchers argued that the biological component still dominated the model. Second, the model was imprecise about how the different factors that make up the model interacted, resulting in a lack of a coherent theory that was hard to empirically test. Third, the individualistic framing of the model meant that the social dimensions were largely ignored as far as any group characteristics were concerned.

BPS Pathways

There were numerous critiques to the BPS model for being vague and not providing causal pathways between the factors that interact to comprise the model. Karunamuni et al. (2021) sought to rectify this problem by developing the BPS pathways model. The concept was that subjective well-being and physical health would be the outcome measures for the model. The focus was then on the causal associations between the biological, psychological, and social factors and their contributions to physical health and subjective well-being. From this analysis, six direct causal pathways were seen to occur between the three factors. Karunamuni et al. continued to describe how each pathway contributed to the outcomes. Thus, the BPS-pathways model expanded the BPS model by identifying the pathways between the psychological, biological, and social factors to make more specific and testable predictions than the original Engel (1977/1992) model. Doom (2020) expanded upon the model proposed by Karunamuni et al. by focusing on improving the BPS-pathways model through enlarging the range of outcomes that could be considered beyond subjective well-being and physical health. Doom also considered how a factor may fall into more than one category (i.e., biological, psychological, or social). Finally, Doom remarked that social factors may directly affect biology independent of psychological mediation. Other than these relative minor adjustments, Doom was generally favorable towards the BPS-pathways model.

Another view of the BPS-Pathways model was presented by Haslam et al. (2021). After first admiring Karunamuni et al.'s (2021) model, especially the message that health was not just about biology but was also structured by an individual's psychology and social context in which they live, Haslam et al. adopted a more critical stance. They suggested first that Karunamuni et al. was too focused on the individual and not enough on the social identity of the group, which could significantly restructure individual psychology (p. 2). Moreover, they raised the issue of whether pathways could in fact be changeways. Where a pathway indicated a causal link between factors, a changeway indicated that in impacting each other, one or more factors could in fact be altered. The authors admitted that Karunamuni et al. may not disagree with them on these points, but their model did not address them.

Why the Model Has Not Been Widely Adopted

Despite pervasive support for the BPS model, many physicians had difficulty utilizing it in their practices. One physician argued that maybe the BPS model is "simply too good for present standards of practice" (Herman, 1989/2005, p. 373). For one thing, the model failed to provide physicians with any meaningful concrete guidance on how to implement the model with their patients (Weston, 2005). Schwartz (1982) challenged the idea that the more information the physician collected the better would be the diagnosis. Some authors proposed that the BPS model was so broad and nonspecific that it encouraged physicians to look everywhere when seeking an explanation for a disorder. As earlier argued, the model had no rules or directions or logical pathways to validate and explain certain disorders (McHugh, 1992).

Pilgrim (2002) remarked on several ways that the BPS model failed to gain traction with the medical fraternity. First, he stated that pragmatism in mental health services may have been more a driving force than the BPS model. Second, there are those who were concerned that psychiatry was becoming neuropsychiatry, a loss to the BPS model. Third, history suggests that the biomedical model was enduring through the ages. Physicians favor a biomedical model and drug company marketing events reinforced the medical model. Fourth was the relative lack of visibility within psychiatric texts after 1980 of the BPS model. Although I view this last with some concern as the author provides only two examples and no statistical or empirical evidence to back up this claim.

In one novel strategy to determine presence of the BPS model, Suls and Rothman (2004) researched all the titles and abstracts in Medline from 1974 through 2001 using the search terms BPS or biomedical. They found in this time span, BPS was mentioned 1,094 times, while biomedical was mentioned 9,994 times, a 1:9 ratio (p. 120). By this rough estimate, the biomedical model remained dominant.

Health Psychology and the BPS Model

Having described why the BPS model was marginalized in much of health care, there was one discipline, that of health psychology, on which it had an enormous impact (Keefe & Blumenthal, 2004). Suls et al. (2019) in their discussion of multimorbidity, which refers to the conjoint presence of multiple (physical and mental) health conditions, specifically pointed to health psychology (p. 2). Multimorbidity with clusters of coexisting health conditions and their myriad effects for prevention, clinical and health care, was the perfect issue for health psychology to address. Health psychology was founded on the BPS model and was a holistic study focusing on the whole person instead of on the pathology of disease. In clinical practice, patients with multimorbidity were often referred to different medical specialists, ending up with disjointed care, miscommunications, and complications. Health psychology's holistic view of the person via the BPS model recognized that people rarely experienced health problems in isolation and could aid the health care team address the person as a whole. Another issue was that health care workers lacked evidence-based guidelines to treat patients with multimorbidity and health psychologists could aid in developing these multiple-condition guidelines.

Statistics show that in the year 2000, 47% of the variance in health outcomes resulted from behavioral and environmental risk factors (Mokdad & Remington, 2010). Health psychology had been a pioneer in the efforts for weight control and smoking cessation. They provided research, campaigns, and interventions to encourage healthy behavior practices and ward off multiple health conditions (Suls et al., 2019). It is proposed that this study may pioneer interventions in combatting the ravages of current and future pandemics and endemics.

Strategies for Model Improvement

In the discussions of the BPS model several suggestions for improvement were made such as delineating pathways for the different factors comprising the model and developing concrete guidelines to aid the physician in their practice. Suls et al. (2013) devised three additional strategies to improve the model. In the introduction to their article the authors made some points that are worthwhile sharing. First, the recent advances in molecular biology have continued medicine’s slant towards the biomedical model. Second, the current pursuit in developing personalized drugs, though miraculous, may have little cross population applicability. Drugs are only effective if they are taken, and their use is affected by all sorts of psychological and social factors, things that are accounted for by the BPS model, not the biomedical model. Having made these succinct comments, Suls et al. proposed:

1. More cross-disciplinary research and training. Today’s important health problems involving chronic disease are complex and involve processes that are beyond the scope of any single discipline. It was becoming common for multidisciplinary research teams to address these complex problems.
2. Efforts to make research and theory more clinically relevant. Chronic diseases, in stimulating the need for the field of health psychology, highlighted that the biomedical model fell short of explaining many health outcomes. The major goal today is to encourage translational research, which transforms scientific research into tangible health benefits. One key to this is designing studies in a manner that decision makers can use.
3. Trying for more representative samples, settings, and outcomes. A goal of this study is to provide user friendly output that stakeholders and other interested parties can utilize.

Health psychologists recruited a larger proportion of their research sample from the convenience sample of community or patient populations than did many other researchers. Reliance on this convenience sample compromised the generalizability of results. Generalizability of findings was important in order to make the results relevant to the real world. In addition, if studying chronic disease, a college aged convenience sample would not be appropriate, for where were the older individuals who were usually subject to chronic disease.

Erikson's Psychosocial Stages of Development

Description of Theory

A theory that had applicability to this study was Erikson's psychosocial stages of development (Erikson, 1950/1993). Building on the work of his predecessor, Freud, Erikson shifted away from Freud's psychosexual analysis to include the social and cultural components and extend the theory over the life span of the individual (Glover, 1998; Knight, 2017). Erikson's theory consisted of eight stages throughout the lifespan, with each stage consisting of two opposing tendencies. Erikson posited that in each stage, which must occur in order and cannot be skipped, a conflict ensues between these opposites. This conflict gave rise to a crisis whose successful resolution resulted in a virtue that aids in negotiating the current stage and navigating to the next stage (Knight, 2017). It is important to realize that the conflict itself gave rise to ego strength or the afore mentioned virtue and thus the negative tendencies played a significant role in the stage resolutions. Erikson's theory illustrated the epigenetic principle in which the human personality grows throughout the lifespan and there was order to the steps of their development (Cote, 2005; Erikson, 1950/1993; Perry et al., 2015).

The eight stages, with their opposing tendencies, and basic virtues in parentheses are as follows (Erikson, 1959/1980, 1950/1993):

Table 1

Erikson's Psychosocial Stages of Development

STAGE	STAGE NAME	CONFLICT	VIRTUE
I.	Infancy	Trust vs. Mistrust	(Hope)
II.	Early Childhood	Autonomy vs. Shame, Doubt	(Willpower)
III.	Play Age	Initiative vs. Guilt	(Purpose)
IV.	School Age	Industry vs. Inferiority	(Competence)
V.	Adolescence	Identity vs. Identity Diffusion	(Fidelity)
VI.	Young Adult	Intimacy vs. Isolation	(Love)
VII.	Adulthood	Generativity vs. Self-absorption	(Care)
VIII.	Mature Age	Integrity vs. Disgust, Despair	(Wisdom)

8th Stage – Mature Age

Of concern for this study is stage 8, mature age, integrity vs. disgust and despair, whose virtue is wisdom. Erikson's view of integrity was that one had suffered the trials of life, resolved issues in their life and personal relationships, and grown through the seven stages of the life cycle (Erikson, 1959/1980). Such an individual was ready to accept their own life's responsibility and to free themselves from the guilt they harbored about their parents that they should have been raised differently. In other words, they came to be at peace with themselves and were calm and did not fear death. This was the resolution of the integrity vs. despair dyad leading to wisdom. For those who have not achieved this state there was despair and often a feeling of disgust which manifested itself in perpetual cynicism and displeasure with people and things: they could not be made happy, and they were afraid of dying because they had not finished living. Such individuals evidenced a contempt of all things because they were in contempt of themselves (Erikson, 1959/1980). Erikson (1950/1993) spoke eloquently about this stage of life when he said, “healthy children will not fear life if their older adults have integrity enough not to fear death” (p. 269).

Application to Study

The current study is about the experiences older adults have had living during COVID-19. Part of the interview questioning concerned “What have you learned from the experiences of the COVID-19 pandemic?” This was directly related to Erikson’s stage eight of the stages of development. Answers to such questions helped in determining if the pandemic had aided or hindered the development of the ego strength or wisdom necessary to traverse the mature age stage.

Rationale for choosing BPS model for this study

The BPS model is well known and used in health psychology and has pertinence in many different applications, which made it a good fit for this study. The BPS model was appropriate for the present study because it explains the pathways between physical, social, and psychological well-being. COVID-19 will be considered as the model outcome. The physical or biological pathway will encompass chronic health conditions, age, and sleep. The psychological factor will consist of such behaviors as fear, anxiety, stress, depression, resilience, telemedicine, and anger under the guise of mental health and will include grief and loneliness, while the social factor will encompass social support and isolation. These are not inclusive categories and were further developed when interview questions were established. This model can explain the older adult resident's experiences in a holistic fashion because it considers many different factors.

The research question, How do older independent adults experience living during COVID-19? builds upon the existing theory because it utilizes the theory outside the prevailing medical model. This current study examined older adult individuals in a retirement community through the lens of the BPS model and provided data that will have a positive impact on older adults living in congregated communities and long-term care facilities and addressed their day-to-day living in time of pandemic and out.

Literature Review

This section of Chapter 2 addresses the variables that makeup the BPS model. These are the biological, psychological, and social components of the model. Each of these components is comprised of a number of heterogeneous elements that may or may not appear at any one moment. It must be noted that the elements described here are not inclusive, they are just the ones that are applicable to this study. This is one reason that this model has fluidity in its application to real world problems.

The disease in question is COVID-19 and the variables of the biopsychosocial model were invoked to examine the experiences independent living adults have living with this disease.

The Disease: COVID-19

A number of viral pneumonia cases were reported in Wuhan City, Hubei province, China in December 2019 (Sun et al., 2020). Deep sequencing analysis of patient samples indicated that a novel coronavirus, severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) was the causative agent of the illness (Sohrabi et al., 2020; Thorpy et al., 2020). The infection spread rapidly across China and on February 11, 2020, the World Health Organization (WHO) declared the infection the novel coronavirus COVID-19 (CDC, 2021a). The number of infections began to spread rapidly giving rise to a worldwide pandemic (Sun et al., 2020). As of July 22, 2022, WHO reported 565,207,160 confirmed COVID-19 infections with 6,373,739 reported deaths, worldwide (WHO, 2021). These figures were only reported values and were widely believed to underrepresent the true nature of the pandemic.

The coronavirus disease (COVID-19) is a highly transmittable, pathogenic viral infection. It is caused by SARS-CoV-2 and gene analysis has shown that it is related to SARS-like bat viruses, thus bats could be the primary reservoir (Shereen et al., 2020). To date, the intermediate source of origin and transfer to humans is not known, though a number of theories surround this topic. Symptoms of the disease include fever, cough, shortness of breath, chills, shaking, headaches, muscle aches, and loss or sense of smell or taste (Thorpy et al., 2020).

While a typical vaccine takes up to 15 years to develop, the vaccine for COVID-19 was accelerated and developed in less than one year after the identification of the disease (Burgos et al., 2021). To accomplish this astonishing feat, the clinical development, manufacturing, and distribution, occurred in parallel for the four vaccine front-runners. In the United States, the Department of Health and Human Services announced the direction and structure of Operation Warp Speed, a partnership between governmental agencies and private companies developing COVID-19 vaccines. These relationships streamlined efforts to deliver millions of doses of COVID-19 vaccines by early 2021 (Burgos et al., 2021). Bypassing the traditional method of immunization by using a deactivated or attenuated live virus, two pharmaceutical companies opted to use mRNA technology to stimulate the body to fight off the SARS-CoV-2 spike protein (Burgos et al., 2021).

For the United States, vaccination rates started off slowly, but soon ramped up and by June 18, 2022, fully 78.0% of Americans had received at least one COVID-19 shot (CDC, 2021a). This was reflected in a relaxing of CDC masking directives and an opening up of businesses. However, there were parts of the world that are currently undergoing pandemic crisis. The developed world is making efforts to supply these areas with free vaccines for their citizens.

Of growing concern, just when it seemed like COVID-19 might be getting under control a Delta variant of the infection has infected many developed and underdeveloped countries. This variant of the COVID-19 virus was more transmissible, with estimates ranging from 60% to 200% more depending on the estimator (Fox, 2021). The Delta variant may cause more serious disease, however, for those who were vaccinated they were unlikely to become seriously ill. Available evidence suggests that the current mRNA COVID-19 vaccines (Pfizer-BioNTech and Moderna) are highly effective against hospitalization and death for a variety of strains including Delta and the even newer strain Omicron and its numerous variants. No vaccine is 100% effective and there are people who are fully vaccinated who nonetheless will become infected, known as breakthrough cases. However, the disposition of their disease will be much less intense than those who have not been vaccinated and hospitalization and death are highly unlikely. Walensky, director of the CDC stated that, “There is a clear message that is coming through: This is becoming a pandemic of the unvaccinated” (Abutaleb & Sellers, 2021, para. 3). In an effort to control the spread of this disease, governments and policy authorities instituted a number of control strategies such as wearing a mask, maintaining a six-foot social distance, and frequent hand sanitizing (Afifi et al., 2020). Additionally, at the height of the pandemic quarantine edicts were mandated in an effort to isolate vulnerable populations from getting infected. The WHO, as of January 3, 2022, reported that 8,693,832,171 vaccine doses had been administered (WHO, 2021). Community living adults were affected by quarantine because of the unique features of their isolation (Kotwal et al., 2020). All of these initiatives weighed heavily on the older adult and their experiences are the focus of this study (D’Adamo et al., 2020).

Independent Living

A number of older adults who meet the admittance requirements are moving into CCRCs. These communities present a form of care which is available to older adults who are independent upon entering the facility. The care setting is designed to allow older adults maximum independence while meeting their increasing needs for assistance and support (Ayalon, 2016b). It is this long-term view that drives many to make the decision to move to a CCRC. Many CCRCs admit adults as young as 55 years old, with no upper limit except for mobility and cognitive ability. For the purpose of this study, I am using the term older adults to encompass both the young-old age group, 65-74, and the old-old age group, 75 and above (Binstock, 2002). Note that some gerontologists break the old-old age group into three groups as follows: the middle-old, 75-84, the old-old 85-95, and the very-old 95-105 (the centenarians; Hartford et al., 1985). It is this venue of an independent living CCRC and an older adult population participating in my study that provides the gist upon which lays the theoretical foundation of the BPS model and its associated factors as described below.

BPS Model: Biological Factors

Multimorbidity

One element of the BPS model as applied to this study is the existence of chronic health conditions, both physical and mental, known as multimorbidity (Suls et al., 2019). Some lack of clarity exists between researchers and health care providers in how they define and assess multimorbidity. For example, some consider substance use a condition, while others do not (Suls et al., 2019). Suls et al. (2019) agreed that medicine and health psychology should move toward a common understanding of what constituted multimorbidity. Health psychology was uniquely positioned to address the issues of multimorbidity because it follows the BPS model which focuses on the whole person, rather than the biomedical model that focuses on pathophysiology and the biological causes of disease. However, health psychology had its drawbacks, for one tending to identify themselves by disease focus, known as ”siloing”, which is reinforced by academia and journals but is contrary to the spirit of the BPSmodel (Suls et al., 2019).

Multimorbity occurs at all age levels, not just the aged. Such examples as depression and anxiety, tobacco and sedentary behavior, and the shared genes of Crohn's Disease and ulcerative colitis, all point to multifactorial causes (Suls et al., 2019). Because multimorbidity increases with age and the United States aged population was growing, the demands on the health care system would be substantial. Moreover, the health care system was designed to treat single conditions one at a time. This was partly because the healthcare guidelines depended on the results of randomized clinical trials, which often excluded older adults and limited generalizability (Suls et al., 2019). A portion of physicians and health psychologists need to shift to being generalists with the resulting need for guidelines to address patients who were diagnosed with multiple conditions.

An issue for patients and health care providers alike was how to manage the myriad of tasks imposed by attempts to control a number of competing medical conditions. There are medical appointments to be kept, diagnostic tests to be arranged, prescriptions to be filled, medications to be taken, bills to be paid, all on a seemingly endless cycle. For the patient trying to self-regulate all of this can bring on anxiety and depression which adds even more to the stress load.

Health behaviors were a leading cause of illness and death in the United States, excluding those from COVID-19 (Mokdad & Remington, 2010). A major change in multimorbidity could be affected by America's health behavior changes. Mokdad (2004) attributed approximately half of all deaths in the United States in the year 2000 to such factors as smoking, physical inactivity, poor diet, and alcohol use. These were all factors controllable by the individual and have been the focus of public health campaigns (Mokdad & Remington, 2010). There was some success in this especially in the anti-smoking campaign, but more needs to be done. The BPS model is uniquely positioned to frame the condition of chronic health behavior in this current study. Study participants were questioned about their chronic health status and other health related criteria with the idea that themes may be developed among participants of issues concerning multimorbidity.

Age

Age is a biological element of the BPS model, because of the older adult population that will be studied. Polidori et al. (2021) made the case that beyond age and multimorbidity, the poor outcomes of COVID-19 may be related to biological age and frailty. Deaths from COVID-19 occurred primarily among male older adults, sparing other vulnerable age groups usually susceptible to viruses. A delineation must be made between biological and chronological age. For example, age related changes, especially of the lung, do not strike older persons to the same extent and thus there were cases of the multimorbid oldest old recovering from the severe respiratory distress of COVID-19 while much younger adults were struck down (Polidori et al., 2021).

Active research suggested that there was currently no measure for biological age (Polidori et al., 2021). However, there was a surrogate marker that could be used to measure biological age and that was frailty. Frailty in an individual was characterized by a decline in multiple physiological systems, accompanied by being more vulnerable to stress. It was noted in persons of high biological age, whereas its absence suggests young biological age. There were a number of established ways to measure frailty and its diagnosis would provide a way to protect the most vulnerable older adults from COVID-19. In other words, frailty and biological age are closely correlated. Polidori et al. (2021) made the case that action must be taken to identify the frail population, not just the oldest, or multimorbid, or symptomatic. The diagnosing of frailty went a long way to managing the complexity of the SARS-CoV-2 infection. The first symptoms manifesting themselves as frailty tend to be exhaustion, followed by slowness of gait, lessened physical activity, and then weakness (Dent et al., 2019). What is consistently reported was that weight loss tends to be the last symptom to develop. Many instruments to measure frailty were in common use, however, this multitude had invoked a debate as to which was the best instrument for clinical practice. As in so many other choices, the clinician needs to consider the instrument's validity as well as its ultimate purpose.

Frailty, or biological age, was one of the most serious global health challenges exacerbated by the rapid expansion of the aging population with its related rise in the number of older adults with frailty (Dent et al., 2019). Therefore, age, particularly biological age, is another element of the biological factor comprising the biopsychosocial model and will be a consideration in interview questions. The study in addition to asking about chronological age, chronic health status, also asked if the participant had a recent fall. Considering all these factors could lead to a conclusion of frailty which could be noted as a theme in the study.

Sleep

Sleep is an element of the biological factor of the BPS model. Sleep is a well-understood indicator of a person's health being critical to their functioning throughout the life span (Sella et al., 2021). The corona virus, COVID-19, had been connected through a quantitative study to conditions that restrict sleep (Grossman et al., 2021). This was especially true for the older adult because they had poorer sleep to start with and also due to the loneliness brought about by social distancing and quarantine. Exposure to stressful life events such as lockdown measures imposed to reduce the spread of COVID-19 could affect the sleep quality of these older adults subject to those stressors (Sella et al., 2021). Lockdown factors such as less exposure to daylight, limited activity levels, and excessive use of technologies, were subject to affecting sleep quality. A quantitative study by Sella et al. (2021) regarding sleep quality under lockdown showed significant correlation between self-reported sleep quality under lockdown for older adults. However, giving attention to the BPS model, the study's authors admitted to limitation in not considering the psychological stress inherent in quarantine and its constraints on older adult's freedom, including their fear of contracting the virus or infecting others. Consideration of these facts would have clarified the role of stressors on sleep quality and older adults.

Most studies of sleep quality took a unidirectional approach in that poor sleep was the consequence of declining physical and mental health, with such declines leading to social withdrawal and dissatisfaction with life (Reynolds et al., 2001). However, Reynolds et al. (2001) took a bidirectional approach to sleep and health in later life, viewing continuing engagement in life, coupled with curtailing time in bed, as associated with better sleep quality.

Sleep quality, even in healthy people, declines with age, especially after age 75: an effect in addition to declining cognition and increasing chronic health problems (Reynolds et al., 2001). Older adult people spend an excessive time in bed with an increase in daytime sleepiness, particularly after the age of 75 (Hoch et al., 2001). Reynolds et al. (2001) claimed that sleep quality could be protected by cutting back on the time in bed, by going to bed 30 minutes later each night. They related this to the story of a group of nuns who practiced restricting their time in bed by 30 to 45 minutes each night and had superior sleep quality. Hoch et al. (2001) conducted a quantitative study that explored sleep-restriction therapy in older adults. Their results were that bed restriction led to sustained improvements in sleep continuity and sleep depth (i.e., preventing loss of sleep quality), thus preventing declines in functional status in those older than age 75.

One of the most common types of sleep disorders in the older population was obstructive sleep apnea, characterized by a reduction or complete cessation of airflow in the upper airways during the night (Pires et al., 2021). Continuous positive airway pressure was the treatment of choice for obstructive sleep apnea and had proved effective among older adults. Insomnia was characterized by complaints of initiating sleep, maintaining sleep, of early awakenings and inability to return to sleep (Pires et al., 2021). To be diagnosed as insomnia, the symptoms must be in the daytime, and it must happen even when the environment and sleep opportunity are adequate. It is possible that these sleep patterns may explain older adults' susceptibility to COVID-19 and the severity of the disease. They are especially affecting community-dwelling older adults because of social isolation, quarantine, and home confinement, as a consequence of COVID-19 lockdown.

Prescriptive advice for healthy sleep includes regular sleep-wake schedules, daytime activities, physical activity, online calls with family and friends, daily exposure to sunlight, limited screen time in the evening, limited consumption of caffeinated beverages, get out of bed if not able to sleep, and finally, avoid any activity in the bed or bedroom that promotes anxiety (Pires et al., 2021). Study participants were questioned about their sleep experience during COVID-19, as part of building a picture of health outcomes under the pandemic.

BPS Model: Psychological Factors

Stressors

Nemes (2020) identified the COVID-19 pandemic with its economic implications and quarantine measures as a social crisis that led to increased mental health symptoms such as depression, anxiety, posttraumatic stress, and substance use disorders. Moreover, stress was a factor that could exacerbate other mental health disorders. An individual's perception of stress depends on the two types of appraisals they performed when faced with a stressor. The primary appraisal evaluated the nature of the stressor, while the secondary appraisal was focused on their ability to cope with the situation (Nemes, 2020). In the COVID-19 pandemic several factors created an image of severity in the appraisals. First, the nature of the stressor was unclear, with conflicting messages from authorities making the situation worse. Secondly, shortage of resources, both for basic needs and for prevention and treatment, high economic losses, and lack of social support due to isolation and travel restrictions created an image of being unable to cope for many people. Sameer et al. (2020) conducted a study to identify various coping strategies used under lockdown during the COVID-19 pandemic. They found that among the most utilized coping strategies were, (a) watching television for entertainment, (b) social networking, (c) listening to music, (d) sleeping, (e) doing mundane house chores, (f) eating well, and (g) clearing up unfinished work. The work of this current study may shed some light on the stressors and coping strategies older adult residents undertook during the COVID-19 pandemic.

Kontoangelos et al. (2020) raised the concern that the focus on the COVID-19 infection might distract attention from the psychosocial cost of the pandemic. The mental health problems emerging from this pandemic may develop into long-lasting health problems. They made the statement that, "During epidemics, the number of people whose mental health is affected tends to be greater than the number of people affected by the infection" (p. 493). This statement is open to criticism as it is not supported by any empirical evidence, but it supports my contention that COVID-19 needs a public mental health focus

Older Adults and COVID-19

Along with the worry and fear of becoming infected with COVID-19, individuals had the stressful experience of being quarantined during lockdown measures. In addition to adapting to the BPS factors of aging, this quarantine experience took a higher toll on the aged population as demonstrated in these quantitative studies, Garcia-Portilla et al. (2020) and Niu et al. (2020). The social distancing and isolation resulting from crisis control measures put older adults at higher risk of mental health problems, including depression, anxiety, post-traumatic stress disorder, and suicide (Garcia-Portilla et al., 2020). Older adults' lower immune response and higher list of chronic health conditions had resulted in greater number of hospitalizations. Older adult individuals were especially susceptible to the pandemic because of their BPS vulnerabilities. They were vulnerable to loneliness, a risk factor for depression, anxiety, and suicide. Moreover, because many of them were not familiar with modern technology it limited their access to quality information and even healthcare.

Jewell et al. (2020) conducted a quantitative study on the mental health of adults in the United States during the early weeks of the pandemic. Their findings were that many U.S. residents suffered high symptoms of depression, anxiety, and stress, especially among those under/uninsured or unemployed. However, contrary to previous research this study found as age increased, anxiety symptoms, depression and stress decreased, and wellbeing increased. These mixed results indicated that further research should be conducted to determine mental health risks relative to age and the COVID-19 pandemic.

In addressing the question of the older adult and "Who cares?", Fischer et al. (2020) identified several perspectives. First, was the principle of solidarity, the need to overcome the paradox of staying together by staying apart. Risk perceptions might differ, but there was a need to protect the rights of the older adult with social distancing, isolation, and quarantine critical for slowing the infection of COVID-19. Second, was political responsibility at all levels of government. There was a shifting of responsibilities and recommendations that generated confusion among the public, that needed to stop. Third, all activities aimed at reducing the spread of COVID-19 should be based on the best available evidence and if none existed explicit research needed to be undertaken. Finally, measures for protecting medical caregivers were needed, including supplies of personal protective equipment, especially in long-term care facilities. All of these measures were needed to generate preparedness and to protect this older adult at risk group. The older adult and COVID-19 are the crux of the current study's research question. It is their experiences of living during COVID-19 that this study explored.

Resilience

Resilience was described as the ability to cope with difficulties across the life span, often interrelated with some psychological conditions (Chen, 2020). Another definition was "the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioral flexibility and adjustment to external and internal demands" (American Psychological Association Dictionary of Psychology, 2015, p. 910). For older adults with higher resilience this means that they are able to obtain better health, such as successful aging, less depression, and longevity (Chen, 2020). However, the loneliness, stress, and fear, engendered by social isolation during COVID-19 may undermine older adults' resilience and risk their health and well-being.

PeConga et al. (2020) identified resilience as the normative response to trauma. Their response to cries of demoralizing headlines was to combat four myths about resilience and see how fostering resilience can facilitate the mental health equivalent of "herd immunity" (PeConga et al., 2020, p. S47). The first myth was that trauma predictably meant mental illness, whereas history suggests that long-term resilience was the most common outcome, even for those on the frontlines and most directly impacted. Myth 2, was that resilient people did not have bad days or periods, when in fact resilience could vary greatly. From simply putting one foot in front of the other every day to sharing with others, one was engaging in adaptive behaviors while struggling and experiencing fear, anxiety, or grief, this was resilience. Myth 3, was that resilience was either an innate trait or it was not. What was most strongly predicted of resilience was the cultivation of social support; it could be learned and acquired. Finally, Myth 4, was that the risk to mental health from COVID-19 was a hoax. Having seen short-term distress from the pandemic, especially in those most directly affected, there were also secondary mental health effects of COVID-19. Access to in-person mental health and social services had slowed and stay-at-home orders may be reinforcing maladaptive coping strategies for those with preexisting mental health problems.

The authors close their remarks by urging those who are reading to honor the innate human capacity for resilience in the face of tremendous adversity. It takes intention and action. Do something for someone else. The timeworn “random acts of kindness” can be put into play. These acts change the mental health of others, but they change us in important ways. They say something about what is valued and what finds meaning in life. Building this community resilience can change it individually and collectively for the years to come. Resilience is a strong personal trait that can deal with all sorts of adversity. It will be interesting to see if the current study detected any signs of resilience in the participants and how it might have been developed or used. Questions eliciting descriptions of emotional reactions to COVID-19 helped to identify instances of resilience in participants.

Telemedicine

The COVID-19 pandemic had forced many health care providers to resort to telemedicine to provide services to their patients (Guido-Estrada & Crawford, 2020). The APA defined telemedicine, also as telehealth, and stated that it was the use of telecommunications and information technology to provide access to healthcare from a distance rather than face-to-face (APA, 2015, p. 1070). Note that this definition was very broad and did not limit communications devices to smartphones or technology to the web. To further narrow the topic to the field under discussion, there is telepsychotherapy, which according to the APA, was the use of different telecommunication technologies to deliver psychotherapy sessions, not face-to-face (APA, 2015, p. 1071).

Prior to the advent of COVID-19, previous quantitative research suggested only about 21% of psychologists used telepsychology (Pierce et al., 2021). Among the reasons for this, such as bias and low self-efficacy, there were federal laws such as the Health Insurance Portability and Accountability Act which forbid the use of applications such as Skype and Facetime for telepsychology (Pierce et al., 2021). Medicare regulations were another example as they restricted physician reimbursement to only patients in Medicare-designated rural areas and specified treatment centers. Additionally, most state laws required that the psychologist be licensed in the same state they and the client are in at time of treatment. Finally, there was often no equipment or space available, and technical issues for both the physician and the client could render the task unmanageable.

However, the COVID-19 pandemic had spurred major policy changes to the above restrictions that made telemedicine more feasible. On March 13, 2020, the White House proclaimed the COVID-19 pandemic a national emergency and gave authority to temporarily waive Medicare and Medicaid requirements (Young, et al., 2020). This waiver removed restrictions on Medicare providers to allow telehealth services. A number of other policy changes were initiated with implications for older adults, but in addressing only those applicable to telehealth the next significant telehealth guidance was issued by the Centers for Medicare & Medicaid Services in early March 2020. This guidance expanded the number of originating sites for telehealth, expanded who could be reimbursed for providing telepsychology services, and opened up the list of services that could be provided. These policy changes improved access to psychological services for all adults, but especially for the older adult. Response to these changes has been vigorous

(Young et al., 2020). However, not all older adults have been able to cross the digital divide, necessitating greater effort to address the technological challenges to older adults. This study determined if any older adult residents experienced telemedicine or utilization of telecommunication devices during COVID-19 and if so, what were their experiences with telehealth. An interview question was specifically asked about participant's use of telehealth during COVID-19.

It is too early to tell whether these temporary policy pronouncements will become permanent after the end of the COVID-19 pandemic. Many of these temporary changes have the potential to improve care beyond the immediate crisis. This nation has a window of opportunity to improve access and quality of care for all, especially for older adults, and advocates and consumer groups need to seize the initiative to support continuing policy enactment.

As a closure to this section, a mention will be made of a qualitative study that produced a listing of 15 Smartphone apps for older adults (Banskota et al., 2020). This study produced an article that was readable by the laity and provides concrete, usable results that they could implement. Mention is often made of having research being more accessible to the user and this study is a perfect example of user-friendly research.

Emotions

Grief. Other emotions such as depression, anxiety, and anger, had been addressed earlier. A discussion of grief highlights a universal emotion and one that has been brought into sharper focus by the COVID-19 pandemic. Grief was a common reaction to loss (Bertuccio & Runion, 2020). Previously mentioned, older adults bore a disproportionate burden when it came to being affected by the COVID-19 virus. Beyond the loneliness, restrictions, and daily coping there was uncertainty in their lives. As one older adult woman bemoaned, “I may never see the ocean again, never touch my kids again” (Ishikawa, 2020, p. S85). Isolation can be a problem for the older adult in the best of times. The restrictions because of COVID-19 could be shattering. Many of these adults relied on exercise classes, religious gatherings, senior centers, and visits from family as their only social connection.

It was often the uncertainty more than the immediate loss that was staggering, what was called anticipatory grief (Ishikawa, 2020). Anticipatory grief had been described as the efforts of an individual that are motivated by an impending loss (Ishikawa, 2020). This was one type of normal loss response to an abnormal situation; others were ambiguous loss and complicated grief (Bertuccio & Runion, 2020). Ambiguous loss occurs when there was a high degree of uncertainty and the lack of closure about an event (Bertuccio & Runion, 2020). For example, when and if children will return to school was an ambiguous loss, as was uncertainty about employment. Complicated grief existed when people experienced severe and possibly dysfunctional grief for months in response to a loss (Bertuccio & Runion, 2020). Because many have been unable to mourn death in traditional ways, this type of grief was expected to become more prevalent. A grief disorder newly proposed as a Diagnostic and Statistical Manual - 5 diagnosis is prolonged grief disorder (PGD; Goveas & Shear, 2020). This was marked by a persistent longing for the deceased and the inability to accept the loss (Weir, 2020). It increased the risk of sleep disorders, substance use, impaired immune function, and suicidal ideation (Weir, 2020). Depression and anxiety could coexist with PGD. However, for PGD itself, psychotherapy was the treatment of choice and adding an antidepressant did not improve symptoms (Goveas & Shear, 2020; Weir, 2020). It was anticipated that there may be an epidemic of PGD on its way due to the shocking deaths, social distancing, and limitations in visits to healthcare facilities and funerals.

Doka (2008) introduced the idea of disenfranchised grief observing it as a loss that was felt as not being openly acknowledged. Albuquerque et al. (2021) wished to examine the challenges that disenfranchisement of grief might add to the bereavement experience. Doka suggested that things being grieved have legitimacy as defined by each society's grieving norms. So, the devaluing of a society's public mourning rituals contributes to the grieving process being disenfranchised.

Adding to the burden of not being able to be with a loved one when they are dying because of restrictive COVID-19 pandemic measures, were the interruptions of religious and cultural mourning rites. These rituals provide many survivors with a strong social support (Goveas & Shear, 2020). Funeral homes are overwhelmed and what funeral arrangements were allowed often had to be made virtually. Cultural practices such as washing the body and open casket viewing were often prohibited. Funeral services were limited to close family, if permitted at all, with the promise of a future memorial service to honor the deceased's life. All of this only intensified the feelings of loneliness that are a part of many grieving individuals.

Some mourners have tried filling this void with virtual shiva and funerals, but this was an inadequate substitute for a personal touch. Cormier stated that being in close touch with other mourners helped produce such feel-good hormones like oxytocin, dopamine and serotonin (Weir, 2020). Funeral rituals served a number of functions; they confronted the reality of the loss, they offered space for introspection on the death, and they helped bring about assimilation of the grief process (Albuquerque et al., 2021).

There was a dire need to implement any COVID-19 bereavement mitigation measures that may lessen the adverse consequences to this pandemic (Goveas & Shear, 2020). The recent rise in the practice of telemedicine had clear advantages over in-person visits and especially for the older adult once they became adapted to the digital universe. Clinicians could provide active empathic listening during virtual discussions to help the bereaved accept their grief. Sleep disturbances could be managed by advice on healthy sleep hygiene and avoiding pharmacological techniques. When PGD was diagnosed, complicated grief psychotherapy was the best studied approach to mitigation (Goveas & Shear, 2021; Weir, 2020). What was of interest in this current study is what if any grief experiences materialized, what was the experience like, and how did the participants cope with the grief. This issue was addressed be questioning about any significant family events that were missed during COVID.

Loneliness. With the onset of the COVID-19 pandemic the issue of loneliness had become a common concern. Loneliness had a wide range of definitions, but for the present study I will use Hawkley and Cacioppo's (2010) defining of loneliness as a distressing feeling when one perceives that their social needs are not met in either quantity or quality of social relationships. The critical point was that simply being alone does not define loneliness. Bereavement and grief were relevant to loneliness and with the loss of life in this pandemic these will only grow stronger. One issue brought forth was that the negative use of the term “social distancing” rather than “physical distancing” by the media and policy makers added to a perception that one was isolating socially (Saltzman et al., 2020).

Tzouvara et al. (2015) presented that there were four predominant theories of loneliness, the psychodynamic, existential, cognitive theoretical, and interactionist approaches. The psychodynamic approach represented by Sullivan (1953) and Fromm-Reichmann (1959) views loneliness as a neurosis because of difficulty in forming social relationships. However, it was noted that this approach was based solely on observations of patients with mental illness and thus lacks generalizability (Peplau & Perlman, 1982, p. 124).

The existential approach whose main adherents are Tillich (1963) and Moustakas (1972) argued that people were ultimately alone, and that loneliness was “an existential condition of people’s existence” (Peplau & Perlman, 1982, p. 126). Existentialists split loneliness into true loneliness, where people were alone throughout the life span, and anxiety loneliness, which was a response mechanism people developed to avoid the reality of their lonely existence. However, the existential theory makes no distinction between objective and subjective notions of feeling alone.

Peplau and Perlman (1982, p. 128) were the key advocates of the cognitive theoretical approach. This approach argued that loneliness resulted from a perceived shortage of achieved as compared to desired social relationships. One of its strong points was its mediating effect between perceived loneliness and the intensity of the experience

(Tzouvara et al., 2015). However, this approach tended to ignore any cultural effects on loneliness.

Weiss (1973) was considered the leading proponent of the interactionist theoretical approach. This approach extended from attachment theory and argued that loneliness came from the lack of both an adequate social network and an intimate figure. The theory proposed that there were two types of loneliness, emotional loneliness, and social loneliness (Tzouvara et al., 2015). Emotional loneliness featured the lack of a close attachment relationship, and social loneliness, which sprang from a lack of a satisfying social network (Peplau & Perlman, 1982, p. 127; Schnittger et al., 2012; Smith, 2012; Tzouvara et al., 2015).

Risk factors for developing loneliness were extensive and varied. Lower levels of loneliness had been associated with marriage, higher education, and higher income, while higher levels of loneliness had been noted with living alone, older, infrequent contact with friends and family, physical and mental health problems and disabilities, chronic stress, marital or family conflict, and divorce and widowhood (Bu et al., 2020; Cacioppo et al., 2014).

Loneliness was prevalent in the older adult because of the many losses, of health, spouse, friends, and independence, that occurred as they aged (Smith, 2012). Additionally, lack of transportation and limited help getting outside the home were challenges of aging. Smith, (2012) in a qualitative study, bemoaned the paucity of qualitative studies to understand the loneliness experience among older adults. This current study is one effort to seek the lived experiences of older adults during COVID-19, which produced any loneliness experiences that may exist among the study participants.

One aspect of loneliness that deserves serious attention was the possibility of cognitive decline. Schnittger et al. (2012) made mention of loneliness being a risk factor for both cognitive decline and Alzheimer's disease. Their quantitative study found the presence of a cognitive variable in the model for social loneliness, but not emotional loneliness, which reflected the importance of cognition to engaging in social activities. Hawkley and Cacioppo (2010) stated that cognitive decline and dementia were particularly devastating results of feeling socially isolated; they reported an increased risk for Alzheimer's disease as a consequence of loneliness. However, a quantitative study of loneliness on cognitive function over a 20-year follow-up did not find any harmful effects on cognitive function in the oldest old age group, those aged 80 and over (Wang et al., 2020). Luchetti et al. (2020), in their quantitative study regarding loneliness in response to COVID-19, found no large increase in loneliness but significant resilience. Yet, in two news reports of reputable researchers both linked loneliness with an increased risk of Alzheimer's disease (Food and Drug Administration Consumer, 2007; Mental Health Weekly Digest, 2021). All of this research reinforced the idea that conclusions cannot be reached on whether there is a positive correlation between cognition and loneliness.

There were many consequences of being lonely; lonely people saw the world as a more threatening place, with more negative social interactions (Hawkley & Cacioppo, 2010). One consequence of loneliness was a reduced capacity for self-regulation, while another was an impairment in sleep quality. Physiological changes, such as cardiovascular disease and mortality, were consequences for the cumulative effective of loneliness. Moreover, fluctuations in the cortisol awakening response were linked to fluctuations in loneliness. An increased risk for inflammatory disease and impaired cellular immunity shown in lower natural killer cell activity has been shown to be associated with loneliness.

Programs to mitigate loneliness in the past had focused on expanding social support for the older adult in distress (Cacioppo et al., 2015; Smith, 2012). More recent papers emphasized the utilization of telecommunications, especially telehealth, in confronting the loneliness problem (Guido-Estrada & Crawford, 2020). Whatever the mechanism, it was crucial that the lonely older adult was drawn into society where their lonely feelings could be abated. Whether the current study was able to determine any incidence of loneliness in the participants is a question of interest by querying about loneliness and transportation problems

BPS Model: – Social Factors

Social Support

Stress Buffering Hypothesis. The COVID-19 pandemic had disrupted the routine interactions with friends, family, and others in their social networks. This had placed stress on these relationships to a degree unknown in modern times. Cohen and Wills' (1985) seminal article on the stress buffering hypothesis shed some light on how to interpret this stress. The authors began by identifying two different models for the process through which social support had a beneficial effect on well-being. One model, termed the buffering model, proposed that a person received support only under stress.

The other model, the main effect model, posited that an individual's social resources had a beneficial effect whether or not they were under stress.

The beneficial effect of the main effect model occurred because individuals with large social networks tended to have a positive effect, a sense of stability and predictability, and an avoidance of negative experiences (Cohen & Wills, 1985). There tended to be some minimum threshold of social support required for these effects to be observed.

In the buffering model, the stress occurs when one appraises a situation as threatening for which they have no coping strategy (Cohen & Wills, 1985). The individual knows it was important to respond but no response was available. A single stressful event may not place this demand on the individual, but multiple demands may accumulate and strain the capacity of the person. Among the various support resources available, several stand out. Esteem support was giving information that the person was esteemed and valued. Informational support, also known as advice, was help with problems. Social companionship was spending times with others, also known as diffuse support, Instrumental support was also known as aid or material support. These resources tended not to occur independently but rather in groups.

The importance of both stress relief models was that stress was positively correlated to mortality and disease (Cohen & Wills, 1985). Lacking positive social relationships could lead to anxiety and depression and have negative effects on neuroendocrine or immune system functioning. Therefore, understanding how stress relief works helped to plan for interventions in stress coping. This current study determined what stressors and coping strategies older adult residents may have used while living under COVID-19 by specifically asking this question.

Role of Pets

As mentioned above, a stress reliever was increasing interaction with social support networks. Unfortunately, during lockdowns and with social distancing this effort had not met with much success (Nieforth & O'Haire, 2020). In the interim, some individuals had turned to pets to fill this void of lack of access to human social networks. Several theories had emerged to explain why people turn to pets for companionship (Nieforth & O'Haire, 2020). The biophilia hypothesis stated that human beings were innately drawn to other living things. This had an evolutionary basis in human survival rates. Attachment theory advanced that the attachments that humans create with other living things were important for security and safety. Additionally, there was a bond of nonjudgmental support, and some say unconditional "love" shared between people and animals that was available when human beings were not accessible.

In their quantitative study, Friedmann et al. (2020), examined the effect pet ownership had on healthy community-living older adults and whether there were any status changes to cognitive, physical, or psychological functions. The researchers remarked that the benefits of human-animal interaction could be understood through the lens of the BPS model. These interactions could be viewed as improvements to the social factor of the model, which through social support can lower depression, stress, and anxiety.

Among Friedmann et al.'s (2020) study sample, pet ownership was associated with younger age, living in single-family homes, and not living alone. There was no difference according to sex of owner. The most frequent reasons given for having a pet were enjoyment and companionship. Reasons given for not owning a pet varied from expenses, housing limitations, lack of interest, and the time and effort involved in having a pet. Study findings suggested that pet ownership may lead to improvements in cognitive functioning. Pet ownership was associated with better health outcomes, especially for those who dog walked a pet. Ownership of a pet was a productive avenue of inquiry for this current study when it came to developing interview questions.

Loneliness and Resilience

Loneliness and resilience have been covered earlier as psychological variables and thus will not be discussed again here. This illustrates that the biopsychosocial factors in the model are not uniquely just one variable type (e.g., biological, psychological, or social). A psychological variable can also be a social variable (e.g., loneliness or resilience), while a biological variable can also be a psychological variable (e.g., age). This flexibility adds to the power of the model, but it has also drawn criticism that it makes the model too broad and nonspecific (Schwartz, 1982).

Isolation

One of the arresting features of the COVID-19 pandemic had been the presence of social isolation. The words quarantine, shelter-in-place, and social isolation were often used similarly; however, they have differing definitions. Quarantine was the movement restriction of individuals who have been exposed to disease, whereas social isolation was the separation of people who have been diagnosed with the disease from those who were not sick (Brooks et al., 2020). This was a more medical definition than that of social isolation being a deficit in the number and frequency of contacts with family, friends, and the community (Kotwal et al., 2020). Another, simpler definition of social isolation was the relative absence of social relationships (Smith et al., 2020). For the purpose of the present study, the terms quarantine and social isolation will be used as similar terms to mean the restriction of individuals who have been exposed to disease.

In one review, the authors found a delineation of stressors during quarantine and post quarantine (Brooks et al., 2020). During quarantine a duration that lasted for more than 10 days showed significantly higher posttraumatic stress symptoms. During this quarantine period, participants reported higher fears about their own health and about infecting others. There was a sense of frustration, boredom, and isolation from the rest of the world. There was frustration, anxiety, and anger, over the lack of adequate supplies, especially personal protective equipment. People reported confusion about poor information from health and government officials about the severity of the pandemic and what clear guidelines to follow. Loneliness was an issue, but that topic is covered elsewhere.

After quarantine, financial loss was a major stressor with the effects expecting to last a long time (Brooks et al., 2020). There are individuals of lower social economic status (SES) who being quarantined might need financial support, as well as those who lost their jobs or earnings due to the pandemic. Another stressor continuing for some time expectantly after the pandemic is the stigmatization of people who had been quarantined versus those not quarantined. There had been reports of this occurring especially among health care workers, but it may be too soon to be definitive about this issue.

One significant aspect of the COVID-19 pandemic that deserves attention was fear. Fear was one of the primary emotions felt due to a decrease in an individual's power and upon which many other emotions were built, such as panic and anxiety (Sloan et al., 2021). It was felt universally and had survival value in its fight-or-flight response. During the current pandemic, fear could lead others to engage in protective behaviors to avoid the spread of disease. Handwashing, social distancing, and wearing a mask, were some of those behaviors.

Fitzpatrick et al. (2020) conducted a quantitative study of the relationship of COVID-19 with social vulnerabilities and mental health among United States adults. They began the study of the diffusion of fear across time and place in the United States. This was projected to be a yearlong longitudinal study and this report were observations from the early weeks of their study. The preliminary analyses showed that surveyed respondents reported mean depressive symptoms at the clinical case level. Although the entire sample reflected mild anxiety scores, more than 25% of respondents reported moderate to severe anxiety symptoms, warranting clinical treatment.

COVID-19 fear meant that some communities faced a battle for recovery after this health crisis (Fitzpatrick et al., 2020). Additional preliminary data analysis revealed that those individuals suffering from increased depression during the pandemic were less likely to support quarantine, canceling mass events, or closing businesses. Without these extreme physical distancing measures in place, obstructed by fear of the virus, the country's recovery may be incomplete and further waves of infection may strike. The present study was an early look at how the COVID-19 pandemic was being absorbed and reacted to by the general U.S. adult population.

A unique article for which I could find no twin, concerns fear of freedom and is titled, "What If I Didn't Go Out Any More?" (Valdre, 2020). The most frequent reaction to forced isolation was the desire to go out, to break the rules. But this article illustrates that was not always the case. The author described a young man who created a niche, his own protected space inside, not outside. Some Italian media gave this desire the name "cabin syndrome,' the retreat into the nest, inside the safety of the home and its certainties. The current study explored this feeling of fear to see if it was detectable in any of the participants.

Summary and Conclusions

In Chapter 2, the BPS model posited by Engel (1977/1992) was discussed as a modern foray into person-centered medicine and healthcare. The individual was no longer at the clinician's mercy but is rather now a part of the health decision making process. This was a radical change for many in health care, but it brings a refreshing air of rejuvenation to the practice of medicine. This was being brought to fruition most explicitly during the current COVID-19 pandemic. If ever the individual needs to be involved in their medical care and decisions it was now when so many frightening and ominous decisions were being made. With words and concepts such as quarantine, isolation, shelter-in-place, social distancing, hand hygiene, masking, and vaccination becoming everyday utterances ordinary citizens need to take charge of their health care needs.

Health care workers attempting to manage clients in such an environment need a strategy that will provide them with a tool to assist their clients in optimizing their health care choices. BPS model is such a tool. With COVID-19 as the disease outcome, the model then provides a number of variables for each bio, psycho, social factor that determines pathways to disease intervention. These variables are not fixed but are determined by the discipline and context in which the model is applied. For example, this current study approached a health problem from a health psychology or behavioral perspective and the variables it examined reflect that lens.

Regarding the topic of this study, there has been a great deal of research about COVID-19 since the advent of this virus. However, much of this literature was of commentary or opinion caliber, and although peer reviewed, did not carry the weight of experiential studies. The limited experiential studies that were available for perusal were cross-sectional and of limited periods for quantitative or extremely small samples for qualitative studies. The literature had explored the role of the older adult in the COVID-19 environment, primarily in their own homes or else in nursing homes. Hardly any research had been conducted on the older adult experiencing COVID-19 while living as an independent adult in a retirement facility. That was the gap that this current study aimed to fill and hoped to extend knowledge in the discipline by providing additional data about a fast-growing segment of the population that was increasingly choosing independent retirement home living while they were still mobile and able.

The gap in the literature will be connected to the methods in Chapter 3, first by the selection of the facility to be examined and then by the recruitment of interview participants. Chapter 3 addresses information about the methodology that will be employed on this project including the interview process. The role of the researcher is addressed. Selection of the sample of participants is covered as well as a discussion of saturation. Additionally, the issues to trustworthiness as related to qualitative studies will be discussed. Finally, an ethical procedures section will indicate what agreements have been received to get access to participants as well as all approvals from the Institutional Review Board (IRB).

Chapter 3: Research Method

Purpose

The purpose of this qualitative study was to examine the experiences of independent older adults who have lived through the COVID-19 pandemic. This age cohort of individuals 65 years old and older is rapidly growing in the United States, and many of these older adults were retiring to retirement communities where they could lead independent lives if they were mobile and able (Shippee, 2009). The question arose as to how this group of individuals had been affected by the COVID-19 pandemic. Claims had been made that the older adults had been hardest hit by the effects of this virus (Garcia-Portilla et al., 2020; Niu et al., 2020). I conducted this study to determine how older adults in independent living communities had been holistically affected by the COVID-19 pandemic.

Preview of Chapter

Merriam and Tisdell (2016) stated that in choosing a study design a researcher should consider whether it corresponds to their research question and whether it matches their worldview and personality (p. 1). With that in mind, I determined that my worldview was more subjective than objective; that I was not independent from what was being researched.dd; and finally, the processing was more inductive than deductive (see Creswell & Creswell, 2018). Having these personal viewpoints led me to select the qualitative method for this study. Additionally, a qualitative researcher processes words and meaning making, while a quantitative researcher processes numbers, and this fundamental distinction resulted in me choosing the qualitative method.

I recruited participants by flyer and snowball sampling from the residents of an independent living retirement community. An interview protocol consisting of semistructured interview questions was used for the were audio-recorded telephone interviews with participants. I developed the interview protocol and conducted the interviews. Each interview was transcribed within 1 day of occurring. I conducted a practice test of the interview questions with several friends and a pilot study of the interview protocol with two facility residents. My data analysis plan included the use of thematic analysis for coding and analysis of data (see Terry et al., 2017). I had no plans to use software for analysis but did use Microsoft Word and Excel to manage the data. Issues of trustworthiness are addressed in detail to include ethical procedures. This chapter ends with a summary of the main points of the chapter and a transition to Chapter 4.

Research Design and Rationale

Central Concepts of Study

The purpose of this qualitative study was to examine the experiences of independent older adults living through the COVID-19 pandemic. The qualitative paradigm has its roots in social sciences but is relatively new to the health sciences (Creswell & Creswell, 2018). Qualitative methods can be distinguished from quantitative methods in several ontological and epistemological ways. Qualitative research is constructive, whereas quantitative research is positivistic (Merriam & Tisdell, 2016). Whereas constructivism, also known as interpretivism, assumes that reality is socially constructed and that there is no single reality, positivism assumes that there is a reality that is observable. Qualitative methods are historical while quantitative methods are experimental (Creswell & Creswell, 2018). These are the philosophical differences between the two paradigms; however, there are also some unique design differences between them, such as the researcher being the primary data collector in qualitative research, often working inductively and reflexively, throughout the process attempting to develop a holistic account of the problem being studied yet keeping a focus on participants' meanings (Creswell & Creswell, 2018; Merriam & Tisdell, 2016). The research process for qualitative research is emergent and theory or hypotheses are not established a priori (Creswell & Creswell, 2018). Moreover, regarding data, I conducted this study in natural rather than experimental settings; gathering data from multiple sources, such as observations, interviews, and documents, and the data were in the form of words rather than numbers (see Creswell & Creswell, 2018; Merriam & Tisdell, 2016).

Research Question

The goal of this study was to have a better understanding of the experiences that older adults living independently had with the COVID-19 pandemic. I focused on the older adult because of the reported information that they had been hardest hit by the pandemic. The focus on independent living adults was chosen because this was a group that had not been studied in any depth in the literature and appeared to be an area worthwhile of inspection. Based on these considerations, the following research question was developed: How do older independent adults experience living during COVID-19?

Research Tradition and Rationale

In this study, I used the basic qualitative design research tradition (see Merriam & Tisdell, 2016). This is a common form of qualitative research in which data are collected through interviews, observations, and/or document analysis. What is asked in the study, as in the research question, depends on the theoretical framework of the study. Analysis of the data consists of identifying repeating patterns in the data that are grouped into themes that support the findings of the study. My overall interpretation of the data was based on the participants' understanding of the subject of interest.

My desire to use a qualitative methodology not only stemmed from the fact that in-depth interviews would answer the research question but also that interview sessions could be flexible. But above all, I chose the qualitative methodology because it aligned with the research question. Merriam and Tisdell (2016) stated that "the primary goal of a basic qualitative study is to uncover and interpret these meanings" (p. 25).

Role of the Researcher

As mentioned, one of the characteristics of qualitative research is that the researcher is the instrument of data collection through interviews, observations, and documentary evidence. This places the researcher at the heart of the research process and, as such, raises several strategic, ethical, and personal issues that should be addressed by the researcher (Creswell & Creswell, 2018). It was here that reflexivity came to the fore, with me identifying my biases, values, and personal background that shaped the interpretations I formed during the study.

My personal background is that I am a female, 78-year-old, fully mobile adult of an above average SES. I currently live in a CCRC and have done so for 4 years, which has given me an appreciation for different cultures and lifestyles. These values and experiences helped shape the interpretations I made during the study. In designing the interview questions, listening carefully to the interview responses, coding the interviews, developing themes, and then devising conclusions to support this data, I needed to reflexively journal my thoughts, feelings, and biases. Only in this way could I hope to ethically portray the results of this study in the most unbiased way possible.

Methodology

Participant Selection Logic

Population

In identifying the population from which to select participants, I chose a CCRC. A CCRC has different levels of care depending on the needs of the individual: independent living, assisted living, memory care, and nursing care. To ensure that I would not be interviewing a vulnerable population, I chose independent living residents to be my sample population.

Sampling Strategy and Criterion

I used a homogeneous, purposeful sampling strategy in which I selected a sample from which the most could be learned. The idea was to select information-rich cases from which I could learn what was of importance to the study (see Patton, 2015). This was also a criterion-based selection in that each member of the sample had to meet certain attributes. The inclusion criteria for the sample were: Individuals t least 65 years of age with no self-reported cognitive disability who were an independent living resident of the CCRC since January 1, 2020 and were able to speak and read English. I expected the resident population to be of high SES.

Participant Recruitment

Initial sample recruitment occurred through a posted flyer. If I received an affirmative response from a prospective participant, I sent them an informed consent form to be signed and then verbally verified over the phone. My plan was to interview one participant a day, allowing for a 60–90-minute interview. This time allocation also permitted time for me to subsequently transcribe an interview the same day and initiate first-pass coding analysis. Allowing for scheduling conflicts and such, the interviews, transcription, and first-pass coding, took approximately 10 weeks.

Size and Data Saturation

The predicted sample size was 15 participants or until data saturation had been reached. This sample size was a reasonable solution for the purpose of the study (see Patton, 2015). Data saturation is reached when the collection of new data becomes redundant and no new information is forthcoming (Mason, 2010). There was no way to know when data saturation would occur, thus it was critical that analysis occurred simultaneously with data collection. In a small study such as this one, saturation may occur more rapidly than in a larger study. Transcription occurred immediately after the interview, so I could analyze the data as soon as possible and determine when data saturation was met. All interview data were maintained as confidential and kept under lock and key. Digital data were password protected in cloud storage.

Instrumentation

Flyer

I made initial contact with potential participants via a flyer. Interested volunteers were directed to call me for further information and to arrange for informed consent.

Informed Consent

If a recruit responded affirmatively to the invitation, then I sent them an informed consent document by email or postal mail. This was a much longer document that contained the study purpose, procedures, some sample questions, an explanation of the voluntary nature of the study, privacy protections, and ways to reach out to contacts and ask questions. Once the participant read and understood the document, if they agreed to participate in the study, they signed the consent form and acknowledged informed consent verbally over the phone before their interview took place. Upon receipt of the informed consent form, I assigned an anonymous ID to the participant. A telephone interview date and time was then set up at the participant's choosing.

Interview Guide

In developing the interview questions, I relied on the literature for the area of interest. Additionally, I considered the theoretical framework and, particularly, the factors of concern to the BPS model. The objective was to keep the interview guide as short and simple as feasible to accomplish the task. After developing the interview questions, I tested them on several friends for clarity and credibility. Adjustments were made where necessary (see Appendix for Interview Guide). A pilot study was also run with two facility residents.

The interview guide consisted of several parts: an introduction and welcome; a brief statement of the purpose of the interview; an explanation of the format of the interview; an overview of the confidentiality terms; an indication of how long the interviews were expected to take; a request for permission to audio record the interview; asking if they have any questions before starting the interview; a list of the semistructured, open-ended questions that were to be asked; and an explanation that the interview would end with a short debriefing session. The debriefing section for the pilot study was slightly different in that it asked about the questions themselves, their lucidity, understandability, meaningfulness, and whether they made sense in terms of the general questioning. I also asked the pilot study participants if they had any comments on how to make the interviews go more informatively and easier for all concerned.

I conducted the interviews using a list of semistructured questions and demographic questions that I devised and tested before use. All participants were asked the same questions, though probing questions sometimes differed. The interview sessions were audio recorded with the participants' permission. No notes were taken during the interview; however, after the conclusion of the interview, I made journal observations about the interview.

Researcher-Developed Instruments

The basis for the development of the interview guide was three-fold: (a) a systematic review of the literature in looking for any patterns or ideas that could develop into questions that aligned with the research question; (b) consideration of the theoretical framework and, in particular, the factors identified in this study as related to the BPS model; and (c) my own experiences with being an older adult and having endured the COVID-19 pandemic. I practice tested the questions with several friends for clarity and comprehension after which adjustments were made. A final pilot study of the interview protocol with two residents was also conducted. Content validity was established by triangulation, my reflexivity, peer review, and an audit trail. With the quantity and quality of research questions on the interview guide, there was a sufficiency of data collection instruments to answer the research question.

Procedures For Pilot Study

Prior to beginning the recruiting of participants (and before IRB approval) I conducted a practice of the interview guide with four friends. This provided me an opportunity to practice my interviewing skills, test my recording equipment, and most of all, test the interview questions. I was also concerned as to the proposed length of time of the interview and the practice gave me an opportunity to gauge that. If there were major problems with the questions I fixed them immediately, otherwise I waited until the practice was complete to make any adjustments. I thanked my friends profusely for their time and interest.

A pilot study of the interview protocol was then performed with two facility residents. The goal was to test the clarity and validity of the informed consent, interview questions, the length of the interview, provide me with an opportunity to hone my interview skills, test the audio recorder, and practice transcription. Procedures for this pilot were those described above for the study. IRB approval was necessary. Recruitment was by flyer, informed consent was obtained, interview date and time was of participant's choosing, and interview was audio recorded and transcribed. IRB approval number: 03-15-22-0625063.

Procedures for Recruitment, Participation, and Data Collection

I explained to each participant that I would be using a code name on the interview, and to ensure confidentiality I would be the only one who knows their real name. Because I would be going into a retirement home during heightened COVID-19 activity I opted to do telephone interviews. Interviews were conducted from an interview guide, were approximately 60 minutes in length, were audio recorded, and consisted of a set of semi-structured questions with a series of probing questions. The interview started off with a brief introduction and ended with a debriefing. I did not take notes during the interview but recorded observations immediately after the interview. I scheduled one interview per day, thus allowing time to immediately transcribe the interview and perform first-pass coding of the interview before the next interview. To allow for glitches, scheduling problems, and the like, I allowed 2 months to interview 15 participants, or until it was obvious from coding that saturation had been reached.

The coding and analysis of the interview data followed the thematic analysis protocol established by Braun and Clarke (2006). After all interviews had been coded into a spreadsheet, the data was sorted on code, which gathered all the codes together. The analysis then continued with the development of themes from the collated codes, using a thematic map or visual aid as an assist. After refining the themes, the next step was to define and name each theme, and finally write a report, the analytical narrative.

During all this process, I continued to write reflexively in my journal and maintained an audit trail of all actions.

The details of data collection for the interview guide and research question begin with collecting data from CCRCs. Because the initial facility from which I was going to recruit participants decided to forego participation in the study I utilized snowball sampling to recruit. This tended to be a blessing as I was able to recruit participants from a more diverse geographic area than originally planned. Participants were recruited by flyers passed around by snowball sampling. I collected the data via telephone interviews at the rate of approximately one interview per week. With transcription and analysis delays, recruitment lags, and other holdups, it was unfortunate that interviewing 10 participants took 2 months. The duration of each interview was 60-90 minutes and was audio recorded and then verbatim transcribed. No notes were taken during the interview, however immediately afterwards I made observations in field notes regarding the interview.

Debriefing Procedures

I thanked each participant for their cooperation in the study. I let the participant know that Walden requires that all study materials be kept for 5 years after the study, and they were maintained under lock and key. Digital files were password protected in the cloud. Finally, I asked if they have any further questions. If not, I thanked them again, and bid adieu.

Follow-up Procedures

There are no plans for follow-up interviews.

Data Analysis Plan

The method chosen for analysis was thematic analysis (Braun & Clarke, 2006, 2012, 2021; Terry et al., 2017). Braun and Clarke (2012) made the point that there are certain continua along which qualitative approaches can be found and it was important as a researcher desiring to use thematic analysis that I make my location on these continua known as they carry particular assumptions on how data can be interpreted. I am using an inductive rather than a deductive approach to the data. This means that coding and analysis are driven by what are in the data themselves. Note that it is impossible to be purely inductive, deductive intrudes, however inductive predominates. This means that inductive thematic analysis tends to be experiential in its orientation and have an essentialist theoretical framework, assuming a world that is knowable and being able to voice experiences and meanings of that world as captured in the data.

My data set consisted of transcribed telephone interviews and field notes. I was the sole interviewer and transcriber. Even though I transcribed the interviews within several days of occurrence, I still listened to the recorded interviews several more times for clarity and understanding. After trying several different transcriptions options, I chose to use a professional transcription service, Temi.com. This service allows for easy downloading of recorded .WAV files and produces a 60-minute transcription in less than 5 minutes. I have compared a Temi transcription to one that I had manually transcribed and found they were quite similar. As with any transcription option, the researcher still has to verify the transcription against the recorded interview. The Temi.com service costs $.25 per minute of transcription, which works out to $15 for a 60-minute recording. I felt this was well worth the cost as I had spent 10 hours transcribing the same recording and was not looking forward to transcribing 15 interviews in the final study.

The next step was to transfer the data to a Microsoft Excel spreadsheet where in addition to the interviewee ID and Question/Response columns, were a code value column, and a theme value column. I made the decision not to use a computer software program for data management and analysis because of the substantial learning curve involved and my limited time available. The purpose in transferring the interview to the Excel spreadsheet was so that codes and themes could be sorted and collated by the spreadsheet. This transfer was accomplished by importing the Word transcript to the Excel spreadsheet. The Temi software already created a .docx document. By this time, I had a good familiarity with the data and had some ideas about what was interesting in it.

Then began the laborious process of coding. Each interviewee response was examined for content and broken up into smaller segments if necessary. For each segment of transcript, decisions had to be made as to whether to code the segment or not. This was the process of organizing the data into meaningful groups (Braun & Clarke, 2006). Braun and Clarke (2006) who have written extensively on thematic analysis, had several recommendations for this stage: (a) code for as many themes as possible. (b). code extracts keeping the context of the data intact. and (c) an extract can be coded, uncoded, many times in the course of analysis. Also, it was important to keep track of any accounts that deviate from the main story in the analysis. It was also at this stage that if data saturation occurred it would be obvious. When codes became obsessively similar it was time to end the interviewing process as no new data is forthcoming.

On the recommendation of Saldana (2016), I chose to use in vivo codes which are taken from the participants' interview responses. From these codes, after collating through all the interviews, themes were developed. The process involved developing potential themes and then collating all the relevant coded data extracts within the themes. The use of a thematic map or visual aid was helpful at this stage to help sort the different codes into themes. After having developed a set of candidate themes the next stage involved refining those themes. The next step once I had a good idea of my themes and the story they told about the data, was to define and name each theme. I was able to describe each theme in a couple of sentences, along with a punchy, concise name that gave the reader an idea of what the theme was all about. The final step was writing the report. The writeup provided vivid examples of extracts to demonstrate the theme I illustrated. The analytical narrative must go beyond the data and make a statement in regard to the research question.

During all of this process, I continued to consider reflexively and maintained an audit trail of all my actions. This process was of my own devising. The literature had a number of different approaches to this data management phase of analysis (see Belotto, 2018; Roberts et al., 2019; Trainor & Bundon, 2020), but they all seemed very unwieldly to me as I was intent on not creating an extensive codebook.

Trustworthiness

Creating a research study is a daunting task, not one to be undertaken lightly. As such, researchers should strive for the highest possible quality and would want that reflected in the respect given to superior research. In a qualitative study there are not many measures of quality because of the nature of the endeavor. It is not like a quantitative study where such perspectives as rigor and validity are measurable and can provide quantifiable indices of credibility. There are even more cognizant reasons to be concerned about trustworthiness (Stahl & King, 2020). Quantitative studies rely on a standard structure and readers know what to expect in a written report, not usually the case with a qualitative study. Another issue is that qualitative research does not strive for replicability as quantitative studies do. For most qualitative researchers, reality is constructed, validity is not a qualitative goal as it is for quantitative researchers. In a qualitative study there are much fuzzier criteria to measure trustworthiness: credibility, dependability, confirmability, and transferability.

Credibility

Credibility is concerned with the congruence of study findings with reality (Stahl & King, 2020). Another way to look at this is to say that when readers observe the experiences, they recognize them (Nowell et al., 2017). Credibility is considered the most important of the trustworthiness criterion (Connelley, 2016). One method of ensuring credibility is through triangulation or having several sources from the field. There are many forms of existent triangulation among which are methodological, data, investigator, theoretical, and environmental triangulation (Stahl & King, 2020). For a single researcher study as this one, data triangulation (i.e., data from transcripts, observations notes, and journal entries) is the most logical choice. Another method to pursue credibility is through prolonged contact where the researcher would be engaged on site with participants for long-term, persistent observations. This is not going to be possible in this study where participants' contact will be entirely by phone for brief periods of time. Member checking is another technique to ensure credibility by testing findings and interpretations with participants (Nowell et al., 2017). Continuing data collection and analysis until a saturation point has been reached is another strategy for establishing credibility as well as peer review with colleagues which can establish a detached reaction to research procedures and findings. Reflexivity is a self-critical account of research process and can be a critical step in creating credibility.

Transferability

Transferability refers to findings that can be applied to other settings or groups (Cope, 2014). This is different from quantitative generalization in that the readers of the research actually determine how applicable the findings are to their own situation (Connelly, 2016). This is accomplished through a number of strategies. Researchers support the issue of transferability by providing rich, detailed descriptions of the location, context, and people being studied. It is in this way that the reader can determine if the original research has applicability to the new field of study.

Dependability

Dependability might be called the trust in trustworthiness. It refers to the stability of the data over time and the conditions of the study (Connelly, 2016). Triangulation is one strategy that can produce this feeling of dependability. Achieving the same results via several different approaches gives credence to the idea that the data is stable and dependable. Another way to demonstrate dependability is for the study process to be audited (Nowell et al., 2017). An audit trail of process logs and the researcher's reflexive journal to name a few items, provides evidence of the choices and decisions made throughout the study. A study and its findings are auditable when another researcher can clearly follow the decisions that were made.

Confirmability

Confirmability refers to the researcher's ability to show that the data represent the participant's responses and not the researcher's biases or viewpoints (Cope, 2014). One way of determining this is through examination of the researcher's reflexive journal and the audit trail. Through examination of the trail of records, the reader should be able to determine if findings are supported by the research and derived from the data. As only a single coder coded the interviews in this study, intra- and intercoder reliability are not applicable.

Ethical Procedures

No agreements exist as to participant access. Participant recruitment consisted of distribution of a flyer throughout the independent living area of the retirement facility. The IRB approval number and date will be included on all materials used for recruitment and provided to the participants. I recruited a vulnerable (older adult) population in a retirement community. To limit exposure to COVID, I restricted recruitment to independent living adults (excluding assisted living, memory care, and health care) who meet the following criteria: Age 65 years old or older; living as an independent adult at the retirement facility since January 1, 2020; no self-reported cognitive decline; and able to speak and read English.

I talked to potential participants by phone when they called me in response to the flyer. I then emailed or postal mailed them a copy of the informed consent document. If they consented, they acknowledged this by phone, at which time we set up a date and time for a phone interview. I recorded that informed consent was received by telephone from the participant and the date and time.

I was unknown to these participants and thus do not foresee any privacy or power issues. However, if issues arise during the interviewand a participant discloses any information that would be detrimental to the safety of themselves or others (e.g., elder abuse), I would be obligated to report it to the appropriate authorities. Regarding treatment of data, upon receipt of the informed consent, I assigned a code ID to the participant, and they were known by that ID throughout the study to ensure confidentiality. Since I was aware of the participants' identities, I cannot guarantee anonymity.

Paper and other hard copies of data are stored in a locked file cabinet to which only I have the key. Digital data was backed up to external hard drives and the cloud on a periodic basis. All these data files are password protected with me being sole owner of the password. All study materials, per Walden University's mandate, are retained for 5 years from the end of the study and then destroyed.

Summary

Chapter 3 provided a lens into the methods and procedures that were used to accomplish the study to answer the research question. The purpose of the study was to examine the experiences of older independent living adults who had undergone COVID-

19 and how they had been affected by the experiences. To set the stage to answer this question, first an examination of the research design and rationale were conducted. Having defined the qualitative paradigm, the centrality of the researcher's role in the study was surveyed, emphasizing how researcher bias can influence the study. The core of the chapter was the methodology section where such topics as participant selection, data collection instrumentation (e.g., interview guide), pilot study, recruitment, and data analysis plan were addressed. This was followed by by the section identifying trustworthiness, and ethical issues.

Chapter 3 provided the entry to Chapter 4: Data Analysis. In Chapter 4 I will discuss in detail participant demographics and data collection. This is followed by the data analyses section where I will describe how I analyzed the data I collected. The issues of trustworthiness examined in Chapter 3 will be applied in Chapter 4. The results section will follow and will present data to support each finding. Here will be found any tables or figures that illustrate the results, if appropriate. And finally, there will be a transition to Chapter 5.

Chapter 4: Results

Purpose

The purpose of this qualitative study was to explore the experiences of older adults living independently through the COVID-19 pandemic. In the United States, the COVID-19 pandemic has been ongoing for a number of years, since January 2020. Older adults who have lived through this experience have been hardest impacted by the virus (Garcia-Portilla et al., 2020; Niu et al., 2020) and may have a wealth of data to impart about how to weather similar pandemics. This led to development of the following research question: How do older independent adults experience living during COVID-19?

Preview of Chapter

The chapter begins with a description of the pilot study undertaken to test the interview protocol. This is followed by an explanation of any changes in the setting that occurred during the time of the study. Then, I provide a brief overview of the demographic characteristics of the participants that are relevant to the study.

In the following section on data collection, I discuss the participants in more detail as well as describe what instrument was used for data collection, including location, frequency, and duration, and how the data were collected. Any variations from the plan presented in Chapter 3 are noted and any unusual circumstances in data collection are presented.

In a following section on data analysis, I report the process used to move inductively from codes to themes. Using quotations for emphasis, a description of some specific codes and themes used is provided. Finally, I discuss any discrepant cases, if present, and how they were factored into the analysis.

In the evidence of trustworthiness section that follows, I describe the factors of credibility, transferability, dependability, and confirmability as well as their implementation and/or adjustment to the strategies set forth in Chapter 3. The results section follows, in which the research question is addressed with data, organized by themes, to support each finding. Discrepant cases are discussed as applicable. Tables and figures are also used to illustrate the results as appropriate. I close the chapter with a summary section and transition to Chapter 5.

Pilot Study

I recruited two pilot interview participants from a local CCRC by flyer. Upon their receiving their interest, I sent an informed consent form to their email address and verified their consent over the phone when they called to schedule the interview. At that time, it was also confirmed that they met the criteria as set forth in the flyer. The interviews were scheduled on different days with an expected duration of approximately 1 hour. The interview protocol used in the pilot study consisted of a series of questions that was asked of both participants, preceded by a briefing section. The interviews were audio recorded with the participants' permission.

The purpose of the pilot study was to test the clarity and understandability of the interview questions, gauge the length of the interview, allow me to sharpen my interviewing skills, test the audio recorder, and practice transcription. IRB approval was necessary to conduct the pilot. The results of the pilot study were not included in the data of the final study.

The pilot study did not result in any instrument changes; however, data analysis strategies were affected in the following ways: several different transcription services were tried (i.e., Otter.ai, temi.com, Microsoft Word Transcription, and self-transcription). The self-transcription was the most accurate, but timewise it was exorbitant. Of the other three software services, I found temi.com to be the easiest to use and with fairly high accuracy. The transcript could also be edited while in temi.com, which made for ease of verification. Therefore, the pilot transcripts were transcribed in temi.com.

Another issue that was impacted was the method used to capture the data and the ensuing codes. After much testing, I devised a method utilizing Word; a Word Add-In, DocToolsExtract; and Excel that allowed for the commenting of the transcript in Word, the converting of comments into a Word table, and then copying the results into an Excel spreadsheet. This was a rather cumbersome process, and the results were not particularly noted for ease of use. In the process of coding a pilot transcript, the suggestion was made to try bypassing the Word steps and entering the transcript directly into Excel and coding it there. It was not that simple, but it worked out and that was what I did for the study in terms of inputting and coding data.

Setting

Two significant events may have influenced my interpretation of the study results. The first was that deep into the study I was notified that my second committee member changed. Because this occurred halfway through the dissertation process, I did not know what impact this may have on the study. The second event was that I had major brain surgery in 2022, which impeded my progress. Hopefully, neither of these events had an undue effect on the interpretation of the results of this study.

Demographics

I assigned all participants a code name to ensure their confidentiality throughout the study. Participants ranged in age from 76 to 93 years old, with a mean of 84.3 years. Six women were widowed, two were married, one was divorced, and one was single. It was a homogeneous female population with all participants identifying as non-Hispanic White. Because of the financial requirements of a CCRC, the sample was considered affluent. All participants were retired, though some participated in volunteer work. Regarding education, 50% had bachelor's degrees, 40% had master's degrees, and 10% had a doctoral degree. A table summarizing the demographics is shown in Table 2.

Table 2

Participant Demographics

Assigned Name	Age (*M* = 84.3)	Marital Status	Years at CCRC (*M* = 10.3)	Children	Degree	Specialty
Ann	85	Widow	16	0	Masters	English
Barb	93	Widow	15	3	Bachelors	Psychology
Carol	85	Widow	16	2	Bachelors	Education
Diane	80	Divorced	5	2	Masters	Counseling
Elsa	88	Widow	10	4	PhD	Administrative
Flo	90	Widow	13	2	Bachelors	Library science
Gwen	81	Single	4	0	Bachelors	Nursing
Helen	81	Married	6	2	Bachelors	Occupational therapy
Irma	84	Married	14	0	Masters	Education
Jackie	76	Widow	4	2	Masters	Nursing

A number of demographic/background questions resulted in yes or no answers that did not lead to more in-depth explanation of participants' experiences with the

COVID virus. These questions and the percentage of yes or no answers are reflected in Table 3.

Table 3

Participant Demographics By Percentage

Desc %	Flu shot	Sleep	Tele-health	Health status	Chronic health	Hospital visits	COVID shot	Had COVID	Fallen	Pets	Trans-port
Flu shot-yes	100										
Sleep problems-yes		40.0									
Tele-health yes			30.0								
Health – good				100							
Chronic health-yes					100						
Hospital visits-yes						20.0					
COVID shot-yes							100				
Had COVID-yes								20.0			
Fallen-yes									30.0		
Pets-no										90.0	
Transportation-Self-driving											80.0

Data Collection

Data collection adhered to the plan presented in Chapter 3. Each potential participant received a recruitment flyer. Upon contacting me with their interest, I obtained some basic contact information from them, such as their phone number or email address, and forwarded a consent form to them with the understanding that replying, “I consent,” over the phone would constitute their agreement to the consent form. I then briefly discussed the study, and we mutually selected a date and time for the interview. At this time, I assigned a code name to the participant that would be used throughout the study to ensure confidentiality.

I conducted in-depth, private, telephone interviews with 10 older adults during late April through early July 2022. The examination of the final resulting interviews revealed that I was not encountering any new data and had reached data saturation. The same interview protocol was used with all participants. The interviews were conducted once by phone from my home office and ranged from 20 minutes to 1 hour 20 minutes in length with a mean of 36.6 minutes. The interviews occurred over a 10-week period, one a day, due to scheduling difficulties with the participants. The interviews were audio recorded with the participants permission, using a Philips DVT1150 Voice Tracer Recorder with a Sony ICD-UX570 Recorder as backup.

The resulting audio files were transcribed using the temi.com transcription service. I then verified the transcription against the audio file for accuracy and made any corrections to the transcription file (in Word). The printout of this file was used for entering the individual responses to interview questions in the Excel spreadsheet. When all interviews were completed, there were a total of three spreadsheets with 28 individual sheets representing the 28 interview questions. Each of the 28 sheets contained all the responses for all the interviews related to that question. In this way, I could graphically look at a single question and see all the responses together which made it a lot easier to code the interviews. This process is a variation from the plan presented in Chapter 3, but it did not materially affect data collection. Further manipulation of this data is covered in the Data Analysis section in this chapter.

I encountered several unusual circumstances during data collection. First, there were several occasions of potential participants receiving the consent form and then saying they could not agree to signing it. I explained that it was a standard document, was for their protection, but that if they did not feel they could sign it, they should not. This occurred several times and definitely had an impact on participant recruitment and my morale. Second, another unusual circumstance encountered in data collection was the withdrawal of my primary recruitment facility from participation in the study. This was remedied by recourse to snowball sampling and the recruitment of additional sources where which to distribute flyers seeking participants for the study.

Data Analysis

I listened to each interview within 24 hours of conducting it during the verification process. The second listening of the interview took place after the transcription was loaded into the Excel spreadsheet. A third audio review of the transcript took place before assigning themes to the coded extracts. Because most of the interviews were about half hour in length, this audio review of the transcripts was adequate to identify any issues regarding responses to the questions and encompassed the first step of the thematic analysis process.

Thematic Analysis

Using the concept of reflexive thematic analysis as set forth by Braun and Clarke (2022), the second step was to code the interview. Using the technique of in vivo coding as proposed by Saldana (2016), I examined each sentence fragment of the transcription searching for the verbatim words that would code that fragment. The codes were then transferred, in question order, to a Word table. From this vantage point I was able to scan the codes looking for matches of like or similar codes that were then color coded alike.

The third step in the process was generating the initial themes from the colored codes. This produced nine themes, which was too many for the study; therefore, I combined several codes into six themes. Having identified potential themes that captured the data and addressed the research question, I next collated all the coded data relevant to each candidate theme, again in a Word table. Step 4 consisted of reviewing and developing themes. I looked for whether each theme told a story about the data, and whether it addressed the most important aspects of the research question. The fifth step consisted of paring down, defining, and naming the themes. This step produced the final themes included in the findings. I needed to write a brief synopsis for each theme and then apply a concise, informative name to the theme. As the final step, Step 6, I wrote up my report in which I wove together my analysis, narrative, and data extracts to tell a compelling story about the data set that addresses the research question.

Working from Step 3 of thematic analysis and as an example of inductively determining codes and then themes from the data, I present some participant quotations and codes that led to the formation of the theme of resilience/grateful. In responding to the question about her experiences during COVID-19 lockdown, Carol stated, “I was just so grateful that they started feeding us and taking care of us.” Talking about her emotions during the lockdown period, Carol responded,

> I really tried to be as grateful as my top priority because I just felt like I can’t imagine what I would’ve done on my own, living in a, you know, by myself, um without friends, we didn’t go anywhere. I didn’t see any family, so I was just grateful to be safe and well.

Jackie, while sharing her emotions of gratitude, remarked that “while I felt very alone, I also felt very grateful that I was in a safe, secure place and that I was relatively financially secure.” The themes through all these vignettes was gratitude and resilience. Flo, in responding to a question about what she had learned about herself during the COVID-19 pandemic, said,

> I’ve gotten older. I can’t walk well. I can’t cook very well. If you can’t make an hors d’oeuvre, maybe you’re just going to serve nuts. I’m learning about myself is that I like my old ways. I am not liking diminishing abilities. And I’m getting very lazy.

Helen summed it up by saying, “I’m resilient and can occupy myself.”

The findings for every theme were reserved for the Results section of this chapter; however, I have included one more example to emphasize the importance of quotations in data analysis. Food as a theme appeared frequently in this study and sharing a few quotations will highlight its value. Going to the grocery store was a task of special importance. Gwen mentioned, “grocery delivery service,” while Irma talked about “grocery ordering,” Helen shared about “grocery shopping,” and Jackie mentioned groceries “delivered from various grocery stores.” These were all comments provided by participants about the COVID-19 lockdown and having meals delivered to their residence. Barb was “grateful” that meals were delivered to her apartment. Diane said, “Yeah, man, I loved it. But I didn’t have, um, I, you know I, I limit it to, uh, three or four a week.” Gwen commented that, “people had become too comfortable with meals in their apartment and didn’t want to come to the dining room after COVID.”

Revising and Naming Themes

Step four of thematic analysis, the refinement of themes, and step 5 the naming of themes followed. I started out initially with nine themes, which were combined into six themes as follows: food, self-entertain and virtual church, resilience/grateful, COVID and health, socialization and communication, and emotions. I decided to collapse the food theme into the self-entertain and virtual church theme and rename it self-nurturance. The COVID and health theme I collapsed into a single health concerns theme, and the socialization and communication theme I collapsed into a single socialization theme. This effort produced five single patterned themes as follows: (a) Self-nurturance: This theme encompassed all activity that can be construed as providing aid, entertainment, or nourishment to an individual, (b) Resilience/Grateful: This theme expressed individual gratitude and reliance in the face of the pandemic, (c) Health Concerns: This theme expressed COVID impacts of the pandemic and any direct effects it may have had on individual health.,(d) Socialization: This theme addressed social interaction of all types for individuals who were affected by COVID, (e) Emotions: This theme explored the feelings that residents may have experienced during COVID. There were no discrepant cases noted during this study.

Evidence of Trustworthiness

Qualitative research is valued throughout many disciplines of the social sciences, and it is crucial that it is conducted with rigor and method such as to yield meaningful results. Demonstrating through their data analysis a systematic, disclosure of their methods of analysis in enough detail, qualitative researchers help the user of the material to determine if it is credible. The standards of credibility, transferability, dependability, and confirmability as set forth in Chapter 3 of this study have undergone implementation of and adjustments to their strategies while under the focus of data analysis. This section aims to highlight those changes that have occurred.

Credibility

Because one method of ensuring credibility is through triangulation, two sources of this became important in Chapter 4, data triangulation and investigator triangulation. Data triangulation was accomplished through the use of data transcripts, observation notes, and journal entries. Whereas investigator triangulation was the method that involved the researcher as the principal investigator, the Dissertation Committee Chair as investigator supervisor, and the Second Committee Member as adjunct investigator. The university research reviewer could also be considered a member of this triangulation team. Another credibility criterion that I used was data saturation in determining after ten interviews that no new data was forth coming. Peer debriefing was conducted after every interview and provided a check on the research process. Additionally, participants were promised a synopsis of the findings at the conclusion of the study, which is another way I engaged with them over the long term. Finally, maintenance of a research journal where I kept an audit trail of the study process and a file of reflexive memos written at perilous times all promoted credibility to readers of the study.

Transferability

I achieved the goal of transferability through providing thick descriptions of data collection and of methods in data analysis so that the reader can determine for themselves if they want to transfer the findings or original research to their new field of study. This material was not only prepared in the study itself but also in other auxiliary materials such as research journals and memos.

Dependability

Triangulation is one strategy that can produce dependability, as mentioned above in Credibility. Another method to prove that the data is stable and dependable was to allow for the process to be audited by providing an audit trail. This involved not just keeping a research journal where decisions made about methodological issues were kept, but also any memos written, transcripts, records of the raw interview data, and a reflexive journal. In any words, anything that could provide a clear trail of the research process and could allow another researcher to follow in my path, foot by foot.

Confirmability

This criterion depended upon the other three being achieved because it was concerned with how my interpretations are clearly derived from the data, requiring me to demonstrate how conclusions had been reached. It is important to show that participant responses were represented not researcher bias in the data. The data analysis section showing how I inductively moved from codes to themes is one way I implemented confirmability.

Results

This results section will address the research question with data organized in patterns that appear as themes. This patterning was chosen as the most efficient and clearest way to present the data to support each finding.

Health Concerns

COVID-19 as the research question noted was central to the case of this study, so important that a theme, health concerns, was developed around it. It not only reflected the disease that was invading the individual, but the theme also encompassed any direct effects on a person's health. Not everyone thought alike when it came to questions about COVID, as illustrated be these responses when queried about how they handled the COVID experience. Carol talking about her experience remarked, "so I was very isolated in one respect to the fact that I felt safer because I was not exposed to anyone." Far from feeling safer, Ann had a different reaction:

> I must confess at the very beginning. I was, I suppose I might describe my feelings as scared. Uh, and the first time we got a notice from … saying that we had a case on campus, I took it very seriously. Okay. And I was alarmed.

This rather covered the extremes of feelings about COVID, some feeling safe and secure in their facility and others feeling apprehensive, scared, and alarmed. A feeling expressed by a few residents was that COVID was brought in by workers or caregivers and not by residents. There was fear that neighbors might harbor the virus and infect them. Another common response was frustration at those who did not get vaccinated. However, all interviewees unanimously responded that healthcare providers whom they had to visit during this period were following CDC mandates for masking and social distancing, with some facilities even going further. Carol replied to this with:

> Uh, well had to wear mask. You had to be tested. Uh, I noticed that the waiting room had many chairs in between, and we were always instructed to come alone, not to have people with you.

According to these responses, COVID was not an overwhelming, negative experience, although there is one postscript about enduring the pandemic, when Carol remarked:

> I guess you can function better by yourself than you thought you could. I would, would want to, I guess, uh, I didn't. I do miss, I did miss the interaction with my friends at church. As I say, with friends, dining by yourself, eating by yourself is is boring. And as you, you do have a spouse and you don't understand how you can go for a whole day and not talk to people. And it's, that's just not good. <laugh> that is not good. So, I think people who live alone, um, have a real different aspect of COVID than those of you who had, who had a, someone to live with. I will say that.

Moreover, Flo digressed when she talked about health concerns, “Good. Trying to adjust now to the change, going back to what was normal, you know, our whole life is a shock.” There is no question that the COVID-19 pandemic had an impact on these residents that they will little forget. Elsa, was a figure of note in that her husband was in hospice, “And, uh, I had to have COVID shots to be able to see him,well having, every time I went to visit him, uh, we had to be tested” Residents incurred the effects of COVID and its health concerns in a variety of ways all of which had a determining factor on their reaction to the impact of the pandemic.

Self-Nurturance

One of the themes developed from the study data was that of Self-Nurturance or taking care of oneself in the midst of the COVID-19 pandemic. This took several forms among which was virtual worship. For all of the residents who still actively participated in worship services, the religious organization provided these services in a virtual approach. This took various forms such as Zoom meetings or televised services. All residents remarked that though they were once very involved with their church, the pandemic had resulted in their only going to church virtually.

A topic of widespread interest among residents was that of food and its different delivery options. During COVID lockdown, meals were prepared centrally and delivered to residents' dwellings; the dining rooms were closed. Jackie stated that "and I felt very fortunate that, uh, that we at least got, you know, one meal a day and usually some little things tucked in there that you could snack on later in the day." However, as Carol protested, "eating by yourself is boring." During this lockdown period, a system was set up to take grocery orders, have the grocery fill them, then return them to the resident. This was a great help to those who had no acquaintances outside the facility who could perform this task for them. Helen was fortunate in having a good friend to perform this service, as she says:

> Um, during the lockdown, we couldn't go out and go grocery. And so, a good friend of mine from the church, um, would get my list and she would go get the groceries and then leave them at the front gate and they were delivered to me.

> And then I would write her a check for what she spent. That was a, a wonderful godsend.

When the lockdown was lifted, residents were still very cautious and did not go out to many restaurants to eat. However, the grocery store still maintained its place of prominence in residential life, as Helen remarks:

> I felt like I had been sprung <laugh>um, we didn't have to go around in masks all the time. Then after that, um, we were able to go to dinner and socialize at that time. Um, let's see, we were able to leave the facility and go grocery'n for ourselves.

Perhaps the most striking object of self-nurturance was the ability of residents to self-entertain themselves, especially during the lockdown period. Ann put it very succinctly when she said, "Unlike, uh, many people, I did not suffer from loneliness. Uh, I can always read, I do a Sudoku every day." Other residents thought of chores and things they could get done. Another resident, Irma, remarked that at her age she was happy to have the time with her husband.

Resilience/Grateful

One of the distinguishing features of this study was the resilience of the participants in the face of a life shattering event such as the COVID pandemic. They were not only resilient, but a majority (*n*=10, 60%) of study participants specifically expressed being grateful for the way their facility took care of them during this crisis. Carol expressed this as, "Well, I really tried to be as grateful as my top priority because I just felt like I can't imagine what I would've done on my own " Barb in response to having meals delivered to her dwelling said she was, “Grateful.” On the same note, Jackie remarked, “Well, I was very grateful for it. I was very grateful.”

However, it was the resilience that was remarkable in these older adults whom one might have thought had the most to be worried about with the virus striking their cohort so devastatingly. Gwen expressed her feelings about this; “so, um, I just kind of went with it. …I didn’t get real stressed out with it. It, it was you know, I accepted it for what it was. And did what I had to do.” Expressions by various adults such as “Be patient,” “Can deal,” “Get things done,” “Follow through,” “Patience,” and “Stronger person,” all were indications of a mindset of recovering from the ravages of the virus.

What was most illuminating were the remarks these older adults made when asked what they had learned from their experiences of the COVID-19 pandemic. Carol remarked, “I guess you can, I, I guess you can function better by yourself then you thought you could.” And Gwen had the following insight:

> I guess part of it was, is that I can, I can cope with anything without too much, uh, without getting, uh, um, too upset about, about it. Um, you know, kids, that’s the way I’ve always been, if I can’t do anything about it, I don’t let it stress me out.

Helen invoked the Almighty in recollection, “That whatever life throws in my direction, God and I can take care of it.” While Irma focused more on self-resilience in saying:

> I think I have learned that I can deal with more things than I thought I could and that I am able to take over more and be more take over and get things done and follow through on things. Yeah.

Flo summed up all these feelings by saying:

> I've gotten older. I can't walk, well, I can't walk. I can't take my two mile walks every day. Um, I am getting, um because I can't um, I can't very well. Um, I'm missing things that I used to do that I liked doing that actually, you know, if you can make an hors d'oeuvre where you can invite people over and if you can't make an hors d'oeuvre anymore, um well maybe you're just gonna serve nuts.

I think that summarized the feelings of study participants, "If you can't serve hors oeuvres, then serve nuts" and get on with life. Finally, Helen, in being asked does she have anything further to add to the interview, closed with these remarks:

> Well, I know that I can go through, you know, a crisis like that because I have already done it and come out on the other side, none the worse for wear. So, so whatever comes up in the future, I think I'll be able to manage.

This is the resilience of a generation that survived the Great Depression, WWII, the Korean War, the Vietnam War, and all the turbulent years between and since.

Socialization

A prominent feature of the COVID-19 pandemic was its impact on residents' social activities and relationships to other people. This had both positive and negative influences on participants' lifestyles. From the negative perspective there were missed family events and holidays, a lack of sociability in not being able to visit neighbors or friends, or just being able to talk to someone. Flo, in remarking on the isolation of lockdown remarked, "I actually sat down and made a list of people I might still know because, um, it seems like I don't know anybody anymore." Helen shared an anecdote that brought home the serious nature of the lack of socialization:

> I was the, um, social chairman in our building at the time [lockdown]. And the only thing we could do was have, um, ice cream socials on each floor and individuals would come get their ice cream and go back to their room. There was no socializing, so that was different. Okay. It was hard to have get togethers, you know.

Some residents remarked that they just lost touch with people during the lockdown, as Jackie said, “I think in some ways, um, you know, I’ve lost touch with people.” For missing family events, Jackie missed her mother’s funeral and Barb missed her sister’s funeral, all because of COVID. Carol stated that she did not go to the lake with her family as usual. The list could go on, but what is evident is that the pandemic had a deleterious effect on facility residents that they would not forget.

Yet with all this going on around them, residents found positive reasons for socialization during the pandemic and especially lockdown. Gwen found solace in friends via the telephone, “you know, of course the telephone, I did a lot of calling people, calling each other, and talking.” Irma reaffirmed this with the remark, “also it was interesting how many other people, all of the friends would call each other and keep in contact. And that really helped a lot, you know.” It became obvious that the telephone was a lifeline for many residents during the pandemic as Gwen relayed:

> on my 80th birthday, normally my family would’ve gotten together, and we didn’t, but I had a lot of phone calls that day and calls from cousins I hadn’t talked to in a long time. And everybody that knew it was my birthday, friends, and all called me. So, I had a really good, good day.

When quizzed about how they communicated with family and friends, all residents admitted to using the phone and the majority (*n*=10, 80%) said they used email or texting in addition. One residents' family uniquely uses FaceTime, "every Sunday night, the whole family gets together and plays bingo." Another resident who had some virtual students, set up Zoom to communicate with them. Helen spoke to relationships by stating:

> I kept my relationships going, you know by the, with the texting and the Zooming and that sort of thing. And, um, so I, I don't think it affected, I mean, nobody has, uh, told me they weren't going to talk to me anymore or anything like that.

Though only one resident in the study had a pet, another resident commented:

> And I think people with pets perhaps have done better than people without pets. And I don't know whether you're finding that, but I found a, you, it was more sociable because some people were out walking and, they would walk down the street and then they would stop to talk because the dog wanted them…

Emotions

Stress and Coping

Each participant was interviewed on a series of emotions as to whether they had any of them since COVID. The first emotion queried was stress and coping. Several people indicated that they did not incur this emotion during COVID, but most dealt with stress and coping in some way. Gwen who was very ill during COVID said:

> Oh, coping. Uh, well, you know, that was when I was sick. Um, um, with the, um, Guillain Barre Syndrome, when I, you know, came through that was stressful and, and, uh, I just had to cope with what they told me to do.

Helen was stressed with dealing with her husband because she couldn't rely on anyone else to help her. Irma remarked, "Stress <laugh> um, well of course it was, there was some stress, it was an entirely different lifestyle, but you can deal with it." Jackie dealt with stress and coping by, "making sure that the things that I watch on TV or read at night are a calming, you know, they're not thrillers or something <laugh> or are really sad, tear-jerking movies."

Depression

The majority (*n*=10, 90%) of residents made no claim to being depressed during COVID.

Anxiety

A minority (*n*=10, 40%) claimed no anxiety with regard to COVID. However, the majority of residents had some anxiety. Gwen stated, "I had anxiety when I was, they were taking me off the ventilator cuz I was in trouble breathing…Um, that was, that was probably the most anxious I've ever been in my life" For Jackie, anxiety stemmed from, "the loss of my husband, loss of my mother, loss of my dog, loss of my freedom…one of the things that was hardest for me to deal with was loss of my autonomy."

Anger

The majority (*n*=10, 80%) of residents stated they had no anger during COVID. One resident remarked they were angry with the government and another with their personal situation, not COVID.

Fear

As with several of these emotions, residents would confuse one emotion with another. This occurred frequently with fear. Ann was straight forward when she remarked, “I was fearful of it [COVID]. I was very annoyed with people who did not get the vaccination.” Carol was afraid of going to the hospital, “I was very afraid of like falling and being sent to the hospital and having to deal with all of the illnesses of COVID at the hospital. I did not want to be sent to the hospital for any reason.” Diane also had fears about her health, “Well, there wasn’t about COVID, but it was fear that I couldn’t do a lot of not knowing what I could really do because I have to be so careful, and I can’t twist certain ways and so forth. So, it was all related to my back, not COVID.” Gwen certainly had fear when she woke up and was on a ventilator, as she tells:

> During that time too, there was fear…when I, um, woke up and was on the ventilator, I couldn’t talk and couldn’t move anything and just saw my relatives, then I thought, well, I don’t know what’s happened. I know something was going to happen and that whatever it is bad. And I just have to do what I can do.

Irma’s fear was for her husband who was dealing with cancer; it was the only thing she was really afraid of. Jackie was at lengths to describe her feeling as anxiety and not fear, saying, “I don’t know that I’d call it fear. I had anxiety. I was anxious that I might get COVID. I didn’t want to get it. I didn’t wanna transmit it to someone else.”

Grief

This was an emotion that touched the lives of many of the residents. Ann was sad about losing close family members and friends. Diane with her back surgery grieved having to use a walker. Else whose husband was in hospice, grieved his dying. Flow lost her husband during COVID, and commented:

> consider death, as I’ve said with the whole population. I mean that’s more distressing, um, to lose so many people that you’ve known, the people that you’ve eaten dinner with, the people who’ve come for wine, who are no longer here. The memorial service at the end of year was really quite staggering, the number of people I knew, who were no more. It’s gonna take a lot of resurrecting to get a life back.

For Gwen who had suffered so much from Guillain Barre Syndrome, another blow came when during COVID her brother had a stroke and then succumbed to COVID in a nursing home. Jackie’s grief came in waves as she first suffered the loss of her husband, then her mother, and then her dog. As she put it:

> I was up than I was down, and I was up than I was down, you know, um, you’d get through one, one scenario and think you’d cope with that. And then something else would kind of hit you in the face, you know? So, emotional rollercoaster.

Loneliness

As with grief, loneliness resonated with most of the study participants. Barb in answer to the question on loneliness said she felt loved by her sister. Diane responded interestingly that loneliness caused her to grow her introverted side. Flo remarked that, "I felt a lack of being able to have somebody come to visit or to go and visit. Um, and, um, you know, I mean, people were afraid. Um, so it was not a social time. It was a time to be lonely." Helen said, "you can be lonely when you're in a room, some full of people." And Jackie who had lost so much in such a short time, said, "I'm still lonely. Uh, not, not to the extent that, um I was, but, um it's a whole new way of life for me. And I guess, um you know, I probably wasn't ready for it."

Others

As a final question on this topic, I asked the interviewees if there were any other emotions they could think of that hadn't been covered. Ann stated, "I did feel very strongly about those people who didn't get vaccinated because I thought they jeopardized others' lives." Barb was happy to come to a facility like a CCRC where you can make new friends. Carol admitted that "I think I lost a lot of confidence. I realized that I had kind of lost my ability to have a good conversation with people, I had been, you know, so without really talking to people" Elsa commented on, "The lack of, uh, sociability, uh, because the restrictions in the dining room" Helen described impatience as an emotion, stating, "I'm not a patient person. My mother used to say, I hit the ground running, you know <laugh>." And for Jackie, she was finding adjusting to widowhood is very different for different people.

Summary

In this chapter I summarized details of the pilot study, discussed the setting for the study, and highlighted the demographics for study participants. In addition, I reviewed the data collection process set forth in Chapter 3 and presented the data analysis process used to develop study themes. The strategies of trustworthiness that were implemented in the study were discussed and finally the results of the study were presented.

The results were arranged as organizing themes in order to support the findings, supported by quotes. The first theme was health concerns, which encompassed both the COVID-19 virus and its variants, but also direct effects that may exist on a person's health. Extremes of feeling about the virus were explored as well as an observation about the role of single women during the pandemic. Several quotes were used to show the variety of health concerns that residents faced.

The next theme to be covered was self-nurturance, the act of caring for oneself during the COVID pandemic. An initial discussion of the role of the virtual church in residents' lives was followed by more extensive coverage of food and its delivery options. Having meals delivered to their dwelling and groceries ordered and picked up did a great deal to ease the burden of the pandemic on many study participants. Additionally, a discussion of the ability to self-entertain to ward off loneliness ensued.

A theme of resilience/grateful followed, remarking first on how grateful many of the residents were for the way their facility took care of them. However, it was residents' resilience that was most notable in this theme. Enumerable quotes attested to participants' abilities to "Get things done," and "Follow through." Having heard of the Greatest

Generation I believe that I was interviewing many members of that cohort for my study. As Queen Elizabeth II exhorts, “Don’t complain. Don’t explain,” and I think study participants followed this maxim.

Socialization was another theme that brought home the vicissitudes of the pandemic. In a negative way residents missed family events and holidays, there was a lack of sociability in being able to relate to neighbors or friends, or just being able to talk to someone was a dire need. However, on the bright side the use of the phone, email, and texting was widespread and helped to maintain relationships with family and friends. One resident commented that she thought people with pets did better than those without during COVID.

The final theme, emotions, developed a little differently because of the list of emotions, each of which was to be addressed separately. Stress and coping were triggering emotions that several people shared how they handled stress in a COVID environment. Depression was denied by 90% of the residents. Anxiety was claimed by just over half (60%) of residents with several sharing their anxiety provoking behaviors. Anger similar to depression was denied by 80% of the participants. Fear, however, invoked numerous responses with definite fear of COVID or its consequences. Grief had touched the lives of many of the residents. From those who suffered personal loss to those who suffered physical pain. Loneliness was an emotion that was felt by most of the residents, a result of COVID. Finally, several residents came up with other emotions that were not covered in the list I devised, such as “loss of confidence,” “lack of sociability,” and “impatience.”

Chapter 5 addressed the findings in ways that extended the knowledge of the discipline as compared to the Chapter 2: Literature Review. This chapter included my interpretations of the findings with regards to the theoretical framework, limitations of the study regarding trustworthiness, and recommendations for further research. Implications for positive social change were described, and a strong conclusion was developed.

Chapter 5: Discussion, Conclusions, Recommendations

The purpose of this qualitative study was to explore the experiences independent living older adults had with the COVID-19 pandemic. In this study, I used the basic qualitative design tradition set forth by Merriam and Tisdell (2016). Using a flyer and snowball sampling, 10 participants were recruited until data saturation was reached. The participants met the age criterion of being 65 years old or older, could demonstrate having lived in their facility since COVID-19 lockdown, showed a command of English, and had no cognitive impairment. Each participant was interviewed with a set of 28 semistructured questions, with interviews lasting from 18 to 80 minutes ($M = 36.6$ minutes). Participants ranged in age from 76 to 93 years old ($M = 84.3$ years) and had spent a range of 4 to 16 years in their facility ($M = 10.3$ years). All of the participants were White females comprising six widows, two married women, one divorced woman, and one single woman. The experiences of older adults were collected through the interview responses of the participants. I answered the research question of the study through analyzing the participants' interview responses.

In summarizing the findings of this study in this chapter, I present them in terms of the themes that were developed during data analysis. The first theme, health concerns, confirmed what was expected in older adults that suffered from the impacts of the COVID-19 pandemic. However, what also became apparent was that many residents did not find the experience to be entirely negative. Another finding was that the study sample was primarily made up of single women who experienced the COVID-19 pandemic differently than an individual living with a partner. Having someone to live with through this experience appeared to help to mitigate the effects of the pandemic to some degree. Multimorbidity was an issue that was not confirmed by the sample who responded that their health was "good." Considering chronological age, chronic health status, and record of recent falls, I determined that the sample had a low biological age (see Dent et al., 2019). This sample of residents indicated that the stress of the COVID-19 pandemic had not disrupted their sleep.

The theme of self-nurturance showed how residents took care of themselves during the COVID-19 pandemic. Briefly touched upon was the concept of the virtual church, which replaced in-person worship for many of these adults. However, it did not replace the entire church experience that many participants previously experienced who were very involved in their church activities. A topic of wide interest and concern was food and how it was delivered to the residents. Residents took a great interest in the meals that were delivered to their dwellings and appreciated them. Of ever greater interest, was the creation of grocery shopping services by a number of facilities, who would take orders, shop for groceries, and then deliver them to the residents. This was often the only outside contact many residents had during COVID-19 lockdown, and they were generous in their praise of the service. Of particular note, when exploring the theme of self-nurturance, was the ability of residents to entertain themselves. Several residents commented that they did not get lonely because they could entertain themselves.

One of the distinguishing features of the theme of resilience/grateful was how grateful residents were for whatever they had, be it delivered meals, shelter provided by the facility, or generally how the facility took care of them during the crisis. However, it was the resilience of these older adults that struck me as I interviewed different residents. They were subjected to a constant news barrage about how deadly COVID-19 was to older adults, yet these adults carried on without stressing and often placing their faith in a higher power. One resident's pithy remark, "if you can't make an hors d'oeuvre, then you're just gonna serve nuts," summed up the attitudes of this group of residents. I was reminded that these older adults were the vanishing breed of what has been called the Greatest Generation.

COVID-19 had a particular impact on residents' social activities and relationships, all part of the socialization theme. As a counterfoil to the resilience noted under the resilience/grateful theme, here residents expressed missing family events, losing touch with people, being locked down in their apartments, and the inability to attend family funerals. The lack of socialization was real; however, the telephone played a key role in connecting friends, family, and community. Texting, emailing, Zoom meetings, and Facetime all played a role in bringing people together. Regarding the role of pets in the pandemic, one resident commented that she thought people had done better who had pets.

The final theme of emotions was asking participants to affirm if they had a series of emotions during the COVID-19 pandemic. Stress and coping were dealt with by most residents, although a few denied having this emotion. A majority of residents denied having the emotions of depression and anger. This was a surprising finding, and I discuss it in greater detail in the Interpretation of the Findings section. Some participants claimed they had no anxiety with regard to COVID-19; however, the rest of the residents had some anxiety. One resident who was on a ventilator suffered a great deal of anxiety when she was removed from it. Another resident who in a short period lost her husband, her mother, her dog, and her freedom, endured a significant amount of anxiety. Fear was experienced by a number of residents, but it was usually not fear of COVID-19, but rather of some underlying health problem. Grief was endured by many of the residents. The loss of close friends and family, health concerns, and attending memorial services for large numbers of people all weighed heavily on people. As with grief, the emotion of loneliness resonated with a majority of residents. They expressed their feelings of loneliness in a myriad of ways.

Interpretation of the Findings

Health Concerns

As was reviewed in the literature, older adults in independent living communities confirmed they were affected by quarantine because of the unique features of their isolation (Kotwal et al., 2020). Impacts such as: (a) social distancing and travel restrictions, (b) school and business closures, (c) cancellation of recreational activities, and (d) fear of shortage of basic living needs weighed heavily on the older adult, and their experiences were the focus of this study (see D’Adamo et al., 2020, p. 913). The findings related to the theme of health concerns confirmed that older adults suffered from the influence of the COVID-19 pandemic (see Garcia-Portilla et al., 2020; Jewell et al., 2020; Niu et al., 2020). However, one finding that had no support in the literature was that single adults would experience the pandemic very differently than adults with partners. The lack of a partner to share the lockdown and further pandemic with was keenly felt by many of the residents. This finding extends the literature as described in Chapter 2.

Another finding of interest was regarding multimorbidity. The literature indicated that health behaviors, including COVID-19, were a leading cause of illness and death in the United States (Mokdad & Remington, 2010). However, the current findings showed that all of the residents considered their health to be "good." The residents had some underlying physical ailments but nothing that was life threatening. Likewise, concerning biological age, the residents confirmed that their chronological age, chronic health status, and the fact few had any recent falls, meant that their frailty status was low. This confirmed the view of low biological age as stated in the literature (see Dent et al., 2019). Low frailty equals low biological age, which results in good health. Sleep was another biological variable that was examined, and I found that lack of or difficulty sleeping was not a concern for most of the participants, disconfirming the previous findings indicating that the stress of the pandemic would affect sleep quality (see Sella et al., 2021). Summarizing these findings, it was apparent that this was a physically healthy sample.

Self-Nurturance

Self-nurturance, or the ability to care for themselves during the COVID-19 pandemic, was barely touched upon in the participants' responses. During a pandemic, worship services could be conducted virtually by television, Zoom, or some other medium, and this virtual church was a finding that extended the knowledge in the discipline. While food was mentioned only in passing, the study results extended the knowledge in the discipline by confirming the prominence of food to facility residents (see Ayalon, 2016b). Self-entertaining in terms of loneliness was only dealt with in the literature as programs to mitigate loneliness (Cacioppo et al., 2015; Smith, 2012). These programs focused on social support for older adults in distress. There was no sense that self-entertaining could be a way to self-motivate the abatement of feelings of loneliness, as reported by many participants in the current study (70%), thus extending the knowledge in the field.

Resilience/Grateful

One of the findings that extended the knowledge in the discipline was how grateful the residents were for whatever they had, whether it be meals delivered or shelter provided by the facility. Resilience was described as the ability to cope with difficulties across the life span (Chen, 2020). PeConga et al. (2020) identified resilience as a normal response to trauma. I was constantly reminded of how strong and resilient every one of the participants in this study were in their experiences with the COVID-19 pandemic.

Socialization

The findings of social support provided to participants confirmed the stress buffering hypothesis of Cohen and Wills (1985). The authors identified two models in which social support had a beneficial effect on well-being: (a) the buffering model, in which individuals only received support when under stress and (b) the main effect model, in which an individual had social resources depending on whether they were under stress. The findings of the current study confirmed both models in that participants in the buffering model missed family events and holidays, suffered a lack of sociability in not being able to visit neighbors or friends, and missed just being able to talk to someone in person. Yet, in the main effect model, participants found positive reasons for socialization during the pandemic and lockdown. It was here that the telephone and other electronic media played an important role in aiding in how participants communicated with family and friends and kept their relationships going.

Pet ownership was neither confirmed nor disconfirmed because only one resident had a pet, though that participant stated that having a dog was beneficial to her. Several people had pets in the past, and in all cases, they remarked that owning the dogs had been a positive experience.

Emotions

Stress and Coping

The findings confirmed that participants used many of the coping strategies to deal with stress, as related by Sameer et al. (2020). These included watching television, doing chores, clearing up unfinished work, and social networking.

Depression

The findings disconfirmed the literature on this emotion in that a majority of participants (90%) denied having this emotion. Because this was a surprising finding, I went back to the literature to see if I could find an explanation. What I found was socioemotional selectivity theory (SST), which is based on an individual's ability to determine their time left in life and the greater impact this time left has on goals than such measures as chronological age do (Carstensen & Hershfield, 2021). One consequence of this theory is the positivity effect, which is an older adult's selective attention to and remembering positive information more than negative information (Reed et al., 2014).

Moreover, there is also the issue of stigma as it relates to depression. Wolpert (2001) stated “that my public declarations that depression is a serious illness and should carry no stigma are not as honest as I would like them to be.” Furthermore, Wiley (2003), in a discussion of his own depression remarked, “Until recently, I felt my feelings were a sign of weakness I was not willing to admit.” Finally, the WHO noted that the single most important barrier to overcome in the community is the stigma and associated discrimination towards persons suffering from mental and behavioral disorders (Wu et al., 2017). What this evidence indicates, is that this cohort of older adults may have been brought up in a society that placed a stigma on those who were depressed. If so, they would of course be reluctant to claim that emotion as one of their own in an interview.

Another aspect that may have a bearing on depression is that older people, by and large, do not identify with being “old.” They think of themselves as subjectively younger than they are, with 70-year-olds reporting feeling 15% to 20% younger than they are (Kotter-Gruhn et al., 2016). Therefore, this subjective 70-year-old may not experience the depressive symptoms of their chronological 70-year-old peer. The hypotheses posited by SST have been widely tested (Carstensen & Hershfield, 2021). Based on this theory, the older adult participants may be selectively filtering out the negative emotion of depression.

Anxiety

Sixty percent of the participants claimed having anxiety with regard to COVID-19; however, the rest reported having no anxiety. For the group claiming anxiety, the findings confirm the literature in Chapter 2. Jewell et al. (2020) found that older adults were suffering high symptoms of depression, anxiety, and anger during the early weeks of the COVID-19 pandemic. However, as opposed to previous research, the current study showed that as age increased, anxiety, depression, and stress symptoms appeared to decrease. Therefore, for the 40% of participants who showed no anxiety, this may account for some of the lag, while SST may account for the rest. Future researchers may wish to quantitatively examine this phenomenon.

Anger

Regarding anger, 80% of the participants denied having this emotion. The other 20% of the participants expressed some anger at the government and at the situation they found themselves in, not related to COVID-19. The mechanisms at work above in depression and anxiety may also work here.

Fear

Fear was confirmed by 60% of participants, but although it was not due to COVID-19 it led to frequent handwashing, social distancing, and wearing a mask. The fear was usually due to some underlaying health concern: (a) fear of the hospital, (b) back surgery, (c) being on a ventilator, (d) fear for a loved one who was dealing with cancer, € loneliness, and (f) a fear of those who did not get vaccinated. Fitzpatrick et al. (2020) conducted a study on the diffusion of fear across time and place in the United States.

More than 25% of the entire sample of respondents showed moderate to severe anxiety symptoms, warranting clinical treatment. Based on Fitzpatrick et al. my study confirmed the literature as at least moderate anxiety symptoms were displayed as the consequence of fear.

Grief

Grief was an emotion ex.pressed by 80% of the interviewed participants This confirmed the literature on grief experienced by older adults during COVID-19. One type of grief was the expression of anticipatory grief or the normal loss to an abnormal situation (Ishikawa, 2020). This was expressed by several residents when they talked about the grief they felt over the loss of friends and neighbors to the pandemic. Complicated grief where the individual experienced severe and possibly dysfunctional grief for several months could be seen in the responses of several residents when they talked about the loss of a spouse (Bertuccio & Runion, 2020). On particular note was evidence of PGD, which is the persistent longing for the deceased and the inability to accept their loss, which was evident in one respondent's reaction to a succession of grief events (Goveas & Shear, 2020).

Loneliness

As with grief, 80% of interviewed residents expressed some degree of loneliness. Hawkley and Cacioppo's (2010) defining of loneliness as a distressed feeling from not perceiving that one's social needs are met, adequately explains the loneliness that was encountered by the participants. Some just answered a brief, "Yes," to the question of loneliness, while others elaborated on the question. One resident said she felt a lack of someone to visit and that it was not a social time, but a time to be lonely. Other participants said, that yes, it got lonely, but there were mitigating circumstances that helped to ward off the feelings. One participant admitted that she was still lonely, and it was a time of mixed emotions.

Theoretical Implications

One of the two theories advanced in this study was the BPS model. Findings highlight the conceptual model that was illustrated in Figure 2 in Chapter 1. In that model the entity represented by the BPS model is the individual and their experiences of being assaulted by the COVID-19 virus with the biology, psychology, and social factors actively engaged. The model provided the framework in which to examine the interaction between the bio, psycho, and social, factors which integrate to form a defense against the corona virus.

The findings supported the fact that COVID-19 and its variants were a life threatening and disabling series of virus attacks resulting in a WHO declaration of a pandemic. As of July 22, 2022, WHO reported 6,373,739 worldwide deaths due to the virus, and this figure was probably underreported (WHO, 2021). This study proceeded to explore the variables that comprised the three factors that interact with the corona virus. It was somewhat of a misnomer to say these factors formed a defense against the virus, when in fact some of their variables could amplify the effects of the virus. For example, the variable sleep could both mitigate the virus by getting enough sleep and practicing good sleep hygiene, while it could also make the virus more virulent by not getting enough sleep (Sella et al., 2021).

Engel (1977/1992) paid particular attention to several features of his model, among that it accounted for the patient's cultural context, and that the boundaries between wellness and illness were dispersed by biological, psychological, and social considerations. The exploration of the variables of the biological, psychological, and social factors in this study confirmed these features exist for this model. The exploration of the social factors, particularly, the stress buffering concept, pet ownership, loneliness, resilience, and isolation all contributed to an understanding of the individual older adult's cultural context. The findings support that every examination of a variable, whether biological, psychological, or social supported the concept that there was a diffusion between the boundaries of wellness and illness. A question about an individual's health elicited the response "good," yet further probing almost always found underlying physical health problems. A question about depression was responded to as "none," yet in discussion of further emotions depression would appear. Illness and wellness could not be easily placed in one category or another, but the whole person had to be considered and this confirmed Engel's conception of a BPS model.

The other theory under consideration was Erikson's psychosocial stages of development, in particular Stage 8 (Erikson, 1950.1993). Stage 8, Mature Age, has the opposing tendencies integrity versus disgust and despair. The resolution of this conflict gave rise to the virtue wisdom. That was an abbreviated description of the theory, but it highlights the importance of wisdom. This study was to determine, if it could, if the pandemic aided or hindered the development of wisdom. It accomplished this task through asking two questions, about what had the respondent learned from COVID-19, and what had they learned about themselves from COVID-19. The answers to these questions were some of the deepest and richest responses of the interview. In learning from COVID-19 the answers ranged from, “I can cope with anything without getting too upset about it,” to “Whatever life throws in my direction, God, and I can take care of it,” to “can deal with more things than I thought.” These answers show a level of wisdom and maturity that Erikson was referring to when he talked about mature age. When tasked to answer the second question, some answers were, “I can manage on my own,” to “blessed not to have a negative attitude around life,” to “You get through whatever you have to, won’t have a fourth shot,” to “I’m learning about myself is that I like my old ways, I am not liking diminishing abilities,” to “That I’m resilient and can occupy myself,” to “sometimes I need people’s help, a hard lesson to learn.” Again, these responses show a deepening level of maturity and wisdom in the face of the COVID-19 pandemic that bodes well for their future.

Limitations of the Study

The current study had some limitations. First, the sample consisted of a relatively homogeneous group of White, female, affluent older adults. I tried to inject some diversity into this sample by recruiting participants from geographic diverse sections of the country but was only successful in doing so for three of the 10 participants. Hence, the findings cannot represent older women from different SES and racial and ethnic minority groups, therefore limiting its generalizability. Because of the fact that several recruits denied participation once they had read the consent document, I assume that those who did volunteer were different from those who did not volunteer. Another limitation of the study is that all interviews were conducted by telephone. This medium was chosen because of the risk of COVID-19, but there were drawbacks to not having face-to-face interviews. I conducted face-to-face interviews in my practice and pilot interviews and found them more rewarding in terms of being able to probe more easily. Often, with the telephone, the participant seemed in a hurry to get off the phone. A prospective limitation that did not seem to appear was that of my bias in that I was of the same age and homogeneity as the sample group. I was cognizant of the possibility of this bias at all times and worked to neutralize it.

Recommendations

One recommendation for further research was to gather a more heterogeneous sample of participants. Given that the study was to explore CCRCs and given the affluent nature of their populations this may not be a realistic suggestion. One recommendation for further research based on this current study is to conduct a study on the effect of COVID-19 on the general population, not just residents of retirement homes. Limiting the current study to CCRCs was too restrictive in terms of the type of participants that could be recruited. It is true that the current study filled a gap in literature, but there may have been a valid reason for that. Widening the participant pool may overcome the homogeneity problem that was a limitation of the current study.

Because the current study disclosed a generational bias to the participants, future research may wish to extend the age criterion for the sample. It is possible that a 55 to 65 older adult has a very different outlook on life than one from the studied generation, which is quite a bit older, aged 76 to 93 (i.e., born 1925–1945; Paulsen et al., 2021).

For a small study such as this one I recommend using Word and Excel to organize transcripts, codes, and themes, rather than manually handling these on index cards or sticky notes. I found that the effort I put into creating the Word documents of codes and themes and the Excel spreadsheet of transcriptions paid off handsomely during the writeup of Chapters 4 and 5. The detail of this is contained in the study.

Further research needs to be done on the apparent avoidance of negative emotions such as depression, anxiety, and anger. This was a surprising finding of this study that bears further research.

Implications

The 65years and older cohort of adults is a growing element in this country (Garcia-Portilla et al., 2020). As a society, caring for and interacting with this segment of the social world will become increasingly important. This study by fostering intergenerational communication between older adults and their younger peers shows positive social change. This change comes about through the provenance of government at the local, state, and national levels. Increasingly the older generation will need public assistance and the governing class will be of the younger age group. Without good communication between these two groups there rises the possibility of misuse of public funds and underserved elderly citizens. Anything that assists in crossing this communications divide will be positive social change.

Another implication for positive social change were the findings that older adults responded positively to negative information. This positivity effect has been well researched and has far reaching social implications. Additionally, the SST from which the positivity effect derives, along with time-horizons literature indicated that whereas younger people are drawn to messages that promise adventure and novelty, older people are drawn to emotionally meaningful rewards messages. Taking all of this in, the implications for marketing in any area are significant. Older adults preferred advertisements that focused on emotional goals and also remembered the products that were framed in emotional terms. (Carstensen & Hershfield, 2021). This has implications not only for commercial venues but also for such areas as medicine, preventive health, exercise, and a myriad of other areas. Using data from this study interventions can be planned that will effect positive social change for older adults in health behaviors and health management. This would have rewards for all members of society.

One final thought and that is the wisdom and gravitas that was shown by participants in this study. In this society too often, people are in too much of a rush to pay attention to their elders and what they have to offer, and it is their loss.

Conclusions

This study has helped expand the literature on older adults independently living in CCRCs by defining how these adults experience COVID-19 in their daily lives. An extensive literature search produced no literature on older adults living independently in CCRCs. The extant literature was about older adults living in assisted living or nursing care in CCRCs. Thus, this study filled a gap in the literature. The study findings were remarkable in several ways. They showed the resilience and grit that this 65 and older cohort of adults faced in living with the COVID-19 pandemic. The findings displayed that there was loneliness and grief at loss of family and friends, but resilience helped to buffer these feelings. The findings showed that the participants in this sample were a remarkably healthy group despite a mean age of 84.3 years. A surprise finding was that a majority (90%) of residents had a negative response to depression and an (80%) negative response to anxiety. A literature search turned up a possible answer for this discrepancy, but further research is needed to confirm that older adults have positive reaction to negative information, what is known as the positivity effect.

This study was about older adults, and I finished the study being respectful of the participants that I interviewed. Having been through the pandemic and lockdown myself I had some understanding of what they had been through, and I was very impressed with how grateful they were for what they had and how resilient they were to adversity. I felt honored to have been able to talk to these women and I thank them for volunteering.

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Appendix: Interview Guide

Introduction

Hi, my name is Karen Stanley, I am a doctoral student at Walden University, and I am conducting this study which is examining how older adults have experienced COVID-19 in independent living. The purpose of this interview is to obtain your experiences with COVID-19. You have been given a code number; this will be used throughout the study to ensure your confidentiality – only I and my supervisor have access to this code.

The interview usually takes approximately one hour; it will consist of a series of questions. I will not be taking notes so I ask your permission to audio tape the interview – may I have your permission? Thanks. After the questions, there will be a brief debriefing section. As you were told in the informed consent document, you are not obligated in any way to complete this interview.

Do you have any questions before we get started?

DATE:___________________PARTICIPANT ID:_____TIME:____________AM/PM

RECORDING : ____hrs ______min______sec : INFORMED CONSENT: __________

Questions

Background

1. Can you tell me a little about yourself? Gender, age, ethnicity, education?
2. Where did you come from to this facility?
3. How long have you lived here?
4. Are you originally from this area?
5. Did you work outside the home? And what did you do?
6. Do you currently do any work, paid or unpaid?
7. Are you married?
8. Do you have children? In this area?
9. Do you have family in this area?
10. Do you belong to a local church, synagogue, or religious group?
11. If so, what changes did your group make during COVID-19?
12. If so, what changes in your involvement did you make during COVID-19?

Health

13. How would you describe your health?
14. Do you have any chronic health conditions? If so, what are they?
15. Have you been hospitalized in the past year? If so, how many times?
16. Have you had COVID?
17. If yes, when? Were you hospitalized?
18. If no, have you been tested? When?
19. Have you fallen in the past 6 months? If so, how many times?

20. Do you get an annual flu shot?
21. Have you gotten one this year?
22. Have you been vaccinated for COVID-19?
23. Have you visited any healthcare providers during COVID-19?
24. If so, what was changed?
25. How did you feel about these changes?

COVID-19

26. Describe your experiences during the COVID lockdown at this facility.
27. Please think back over the COVID lockdown period, what were your emotions during this period?
28. What aspects of your life particularly made you feel this way?
29. What did you feel like when the lockdown was lifted?
30. How did you feel about having meals delivered to your apartment after the lockdown was suspended?
31. How has your sleep been since COVID?
32. Have you missed any significant family type events since January 2020?
33. If so, what were they. (For example, baptisms, graduations, weddings, funerals.)
34. How did you deal with this?
35. Did you have any transportation problems during COVID? Explain.
36. Have you used any telehealth applications since COVID? Describe.
37. How did you communicate with family, friends, and the community?
38. By phone, email, iPad, postal mail, Zoom, Echo, or some other way?

39. Do you think COVID, and its restrictions affected your relationships in any way?
40. How would you describe the following emotions since COVID?
41. Stress and coping
42. Depression
43. Anxiety
44. Anger
45. Fear
46. Grief
47. Loneliness
48. Any others?
49. Do you have any pets?
50. If so, what kind?
51. Did you get the pet(s) during COVID?
52. Do you think COVID affected your relationship with your pet?
53. How would you evaluate the way you have dealt with the COVID-19 pandemic?
54. What have you learned from the experiences of the COVID-19 pandemic?
55. What have you learned about yourself from the COVID-19 experiences?
56. Do you have anything else you would like to add?

Actual Study Debriefing

I thank you for your cooperation in participating in this study. All study materials are required by Walden University to be retained for 5 years after the study, and they will be maintained under lock and key. Digital files are backed up and password protected.

Do you have any further questions? If not, I thank you again for your help.

Pilot Study Debriefing

I thank you for your cooperation in participating in this pilot study. All study materials are required by Walden University to be retained for 5 years after the study, and they will be maintained under lock and key. Digital files are backed up and password protected.

I would like to ask your opinion about the interview, particularly the questions; were they clear, understandable, make sense in terms of the general direction of the interview. Do you have any comments to make as to how to make the interviews more informative and easier for all concerned? Finally, is there anything else that you wish to add regarding your interview experience with this pilot study?

Thank you for coming, and I bid you adieu.