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Nursing Faculty Perceptions of Stress, Coping, and Intent to Leave the Profession in the Ongoing COVID-19 Pandemic: A Quantitative Study

LynLee Morgan

NURSING FACULTY PERCEPTIONS OF STRESS, COPING, AND INTENT TO

LEAVE THE PROFESSION IN THE ONGOING COVID-19 PANDEMIC:

A QUANTITATIVE STUDY

by

LynLee Morgan

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Approved by:

Dr. Lachel Story, Committee Chair
Dr. Bonnie Harbaugh
Dr. Mayantoinette Watson
Dr. Hwanseok Choi

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ABSTRACT

The COVID-19 pandemic impacted all of society to varying degrees; this impact was especially true in higher education due to an overnight transition to distance learning and incessant pivots to meet new guidelines and overcome obstacles. Nursing faculty were significantly impacted due to the responsibility of producing safe, qualified, competent practitioners to provide care in the clinical setting. The limitations in or exclusions from clinical experiences combined with the fact that faculty were managing personal concerns and had never encountered these unprecedented conditions exacerbated the challenge of preparing new nurses. This study was critical due to the faculty role and a growing faculty and nursing workforce shortage which poses a threat to the health and well-being of society (American Association of Colleges of Nursing (AACN), 2020; Auerbach et al., 2022; Zhang et al., 2018).

A convenience sample of 81 nursing faculty teaching from January 2020 to January 2023 at all levels throughout the United States. A retrospective pre-test post-test design was used to examine the lasting impact of issues imposed by the COVID-19 pandemic on nursing faculty stress, coping, and intent to leave the profession, compared to the initial onset. Lazarus and Folkman's (1984) transactional model of stress and coping served as the theoretical framework. Faculty's responses to the instruments and open-ended questions aimed to provide implications for future research and practice regarding the lasting impact of COVID-19 on faculty-identified concerns; program development/implementation; and resource attainment for faculty support, recruitment, and retention.

Adaptations of the Cohen Perceived Stress Scale, the State Trait Anxiety

Inventory (STAI®), and single-item indicators were used to measure the variables (Cohen

et al., 1983; Spielberger et al., 1983; Youngblut & Casper, 1993). Open-ended questions

allowed for elaboration and insight into faculty experiences. Data were analyzed using

bivariate analyses, descriptives, and content analyses. The data from the instruments and

comments of faculty were triangulated to further validate the responses. The findings

were significant regarding contributing factors to nursing faculty stress and coping in the

ongoing pandemic, alignment with the transactional model of stress and coping, and

identified recommendations for research and action.

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DEDICATION

With the most heartfelt gratitude, I dedicate this dissertation to God and my

family. Thank you, God, for all the blessings you have graciously bestowed upon me

including the resilience you have instilled through many tears and times of uncertainty.

To my husband, Rocky, there are not words to thank you for the love, support,

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inspires you, especially my children, to chase your dreams. DO IT SCARED; even if your voice shakes, do it anyway! You are good, smart, pretty, strong, and talented enough! Climb every mountain, and never let yourself or anyone else holds you back from your dreams, even if it seems impossible!

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LIST OF ABBREVIATIONS

AACN   American Association of Colleges in Nursing

ADN   Associate Degree Nursing

APA   American Psychological Association

CDC   Centers for Disease Control and Prevention

CINAHL   Cumulative Index to Nursing and Allied Health Complete

COVID-19   Coronavirus Disease

DNP   Doctor of Nursing Practice

GAS   General Adaptation Syndrome

Ed.D.   Doctor of Education

IBM   International Business Machines Corporation

IES   Impact of Event Scale

IHL   Institutions of Higher Learning

IRB   Institutional Review Board

LPN   Licensed Practical Nurse

LVN   Licensed Vocational Nurse

NLN   National League for Nursing

Ph.D.   Doctor of Philosophy

PPE   Personal Protective Equipment

PSS   Perceived Stress Scale

PTSD   Posttraumatic Stress Disorder

RN   Registered Nurse

SPSS®   Statistical Package for the Social Sciences

STEM   Science, Technology, Engineering, and Mathematics

USM   The University of Southern Mississippi

WHO   World Health Organization

CHAPTER I - INTRODUCTION

The complex role and perceived burdens of nursing faculty have been exponentially convoluted by the shift in both personal and professional obligations and expectations since the onset of the COVID-19 (coronavirus disease) global pandemic. Required changes in academia combined with the responsibility of preparing competent practitioners in unprecedented and unfamiliar academic and healthcare settings have been especially arduous for nursing faculty. These professional challenges were onerous to endure as they were further complicated by the reality that faculty were simultaneously facing personal or familial health concerns and resource inadequacies, amongst myriad other real and undetermined threats (Xiong et al., 2020).

Higher education faced unique challenges that resulted in a sudden disruption in the planning and delivery of academic programs. Brooks et al. (2021) identified some of the main challenges as being a:

> rapid shutdown of in-person operations and the move to online forms of program delivery, the continued uncertainty of the safety and timing of a return to in-person education, and the need to modify all in-person activities to allow for appropriate use of personal protective equipment (PPE) and maintenance of physical distancing. (p. 266)

Scott (2020) discusses the seemingly never-ending pivots that were thrust upon faculty with no clear vision of what direction that pivot was headed. Additionally, Scott (2020) reports a great concern about the quality of education being delivered virtually, combined with the lack of social interaction.

While higher education inarguably faced immense challenges, nursing programs had additional unique obstacles to overcome. The expectation for undergraduate nursing faculty to prepare nurse generalists to care for human lives in a relatively short amount of time is a tremendous undertaking under normal circumstances, and the COVID-19 pandemic only exacerbated the pressures for student preparation. Universities closed and hospitals forbade clinical rotations, forcing nursing faculty to shift didactic and clinical instruction to a virtual format in a two-week or less timeframe, when this typically would take months to prepare for and execute properly (Roney et al., 2020). Many faculty were inexperienced with online education and some programs had no electronic learning management system (LMS), which further complicated this rapid transition (Marek et al., 2021).

Risks and fears were present and associated with nursing faculty navigating unprecedented and unpredictable clinical environments with multiple inexperienced students in tow if they were even fortunate enough to be allowed in the clinical setting (Morin, 2020). Additionally, immense responsibility was placed on faculty to ensure proper clinical course expectations and outcomes were met during a tumultuous time. The faculty had to ensure students were ultimately prepared to care for the most vulnerable in both settings and scenarios in which the faculty had yet to encounter themselves and could not truly anticipate. These expectations were further complicated by the inability to physically tutor students in the clinical environment (Morin, 2020). Evaluating the true representation of a student's ability to provide safe nursing practice in a virtual setting is an overwhelming challenge as there are many factors that are unique to each student, patient, situation, and clinical setting (Wittenberg et al., 2021).

In addition to the professional challenges faced by nursing faculty during this time, seemingly endless personal and moral dilemmas were also occurring simultaneously. Faculty felt guilt for not being on the frontlines while knowing the current workforce would become exhausted, and there would be a dire need for fresh new graduates. Additionally, faculty may have been impacted by either personal illness, or death/illness of a family member, or a lack of financial and physical resources (Kar et al., 2021). Other real concerns nursing faculty faced included either personal or spousal loss of income and family challenges, including the sudden necessity to homeschool children or secure childcare (Adams et al., 2021).

The impact on faculty has evolved into a significant public health concern. Without the identification of faculty's concerns and needs, there is a high likelihood that perceived elevated levels of stress will lead to an exodus of nurse faculty (Lin et al., 2021). Consequentially, the reduced faculty workforce will cause more strain to the already exhausted faculty. With the nursing faculty defeated and depleted, a reduction in new graduates entering nursing will result, in exacerbating the nursing shortage. This unfortunate cascading sequence of events will ultimately leave no one to provide nursing care to society (Lin et al., 2021).

While at present there seems to be an end in sight, the pandemic and associated repercussions are ongoing. Due to continued developments relating to the COVID-19 pandemic and the relatively short time-lapse since the onset, research available on this topic is limited. The existing body of literature does not provide insight into current nursing faculty perceptions, as the impact has evolved and endured; available studies reflect findings from the initial impact.

Toward the onset of the COVID-19 pandemic, faculty provided responses that reflected a negative impact on their overall well-being, but the evidence did not reflect a high-incidence of feelings of burnout (Sacco & Kelly, 2021). Existing literature emphasizes the need for research on the long-term impact of stress imposed by the COVID-19 pandemic, the support needed to reduce nursing faculty's perceived high stress, and the intent to leave the profession (Bhattacharjee & Gosh, 2022; Sacco &Kelly, 2021). A more comprehensive review of the literature can be found in Chapter II.

Purpose Statement

The purpose of this quantitative study was to use a retrospective pre-test and post-test design to identify relationships between the perceived stress and intent to leave the profession imposed by the COVID-19 pandemic on nursing faculty at the onset of the pandemic as compared to the present time. The retrospective pre-test and post-test designs were chosen to examine the lasting impact of impositions posed by the COVID-19 pandemic. The design ensured that participants were aware of the true impact of the pandemic when evaluating the effect on their perceptions of stress and coping regarding their role as nursing faculty at the onset compared to currently.

Adaptations of the Cohen Perceived Stress Scale, as well as the State-Trait Anxiety inventory [STAI©], were used to measure the variables (Cohen et al., 1983; Spielberger et al., 1983). Single-item indicators were used to specifically address the variables under consideration in this study (Youngblut & Casper, 1993). Additional information including demographics, years in the profession, degree program taught, intent to leave, and setting of instruction was collected. Optional open-ended questions were provided to allow faculty to identify causes of stress and support needed to mitigate

perceived stress and intent to leave, as well as other faculty-deemed relevant comments. The open-ended questions were analyzed for content to provide context to nursing faculty's reported experiences related to the impact of COVID-19 on faculty stress, intent to leave the profession, and identified needs for support resources.

This study examined 1) whether nursing faculty reports of stress and/or coping related to the lasting effects of the pandemic will vary when compared to the initial onset; 2) whether there is a relationship between the faculty perceptions of stress/impaired coping related to the lasting effects of the COVID-19 pandemic and intent to leave nursing education compared to the initial onset; 3) the relationship between demographic variables and faculty perceived stress, coping, and/or intent to leave the profession; and 4) insight into faculty's experiences and identified needs for support resources. The outcome of this study provides a basis for further research on the lasting impact of COVID-19 on faculty stress; program development/implementation; and resource attainment for faculty support, recruitment, and retention.

<div align="center">Significance</div>

Due to the requirement for nursing faculty to educate and develop nurses entering the workforce, faculty shortages and workforce shortages are closely intertwined. With over 1500 reported nursing faculty shortages reported by the American Association of Colleges in Nursing (AACN) in 2019 and a continuously aging current faculty pool, the future of nursing education had a grim outlook before the global pandemic (AACN, 2020). The faculty shortage means that qualified nurses cannot be trained to enter the nursing workforce when the United States Bureau of Labor Statistics (2022) estimates a need for close to 200,000 registered nurses (RNs) annually to fill vacancies left by

transfers, burnout, and retirement. Auerbach et al. (2022) discussed that in 2021 the "total supply of RNs decreased by more than 100,000 in one year" and stated:

> …growth in the RN workforce plateaued during the first 15 months of the pandemic. Contributing factors likely include early retirements, pandemic burnout and frustration, interrupted work patterns from family needs such as childcare and elder care, COVID-19 infection, and related staffing shortages…

The authors also suggest that younger nurses (<35 years old) in hospitals made up a significant amount of the nurses who left the workforce. While there is limited data regarding recent figures, there is anecdotal evidence that suggests the excessive mental and physical demands imposed on the nursing workforce during the COVID-19 pandemic have only exacerbated the vacancies and the need for new graduate nurses.

Due to the lack of available research on the lasting effects of stress foisted by the life-altering COVID-19 pandemic, an investigation of whether a relationship exists between the lasting implications of the pandemic, nurse faculty stress, and an intent to leave the profession was needed. The outcome of this study could serve as a catalyst for future research regarding interventions to increase work-life balance, and coping, and foster faculty retention to ultimately combat the current and impending faculty and nursing shortages. Studies focused on identifying issues affecting nurse faculty satisfaction and retention are dire as the pandemic only exacerbated reported anticipated shortages of over 500,000 RNs by 2030 and faculty shortages prohibiting over 80,000 new nursing school admissions in 2017 (Zhang et al., 2018). New reports from AACN (2022) indicate that close to 92,000 qualified applications were turned away by nursing schools in the United States from "baccalaureate and graduate nursing programs in 2021

due to the insufficient number of faculty, clinical sites, classroom space, and clinical preceptors, as well as budget constraints." Therefore, evidence supporting faculty retention and recruitment is dire.

Background

While there are available studies on the effects of the COVID-19 pandemic-related stress imposed on certain populations, a gap exists in the literature regarding the impact on undergraduate nursing faculty. Son et al. (2020) discuss the impact on college students' mental health. Giorgi et al. (2020) reviewed the related effects of the COVID-19 pandemic within the workplace. Roney et al. (2020) conducted an in-depth study on the effects of stress caused by the COVID-19 pandemic on critical care educators. The study addressed preventative wellness measures to mitigate anxiety and provide the nurse educator with resources to promote self-care and combat burnout.

Zhang and Ma (2020) implemented a cross-sectional design using the Impact of Event Scale (IES) to evaluate the impact of the COVID-19 pandemic on residents in Liaoning Province, China as of February 2020. Khanam et al. (2020) conducted a quantitative review also using the IES submitted through a hospital-based survey for frontline healthcare workers where "severe psychological impact" was reported by 60.9% of respondents. Manzano-García and Ayala-Calvo (2020) used the job demands-resources theory in a quantitative study on the influence of the perceived threat of the COVID-19 pandemic on nurses' burnout throughout Spain and found the lack of psychosocial support greatly impacted burnout. Since this crisis is evolving and unprecedented, the literature on the impact on nursing faculty and related topics is limited. More research is needed to identify the initial and lasting impact of the COVID-

19 pandemic on nursing faculty stress and coping to understand the implications and supportive needs for faculty satisfaction and retention.

Research Questions

A pragmatic worldview guided this quantitative study. According to Creswell and Creswell (2018), pragmatism seeks to gain a broad insight into a problem and viable solutions. In this study, the researcher developed research questions to allow for triangulation through analysis of demographic variables as well as Likert-scale and free-text data to best understand the problem and implications for practice. This study sought to answer the following questions:

1. Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty, compared to the initial onset?

2. Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty compared to the initial onset and intent to leave nursing education?

3. Is there a relationship between age, ethnicity, employment status, state of residence, number of dependents, marital status, gender, educational background, level of instruction, and/or years of service and nursing faculty's perceived stress levels, coping and/or intent to leave the profession due to the lasting impact of the COVID-19 pandemic as compared to the initial onset?

4. How do nursing faculty describe their experience and are there any identified needs for support resources?

Hypotheses

Several hypotheses for these questions were developed based on current research, anecdotal information, and personal experience. The lasting impacts of the COVID-19 pandemic were predicted to have influenced nursing faculty's perceived stress and/or coping differently than at the onset. It was also predicted that faculty would have a different inclination to leave the profession due to the lasting impact of the COVID-19 pandemic as compared to the initial onset. Another hypothesis was that a relationship exists between demographic variables and faculty's perceived stress, coping, and/or intent to leave the profession.

Research Objectives

The objectives of this research study were:

1. To identify the relationship between the lasting impositions of the COVID-19 pandemic and perceived stress levels and/or coping for nursing faculty compared to the initial onset.

2. To identify the relationship between nursing faculty's perceived stress levels and/or coping due to the lasting issues imposed by the COVID-19 pandemic as compared to the initial onset of their intention to leave the profession.

3. To identify the relationship between demographic variables and nursing faculty's perceived stress levels, coping, and/or intent to leave the profession due to the lasting impact of the COVID-19 pandemic as compared to the initial onset.

4. To explore and understand how nursing faculty describe their experience and any identified needs for support resources to provide implications for future research.

Theoretical Framework

Lazarus and Folkman's (1984) transactional model of stress and coping served as the theoretical framework for this study. The transactional model of stress and coping was applied to explore and identify the relationship between the lasting impact of the COVID-19 pandemic on faculty's perception of stress, coping, and intent to leave the profession in comparison to the initial onset. Lazarus and Folkman (1984) describe stress as a relationship between the individual and environment "that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (p. 19). Stress is described by the authors as biphasic, starting with primary and secondary cognitive appraisals, and followed by coping. Through the cognitive appraisal, Lazarus and Folkman (1984) describe that primary and secondary appraisal takes place to determine "why and to what extent a particular transaction or series of transactions between the person and the environment is stressful" (p. 19). According to Lazarus and Folkman (1984), primary appraisal consists of the consideration of the current and or future impact of the situation to determine if it is considered a loss, a threat, or a challenge. During a secondary appraisal, the individual considers whether they have the physical, social, psychological, or material resources to cope with the situation. According to Lazarus and Folkman (1984), for one to cope, one must have first designated the situation as stressful, and coping functions to regulate emotions during stressful situations and/or manage the problem causing the stress.

In the transaction model, the way the person appraises the stress and copes is determined by the individual's characteristics as well as characteristics of the environment and situation itself (Berjot & Gillet, 2011). Lazarus and Folkman (1984) pose that an individual's stress is:

> determined by the appraisal of a specific encounter with the environment; this appraisal is shaped by person factors including commitments, vulnerabilities, beliefs, and resources, and by situation factors including the nature of the threat, its imminence, and so on. (p. 290)

According to the transactional model, stress, coping, and the outcome of an event are not considered as a static or linear event, nor one with clearly defined, predictable antecedents and consequences (Lazarus & Folkman, 1984). Rather, they are suggested as a perception of the relationship between personal and environmental factors contributing to stress and coping that can evolve and shift depending on other contributing factors as the situation persists or the individual's perspective shifts.

Lazarus and Folkman (1984) describe the relationship between the person and the environment as "dynamic, mutually reciprocal and bidirectional" (p. 293), and emphasize that either could be considered the cause, antecedent, or consequence over time. To illustrate this concept, a person may experience feelings of shame and disgust upon the loss of a job initially but later express feelings of gratitude for having the opportunity to seek a more fulfilling position. The shifting perception and evolution of the relationship between the person and environment involving the changing processes of emotions, social support, coping, and adaptation associated with a threatening situation as it unfolds in the transactional model, served as a model for analysis in this study. The model

explored the evolution of nurse faculty's perception of the relationship between stress, coping, and outcome at the initial onset of the COVID-19 pandemic and as it lingered over time. The perception of stress, coping, and the outcome was expected to be further complicated by psychosocial factors in the work context (environmental factors), which were negatively impacted by the mandated social isolation through direct consequences of the COVID-19 pandemic.

Lazarus and Folkman's transactional model was applied to this study through the analysis of the participants' self-reported stress state using the State-Trait Anxiety Inventory-State (STAI-S©) (Spielberger et al., 1983), the Perceived Stress Scale (PSS-4) (Cohen et al., 1983), Single-Item Indicators (Youngblut & Casper, 1993), and open-ended questions—all of which measured how they perceived/coped with stress at the onset as well as currently. These findings were considered through the analysis of how the COVID-19 pandemic has impacted their perceived stress, coping, and intent to leave the profession to further delineate the resulting impact of the COVID-19 pandemic specifically on stress/coping related to their faculty role, as opposed to other circumstances. As applied to this study, the theory held that it was expected that the lasting impositions/responsibilities placed on nursing faculty because of the COVID-19 pandemic were directly related to sociodemographic variables, faculty's perceived stress level, faculty coping, and resulting intent to leave the profession with respect to the authors' emphasis on the necessity to study the same individual over time. The presumption of the change in perceived stress overtime was based on the propositions of the transactional model of stress and coping as well as the impact of duration of stress

described in the general adaptation syndrome (GAS) as stages progressing from an initial alarm reaction, followed by resistance, and eventually exhaustion (Selye, 1950).

Operational Definitions

The theoretical definitions for this study were:

1. *Adaptation* was defined as the "process of changing to suit different conditions" and/or "continue to exist in a particular environment" (Adaptation, n.d.).

2. *Cognitive appraisal* was defined as the "process of categorizing an encounter and its various facets, with respect to its significance for well-being" (Lazarus & Folkman, 1984, p. 31).

3. *Coping* was defined as "the use of cognitive and behavioral strategies to manage the demands of a situation when these are appraised as taxing or exceeding one's resources or to reduce the negative emotions and conflict caused by stress" (Coping, n.d.).

4. *Coronavirus Disease (COVID-19) Pandemic* is a disease caused by the SARS-CoV2 virus that spread worldwide beginning in December 2019 (World Health Organization [WHO], 2021).

5. *Initial onset* is described as the period between late March and May 2020.

6. *Intent to leave the profession* intention to leave nursing education to either return to the bedside, pursue other nursing specialties, or leave the nursing profession altogether.

7. *Lasting impact imposed by the COVID-19 pandemic* is intended to describe factors that impacted healthcare, higher education, nursing, and nursing

education that influence the faculty role which was nonexistent prior to the COVID-19 pandemic.

8. *Nursing faculty* described educators teaching in nursing programs at the practical nursing, associate, baccalaureate, master's, or doctoral level.

9. *Stress* was defined as "a state resulting from stress, especially of bodily or mental tension resulting from factors that tend to alter an existent equilibrium" (Stress, n.d.).

Assumptions

Assumptions for this study included the belief of this researcher that:

1. Responses were honestly reported and free of bias.

2. The COVID-19 pandemic resulted in significant changes in myriad facets of nursing education including, but not limited to, the method of instruction delivery and perceived efficacy/quality of instruction.

3. Nursing faculty experienced increased stress and impaired coping as a direct result of the COVID-19 pandemic.

4. The lasting impositions of the COVID-19 pandemic significantly impacted the perceived stress and coping of nursing faculty, as well as the intent to leave the profession.

Limitations and Delimitations

Potential weaknesses were inherent in this study. While the sample size met the requirements for statistical significance, the relatively small size could be considered a limitation. To determine application to the overall population, a greater sample size is needed. An increase in participants would likely aid in increasing diversity in

sociodemographic variables, which was also a limitation of the study. Due to no fault of the respondents, the majority identified as Caucasian, married females. An increase in the number of participants would likely lead to an increase in the diversity of the target sample and contribute to a result more likely to be generalizable to the overall population. An increase in number and diversity would also contribute to further analyses of potential predictor variables for stress, coping, and intent to leave the profession.

Another limitation is regarding recruitment. Recruitment methods also contributed to the lack of diversity in the sample as while there were responses from participants in at least 21 different states across the United States, there was a disproportionate representation from Mississippi, as anticipated. To ensure reliable data, a power analysis was performed to determine an appropriate sample size of at least 68 participants. The sample consisted of 81 nursing faculty from multiple schools, programs, and levels of nursing education across the United States. Future studies could benefit from additional recruitment methods and efforts to gain access to a wider audience.

The design of the study could have also impacted the validity of the results. Since respondents were reflecting on feelings surrounding the onset of a significant historical event, the COVID-19 pandemic, there could be a stigma that could impact their responses. Faculty could feel as though they are coping and should not feel more stressed now since society appears to have settled into a sense of normalcy. Future studies could benefit from considering other research methods.

Delimitations of the study recruitment methods and inclusion criteria resulted in a lack of representation for all faculty actively employed during the COVID-19 pandemic. Anecdotal evidence indicates that faculty have left the profession either to return to the

bedside, retire, or left the career altogether. Therefore, a gap in representation for those who were possibly more significantly impacted by stress imposed by the COVID-19 pandemic was conceivable.

Assumptions and biases may have been present in participants' reports despite instructions within the survey. The nature of the topic under consideration and the methods of this study increased the potential for reporting stress that is not directly related to the COVID-19 pandemic. Measures were taken to guide responses to only reflect stress related to the COVID-19 pandemic, including open-ended contextual response questions, but the potential could be excluded. Future studies could benefit from an expansion of recruitment, the inclusion of faculty who are no longer actively working in nursing education, and the use of other instruments to provide greater insight into this phenomenon.

<div align="center">Summary</div>

Chapter I provides an overview of the stress imposed by the COVID-19 pandemic, the impact on nursing faculty, and the need to address these concerns. The relationship between the lasting impact of impositions by the COVID-19 pandemic on faculty perceived stress, coping, and intent to leave the profession compared to the initial onset was explored using the transactional model of stress and coping as a philosophical framework. To ensure there are competent nurses entering the workforce to care for society, it is critical to identify nursing faculty identified needs for resources to combat perceived stress, coping, and intent to leave the profession.

CHAPTER II – REVIEW OF LITERATURE

Chapter II focuses on the concepts of stress and coping as well as what is known about stress related to the COVID-19 pandemic. A focused search of scholarly literature from the Google Scholar database, APA PsycInfo, PubMed, MEDLINE, and Cumulative Index to Nursing and Allied Health Complete (CINAHL) was conducted. The search criteria included full-text articles in English using variations and combinations of the keywords nursing, nursing faculty, nursing education, higher education, COVID-19, stress, coping, and intent to leave the profession. The literature review included articles published within the past 10 years. Through the review of the literature, studies discussing stress and coping in the general population, healthcare workers, and higher education students were revealed, with multiple studies published regarding nursing students' experiences. Due to the short period since the initial outbreak of the COVID-19 pandemic, relatively limited literature was available. This review of the literature included 46 articles regarding stress related to COVID-19, stress in nursing education, and stress in higher education which were selected to reflect diverse opinions, a broad view of the impact of society and nursing education, and the alignment with the theoretical foundation of this study. Through this review, only six articles that discussed the impact of the COVID-19 pandemic on nursing faculty were identified, reflecting a gap in the literature, especially as the effects of the pandemic have endured.

Stress and Coping

The Spielberger State-Trait Anxiety Inventory (STAI©) is an instrument used frequently to measure state and trait anxiety that allows for the distinction between a state of stress versus a predisposition to anxiety or depressive symptoms/disorders (Spielberger

et al., 1983). The instrument was used frequently in both clinical settings and the general population and has a citation index of over 16,000 in 2020 according to Zsido et al (2020). Due to the global impact of the COVID-19 pandemic, the STAI© has been used to measure the impact of the pandemic on stress and coping across many populations of interest including nursing students, higher education students, healthcare workers, older adults, school-aged children, medical educators, dental students, amongst others (Amicucci et al., 2021; Çalık, 2020; Herrmann-Werner et al., 2021; Manjareeka & Pathak, 2021; Miguel-Puga et al., 2021; Özdede & Sahin, 2020).

Stress Related to the COVID-19 Pandemic

The COVID-19 pandemic threatened all of society, and no one was exempt from the impact of the social isolation, fear, mistrust, or disruption of all aspects of their lives that ensued. This reality contributed to a potential for stress, anxiety, depression, suicidal ideations or actions, or posttraumatic stress disorder (Adams et al., 2021). In a guide developed for the management of psychiatric symptoms during the COVID-19 pandemic in India, Manjunatha et al. (2020) discussed the psychological impact of the mandated lockdown as stemming from "normal people being exposed to extraordinary situations" (p. 7). The guide discussed the presentation of these effects as including emotional difficulties (e.g., anxiety, depression, stress, irritation, aggressive behavior), sleep disturbances, increased substance use or abuse, and possibly severe mental illness in the general population, but with increased incidence amongst vulnerable populations, those on the frontlines, and those predisposed to mental health concerns pre-COVID-19.

Kar et al. (2021) assessed anxiety, depression, coping, posttraumatic stress disorder [PTSD], and sociodemographic variables using an online survey distributed to

the general public through online platforms including professional and social groups from March 29-July 4, 2020. Of the 733 respondents, mental health symptoms were higher in "students, 20- to 30-year-olds, those who are single, and university educated" (p. 3); there was a lack of significant representation from unemployed and self-employed individuals. While there were significant reports of stress, anxiety, and depression amongst healthcare workers, they were less than the aforementioned. However, due to the timing of the study, the healthcare professionals working the frontlines may not have responded, and the study was conducted early in 2020 with factors like resilience potentially influencing the results. Interestingly, Huang et al.'s (2022) meta-analysis found "a substantially higher prevalence of depression, anxiety, and stress among first responders during the COVID-19 pandemic" (p. 10). Giusti et al. (2020) reported "high levels of burnout and psychological symptoms" among healthcare professionals (p. 1); however, these results were not compared with those of the general public.

Due to the requirement for school closures and the overall nature of their role, parents were prone to stress related to the COVID-19 pandemic. Adams et al. (2021) surveyed parents of more than one child between the ages of 5-18 during May 2020 (the peak of stay-at-home mandates), in September 2020 (when most children returned to school), as well as performed a retrospective pre-test to determine pre-COVID-19 stress. The authors used the Perceived Stress Scale in addition to other questions specific to parenting with a sample of over 400 parents and determined that parents stress changed over time, with reported high stress increasing from before the COVID-19 pandemic to 22.4% in May 2020 and decreased to 12.2% by September. Over 70% of parents reported

an increase in parenting-specific stress from May 2020 to September and 85% of parents reported difficulty in maintaining their pre-COVID-19 parenting methods in May 2020.

De Sousa et al. (2021) performed a meta-review of 18 meta-analyses exploring the prevalence of mental health concerns during the COVID-19 pandemic (from 2019-March 2, 2021). This analysis included symptoms of psychophysiological stress (sleep disturbance, psychological distress, stress, and burnout) and psychopathology (anxiety, depression, and PTSD). De Sousa et al. (2021) found the overall prevalence of reported mental health concerns to range from 20-36%. In this review, healthcare workers showed the highest prevalence of psychophysiological stress as compared to the general population.

Stress Within Higher Education During the COVID-19 Pandemic

Due to the concern about contracting the COVID-19 virus and the lack of knowledge and resources to provide proper treatment, a worldwide "stay-at-home order" was initiated in early 2020 (Marek et al., 2021). Institutions for higher education were among those mandated, forcing an instantaneous transition to distance learning. The preparation or skill of the faculty, as well as the financial, physical, and technological resources of the institution, faculty, and/or students significantly influenced the ease (or discomfort) of this transition (Dewart et al., 2020; Marek et al., 2021; Navarro-Espinosa et al., 2021). Not only was this abrupt transition concerning the quality of instruction resulting from the inability to ensure the standards and guidelines required for distance learning, but the educational experience was also impacted by the lack of social interaction (Dewart et al., 2020; Marek et al., 2021; Navarro-Espinosa et al., 2021).

Marek et al. (2021) conducted a quantitative study on faculty and student experiences of the conversion to distance learning. The worldwide study consisted of 418 faculty across multiple ages, ranks, disciplines, and degree levels in higher education who had converted courses to distance learning. More than half (51.3%) of the respondents reported never incorporating technology "beyond the basics of PowerPoint slides or discipline-specific hardware/software" (p .95) previously. The authors reported a mix of positive and negative experiences along with high variability in the responses. Prior experience in distance education was determined to be a common predictor of positive experiences among faculty.

One of the key takeaways of Marek et al.'s (2021) study was that faculty had an "understanding that it was necessary for the safety of themselves and their students, regardless of how troublesome the process might be" (p. 104), emphasizing the faculty's priorities. Nearly 90% of the respondents were from Asian countries and the study was conducted during the Spring 2020 semester, so this sampling could be considered a relatively narrow representation of faculty experiences. Therefore, this study was not representative of the lasting impact of the COVID-19 pandemic since it was impossible for faculty to predict the duration and degree of impact of the pandemic at that time.

Navarro-Espinosa et al. (2021) found that anxiety and depression symptoms were highly elevated amongst STEM teachers in higher education. The symptoms were linked to the faculty's perception of the COVID-19 pandemic and the resulting transition to distance education, technological issues, balance between family and work, and other obstacles such as lack of training, resources, time, or research. Bergantz and Curtis' (2022) mixed methods study of 33 students at a rural Alabama university revealed "100%

of students indicated higher levels of anxiety and stress due to the outbreak" (p. 3).

According to Bergantz and Curtis (2022), contributing stressors were identified as

"anticipated duration of the pandemic (93.9%), the stress of current financial situation

(72.7%), the uncertainty of the future (93.9%), decreased social interactions and sense of

community with peers (87.9%), and concerns about the health of loved ones and self

(100%)" (p. 3). In both studies, students' reports, and faculty's perceptions of students'

level of comfort with distance education were high (Bergantz & Curtis, 2022; Navarro-

Espinosa et al., 2021). Despite the varying reports amongst students and faculty and those

from various disciplines and regions, the evidence revealed that the COVID-19 pandemic

influenced mental well-being within higher education.

Stress in Nursing Faculty Pre-COVID-19 Pandemic

While faculty inevitably experience work-related stress regardless of level,

discipline, or years of service, it is arguable that nursing faculty have a unique set of

additional stressors. These stressors stem from the nature of the role and the

responsibility to produce competent practitioners to provide safe and quality care to

society. Factors such as maintaining a clinical practice, scholarship, and service

endeavors within the institution and the community, staying abreast of best practice

guidelines, and maximizing effort while minimizing costs contribute to the burdens

placed on nursing faculty (Boamah et al., 2021; Candela et al., 2015; Nowell et al., 2021).

Increased faculty workload, inadequate student preparation, and pressures to increase

enrollment to combat the pre-COVID-19 pandemic nursing shortage contribute to nursing

faculty stress and intent to leave the profession (Boamah et al., 2021; Candela et al.,

2015; WHO, 2020).

While faculty workload was likely a cause for concern amongst all faculty due to the need for preparation for instruction, scholarship, and service; anecdotal evidence suggests that the physical and mental strains nursing faculty face through clinical instruction in healthcare settings, as well as preparing students for national licensure and clinical practice, is often not factored into the workload. Other identified stressors in nursing education found through a scoping review of nine studies include physical working environment, organizational policies, minimal autonomy, unrealistic expectations, additional responsibilities (e.g., mentoring new faculty), inadequate administrative support, and poor workplace culture (Boamah et al., 2021). Boamah et al.'s (2021) scoping review consisted of "three qualitative studies (e.g., Kirkham, 2016; Tourangeau et al., 2012; Vandyk et al., 2017), two quantitative studies (e.g., Tourangeau et al., 2014; 2015), and four mixed-method studies (e.g., Cash et al., 2009; 2011; Singh et al., 2014; 2016)" (p. 577). A widely accepted adage in nursing is that nurses eat their young, and unfortunately, that sentiment can often also be true in nursing education, adding to an already stressful environment.

Stress in Nursing Faculty During the COVID-19 Pandemic

Although higher education was impacted significantly by the COVID-19 pandemic, nursing faculty faced myriad nuanced challenges. These challenges included the desperate need to prepare new graduates to meet the needs of the nursing workforce with limitations in ability and quality of clinical instruction in addition to physical, technological, and fiscal resource inadequacies (Agu et al., 2021; Castro, 2022; Dewart et al., 2020; Iheduru-Anderson & Foley, 2021; Nabolsi et al., 2021; Sacco & Kelly, 2021). Agu et al. (2021) discusses the implications of the recommendation by the National

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Council of State Boards of Nursing (NCSBN, 2020) for video demonstrations as well as high-fidelity simulations as replacements to clinical practice on the faculty required to create and disseminate those experiences, as well as the students and potential future stakeholders.

The psychological impact of the impositions posed by the COVID-19 pandemic was greatly influenced by the motivation behind serving as a nursing faculty. Dewart et al. (2020) discuss the ethical dilemma faculty face through "weighing the value of education against the risk and strain to the learner personally and professionally" (p. 2). Other factors leading to stress among nursing faculty included the feelings of inadequacy and uncertainty from relaying sometimes rapidly changing and conflicting information/guidelines from the institution, stakeholders, and governing bodies to students, and the inability to accommodate diverse learning styles and needs (Agu et al, 2021; Iheduru-Anderson & Foley, 2021; Nabolsi et al., 2021; Nowell et al., 2021; Sacco & Kelly, 2021).

Chang-Martinez (2020) discussed the necessity for nursing faculty to consider the health/exposure risks associated with returning to the classroom and clinical instruction using guidelines provided by the Centers for Disease Control and Prevention (CDC) regarding personal and environmental prevention practices including but not limited to: social distancing, decontamination, masking, and temperature monitoring. The author also discussed the additional burden on nursing faculty through the responsibility to "self-adhere and have students adhere to these guidelines and measures" to prevent transmission (para. 8). To achieve buy-in from students regarding infection control, faculty were required to take time away from planned instruction to collaborate with

students through engaging conversations regarding infection control (Chang-Martinez, 2020).

In addition to managing their own stress, faculty had a deep desire (and were also required) to provide support for student concerns (Iheduru-Anderson & Foley, 2021). During this time, students were worried about instruction quality, inadequate technology/resources, contracting/spreading the virus, clinical practice/licensure preparation, and decreased clinical experiences, amongst other concerns (Dewart et al., 2020; Sacco & Kelly, 2021). Additionally, the stress associated with faculty balancing teaching responsibilities while also joining colleagues on the frontlines in the clinical setting or the guilt associated with not doing so was a hard reality to bear for many (Castro et al., 2022; Dewart et al., 2020; Iheduru-Anderson & Foley, 2021; Nowell et al., 2021; Sacco & Kelly, 2021).

Through a qualitative study between June and July 2020, faculty reported stress from the pandemic-related work causing all other responsibilities to be forgotten (Nowell et al., 2021). Their new responsibility became preparing for uncertainties associated with the COVID-19 pandemic, particularly in the clinical environment (e.g., lack of personal protective equipment [PPE], space constraints) (Nowell et al., 2021). However, the faculty in this study expressed positive coping through self-care practices, showing grace and compassion, and a sense of pride in their abilities to overcome and adapt. Other positive outcomes discussed include increased resourcefulness, innovative ways to "optimize student learning", perceived productivity, networking/collaboration, and community support. The need for research on the lasting impact of the COVID-19 pandemic, especially in diverse populations, was demonstrated through several

participants' reports that the increased stress from overwhelming work demands, seemingly never-ending workload, managing home-life and childcare, adaptations required from the constant uncertainty, and the pressing desire to put on their "game face" with loved ones as being "unsustainable" (Nowell et al., 2021, p. 9).

Iheduru-Anderson and Foley (2021) performed a descriptive phenomenological study consisting of 41 associate degree nursing faculty of various years of both teaching and nursing experience, as well as ages in the United States. This study explored the challenges nursing faculty faced during the transition to solely online teaching. The authors discuss the lack of funding and resources often present in associate degree nursing programs combined with pressures for innovation and excellence, as being greatly complicated by the requirement to transition all nursing instruction online in a matter of days during the onset of the COVID-19 pandemic. In this study, 100% of the faculty reported stress related to the transition.

Iheduru-Anderson and Foley (2021) also identified seven themes: stressful/daunting/overwhelming, feeling emotionally and physically exhausted, coping with stress and making time for self-care, support, new knowledge and growth under pressure, new opportunities for nursing education, and leadership in times of crisis. Some factors reported as contributing to the stress included having no clear direction, inadequate resources and technological skills/support, increased workload, information overload, physical fatigue/pain, social isolation, and lacking boundaries related to the overwhelming concern for students. One faculty reported the "grim reality of the times" as being another stressor and stated, "I was drained and had nothing left to give" (p. 4); others reported considering leaving nursing education.

In Iheduru-Anderson and Foley's (2021) study, several of the faculty members discussed dissatisfaction with the students being withheld from clinical with accusations of administrators "pandering," "cuddling," and preventing the ability to "weed out" those "not cutout for nursing" by not allowing them to care for patients alongside the nursing workforce (p. 8). One instructor's frustration over decisions regarding students is evidenced by the claim that "I am learning to adapt, so should they" (Iheduru-Anderson & Foley, 2021, p. 8). While these sentiments seem harsh and lack the context that there was much more to consider, namely health and safety concerns, not to mention liability; it is this researcher's opinion that complete exclusion from the healthcare setting was likely not what was best for students, faculty, healthcare staff, and facilities, nor patients (both then and in the future).

Like Nowell et al.'s (2021) study, the faculty did report stress, uncertainty, and overwhelming, but many positive factors were reported in collegiality, growth, and knowledge as a faculty member, adaptability, obtaining needed resources (that had been previously neglected), and understanding of students (Iheduru-Anderson & Foley, 2021). The authors also reported that about 75% of the faculty reported they had experienced "good nursing leadership support during the transition" (p. 9), while others reported frustration from lack of direction and support from administration, as well as exclusion from the discussion on the return to face-to-face clinical and classroom instruction. A similar disenchantment caused by the whole experience as discussed in Nowell et al.'s (2021) study as reported by some faculty is exemplified by one faculty's statement, "I didn't have the same love for the job I had before" (Iheduru-Anderson & Foley, 2021, p. 6).

Nabolsi et al. (2021) conducted a qualitative study to explore the lived experiences of 15 undergraduate nursing faculty implementing online instruction delivery in Jordan, where distance learning was not accredited for use prior to the onset of the pandemic. According to Nabolsi et al. (2021), "most participants described experiencing feelings of being anxious, stressed, confused, and helpless toward this crisis and sudden shift from face-to-face teaching to online distance teaching" (p. 4). Like Iheduru-Anderson and Foley's (2021) and Nowell et al.'s (2021) studies, frustration surrounding the lack of faculty involvement in decision-making and being forced to transition online, lack of boundaries, fear of the pandemic, as well as familial responsibilities. However, the faculty credited a commitment to their duties as faculty members as allowing them to overcome their mental and physical stress and anxieties. However, others reported consequences associated with this commonly reported sentiment as described in one participant's statement regarding the requirement "to overcome obstacles and fulfill our expected roles as teachers, counselors, and supporters of our students, even if it was at the expense of our personal and family time" (Nabolsi et al., 2021, p. 6).

According to Nabolsi et al. (2021), one participant attributed change and the burden of preparing students with equitable quality and rigor in their education as pre-COVID-19 pandemic circumstances, as a great contributor to stress. Other identified stressors included the need to provide emotional support and reassurance to students, the lack of contingency plans in place within their institutions, and the time commitment required to train themselves in online delivery methods. The disruptions to instruction due to bandwidth and other technological issues as well as the necessity of sharing

electronic devices amongst family members due to the worldwide lockdown were also identified.

The faculty also discussed frustration from insufficient engagement from students, lack of cues in face-to-face instruction, as well as students' expectations of faculty to troubleshoot technological errors (Nabolsi et al., 2021). Other concerns included students' reluctance to participate due to the concern over other family members hearing them or background noises. A significant concern with the integrity and rigor associated with online exams was questioned due to the lack of effective proctoring. Additionally, the feasibility of the students' ability to take online exams without technological error was discussed. While the faculty felt the knowledge aspect of instruction was well-maintained and supported through online delivery, they believed compassion, skills, attitudes, values, and professionalism were not able to be cultivated in virtual learning, through the loss of role modeling. The inability to nurture and develop these factors was a great concern as these are essential to the nursing role.

Sacco and Kelly (2021) performed a quantitative descriptive study on faculty teaching in undergraduate, graduate, and doctoral nursing programs in the United States during the Spring and Summer of 2020. Findings included a reduced ability to meet the learning and emotional needs of students, as well as professionally advised. Most participants indicated they were occasionally under stress, with 47.4% of them attributing their position as the cause; however, 68.7% reported being satisfied to very satisfied with their position. Approximately 73% of the faculty reported that the pandemic affected their well-being, while those with greater than 15 years of experience reported a significantly increased impact compared to those with one to five years of experience (p

= .01). Nearly 89% of the faculty indicated that the pandemic affected student well-being. The open-ended questions in Sacco and Kelly (2021) resulted in six themes:

> University- or administration-related issues, increased workload and decreased resources, faculty stress from uncertainty and the intersection of work and life, student's educational experience, faculty commitment, and positive experience, and nursing faculty and COVID-19 in the context of the current advocacy movements. (p. 4)

Due to the timeframe in which Sacco and Kelly's (2021) study was conducted, it is believed by this researcher there would perhaps be an inverse of the findings if this study was repeated. The expectation was that as the COVID-19 pandemic evolved, those faculty with less experience would have exhausted their reserves and reported more stress, while those with more experience would have adapted.

Gandhi et al. (2021) conducted a quantitative study on nursing students and nurses, including nurse educators, in India. Through this study, self-efficacy, optimism, and resilience emerged as predictors of psychological preparedness. While Gandhi et al. (2021) and several other studies discussed factors of resilience, coping, adapting, and overcoming, these studies were conducted early in the pandemic. This response was almost expected by nurses, since as Sacco and Kelly (2021) discuss, nurses, are used to change and adaptation. However, it was predicted that the findings of this study would indicate that persistence was not sustainable as the pandemic and its impositions on nursing faculty lingered.

In contrast to findings citing incivility amongst faculty as a stressor for nursing faculty prior to the COVID-19 pandemic, findings from recent studies found

collaboration with colleagues as a major source of support throughout the transition to distance learning (Iheduru-Anderson & Foley, 2021; Nowell et al., 2021). Other faculty reported feeling defeated by the disregard for challenges, experiences, and needs of nursing faculty, particularly regarding the COVID-19 pandemic while other healthcare professionals were praised (Nowell et al, 2021). The lack of representation, recognition, or even consideration of nursing faculty was exemplified by this literature review in the relatively limited amount of research available surrounding this topic.

Calls for Action

Through the research focused on nursing faculty experiences throughout the COVID-19 pandemic, calls for action to provide for future preparation and advancement of the discipline were identified. Some recommendations included technological training for both students and faculty (Navarro-Espinosa et al., 2021), flexible delivery methods offered in the future (Bergantz & Curtis, 2022), and support from the administration (Nowell et al., 2021). Faculty members reported a need for an increase in involvement in decision-making in their institutions, communities, and globally (Nowell et al., 2021). According to Nowell et al. (2021), faculty emphasized the need for planning and preparation using lessons learned from this experience to be better equipped in the future. Nowell et al. (2021) recommend leaders address work stress to promote nursing faculty members' mental health and well-being to increase the retention of nursing faculty.

Agu et al. (2021) calls for nursing schools to implement strategies to be better prepared to handle comparable situations in the future through the cycle of recovery which includes preparation, responding, coping, and recovery. To prepare, schools need to have recorded instruction available and accessible, including the necessary physical

and technological support resources. Since the schools responded with simulation as a replacement, the authors recommend more integration of simulation throughout the curriculum to decrease the burden and stress of lack of familiarity for both faculty and students. Agu et al. (2021) emphasizes the need to not only consider coping in the context of the educational experience but also the faculty and students' emotional well-being since they may affect the "process and outcome of teaching and learning" (p. 4). The need for measures to mitigate mental health crises and support faculty and students to return to a sense of normalcy is emphasized. The authors also call for the governing and accrediting bodies to consider and revise policies to support an action plan for the continuation of quality instruction in the case of a similar event in the future.

Transactional Model of Stress and Coping

Lazarus and Folkman's (1984) transactional model of stress and coping served as the theoretical framework for this study. The theory asserts that stressors are dynamic and personal. A situation must first be determined by the individual as stressful, and then, the person assesses their abilities and resources to mitigate the stressors, and if the stress continues, they cope with the stress (Lazarus & Folkman, 1984). In a revision of the model, Lazarus (1999) describes the personality and environmental characteristics as determinants of the "person-environment relationship" that impacts the appraisal of a situation as either a challenge (something able to be overcome) or a threat (harmful) (p. 76). Lazarus (1999) describes coping as the "effort to manage psychological stress" (p. 111).

The transactional model of stress and coping is frequently cited in the literature on stress and coping. As it applies to the COVID-19 pandemic, the model has been used in

several studies in various countries and populations. Al Gharaibeh and Gibson (2022) studied mental health concerns in families in Jordan imposed by the COVID-19 pandemic to determine the implications for social worker preparation to develop an intervention model to manage the psychological impact on society during emergent situations. The study indicated that social workers could have conducted primary appraisal through a needs assessment to determine if social isolation could be considered a stressor, and secondary appraisal to identify available resources for coping. Based on the findings of these assessments, the authors report that measures could have been taken to aid in healthy adaptation.

Chachula and Ahmad (2022) used the transactional theory of stress and coping to examine stress in nursing students before and during the pandemic. The authors reported alignment with this model through the participants' reports of higher levels of stress, burn-out, and prior trauma which were significantly positively correlated, and significant inverse relationships were found in participants who reported greater positive coping skills on stress factors. Straus et al. (2022) conducted research on remote workers using another theory along with the transactional model of stress and coping to determine the need for improvement in human resource management. The authors reported finding the need for means to increase self-efficacy (to enhance coping) through the provision of resources including coaching, facilitation of informal interactions to foster collegiality and social support, as well as physical resources.

Coping is individualized and dynamic, dependent on the person, threat, stage of the stressful encounter, and the outcome (well-being, social functioning, or somatic health); and coping changes over time (Lazarus, 1999). In this study, the duration of the

pandemic was expected to significantly impact the appraisal of the pandemic as stressful, as well as the perception of the adequacy of personal and environmental resources. The transactional model of stress and coping was appropriate to evaluate the indicated research questions because each individual had a unique experience, and it was anticipated that the open-ended questions would provide context to the variances among the participants overall, as well as individually over time.

Research Questions

1. Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty, compared to the initial onset?

2. Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty compared to the initial onset and intent to leave nursing education?

3. Is there a relationship between age, ethnicity, employment status, state of residence, number of dependents, marital status, gender, educational background, level of instruction, and/or years of service and nursing faculty's perceived stress levels, coping and/or intent to leave the profession due to the lasting impact of the COVID-19 pandemic as compared to the initial onset?

4. How do nursing faculty describe their experience and are there any identified needs for support resources?

Summary

Chapter II presented the body of literature reviewed; provided an overview of stress related to the COVID-19 pandemic, especially in nursing faculty; and consists of a

variety of research methods. The literature review highlighted a gap in research

surrounding the impact of the COVID-19 pandemic on nursing faculty's perceived stress

and coping, specifically as the pandemic persisted. The transactional model of stress and

coping was utilized as a theoretical framework for several of these studies. The literature

supports that the use of this theoretical framework was appropriate in this quantitative

study to identify the impact of the lasting impositions of the COVID-19 pandemic on

nursing faculty's perceived stress, coping, and intent to leave the profession, in

comparison to the initial onset, as well as faculty identified needs for support resources.

CHAPTER III - METHODS

Introduction

Chapter III discusses the design, setting, sample, procedures, instruments, and data analysis used in this study. A retrospective pre-test and post-test design were used to answer the research questions of this study:

1. Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty, compared to the initial onset?

2. Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty compared to the initial onset and intent to leave nursing education?

3. Is there a relationship between age, ethnicity, employment status, state of residence, number of dependents, marital status, gender, educational background, level of instruction, and/or years of service and nursing faculty's perceived stress levels, coping and/or intent to leave the profession due to the lasting impact of the COVID-19 pandemic as compared to the initial onset?

4. How do nursing faculty describe their experience and are there any identified needs for support resources?

A quantitative design was used to explore the relationship between the lasting impact of the COVID-19 pandemic and faculty stress, coping, and/or intent to leave the profession, compared to the initial onset. A descriptive analysis and triangulation were used to expand understanding of those relationships. Data was collected using Qualtrics®, an online survey software, after permissions were obtained.

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Research Design

When searching the literature for evidence regarding the relationship between stress, coping, and intent to leave the profession imposed by the COVID-19 pandemic in nursing faculty, few studies were available. The available literature only reflected findings from the onset of the pandemic (late March-early April of 2020) to approximately one year later (Iheduru-Anderson & Foley, 2021; Nowell et al., 2021; Sacco & Kelly, 2021). Due to the nature of the questions and gaps in the literature, a retrospective pre-test and post-test survey design were used to satisfy the quantitative nature of this study.

The purpose of using the retrospective pre-test and post-test design was to examine self-reports of perceived stress, coping, and intent to leave the profession from the lasting impact of the COVID-19 pandemic compared to an informed, reflective self-report from the onset. According to Bhanji et al. (2012), the validity of the pre-test could be questioned when a pre-test is given before knowledge/experience acquisition. It was anticipated that faculty's perception of the stress they felt at the time of onset versus what they would report reflectively, knowing what they know now, would shift.

The retrospective pre-test post-test design was appropriate because this study was non-experimental, and it was beneficial in determining how the nursing faculty's perception of stress and coping have evolved as the impositions of the pandemic have endured. The design choice was essential in reducing response shift bias to most accurately reflect a true representation of the stress related to impositions by the COVID-19 pandemic, both initially and over time; as nursing faculty's initial opinions likely changed as the pandemic endured (Bhanji, 2012). The design was chosen because it was

anticipated that findings from studies reflecting nursing faculty perceived stress and coping evolved over time due to the sustained impact.

Setting and Sample

The population of interest was a convenience sample of nursing faculty in the United States, obtained strictly through volunteering. According to Gray et al. (2017), convenience samples are easily accessible, inexpensive, and useful when time constraints are present, but there is a potential for multiple biases. Potential bias was addressed in this study through distribution via social media and publicly available email addresses to increase access, as well as inclusion criteria for all faculty in the United States, teaching at all levels of nursing education. The intent of this criteria and snowballing was to provide diversity in the sample that otherwise would limit the validity of the results.

After providing the details and disclaimers for the study and obtaining consent using online forms, a Qualtrics® online survey was submitted to nursing faculty at The University of Southern Mississippi, and others accessed through the Mississippi Council of Deans and Directors. A survey method is a preferred approach for this non-experimental study to provide a numerical depiction of the participants' opinions for interpretation (Creswell & Creswell, 2018). The use of an online survey allows the potential for increased access to diverse populations and strategic organization of the data (Creswell & Creswell, 2018). According to Creswell and Creswell (2018), the use of software programs provides organization, proper entry, and allowance for expedient analysis of data. Other advantages discussed include relatively low costs and convenience. Disadvantages are also discussed and include the possibility of a data

breach, the potential for response fatigue, and the dependence on respondents to be truthful, as well as the request being overlooked.

The survey was made available to additional nursing faculty using relevant and approved groups through social media platforms and publicly available contact information. In the description of the study, the potential respondents were asked to share the survey with other qualified applicants. Snowballing aided in assuring validity and diversity in the sample. The survey aimed to determine perceived stress, coping, effects of stress, and intent to leave the profession directly related to the COVID-19 pandemic.

A power analysis was performed to determine the required sample size to adequately detect relationships between stress and the lasting impact of the COVID-19 pandemic on the population (Gray et al., 2017). Statistical methods to analyze the data were assumed to include multiple regression and mean comparison analyses among around 11 independent variables. However, multiple regression was not decided to be the best method for analysis after data collection. The targeted power $(1 - \beta)$ is 0.8, and the significance level is set at 0.05 ($\alpha = 0.05$). Along with the different effect sizes from small ($\delta = 0.02$), to medium ($\delta = 0.15$), to large ($\delta = 0.35$), the sample sizes were calculated using G-Power ver. 3.1.9. Assuming a medium effect size, a minimum of 68 responses were required. Through consideration of 20% to 30% of responses consisting of missing or incomplete values/ surveys, the target sample was 85 to 95 participants. The sample consisted of 81 participants, which was an appropriate representative number of participants to decrease bias and error based on the power analysis.

The respondents to the survey represent the nonrandom sample. Inclusion criteria included currently practicing nursing faculty in the United States who served from

January 2020 to January 2023. The participants also had to provide written/electronic consent to be eligible for the study. Exclusion criteria included the ability to read and speak English.

<div align="center">Procedures</div>

Recruitment was initiated after approval from the Institutional Review Board (IRB) (Protocol number 22-1565) at The University of Southern Mississippi (USM) (Appendix G). Permission was sought from the Dean of USM's College of Nursing and Health Professions, as well as the Mississippi Institutions of Higher Learning (IHL) to contact nursing faculty throughout the state through the Mississippi Council of Deans and Directors (Appendix H). The researcher also sought permission to post the recruitment request from the administrators of the applicable social media group pages. Recruitment information was distributed through publicly available email addresses and posted to the applicable social media pages after permission was obtained. Participants were asked to share or forward the email or post to qualified participants to include as many diverse participants as possible to ensure the validity and reliability of the findings.

Informed consent was reviewed and electronically signed prior to accessing the survey to provide an understanding of the study's purpose and verification of appropriate participant criteria (Gray et al., 2017). Once consent was obtained, the individual confirmed they were working as nursing faculty in the United States throughout the COVID-19 pandemic to ensure the criteria were met for participation. Since the researcher is employed at one of the recruiting universities, an emphasis on adherence to confidentiality and voluntary enrollment was included in the recruitment email, as well as in the informed consent. All participants who completed the survey entirely were invited

<div align="center">40</div>

to enter a drawing to win a $50 Visa gift card. Participants wishing to enter the drawing for the gift card were asked to enter their email addresses at the end of the survey. The confidentiality of the participants and data was maintained by using anonymous surveys. Additionally, all data was collected and stored on a password-protected computer.

<div align="center">Instruments</div>

The instruments aimed to assess the presence of relationships between nursing faculty perceived stress, coping, and intent to leave the profession imposed by the COVID-19 pandemic at the initial onset compared to currently. Demographic data were obtained via a survey. Single-item indicators and adaptations of short versions of both the Cohen Perceived Stress Scale (PSS-4) and the Stress Trait Anxiety Inventory (STAI-S/STAI-T©) were used to measure the variables (Cohen et al., 1983; Spielberger et al., 1983; Youngblut & Casper, 1993). Open-ended questions provided an opportunity for faculty to provide information regarding their experience and insight to add context to the responses.

Demographic Survey

Demographics were assessed to provide a description of the sample (Gray et al., 2017). Through consideration of the demographics, conclusions and recommendations are provided, as applicable. The demographics served as moderating variables, as it was predicted they could impact the perception of stress, coping, and intent to leave the profession caused by the COVID-19 pandemic in nursing faculty. The demographics collected were:

<div align="center">41</div>

1. Age.

2. Ethnicity: Native American, Asian, African American, Hispanic, Native Hawaiian or Pacific Islander, Caucasian.

3. Employment status: full-time tenured, full-time non-tenured, part-time, seeking opportunities, adjunct in-person, adjunct on-line, unemployed.

4. State of residence.

5. Number of dependents

6. Marital status: married, domestic partnership, widowed, single, prefer not to say.

7. Gender: male, female, prefer not to say.

8. Educational background: nursing diploma, associate degree, baccalaureate, master's, Doctor of Philosophy [Ph.D.]/Doctor of Education [Ed.D.], Doctor of Nursing Practice [DNP], prefer not to say.

9. Level taught during the onset of the COVID-19 pandemic: hospital-based nursing program, Licensed Practical Nurse [LPN]/Licensed Vocational Nurse [LVN], associate, baccalaureate, Master's, Ph.D./ Ed.D., DNP.

10. Level taught currently: hospital-based nursing program, LPN/LVN, associate, baccalaureate, Master's, Ph.D./Ed.D., DNP.

11. Primary setting of instruction during the onset of the COVID-19 pandemic: clinical, didactic, lab, time equally distributed across lab and clinical, time equally distributed across classroom and clinical, time equally distributed across classroom and lab, varies.

12. Primary setting of instruction currently: clinical, didactic, lab, time equally distributed across lab and clinical, time equally distributed across the classroom and clinical, time equally distributed across classroom and lab, varies.

13. Years of nursing education experience at the onset of the COVID-19 pandemic.

State of residence was considered to determine the presence of a link between location and faculty perceptions. Age, race, and gender were considered using results from the National League for Nursing's (NLN) faculty census survey from 2020-2021 to determine the degree of representation through this study. The NLN (2021) indicates that 50.3% of full-time faculty across all ranks are between 46-60 years of age, 28.4% between 30-45, 19.8% 61 and older, and 1.6% under 30. According to the NLN (2021), 91.3% of full-time faculty are female, 8.4% male, 0.2% transgender, gender queer, or gender non-binary, and 0.1% other/unknown. Nearly 77% (76.8%) of full-time faculty are White non-Hispanic, 10.8% African American, 4.3% Asian, 4.0% Hispanic, 2.7% other/unknown, 1.2% multiracial, and 0.3% American Indian.

While the demographics provide a description of the sample of participants, evidence also indicates a significant link between demographic factors and stress related to the COVID-19 pandemic (Lawal et al., 2020). The number of dependents and marital status was of particular importance due to the topics under consideration in this study. The impact of marital status is individualized and could be a greater contributor to stress in situations such as abusive relationships, which evidence shows was of great concern during the pandemic (Özad et al, 2022; Silva et al, 2020). Other studies have shown a

positive link between marriage as a support system that aids in coping and serve as a protective factor from stress (Lawal et al., 2020; Özmete & Pak, 2020). In a study on the impact of COVID-19 on university students' psychological distress, evidence to suggests significant correlations between marital status as social support for coping and between being single and mild psychological distress (Watson, 2021). It was predicted that there is a relationship between the marital status of the participants and their perceived stress, coping, and/or intent to leave the profession.

Educational level was considered as prior studies indicated there was a connection between education level and perception of stress and coping related to the COVID-19 pandemic (Lawal et al., 2020; Özmete & Pak, 2020). Additionally, factors surrounding the faculty role such as the primary setting of instruction (clinical or non-clinical) and level taught currently and at onset were evaluated. Due to the varying responsibilities and concerns amongst the different levels and settings, it was anticipated the relationships among them, and the faculty's perceptions would also vary.

State-Trait-Anxiety-Inventory (STAI®)

Adapted short forms of the STAI-S© and STAI-T® were used to distinguish nursing faculty reports of stress or impaired coping directly associated with the COVID-19 pandemic from anxious or depressive predispositions. The original inventory consists of 40 questions with a 4-point Likert-scale ranging from (1) = not at all to (4) = very much (Spielberger, 1983). The STAI© is a well-researched instrument used in both clinical and non-clinical settings to measure anxiety in adults, and the short forms have been well-documented and proven reliable in settings where time is a consideration

(Spielberger, 1983). According to Spielberger (1983), the STAI© aids in the differentiation between a state of anxiety and traits consistent with anxiety or depression.

Marteau and Bekker's (1992) shortened STAI-S© scale consists of 6 of the most highly correlated items from the original inventory which evaluate feelings of apprehension, tension, nervousness, and worry. On the shortened 10-item version of the STAI-T© scale provided by Spielberger et al. (1983), traits of anxiety (psychoneurosis and depression) under normal conditions result in an elevated score. On both scales, questions assess the presence and absence of anxiety symptoms; the scores of the absence of symptoms must be inverted before calculation (Spielberger et al., 1983). According to Spielberger et al. (1983), the median alpha coefficient for the trait scale was .90, while the state alpha coefficient was .93 on the original instrument. When used in working adults, the shortened version of the STAI-T® showed an alpha between .88-.94 across ages and genders (Spielberger et al., 1983). To determine the reliability of the shortened version of the STAI-S©, several groups in varying ranges of anxiety levels were analyzed and it was determined the 6-item version should be considered equally as reliable as the full form in determining state anxiety, particularly in research settings (Marteau and Bekker, 1992). The shortened versions of the STAI® were found reliable in many recent studies including those on academic stress (Wright et al., 2022) and nursing burnout (Sullivan et al., 2022). In this study, faculty indicated their responses for the STAI-S® regarding the onset of the pandemic and in the past month, as well as their responses for the STAI-T® for prior to the pandemic and currently.

Perceived Stress Scale

According to Cohen (1994), the "Perceived Stress Scale (PSS) is the most widely used psychological instrument for measuring the perception of stress" (p. 1). The instrument was used to measure stress and coping by asking respondents to indicate how predictable, controllable, and manageable they believed their lives to be. Participants indicated the frequency of having the thought/feeling specified on the 10-item measurement, using a 5-point Likert scale ranging from (0) never to (5) very often. The positive response items were inversed and then added to the other scores before scoring. Cohen and Williamson (1988) reported adequate internal consistency ($\alpha = .78$) on the 10-item perceived stress scale.

To prevent response fatigue, a four-item shortened version of the PSS was used in this study. The PSS-4 has been used successfully in recent studies exploring the perceived stress and coping of nursing students (Watson, 2021); healthcare workers (Alwaqdani et al., 2021); students in virtual classrooms (Al Ateeq et al., 2020); adults in Columbia (Pedrozo-Pupo et al., 2020); and across all ages worldwide (Gamonal-Limcaoco et al., 2021). In this study, the participants indicated their perceived stress and coping at the onset of the pandemic as well as at present, as it relates to the impact of the COVID-19 pandemic on their faculty role.

Single-Item Indicators

Single-item indicators have been used among researchers to provide brevity and flexibility in the questionnaire, as well as combat response fatigue from repetitive or non-specific questions (Fuchs & Diamantopoulos, 2009; Gardner et al., 1998; Pomeroy et al., 2001). According to Bergvist and Rossiter (2007), the psychometric properties of single-

item indicators have been proven throughout multiple studies. Youngblut and Casper (1993) discuss the recommendations for use of single-item indicators in nursing research. According to Youngblut and Casper (1993), single-item indicators can be used to provide a holistic view of a participant's perception of a situation.

Since the impact of the COVID-19 pandemic is unique and highly subjective, single-item indicators were used to provide content validity, context, and insight as a supplement to the PSS and STAI© forms (Youngblut & Casper, 1993). The development of the single-item indicators in this study was guided by recommendations from Youngblut and Casper (1993). The participants were asked to respond to single-item indicators using a Likert-scale. Respondent's responses are presented in Chapter IV.

<div align="center">Data Analysis</div>

Data from 81 participants were analyzed after exporting from Qualtrics® into a dataset in IBM SPSS® version 29. All collected data were reviewed by the researcher to ensure consistency and completion; missing data were excluded on a case-by-case basis. An audit of random surveys was completed to ensure adequate responses. Reliability was determined for all instruments, except demographics, in SPSS® using Cronbach's alpha analyses, ensuring a score of at least .7 was obtained. Creswell and Creswell (2018) report the optimal range to determine internal consistency is between .7 and .9. Descriptive statistics were used to describe the sample and parameters of the main variables (Creswell & Creswell, 2018).

The data were analyzed separately and then merged for comparison. Table 1 presents each research question, the associated variables, hypotheses, and the analysis method used. Bivariate analyses performed through SPSS® version 29 were used to

determine the relationships between the interval data. According to Gray et al. (2017),

bivariate analyses can be used to determine a relationship among variables. Through the

analyses, the relationship between the variables was analyzed for statistical significance.

Relationships amongst the variables were expected.

Descriptive statistics were performed to analyze the sociodemographic variables

as well as the single-item indicators. A t-test was performed to compare responses to the

PSS-4 and the STAI-S© from the onset of the COVID-19 pandemic to and present time.

According to Gray et al. (2017), a t-test is used to determine differences between two

samples; in this case, the two samples were reports from the onset of the pandemic as

compared to the present time. Additionally, comparisons were made to findings from the

single-item indicators in recent studies for further validation.

In addition to the indicated instruments, the participants had the option to

complete open-ended questions. The purpose of the open-ended questions in this study

was to provide an opportunity for participants to elaborate for context and insight into the

findings from the survey. The content of the open-ended questions was analyzed and

disseminated as applicable. A committee member reviewed and confirmed the

categorization of data from the open-ended questions accurately represents the

participants' responses and that overarching themes display understanding and valid

interpretations.

Triangulation was used to descend the properties of multiple data sources among

the quantitative instruments and the responses to the open-ended questions. The

triangulation provided context to findings and implications and confirmed and

strengthened the reliability and validity of the responses across all sources. Based on the

transactional model of stress and coping, it was hypothesized that the faculty would report more perceived stress and coping as the impact of the COVID-19 pandemic lingered.

Table 1

Presentation of Criterion for Data Analysis

Research Question	Hypotheses	Variables	Instrument	Analysis
1) Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty, compared to the initial onset?	There is a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty, compared to the initial onset.	Variable 1: Nursing faculty's perceived stress and coping at the initial onset of the COVID-19 pandemic Variable 2: Nursing faculty's perceived stress and coping within the last month/ currently	PSS-4; STAI-S©; Single-item indicators	t-test; Frequency
2) Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty compared to the initial onset and intent to leave nursing education?	There is a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty compared to the initial onset and intent to leave nursing education.	Independent: Faculty able to cope more efficiently at the onset of the COVID-19 pandemic compared to currently Faculty feel more stressed as impact of the COVID-19 pandemic has lingered compared to the onset Dependent: intent to leave the profession	Single-item indicators	Chi-square test
			Demographic survey; Single-item indicators	Descriptive statistics; t-test; Chi-square test; Spearman's rho

Table 1 (continued).

Research Question	Hypotheses	Variables	Instrument	Analysis
gender, educational background, level of instruction, and/or years of service and nursing faculty's perceived stress levels, coping, and/or intent to leave the profession due to the lasting impact of the COVID-19 pandemic as compared to the initial onset?	pandemic has persisted compared to the initial onset.	instructional setting, years of service Dependent: Faculty coping, perceived stress, intent to leave the profession		
4) How do nursing faculty describe their experience and are there any identified needs for support resources?			Single-item Indicators Open-ended questions	Frequency Content analysis

Summary

Chapter III included a discussion of the methodology, design, sample and setting, procedures, data collection, instruments, and data analyses. Chapter IV will discuss the results of those data analyses. Analyses were conducted within the quantitative data sets and a content analysis was performed for the open-ended questions. Findings related to the measurement tools and any applicable responses from the open-ended questions included in the study were reviewed and triangulated to provide implications for future research and practice application.

CHAPTER IV – RESULTS

This chapter presents a discussion of the results from the analysis of the quantitative data and comments from the nursing faculty. Details about each instrument included in the study as well as the results from each will be reviewed. Additionally, the open-ended questions and responses will be reviewed.

Instruments

This study used the Perceived Stress Scale (PSS-4) (Cohen et al., 1983); State-Trait Anxiety Inventory-Stress (STAI-S©), State-Trait Anxiety Inventory-Trait (STAI-T®) (Spielberger et al., 1983), and single-item indicator Likert-scale questionnaires to measure the impact of the COVID-19 pandemic both at the initial onset and as the effects have lingered through nursing faculty's perceived coping, stress, and intent to leave the profession. The PSS-4 was modified only to provide a contextual understanding of the variable in question, faculty stress surrounding the COVID-19 pandemic, see Appendix B. The instructions of the STAI-S® and STAI-T® were also modified only to orient the participants to the time frame and the variable being addressed, stress surrounding the faculty role throughout the COVID-19 pandemic, see Appendix C. The items within the questionnaires themselves were not altered from their original phrasing or meaning and therefore should not have a negative impact on the validity or reliability of the results. Standard procedures for scoring, analysis, and interpretation were used for all instruments.

Presentation and Analysis of Data

The data presented depicts the relationship between nursing faculty's perception of stress, coping, and intent to leave the profession at the initial onset of the pandemic compared to currently. Additionally, demographics were examined as potential influences for perceived stress, coping, and intent to leave the profession. Survey responses from 81 questionnaires were imported from the Qualtrics® platform using the statistical analysis software, SPSS® version 29. Descriptives and bivariate analyses were performed. Hypotheses and analytical information for each research question are presented.

Demographic Survey

A total of 81 participants completed the survey, but the number of respondents varies for different items in the demographics section, as depicted in Table 2. Ninety-two percent (n=69; N=75) of respondents were female and eight percent (n=6) were male. The ages of the respondents varied from 29-75 years with a mean of 49.32 (N=72). Eighty-eight percent (n=66; N=75) of the respondents were Caucasian and 12% (n=9) identified as either African American, Native American or Asian. Respondents identifying as married or in a domestic partnership consisted of 89.3% (n=67; N=75) of the responses and 10.7% (n=8) identified as single or widowed. Nursing faculty reporting having a bachelor's or master's degree made up 48.7% (n=37; N=76) of respondents; 26.3% (n=20) had a Doctor of Philosophy (Ph.D.) or Education (Ed.D.); and 25% (n=19) had a Doctor of Nursing Practice (DNP). Respondents reporting having no dependents consisted of 26.7% (n=20; N=75) of the sample; 29.3% (n=22) reported having one

dependent; 18.7% (n=14) reported two dependents; and 25.3% (n=19) reported having three or more. The survey represents respondents in at least 21 different states across the United States, with Mississippi comprising 54.7% (n=41; N=75) of responses, and 45.3% (n=34) from the other 20 states.

Respondents with two or fewer years of experience comprised 18.7% (n=14; N=75) of the responses; those with 2.5-5 years made up 25.3% (n=19); 30.7% (n=23) had 5.5-15 years; and 25.3% (n=19) had 15.5 or more years of experience. Respondents teaching in Licensed Practical Nursing (LPN) or associate degree Nursing (ADN) programs comprised 23.7% (n=18; N=76) of the sample; 56.6% (n=43) taught in Bachelor of Science in Nursing (BSN) programs; and 19.7% (n=15) taught in graduate programs. Full-time faculty made up 94.7% (n=72; N=76) of the respondents and 5.3% (n=4) were part-time or adjunct. When asked what the primary setting of instruction respondents taught in, 13.3% (n=10; N=75) indicated the clinical and or lab setting; 25.3% (n=19) indicated the classroom setting; 48% (n=36) indicated their time was equally split between either the classroom and lab or classroom and clinical settings; and 13.3 % (n=10) indicated that the setting varies. Groups within each demographic variable were collapsed to increase the sample sizes to make comparable groups within variables to detect meaningful results.

To better understand the participants' perceived general anxiety prior to the COVID-19 pandemic and currently, the STAI-T© scores were grouped as low, moderate, or high and analyzed. When reporting how the respondents generally felt prior to the COVID-19 pandemic, 33.8% (n=23; N=68) scored in the low anxiety range, 38.2%

(n=26) scored in the moderate anxiety range, and 27.9% (n=19) scored in the high

anxiety range. When reporting how the respondents generally feel currently, 39.7%

(n=27; N=68) scored in the low anxiety range, 29.4% (n=20) scored in the moderate

anxiety range, and 30.9% (n=21) scored in the high anxiety range. See Table 2 for a

complete representation of the sociodemographic data.

Table 2

Demographic Characteristics of the Nursing Faculty Stress, Coping, and Intent to Leave

Questionnaire Respondents (N=81)

Variables		N	%	Mean (SD)
Gender		75		
	Male	6	8.0	
	Female	69	92.0	
Age		72		49.3 (10.36)
Ethnicity		75		
	Caucasian	66	88.0	
	Non-Caucasian	9	12.0	
Marital Status		75		
	Married/Partner	67	89.3	
	Other	8	10.7	
Education		76		
	BSN/MSN	37	48.7	
	Ph.D./Ed.D.	20	26.3	
	DNP	19	25.0	
Number of Dependents		75		
	0	20	26.7	
	1	22	29.3	
	2	14	18.7	
	3+	19	25.3	

Table 2 (continued).

Variables		N	%	Mean (SD)
State of Residence		75		
	Mississippi	41	54.7	
	Other	34	45.3	
Years of Experience at Onset of the Pandemic		75		
	</=2	14	18.7	
	2.5-5	19	25.3	
	5.5-15	23	30.7	
	15.5+	19	25.3	
Level of Instruction Taught at Onset of the Pandemic		76		
	LPN/AND	18	23.7	
	BSN	43	56.6	
	Graduate	15	19.7	
Level of Instruction Taught Currently		49		
	LPN/AND	9	18.4	
	BSN	28	57.1	
	Graduate	12	24.5	
Employment Status		76		
	Full-Time	72	94.7	
	Other	4	5.3	
Primary Setting of Instruction Taught		75		
	Clinical/Lab	10	13.3	
	Classroom	19	25.3	
	Split Classroom/Lab or Clinical	36	48.0	
	Varies	10	13.3	
STAI-T© General Anxiety Prior to the Pandemic		68		
	Low	23	33.8	
	Moderate	26	38.2	
	High	19	27.9	

Table 2 (continued).

Variables	N	%	Mean (SD)
STAI-T© General Anxiety Currently	68		
Low	27	39.7	
Moderate	20	29.4	
High	21	30.9	

Research Questions Hypotheses and Findings

A retrospective pre-test and post-test design were used in this study to address the following research questions and hypotheses:

RQ1: Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty, compared to the initial onset?

Null Hypothesis (H1$_o$) There is no relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty, compared to the initial onset.

Alternative Hypothesis (H1$_a$) There is a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty, compared to the initial onset.

The results from the paired sample independent t-test (Table 3) on the scores from the PSS-4 at the initial onset compared to the last month were significant (p = 0.002), indicating a strong relationship between the two. Additionally, the scores from the STAI-S© at the initial onset compared to currently were highly significant (p < 0.001), also indicating a strong relationship between the variables. The results from the analyses of

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both instruments indicate a strong relationship between nursing faculty perceptions of

stress and coping at the onset of the COVID-19 pandemic compared to currently. For

Research Question 1, the statistical measurement of the relationship between two

variables is considered significant. Therefore, the null hypothesis was rejected at $\alpha = 0.05$

level.

Table 3

Bivariate Analyses Between Stress at Onset of the COVID-19 Pandemic and Currently

Variable 1	Variable 2	Test	Test Statistic	*P*
PSS-4 Score (Onset)	PSS-4 Score (Currently)	*t*	3.194	**0.002**
STAI-S© Score (Onset)	STAI-S© Score (Currently)	*t*	4.302	**<.001**

To further investigate nursing faculty's perceptions, single-item indicators were

analyzed. The analysis depicted in Table 4 shows the frequency of faculty reports of

stress and coping. The 5-point Likert items were compressed to form a dichotomous

(Yes/No) variable to have a better representation of the faculty's perceptions. If faculty

selected "unsure" for the item regarding "feeling more stressed as the pandemic has

lingered," those were added to the "yes" group since it was believed if a person could not

say definitively whether they were more stressed or not, they likely were. Likewise, if

faculty selected "unsure" for the item regarding "coping better at the onset," those were

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added to the "no" group because it was believed if a person could not say whether they were coping or not, they likely were not. Based on responses on the PSS-4, the STAI-S©, and the single-item indicators, evidence suggests that faculty's perceptions of stress and coping were greater at the onset compared to currently.

Table 4

Frequency Report of Single Item Indicators: Stress and Coping

Variables		N	%
I Feel More Stressed as the COVID-19 Pandemic has Lingered Compared to the Initial Onset		68	
	Yes	25	36.8
	No	43	63.2
I was Able to Cope More Efficiently at the Initial Onset of the COVID-19 Pandemic Compared to Currently		68	
	Yes	26	38.2
	No	42	61.8

RQ2: Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty compared to the initial onset and intent to leave nursing education?

Null Hypothesis (H1$_o$) There is no relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty compared to the initial onset and intent to leave nursing education.

Alternative Hypothesis (H1$_a$) There is a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty compared to the initial onset and intent to leave nursing education.

Single-item indicator items for stress, coping, and intent to leave were analyzed to address RQ2. The 5-point Likert item for intent to leave was compressed to form a dichotomous (Yes/No) variable to have a better representation of the faculty's perceptions. If faculty selected "unsure" for the item, those were added to the "yes" group since it was believed if a person could not say definitively whether they intended to leave, they were likely to. The results from a chi-square test (Table 5) on faculty's perceived ability to cope more efficiently at the initial onset of the COVID-19 pandemic compared to currently and intent to leave the profession to reflect a significant correlation ($p = 0.004$), indicating a strong relationship between the variables. As depicted in Table 5, a chi-square was also performed on faculty's perceived greater stress as the impact of the COVID-19 pandemic has lingered compared to the initial onset and intent to leave nursing education, reflecting a highly significant correlation ($p < 0.001$) amongst the variables.

For RQ2, the evidence indicates a significant positive correlation between perceived stress and coping currently and intent to leave the profession, compared to the initial onset. Therefore, the null hypothesis was rejected at $\alpha = 0.05$ level. There is a statistically significant relationship between the perception of greater stress and decreased coping efficacy currently compared to the onset of the COVID-19 pandemic, and intent to leave the profession of nursing faculty.

Table 5

Bivariate Analyses Between Intent to Leave the Profession and Faculty Perceptions of Stress and Coping Due to the Lasting Impact of the COVID-19 Pandemic Compared to the Onset

Variable	Independent Variables	Test	Test Statistic	P
Intent to Leave	Able to Cope More Efficiently at Onset Compared to Currently	χ^2	8.340	**0.004**
	Feel More Stressed as Impact has Lingered Compared to Onset	χ^2	13.592	**<0.001**

RQ3: Is there a relationship between age, ethnicity, employment status, state of residence, number of dependents, marital status, gender, educational background, level of instruction, and/or years of service and nursing faculty's perceived stress levels, coping and/or intent to leave the profession due to the lasting impact of the COVID-19 pandemic as compared to the initial onset?

Null Hypothesis (H1$_0$) There is no relationship between age, ethnicity, employment status, state of residence, number of dependents, marital status, gender, educational background, level of instruction, and/or years of service, and nursing faculty's perceived stress levels, coping and/or intent to leave the profession due to the lasting impact of the COVID-19 pandemic as compared to the initial onset.

Alternative Hypothesis (H1$_a$) There is a relationship between age, ethnicity,

employment status, state of residence, number of dependents, marital status,

gender, educational background, level of instruction, and/or years of service, and

nursing faculty's perceived stress levels, coping and/or intent to leave the

profession due to the lasting impact of the COVID-19 pandemic as compared to

the initial onset.

As depicted in Table 6, Table 7, & Table 8 bivariate analyses were conducted to

determine the relationships between the demographic variables and perceptions of stress

and coping as the pandemic has lingered compared to the initial onset, and intent to leave

the profession. Results determined there was a relationship between age and perceived

coping as the p-value (0.006) is less than the significance level of 0.05. There were no

significant relationships between gender, ethnicity, marital status, employment status,

state of residence, years of service, number of dependents, level of instruction at onset

nor currently, nor educational background and perceived stress, coping, nor intent to

leave. There also was no significance between age and perceived stress nor intent to

leave. See Table 6, Table 7, and Table 8 for a visual representation of the bivariate

analyses between perceived independent variables and coping, stress, and intent to leave

using an independent t-test, Pearson's chi-square, or Spearman's rho. The null hypotheses

for the presence of a relationship between age and decreased perceived coping efficacy

currently compared to the onset of the COVID-19 pandemic was rejected at $\alpha = 0.05$

level. Therefore, age is related to decreased perceived coping efficacy currently

compared to the onset of the COVID-19 pandemic. The null hypothesis for gender,

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ethnicity, marital status, employment status, state of residence, years of service, number

of dependents, level of instruction taught, and educational background could not be

rejected. Therefore, gender, ethnicity, marital status, employment status, state of

residence, years of service, number of dependents, level of instruction taught, and

educational background did not show a statistically significant relationship with

perceived stress, coping, and intent to leave the profession currently compared to the

initial onset.

Table 6

Bivariate Analyses Between Perceived Coping and Sociodemographic Variables

Variable	Independent Variables	Test	Test Statistic	*P*
Able to Cope More Efficiently at Onset Compared to Currently	Gender	χ^2	0.067	0.796
	Age	t^*	2.836	**0.006**
	Ethnicity	χ^2	0.479	0.489
	Marital Status	χ^2	1.296	0.255
	Employment Status	χ^2	0.121	0.728
	State of Residence	χ^2	0.330	0.565
	Years of Service	ρ *(rho)*	-0.159	0.195

Table 6 (continued).

Variable	Independent Variables	Test	Test Statistic	P
Able to Cope More Efficiently at Onset Compared to Currently	Number of Dependents	ρ (rho)	0.150	0.223
	Level of Instruction at Onset	ρ (rho)	-0.083	0.500
	Level of Instruction Currently	ρ (rho)	-0.058	0.706
	Educational Background	ρ (rho)	-0.088	0.475

Equal variance assumption was violated; Satterthwaite t-test was performed.

Table 7

Bivariate Analyses Between Perceived Stress and Sociodemographic Variables

Variable	Independent Variables	Test	Test Statistic	P
Feel More Stressed as the Pandemic has Lingered Compared to Onset	Gender	χ^2	0.033	0.855
	Age	t	0.052	0.480
	Ethnicity	χ^2	0.625	0.429
	Marital Status	χ^2	0.033	0.855
	Employment Status	χ^2	1.198	0.274
	State of Residence	χ^2	0.498	0.481

Table 7 (continued).

Variable	Independent Variables	Test	Test Statistic	*p*
Feel More Stressed as the Pandemic has Lingered Compared to Onset	Years of Service	ρ *(rho)*	0.047	0.705
	Number of Dependents	ρ *(rho)*	0.005	0.969
	Level of Instruction at Onset	ρ *(rho)*	-0.086	0.483
	Level of Instruction Currently	ρ *(rho)*	-0.129	0.403
	Educational Background	ρ *(rho)*	-0.029	0.818

Table 8

Bivariate Analyses Between Intent to Leave and Sociodemographic Variables

Variable	Independent Variables	Test	Test Statistic	*p*
Intend to Leave Nursing Education	Gender	χ^2	1.410	0.235
	Age	*t*	0.774	0.442
	Ethnicity	χ^2	2.371	0.124
	Marital Status	χ^2	0.004	0.947
	Employment Status	χ^2	0.442	0.506

Table 8 (continued).

Variable	Independent Variables	Test	Test Statistic	p
Intend to Leave Nursing Education	State of Residence	χ^2	0.882	0.348
	Years of Service	ρ (rho)	-0.104	0.399
	Number of Dependents	ρ (rho)	0.041	0.742
	Level of Instruction at Onset	ρ (rho)	-0.149	0.225
	Level of Instruction Currently	ρ (rho)	-0.130	0.399
	Educational Background	ρ (rho)	0.066	0.594

RQ 4: How do nursing faculty describe their experience and are there any identified needs for support resources?

Single-Item Indicators

      Single-item indicators were created to better understand the experience of faculty throughout the COVID-19 pandemic. The 5-point Likert items for the variables depicted in Table 9 were compressed to form a dichotomous (Yes/No) variable to have a better representation of the faculty's perceptions. If faculty selected "unsure" for the item, those were added to the "yes" group since it was believed if a person could not say definitively, they were likely to at least have considered "yes". Table 9 depicts nursing faculty

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responses to the single-item indicators that reflect their experiences. In the responses, 86.8% (n=59; N=68) of faculty indicated they had concerns for the future of nursing education as a direct result of the impact of the pandemic on nursing faculty. Over half, 55.9% (n=38; N=68), of faculty indicated their stress and coping were impacted because of their role as faculty throughout the pandemic. Despite the impact of the pandemic on faculty, only 19.1% (n=13; N=68) considered leaving their positions, and only 22.1% (n=15) considered leaving nursing education. As depicted in Figure 1, when asked what they would identify as the most impactful challenge near the initial onset of the COVID-19 pandemic, 43.1% (n=25; N=58) of respondents indicated the transition to online instruction; 17.2% (n=10) indicated a lack of physical or technical resources for educational needs; 10.3% (n=6) indicated student behavior; 10.4% (n=6) indicated social isolation; 8.6% (n=5) indicated support from administration or institution; 6.9% (n=4) indicated concern for contracting the illness; and 3.4% (n=2) indicated "other" causes.

Table 9

Frequency Report of Single Item Indicators

Variables		N	%
I have concerns for the future of nursing education due to the impact of the COVID-19 pandemic on nursing faculty		68	
	Yes	59	86.8
	No	9	13.2
My role as nursing faculty significantly impacted my stress and ability to cope throughout the COVID-19 pandemic		68	
	Yes	38	55.9
	No	30	44.1

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Table 9 (continued).

Variables		N	%
I considered leaving my current position because of stress related to the COVID-19 pandemic		68	
	Yes	13	19.1
	No	55	80.9
I considered leaving nursing education because of stress related to the COVID-19 pandemic		68	
	Yes	15	22.1
	No	53	77.9

Faculty Indications of the Most Impactful Challenge Near the Initial Onset of the COVID-19 Pandemic

	Percent (N=58)
■ Other	3.4
■ Transition to Online Instruction	43.1
■ Lack of Resources for Education Needs (Physical or Technical)	17.2
■ Support from Administration/ Institution	8.6
■ Social Isolation	10.3
■ Student Behavior	10.3
■ Concern For Contracting the Illness	6.9
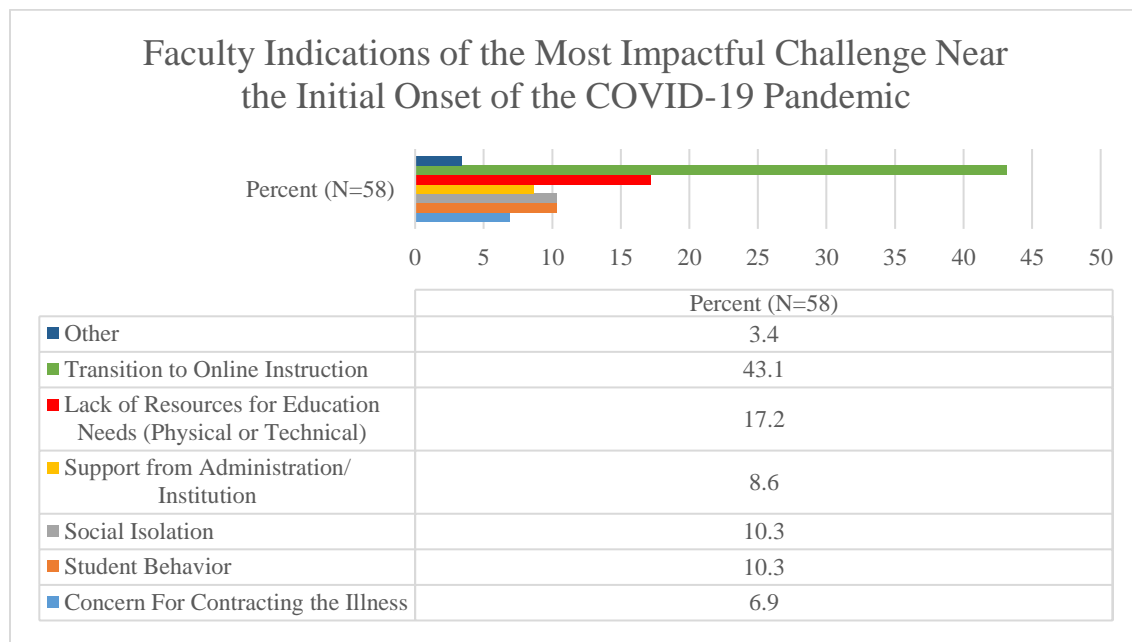
Figure 1. Frequency Report of Single-Item Indicators for Faculty Indication of Challenges

Open-Ended Responses

To further understand faculty experiences, open-ended questions were available for elaboration. The responses to these questions were downloaded from Qualtrics® into SPSS® and transferred to a table in a Word document for categorization. The questions

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were read multiple times and analyzed for commonalities then categorized into themes. To confirm proper categorization and identification of overarching themes, a committee member compared the participant's responses to the identified themes and confirmed valid interpretations were present. In the open-ended responses, faculty describe their experience as stressful for numerous reasons related to the faculty role, but also the seemingly endless responsibilities that coincided with them throughout the COVID-19 pandemic.

Greatest Challenge at Onset and Currently. Seven themes were identified for the question addressing what faculty found most challenging regarding the faculty role near the onset of the COVID-19 pandemic. The themes were a concern for clinical (placement, safety, quality, experience); technological issues; lack of down-time, lack of guidance/support/direction from leadership, having to expediently transition to online instruction; lack of supplies/resources; and concerns with engaging and supporting students while teaching effectively in the new environment. Five themes were identified when asked what respondents found most challenging/concerning regarding the faculty role presently, as the effects of the pandemic have endured. The themes identified were the concern for lack of student preparation for the rigor of nursing school; student attitude, commitment, emotional or mental aptitude; lack of guidance from leadership; lack of faculty support; and the transition back to face-to-face to meet the needs of the new nursing students.

Faculty Support at Onset and Currently. When asked what response/action/resources from the institution or administrator could have better-

supported faculty during the initial onset of the COVID-19 pandemic, five themes were identified. The identified themes were the provision of open and clear communication; compassion/mental health support; physical and technological resources, and more time to transition to online; and faculty felt that administrators/institutions handled it to the best of their ability. When asked what response/action/resources nursing faculty believed their institution/ administrators could implement presently to support faculty as the effects of the pandemic have lingered, the responses varied. The themes that were identified were understanding/ acknowledgment of the burdens that faculty endured and their resilience, rewarding faculty resilience and efforts/pay adjustment to meet bedside nursing pay; and support for the challenges surrounding the many realms of the faculty role/stress management and wellness programs/ training or mental health days; or faculty felt that administrators/institutions handled it to the best of their ability.

Greatest Influence on Leaving/Maintaining Role. When asked what the greatest influence on faculty's desire to leave was if they considered leaving their position/nursing education during the pandemic or plan to retire prior to August 2023, six themes were identified. The themes included a lack of faculty support, pay disparities, increased responsibilities/lack of consideration for work-life balance; age (near retirement); and work environment. When asked what influenced faculty to stay if they considered leaving their position or nursing education during the pandemic, but will likely resist, six themes were identified. The themes that emerged were a love for teaching and students; being close to retirement; schedule/work environment; concern for the integrity of instruction/ profession/institution and lack of attrition/attainment of faculty; personal

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motivation/passion/commitment and accomplishments within/to the career choice; and financial needs.

Additional Insight. When given the opportunity to provide additional free-text comments, respondents provided further insight into the experience of nursing faculty throughout the COVID-19 pandemic. Faculty discussed the difficulties at the onset, but also the challenges transitioning back to face-to-face, describing the "chaos and uncertainty" experienced as "overwhelming". One faculty member discussed that "adjustments need to be made to teach the 'post-pandemic' student". Frustration with a lack of acknowledgment/understanding of the additional responsibilities and additional burdens experienced by nursing from other academic departments and the institution was also expressed.

Another faculty member "felt that decisions by the nursing faculty to begin testing by computer and the decision by the college administration to make sure all instructors had portable devices was pivotal," and that having these procedures in place before the pandemic made the "response much easier." Other respondents discussed frustration surrounding "supply chain issues." One respondent discussed a sense of "inadequacy" associated with feeling like the students were suffering a "disservice" through the myriad changes in instruction. Other respondents discussed the benefits that emerged from the pandemic such as virtual meetings and office hours, working from home, technological aptitude, "innovative teaching strategies," and perseverance. The varied responses in the open-ended comments reflect the varied responses in the survey regarding the faculty's perceptions of stress, coping, and intent to leave throughout the COVID-19 pandemic.

Summary

      Chapter IV presented the findings of the quantitative analysis and themes found in the open-ended responses. A discussion of the implementation of the instruments was also presented. Chapter V will include an interpretation of the findings, as well as recommendations.

CHAPTER V – DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Chapter V discusses the findings from the analysis. Findings and interpretations from each research question, as well as discrepancies, will be discussed. Recommendations for future research and calls for action are also presented.

Interpretation of Findings

Findings from this study contribute to the growing body of literature regarding the impact of the COVID-19 pandemic on nursing faculty and in higher education, nursing faculty's perceptions of stress, coping, and intent to leave during the pandemic, the nursing faculty shortage, and leadership needs in nursing academia. The findings from this study emphasize the need for interventions to increase the retention of highly qualified, committed nursing faculty to prepare nurses for the future. Additional challenges are presented that are directly related to the impositions of the COVID-19 pandemic on the faculty role.

Triangulation was performed using the results from multiple instruments and open-ended responses in a retrospective pre-test post-test quantitative design to corroborate the identification of relationships between the perceived stress, coping, and intent to leave the profession imposed by the COVID-19 pandemic on nursing faculty at the onset of the pandemic as compared to the present time. According to Bhanji et al. (2012), the retrospective pre-test and post-test are beneficial when the participants' understanding or perspective changes. The design choice was essential in reducing response shift bias to most accurately reflect a true representation of the stress related to impositions by the COVID-19 pandemic, both initially and over time; as nursing

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faculty's initial opinions likely changed as the pandemic endured (Bhanji et al., 2012). In this study, the design was chosen because it was believed that the nursing faculty's perception of the impact of the COVID-19 pandemic had evolved due to the sustained impact. Triangulation was used to establish consistency in faculty reports across multiple instruments and analysis of statements.

Research Question 1

Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty, compared to the initial onset? Bivariate analyses and frequency reports were used to analyze research question one. The PSS-4 (Cohen et al., 1983), STAI-S© (Spielberger et al., 1983), and single-item indicators were used for data collection. The analyses explored the relationships between nursing faculty's perceived stress and coping at the initial onset and currently. There was a statistically significant relationship between the PSS-4 scores at the onset and within the last month (p = 0.002). There also was a statistically significant difference between the STAI-S© scores at the onset compared to currently (p < 0.001). Therefore, the null hypothesis was rejected at α =0.05 level. While there was a significant relationship, the findings were not as anticipated. Stress and coping were anticipated to have been greater as the impact of the pandemic has lingered compared to the onset, but faculty reported feeling more stressed at the initial onset more frequently. The findings were further validated through the analysis of the single-item indicators regarding the comparison of stress and coping at the onset and currently, where 63.2%

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(n=43; N=68) of faculty reported feeling more stressed at the onset and 61.8% (n=42) of faculty reported coping more efficiently currently compared to the initial onset.

The results from research question one could be interpreted as the impact of the pandemic was unprecedented, traumatic, shocking, and unfathomable, as supported by Manjunatha et al. (2020). Therefore, when asked if stress or coping is more affected now that life has returned to a semblance of normal, faculty may not be able to perceive the stress or coping on the same scale, understandably. In the open-ended responses, multiple respondents discussed the added responsibility of having to suddenly homeschool children in addition to their faculty roles during the onset of the pandemic, which also would explain a feeling of greater stress during that time. The negative impact of the necessity of homeschooling on stress during the pandemic was previously discussed by Adams et al. (2021) and Nowell et al. (2021).

Similar to findings from Nabolsi et al. (2021), several nursing faculty respondents described the passion and commitment to/for the profession as motivators to stay in academia, which could contribute to psychological resilience, as supported by Gandhi et al. (2021). According to Hyun et al. (2021), psychological resilience is considered a necessary trait for adaptation. There is a possibility that faculty could also be experiencing a phenomenon known as posttraumatic growth. This phenomenon occurs when individuals experience a positive transition or attribute positive outcomes to overcoming trauma from a crisis, such as the COVID-19 pandemic (Hyun et al., 2021; Liu et al., 2023). This assumption is supported by respondents' comments suggesting that despite the "horrible" experience at the onset, as nurses, we persevered and have added

new accomplishments to the repertoire throughout the process. This suggestion is exemplified through findings in Dewart et al. (2020), Gandhi et al. (2021), Nowell et al. (2021), and one respondent's comment in the open-ended questions in this study:

> I think the pandemic forced us to be a little more innovative and creative. While I hate that the pandemic has ever happened, I'm excited for some of the innovative teaching strategies that have come out as a result of the pandemic. As a nurse, we are taught to be able to adapt to our surroundings. I think even as nurse faculty we did that, and we did it well.

Due to the nature of the faculty and nursing roles and the prolonged stress imposed by the pandemic, nursing faculty could also be so accustomed to tolerating stress at this point and thus not fully appreciating the lasting impact has had on their mental health. Essentially, they may be numb to the constant impositions of the pandemic, which could make it hard to acknowledge the toll it has taken on their stress/coping. The faculty member's comment regarding the expectation of nurses to "adapt to our surroundings" reinforces this suggestion; nurses and nursing faculty are so accustomed to overcoming and adapting that they can/have not recognize (d) the magnitude of the COVID-19 pandemic on their stress/coping abilities. Findings from Gandhi et al. (2021), Nowell et al. (2021), and Sacco and Kelly (2021) support that due to the requirements of nurses, they are accustomed to frequent adaptation, and thus are, likely, less inclined to report/appreciate the significant impact of a crisis.

Research Question 2

Is there a relationship between the lasting issues imposed by the COVID-19 pandemic and perceived stress levels and/or coping in nursing faculty compared to the initial onset and intent to leave nursing education? There was a statistically significant relationship between the single-item indicators regarding faculty perceptions of stress and coping currently compared to the initial onset and the intent to leave nursing education. The chi-square test comparing faculty's perceived ability to cope more efficiently at the initial onset of the COVID-19 pandemic compared to current and intent to leave the profession indicated a strong relationship between the variables (p = 0.004). Similarly, the chi-square performed on faculty's perception of experiencing greater stress currently compared to the onset of the COVID-19 pandemic and intent to leave reflected a highly significant correlation (p < 0.001) amongst the variables.

Although more respondents reported their coping was more negatively impacted at the onset compared to currently (61.8%; n=42), those who reported coping less efficiently currently compared to the initial onset (38.2%; n=26) indicated they intended to leave the profession more frequently. Likewise, more respondents reported feeling less stressed currently than at the initial onset of the COVID-19 pandemic (63.2%; n=43) than those who feel more stressed currently compared to the initial onset (36.8%; n=25). However, those who feel more stressed currently reported a greater intent to leave the profession than those who felt more stressed at the onset.

The results align with Lazarus and Folkman's (1984) transactional model of stress and coping. The nursing faculty who reported feeling more stressed at the initial onset is

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no longer appraising the impact of the pandemic as a threat and/or have adapted through effective coping, and therefore do not feel the need to leave. The nursing faculty who reported feeling more stressed currently are appraising the lingering impact as a threat and/or have not adapted/have impaired coping possibly from exhausting their reserves due to the sustained impact, and therefore are compelled to leave to remove the perceived stressor.

Research Question 3

Is there a relationship between age, ethnicity, employment status, state of residence, number of dependents, marital status, gender, educational background, level of instruction, and/or years of service and nursing faculty's perceived stress levels, coping and/or intent to leave the profession due to the lasting impact of the COVID-19 pandemic as compared to the initial onset? Bivariate analyses were conducted to determine relationships between the demographic variables and perceptions of stress and coping as the pandemic has lingered compared to the initial onset, and intent to leave the profession. There was a statistically significantly relationship found only between age and perceived coping (p = 0.006). Otherwise, there were no significant relationships between gender, ethnicity, marital status, employment status, state of residence, years of service, number of dependents, level of instruction at onset nor currently, nor educational background and perceived stress, coping, nor intent to leave. There also was no significance between age and perceived stress nor intent to leave.

Limited sample size could have impacted the results of research question one. The diversity of the sample also could have influenced the results for this question. A recent

study conducted by Choi et al. (2022) indicates that protective factors such as marital status, education, and perceived social support can impact feelings of loneliness and psychological symptoms. Therefore, the presence of support from loved ones could impact the positive assessment of stress and coping currently, especially as the initial trauma of the onset has subsided. Since Choi et al.'s (2022) study reflected the impact of these protective factors on the Mississippi Gulf Coast residents, even a larger, more diverse sample from Mississippi would likely result in different indications of perceived stress and coping throughout the pandemic. However, the mean age for respondents in this study (49.3) (10.36) resembles NLN (2021) reports that 50.3% of full-time faculty are between 46-60 years of age. Also, in this study, 92% of participants are female and 88% (n=75), are Caucasian which aligns with the NLN (2021) census data reporting 91.3% of full-time faculty are females and 76.8% are White, non-Hispanic.

While not statistically significant, there was an inverse relationship between years of service, level of instruction taught currently and at onset, educational background, and coping more efficiently at onset compared to currently; level of instruction taught currently and at onset, educational background, and feeling more stressed as pandemic has lingered compared to onset; and years of service, level of instruction taught at onset and currently, and intent to leave the profession as depicted in Table 10. The presence of these relationships indicates the need for a larger, more diverse population. If there were greater representation from those with varied marital status, other geographical regions, ethnicities, ages, or levels of education taught, the results would possibly have differed.

Table 10

Inverse Relationships Between Sociodemographic Variables and Single Item Indicators

Variable	Independent Variables	Test	Test Statistic	P
Able to Cope More Efficiently at Onset Compared to Currently	Years of Service	ρ (rho)	-0.159	0.195
	Level of Instruction at Onset	ρ (rho)	-0.083	0.500
	Level of Instruction Currently	ρ (rho)	-0.058	0.706
	Educational Background	ρ (rho)	-0.088	0.475
Feel More Stressed as the Pandemic has Lingered Compared to Onset	Level of Instruction at Onset	ρ (rho)	-0.086	0.483
	Level of Instruction Currently	ρ (rho)	-0.129	0.403
	Educational Background	ρ (rho)	-0.029	0.818
Intend to Leave Nursing Education	Years of Service	ρ (rho)	-0.104	0.399
	Level of Instruction at Onset	ρ (rho)	-0.149	0.225

Table 10 (continued).

Variable	Independent Variables	Test	Test Statistic	P
Intend to Leave Nursing Education	Level of Instruction Currently	ρ (rho)	-0.130	0.399

Research Question 4

In reviewing the responses to the open-ended questions, themes were identified and discussed in Chapter IV. These themes provided context to the quantitative findings and are discussed throughout Chapter V, with particular emphasis on the recommendations. In the open-ended responses, nursing faculty describe the stress imposed by the COVID-19 pandemic related to the faculty role and discuss implications and recommendations, based on their experiences.

Theoretical Underpinnings

Lazarus and Folkman's (1984) transactional model of stress and coping served as the theoretical framework for this study. The assertions by this theory, that stress and coping are dynamic and highly individualized, align with the outcomes of this study. The theory states that a person encounters a stressor, appraises the potential impact as a challenge or a threat, and determines their ability to cope/overcome it. Depending on context and external factors, an individual's perception of the stressor and ability to cope may evolve over time (Lazarus, 1999). While it was believed that as the COVID-19 pandemic endured, nursing faculty would have exhausted their reserves and would

perceive the stress to be greater and their coping mechanisms would have been exhausted, however, it seems to be the case. Results suggest that as time has passed, the nursing faculty have adapted; and their appraisal of the current/prolonged stress is that it is not as significant as the initial shock at the onset of the pandemic. The faculty also reported perceiving their coping was more efficient currently compared to the onset. Due to the unprecedented, global impact of the pandemic, it is understandable that faculty's appraisal of the stress as well as their perception of their ability to cope would be different as the circumstances have evolved and time has passed and follows Lazarus' (1999; 2012) discussion of the model.

<div align="center">Recommendations for Further Study</div>

Through this study, it was clear that faculty were impacted by the COVID-19 pandemic both at the onset and currently as 55.9% (n=38; N=68) of faculty reported the role as nursing faculty significantly impacted their stress and ability to cope throughout the COVID-19 pandemic. Comments by respondents indicating concerns with a lack of down time and increased responsibilities; need for guidance/support from leadership and mental health training and support; and faculty retention, attrition, and compensation. Future studies could benefit by exploring the current cause of faculty stress and specific concerns for nursing education.

Concern for Nursing Education

While several respondents professed love for and commitment to the profession and the overall impact on society, staggering results were found when faculty were asked if they were concerned for the future of nursing education; 86.8% (n=59; N=68)

responded "yes". A common theme throughout the open-ended comments was the lack of student preparation, commitment, attitude, and aptitude. Faculty reported feeling concerned about the trajectory for education if the rigor of the program must be decreased due to the qualities and attitudes of the "post-pandemic" students. Based on the findings from this study as well as reports from Iheduru-Anderson and Foley (2021), Chang-Martinez (2020), Nabolsi et al. (2021) future studies could benefit from an exploration of the change in qualities, attitudes, and aptitude of nursing school applicants. Additionally, these findings support the need for future studies to explore implications for nursing faculty and academic nursing institutions to properly prepare nursing graduates without compromising expectations, integrity, nor rigor of the programs.

Burnout

Future studies could explore potential burnout in nursing faculty. There was a contradiction in the comments of nursing faculty reporting stress as the pandemic has lingered and the results from the quantitative analyses. Comments in this study and reports by Agu et al. (2021), Boamah (2022), De Sousa et al. (2021), Giusti et al. (2020), and Nowell et al. (2021) support a need for further examination of faculty's experiences to determine further calls for action.

Positive Administrative/Institutional Response

Some faculty members reported feeling as though administrators and their institutions had reacted in a way that supported faculty and students' needs to the best of their ability. Based on these findings and those from Gandhi et al. (2021), Iheduru-Anderson and Foley (2021), Nowell et al. (2021), and Sacco and Kelly (2021), potential

future studies could explore what influenced faculty's positive perceptions of their administrators and institutions. Results from the suggested studies could identify potential calls for action for administrators/institutions.

Posttraumatic Growth

Since multiple respondents in this study discussed the perseverance of nursing faculty/higher education faculty and the positive outcomes of overcoming the impact of the COVID-19 pandemic. The respondents' comments along with findings from Gandhi et al. (2021), Iheduru-Anderson and Foley (2021), and Nowell et al. (2021), suggest that posttraumatic growth in nursing faculty should be explored. A few recent studies have evaluated personal growth directly related to the COVID-19 pandemic and have identified correlations in those who perceived experiencing growth through the crisis (Chi et al., 2020; Hyun et al., 2021; Kowalski et al., 2021; Vasquez et al., 2021; Zhou et al., 2020). Future studies could benefit by determining if a significant amount of nursing faculty would report personal growth through the pandemic and if any correlations between protective/predictive factors could be identified.

<div align="center">Recommendations for Action</div>

While numerous faculty discussed a commitment to the profession, there was a significant concern for the future of nursing education with 86.8% (n=59; N=68) of respondents indicating they were concerned for the future of nursing education. Academic nursing institutions, nursing organizations, and other stakeholders within academia should take heed of faculty concerns. One respondent's comment encompasses an abundance of concerns addressed by other respondents regarding the future of nursing

education that are believed to be significant considerations for professional and academic institutions:

Student retention appears to be the highest priority above current faculty working conditions. Nursing faculty work long hours and are not compensated for it. The lack of understanding of the strenuous work schedule and lack of work/life balance creates extreme anxiety and stress. The workday does not end at 5pm or when classes end for the day. Many nursing faculty must complete additional lesson plans, clinical assignment, grade papers, and prepare reports. Student advisement, mentoring, and coaching appears to be ongoing. These are requirements of the faculty that blurs the lines between home and work. Many nursing faculty work 60+ hour work weeks. It appears that administration and the university leadership fail to acknowledge this and are always wanting more. It's overwhelming and tiring. This may be one of the main reasons why nursing faculty plan to leave the profession. Over work, under pay, no consistent work/life balance, and few if any days to destress.

Work-Life Balance/Work Environment

The lack of work/life balance was a frequent report by respondents. When faculty feel as though they do not have the option to practice self-care or perform their duties outside of being an educator, it is inevitable their productivity and efficiency will be impacted. Now that tools are available to maximize productivity in a reduced amount of time and without the need for physical presence, it seems prudent to take advantage of the opportunity to work smarter, not harder. Another frequently reported concern was toxic

work environments or feeling as though their concerns were not considered. If nursing

academia is to grow and meet the standards required to produce a nursing workforce fit to

care for society, it is critical for all stakeholders to involve nursing faculty in

conversations and consider their never-ending responsibilities. These suggestions are

further supported by similar findings reported by Agu et al. (2021), Boamah et al. (2021),

Gazza (2022), Iheduru-Anderson and Foley (2021), Nabolsi et al. (2021), Nowell et al.

(2021), and Sacco and Kelly (2021), and Tourangeau et al. (2015).

Recognition/Reward/Faculty Support and Retention

Perceived compensatory disparities and a lack of a sufficient, qualified faculty

pool were common concerns among respondents. Faculty also reported feeling defeated

by the lack of recognition for the personal, professional, and emotional sacrifices

imposed by the COVID-19 pandemic, which was also expressed by Iheduru and

Anderson Foley (2021) and Nowell et al. (2021). Administrators could benefit by

considering the discrepancy in pay between bedside nurses and nursing faculty, and the

probability of nursing faculty returning to the bedside if they believe they would be

appreciated and compensated more fairly if they were to leave nursing education, which

was also discussed in Boamah (2021). Additionally, faculty should be involved in

processes concerning the recruitment and retention of qualified nursing faculty. A

decreased faculty pool generally translates to an increased workload for existent faculty,

so faculty are likely highly motivated to aid in these processes, as supported by Nowell et

al. (2021).

Maintaining Quality

One of the most common themes in the respondents' comments was regarding the quality of students since the onset of the COVID-19 pandemic. There is a dire need for rigor to be maintained and measures are taken to ensure that students who can succeed are being recruited into nursing programs. As such, it is believed nursing faculty must be involved in decisions surrounding the recruitment and retention of well-qualified, committed, academically/mentally/ physically/emotionally apt students as well. These suggestions are also supported by the findings of Nabolsi et al. (2021).

Conclusion

This study provides new information regarding faculty perceptions of stress, coping, and intent to leave the profession throughout the COVID-19 pandemic. As the impact of the pandemic continues to evolve, it is critical for researchers, administrators, institutions, and organizations to consider faculty experiences to mitigate an exodus and a decline in the quality of nursing education. Measures need to be taken to ensure faculty feel supported, heard, and valued. There must be a provision of clear guidance, direction, and expectations to ensure nursing faculty are more prepared to cope with the stressful demands associated with their role. There was an identified need for recognition for the monumental impact nursing faculty have on the well-being of society through pay adjustment, formal and informal recognition, and simply being considered and included.

Faculty's concerns suggested the desire for the temperature of the work environment to be assessed and the inclusion of mental wellness programs to ensure all faculty feel safe and supported. Above all, all stakeholders would benefit from

understanding that most faculty have remained in their positions despite many challenges because of their passion for nursing, education, and student interactions. Stakeholders must champion faculty's commitment to promoting growth and achievement, rather than stagnation and a diminishment of rigor and expectations for the nurses of the future and the overall health of society.

APPENDIX A – Demographic Survey

Indicate Age							
Race	Native American	Asian	African American	Hispanic	Native Hawaiian or Pacific Islander	Caucasian	Prefer not to say
Employ-ment Status	Full-time tenured	Full-time non-tenured	Part-time	Seeking Opportunities	Adjunct in-person	Adjunct on-line	Other
Indicate the State in Which you Reside							
Indicate Number of Dependents							
Marital Status	Married	Domestic Partnership	Widowed	Single			Prefer not to say
Gender	Male	Female					Prefer not to say
Educational Background	Nursing Diploma	Associate Degree	Bachelor's Degree	Master's Degree	Ph.D./ Ed.D.	DNP	Prefer not to say
Level taught during the initial onset of the Covid-19 Pandemic	Hospital based nursing program	LPN/LVN	Associate	Bachelor's	Master's	Doctoral	Prefer not to say
Level taught currently	Hospital based nursing program	LPN/LVN	Associate	Bachelor's	Master's	Doctoral	Prefer not to say
Primary setting of instruction during the initial onset of the Covid-19 Pandemic	Clinical	Didactic	Lab	Time equally distributed across lab and clinical	Time equally distributed across classroom and clinical	Time equally distributed across classroom and lab	Varies
Primary setting of instruction currently	Clinical	Didactic	Lab	Time equally distributed across lab and clinical	Time equally distributed across classroom and clinical	Time equally distributed across classroom and lab	Varies
Indicate years of nursing education experience at the initial onset of the Covid-19 Pandemic							

APPENDIX B – Perceived Stress Scale (PSS-4)

Adapted from the Cohen Perceived Stress Scale

Directions: The following questions aim to gauge the impact of the COVID-19 pandemic on nurse faculty stress and coping at the initial onset and as the effects have lingered. Please read each item and first think about your feeling and thoughts in late March-April 2020 (near the onset of the COVID-imposed mandated isolation), and then consider your feelings and in the past month. For each response, indicate HOW OFTEN you felt or thought a certain way. Despite seeming similar, each question should be treated separately. The best approach is to select the most reasonable estimate upon reading rather than trying to think of how many times you felt a particular way.

Thought/Feeling related to faculty role?	During the initial onset of COVID-imposed isolation how often	In the last month, how often
Did you feel that you were unable to control the important things in your work?	Never Very Often 0 1 2 3 4 5	Never Very Often 0 1 2 3 4 5
Did you feel confident in your ability to handle your work problems?	Never Very Often 0 1 2 3 4 5	Never Very Often 0 1 2 3 4 5
Did you feel that things were going your way regarding work?	Never Very Often 0 1 2 3 4 5	Never Very Often 0 1 2 3 4 5
Did you feel difficulties at work were piling up so high that you could not overcome them?	Never Very Often 0 1 2 3 4 5	Never Very Often 0 1 2 3 4 5

Sample of the Adaptation of the STAI-S© Short Form

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then select the corresponding to the statement indicating how you felt at the initial onset of the COVID-19 pandemic regarding your faculty role and how you feel right now, that is, currently. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your feelings best (1=Not at all, 2=Somewhat, 3=Moderately So, 4=Very much so)

Sample of the Adapted STAI State Anxiety Short Form (STAI-S©)		
	Regarding my faculty role at the <u>initial onset</u> of the COVID-19 pandemic	**Regarding my faculty role currently**
I felt/feel at ease	Not at all Very much so 1 2 3 4	Not at all Very much so 1 2 3 4
I felt/feel upset	Not at all Very much so 1 2 3 4	Not at all Very much so 1 2 3 4

Sample Adaptation of the STAI-T© Short Form

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then select the appropriate response to indicate how you generally feel now and how you generally felt pre-COVID-19 pandemic.

(1=Almost Never, 2=Sometimes, 3=Often, 4=Almost Always)

Adapted STAI Trait Anxiety Short Form (STAI-T©)		
	Prior to the COVID-19 pandemic, generally	**Currently, generally**
I lacked/lack self-confidence	Not at all Very much so 1 2 3 4	Not at all Very much so 1 2 3 4
I was/am a steady person	Not at all Very much so 1 2 3 4	Not at all Very much so 1 2 3 4

Directions: Several statements are given below. Read each statement and then select the appropriate response indicating how you relate to the statement. (1=Strongly Disagree, 2=Disagree,3=Unsure, 4=Agree, 5=Strongly Agree)

I intend to leave nursing education because of stress related to the COVID-19 pandemic	Strongly Disagree 1 2 3 Strongly Agree 4 5					
I was able to cope more efficiently at the initial onset of the COVID-19 pandemic compared to currently	Strongly Disagree 1 2 3 Strongly Agree 4 5					
I feel more stressed as the COVID-19 pandemic has lingered compared to the initial onset	Strongly Disagree 1 2 3 Strongly Agree 4 5					
I have concern for the future of nursing education due to the impact of the COVID-19 pandemic on nursing faculty	Strongly Disagree 1 2 3 Strongly Agree 4 5					
My role as nursing faculty significantly impacted my stress and ability to cope throughout the COVID-19 pandemic	Strongly Disagree 1 2 3 Strongly Agree 4 5					
I considered leaving my current position because of stress related to the COVID-19 pandemic	Strongly Disagree 1 2 3 Strongly Agree 4 5					
I considered leaving nursing education because of stress related to the COVID-19 pandemic	Strongly Disagree 1 2 3 Strongly Agree 4 5					
What would you identify as the most impactful challenge for faculty near the initial onset of the Covid-	1 Concern for contracting the illness	2 Student behavior	3 Social isolation	4 Support from administration or institution	5 Lack of resources for educational needs (physical or technical)	6 Transition to online

| 7 Other |

19 Pandemic?							

APPENDIX E – Open-Ended Questions

1. What did you find most challenging/concerning regarding your faculty role near the initial onset of the Covid-19 Pandemic?

2. What do you find most challenging/concerning regarding your faculty role presently, as the effects of COVID have endured?

3. What response/action/resources from your institution or administrator do you feel could have better supported faculty during the initial onset of the Covid-19 Pandemic?

4. What response/action/resources do you feel your institution or administrator could implement presently to support faculty as the effects of the COVID-19 pandemic have endured?

5. If you contemplated leaving your position, nursing education, or you plan to retire prior to August 2023 what do you believe had the greatest influence on your desire to leave?

6. If you contemplated leaving your position or nursing education, but will likely resist, what do you believe had the greatest influence on your decision to stay?

7. Please indicate any additional comments that you feel would be beneficial in understanding the faculty's experience during this tumultuous time.

APPENDIX F – STAI Copyright Permission

mind garden

www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

State-Trait Anxiety Inventory for Adults

The four sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

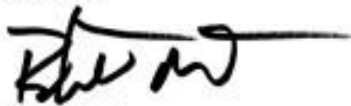**Citation of the instrument must include the applicable copyright statement listed below.**
Sample Items:

> I feel at ease
> I feel upset
> I lack self-confidence
> I am a steady person

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

APPENDIX G – IRB Approval Letter

Office _of_ Research Integrity

THE UNIVERSITY OF **SOUTHERN MISSISSIPPI.**

118 COLLEGE DRIVE #5116 · HATTIESBURG, MS | 601.266.6756 | WWW.USM.EDU/ORI

NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident submission on InfoEd IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER:	22-1565
PROJECT TITLE:	Nursing Faculty Perceptions of Stress, Coping, and Intent to Leave the Profession in the Ongoing COVID-19 Pandemic
SCHOOL/PROGRAM	Leadership & Advanced Nursing
RESEARCHERS:	PI: LynLee Morgan Investigators: Morgan, LynLee~Story, Jennifer~
IRB COMMITTEE ACTION:	Approved
CATEGORY:	Expedited Category
PERIOD OF APPROVAL:	14-Dec-2022 to 13-Dec-2023

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

MISSISSIPPI INSTITUTIONS OF HIGHER LEARNING
OFFICE OF ACADEMIC AND STUDENT AFFAIRS

November 21, 2022

Dr. Lachel Story and USM IRB
University of Southern Mississippi
118 College Drive
Hattiesburg, MS 39406

Dear USM IRB:

On behalf of the Mississippi State Institutions of Higher Learning, I hereby agree to allow
LynLee Morgan to submit her study entitled "Nursing Faculty Perceptions of Stress, Coping, and
Intent to Leave the Profession in the Ongoing COVID-19 Pandemic: A Quantitative Study" to
deans and directors for distribution through their institutions' listservs. This permission is
contingent pending USM IRB approval **and receipt of the approval to IHL Nursing
Education**, and the researcher maintains responsibility for the integrity of this study.

Sincerely,

Melissa Temple, Ph.D., M.S.N., RN
Director of Nursing Education
Mississippi Institutions of Higher Learning

3825 RIDGEWOOD ROAD · JACKSON, MISSISSIPPI 39211 · WWW.MISSISSIPPI.EDU · (601) 432-6601 · FAX (601) 432-6225

REFERENCES

Adams, E. L., Smith, D., Caccavale, L. J., & Bean, M. K. (2021). Parents are stressed!

Patterns of parent stress across COVID-19. *Frontiers in Psychiatry*, *12*(1), 1-10.

https://doi.org/10.3389/fpsyt.2021.626456

Adaptation. (n.d.). Retrieved October 18, 2022, from

https://dictionary.cambridge.org/dictionary/english/adaptation

Agu, C.F., Stewart, J., McFarlane-Stewart N., & Rae T. (2021) COVID-19 pandemic

effects on nursing education: Looking through the lens of a developing country.

International Nursing Review, 68(2), 153–158.

Al Gharaibeh, F., & Gibson, L. (2022). The impact of COVID-19 quarantine measures on

the mental health of families. *Journal of Social Work, 22*(3), 655-673.

https://doi.org/10.1177/14680173211011705

AlAteeq, D. A., Aljhani, S., & AlEesa, D. (2020). Perceived stress among students in

virtual classrooms during the COVID-19 outbreak in KSA. *Journal of Taibah*

University Medical Sciences, *15*(5), 398–403.

https://doi.org/10.1016/j.jtumed.2020.07.004

Alwaqdani, N., Amer, H.A., & Alwaqdani, R. (2021). Psychological impact of COVID-

19 pandemic on healthcare workers in Riyadh, Saudi Arabia: Perceived stress

scale measures. *Journal of Epidemiology and Global Health 11,* 377–388 (2021).

https://doi.org/10.1007/s44197-021-00014-4

American Association of Colleges of Nursing (AACN). (2020). *Fact sheet: Nursing*

faculty shortage. AACN Fact Sheet - Nursing Faculty Shortage (aacnnursing.org)

American Association of Colleges of Nursing (AACN). (2022, October). *Nursing*

    Shortage Fact Sheet. https://www.aacnnursing.org/News-Information/Fact-

    Sheets/Nursing-Shortage

Amicucci, G., Salfi, F., D'Atri, A., Viselli, L., & Ferrara, M. (2021). The differential

    impact of COVID-19 lockdown on sleep quality, insomnia, depression, stress, and

    anxiety among late adolescents and elderly in Italy. *Brain Sciences*, *11*(10), 1-10.

    https://doi.org/10.3390/brainsci11101336

Auerbach, D., Staiger, D., Donelan, K., & Buerhaus, P. (2022). A worrisome drop in the

    number of young nurses. *Forefront Group*.

    https://doi.org/10.1377/forefront.20220412.311784

Berjot, S., & Gillet, N. (2011). Stress and coping with discrimination and stigmatization.

    Frontiers in Psychology, *2*(33), 1-13. https://doi.org/10.3389/fpsyg.2011.00033

Bergantz, L., & Curtis, C. E. (2022) COVID anxiety and stress in higher ed (CASH).

    Journal on Empowering Teaching Excellence, 5(3), 55-66. DOI:

    https://doi.org/10.26077/cad5-64db

Bergkvist, L., & Rossiter, J. (2007). The predictive validity of multiple-item versus

    single-item measures of the same constructs. *Journal of Marketing Research,*

    44(2), 175-184.

Bhanji, F., Gottesman, R., de Grave, W., Steinert, Y., & Winer, L. R. (2012). The

    retrospective pre-post: A practical method to evaluate learning from an

    educational program. *Academic Emergency Medicine*, *19*(2), 189–194.

    https://doi.org/10.1111/j.1553-2712.2011.01270.x

Bhattacharjee, A., & Ghosh, T. (2022). COVID-19 pandemic and stress: Coping with the

new normal. *Journal of Prevention and Health Promotion*, *3*(1), 30-52.

https://doi.org/10.1177/26320770211050058

Boamah, S. A. (2022). Investigating the work-life experiences of nursing faculty in

Canadian academic settings and the factors that influence their retention: protocol

for a mixed-method study. *BMJ open*, *12*(1), e056655.

https://doi.org/10.1136/bmjopen-2021-056655

Boamah, S. A., Callen, M., & Cruz, E. (2021). Nursing faculty shortage in Canada: A

scoping review of contributing factors. *Nursing Outlook*, *69*(4), 574-588.

https://doi.org/10.1016/j.outlook.2021.01.018

Brooks, J. V., Cox, G. G., Averett, E., & Hughes, D. (2021). Teaching during the

COVID- 19 pandemic: MHSA faculty experiences. *The Journal of Health

Administration Education, 38*(1), 265–284.

Çalık, M. (2020). Determining the anxiety and anxiety levels of university students in the

COVID-19 outbreak. *International Journal of Medical Science and Clinical

Invention*, *7*(7), 4887-4894.

Candela, L., Gutierrez, A. P., & Keating, S. (2015). What predicts nurse faculty members'

intent to stay in the academic organization? A structural equation model of a

national survey of nursing faculty. *Nurse Education Today*, *35*(4), 580-589.

https://doi.org/10.1016/j.nedt.2014.12.018

Cash, P., Daines, D., Doyle, R.M., & von Tettenborn, L. (2009). Quality practice

environments for nurse educators: Implications for recruitment and retention.

Nursing Economic$, 27(5), 315-321.

Cash, P., Doyle, R.M., von Tettenborn, L., Daines, D., & Faria, V. (2011). Working with

    nurse educators' collective wisdom: Implications for recruitment and retention.

    Nursing Economic$, 29(5), 257-264.

Castro, G. M., Taala, W. D., Guerrero, J. G., Rosales, N. S., De Sagun, R. S., Cordero, R.

    P., Ciriaco, R. N., & Javines, R. G. (2022). Nursing educators' and students'

    perspectives regarding online learning during the pandemic in Saudi Arabia.

    Nursing: Research and Reviews, *12*(1), 77-84.

    https://doi.org/10.2147/nrr.S358689

Chachula, K. M., & Ahmad, N. (2022). Professional quality of life, stress, and trauma in

    nursing students: Before and during the novel coronavirus pandemic.

    Psychological Trauma: Theory, Research, Practice, and Policy 14(8)*,* 1333-1337.

    https://doi.org/10.1037/tra0001216

Chang-Martinez, C. (2020). *Infection control considerations for nursing faculty during*

    COVID-19 pandemic. Retrieved October 20, 2022, from

    https://www.wolterskluwer.com/en/expert-insights/infection-control-

    considerations-nursing-faculty

Chi, X., Becker, B., Yu, Q., Willeit, P., Jiao, C., Huang, L., Hossain, M. M., Grabovac, I.,

    Yeung, A., Lin, J., Veronese, N., Wang, J., Zhou, X., Doig, S. R., Liu, X.,

    Carvalho, A. F., Yang, L., Xiao, T., Zou, L., … Solmi, M. (2020). Prevalence and

    psychosocial correlates of mental health outcomes among Chinese college

    students during the coronavirus disease (COVID-19) pandemic. *Frontiers in*

    Psychiatry, *11*. https://doi.org/10.3389/fpsyt.2020.00803

Choi, H., Brazeal, M., Duggirala, L., & Lee, J. (2022). Loneliness and depression among
adults living on MS Gulf Coast: Individual, interpersonal and community
predictors. *The International Journal of Social Psychiatry*, *68*(1), 108–117.
https://doi.org/10.1177/0020764020978677

Cohen, S. (1994). *Perceived Stress Scale.* Mindgarden. PerceivedStressScale.pdf
(mindgarden.com)

Cohen, S., & Williamson, G. (1988) Perceived stress in a probability sample of the
United States in: Spacapam, S. & Oskamp, S. *The Social Psychology of Health*
(pp. 31–67). Sage Publications, Inc.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress.
Journal of Health and Social Behavior, *24*(4), 385-396.
https://doi.org/10.2307/2136404

Coping. (n.d.). Retrieved June 6, 2022, from https://dictionary.apa.org/coping.

Creswell, J.W., & Creswell, J.D. (2018). *Research design: Qualitative, quantitative, and
mixed methods approaches.* (5th ed.). Sage Publications, Inc.

de Sousa, G. M., Tavares, V., de Meiroz Grilo, M., Coelho, M., de Lima-Araújo, G. L.,
Schuch, F. B., & Galvão-Coelho, N. L. (2021). Mental health in COVID-19
pandemic: A meta-review of prevalence meta-analyses. *Frontiers in Psychology*,
12(1), 1-9. https://doi.org/10.3389/fpsyg.2021.703838

Dewart, G., Corcoran, L., Thirsk, L., & Petrovic, K. (2020). Nursing education in a
pandemic: Academic challenges in response to COVID-19. *Nurse Education
Today*, *92*(2020), 104471. https://doi.org/10.1016/j.nedt.2020.104471

102

Fuchs, C., & Diamantopoulos, A. (2009). Using single-item measures for construct measurement in management research: Conceptual issues and application guidelines. Die *Betriebswirtschaft, 69*(2), 195-210.

Gamonal-Limcaoco, S., Montero-Mateos, E., Lozano-López, M. T., Maciá-Casas, A., Matías-Fernández, J., & Roncero, C. (2021). Perceived stress in different countries at the beginning of the coronavirus pandemic. *The International Journal of Psychiatry in Medicine*, *57*(4), 309–322. https://doi.org/10.1177/00912174211033710

Gandhi, S., Sahu, M., Govindan, R., Nattala, P., Gandhi, S., Sudhir, P. M., & Balachandran, R. (2021). Psychological preparedness for pandemic (COVID-19) management: Perceptions of nurses and nursing students in India. *PLoS One*, *16*(8), e0255772. https://doi.org/10.1371/journal.pone.0255772

Gardner, D., Cummings, L., Dunham, R., & Pierce, J. (1998). Single-item versus multiple-item measurement scales: An empirical comparison. *Educational and Psychological Measurement, 58,* 898-915.

Gazza, E. A. (2022). The experience of being a full-time academic nurse educator during the COVID-19 pandemic. *Nursing Education Perspectives, 43*(2), 74–79. https://doi.org/10.1097/01.nep.0000000000000933

Giorgi, G., Lecca, L., Alessio, F., Finstad, G.L., Bondanini, G., Lulli, L.G., Arcangeli, G., & Mucci, N. (2020). COVID-19-related mental health effects in the workplace: A narrative review. *International Journal of Environmental Research and Public Health, 17*(21), e7857. https://doi.org/10.3390/ijerph17217857

Giusti, E. M., Pedroli, E., D'Aniello, G. E., Stramba Badiale, C., Pietrabissa, G., Manna, C., Stramba Badiale, M., Riva, G., Castelnuovo, G., & Molinari, E. (2020). The psychological impact of the COVID-19 outbreak on health professionals: A cross-sectional study. *Frontiers in Psychology*, *11*(1) 1-10. https://doi.org/10.3389/fpsyg.2020.01684

Gray, J., Grove, S., & Sutherland, S. (2017). *The practice of nursing research: Appraisal, synthesis, and generation of evidence.* Elsevier.

Herrmann-Werner, A., Erschens, R., Zipfel, S., & Loda, T. (2021). Medical education in times of COVID-19: Survey on teachers' perspectives from a German medical faculty. *GMS Journal for Medical Education*, *38*(5), 1-13. https://doi.org/10.3205/zma001489

Huang, G., Chu, H., Chen, R., Liu, D., Banda, K. J., O'Brien, A. P., Jen, H. J., Chiang, K. J., Chiou, J. F., & Chou, K. R. (2022). Prevalence of depression, anxiety, and stress among first responders for medical emergencies during COVID-19 pandemic: A meta-analysis. *Journal of Global Health*, *12*(1), 1-11. https://doi.org/10.7189/jogh.12.05028

Hyun, S., Wong, G. T. F., Levy-Carrick, N. C., Charmaraman, L., Cozier, Y., Yip, T., & Liu, C. H. (2021). Psychosocial correlates of posttraumatic growth among US young adults during the COVID-19 pandemic. *Psychiatry Research*, *302*, 114035. https://doi.org/10.1016/j.psychres.2021.114035

Iheduru-Anderson, K., & Foley, J. A. (2021). Transitioning to full online teaching during COVID-19 crisis: The associate degree nurse faculty experience. *Global*

Qualitative Nursing Research, 8(1), 1-20.

https://doi.org/10.1177/23333936211057545

Kar, N., Kar, B., & Kar, S. (2021). Stress and coping during COVID-19 pandemic:

Result of an online survey. *Psychiatry Research*, *295*, 1-5.

https://doi.org/10.1016/j.psychres.2020.113598

Khanam, A., Dar, S. A., Wani, Z. A., Shah, N. N., Haq, I., & Kousar, S. (2020).

Healthcare providers on the frontline: A quantitative investigation of the stress

and recent onset psychological impact of delivering health care services during

COVID-19 in Kashmir. *Indian Journal of Psychological Medicine*, *42*(4), 359–

367. https://doi.org/10.1177/0253717620933985

Kirkham A. (2016). Enhancing nurse faculty retention through quality work

environments: A photovoice project. *Nursing Economic$*, *34*(6), 289–295.

Kowalski, R. M., Carroll, H., & Britt, J. (2021). Finding the silver lining in the covid-19

crisis. *Journal of Health Psychology*, *27*(6), 1507–1514.

https://doi.org/10.1177/1359105321999088

Lawal, A. M., Alhassan, E. O., Mogaji, H. O., Odoh, I. M., & Essien, E. A. (2020).

Differential effect of gender, marital status, religion, ethnicity, education, and

employment status on mental health during covid-19 lockdown in Nigeria.

Psychology, Health, & Medicine, 27(1), 1–12.

https://doi.org/10.1080/13548506.2020.1865548

Lazarus, R. S. (1999). *Stress and emotion: A new synthesis.* Springer.

Lazarus, R. S. (2012). Evolution of a model of stress, coping, and discrete emotions. In

    V. Hill-Rice (Ed.), Handbook of stress, coping, and health (2nd ed., pp. 199-223).

    SAGE Publications.

Lazarus, R. S., & Folkman S. (1984). *Stress, appraisal, and coping.* Springer.

Lin, Y., Hu, Z., Danaee, M., Alias, H., & Wong, L. P. (2021). The impact of the COVID-

    19 pandemic on future nursing career turnover intention among nursing

    students. *Risk Management and Healthcare Policy*, *14*(1), 3605–3615.

    https://doi.org/10.2147/RMHP.S322764

Liu, Y., Zou, L., Yan, S., Zhang, P., Zhang, J., Wen, J., Mao, J., Li, L., Wang, Y., & Fu,

    W. (2023). Burnout and post-traumatic stress disorder symptoms among medical

    staff two years after the COVID-19 pandemic in Wuhan, China: Social support

    and resilience as mediators. *Journal of Affective Disorders*, *321*(15), 126–133.

    https://doi.org/10.1016/j.jad.2022.10.027

Manjareeka, M., & Pathak, M. (2021). COVID-19 lockdown anxieties: Is student a

    vulnerable group? *Journal of Indian Association for Child and Adolescent Mental*

    Health, 17(1), 72-80.

Manjunatha, N., Kumar, C., & Bada Math, S. (2020, April). *Mental health in the times of*

    COVID-19 pandemic guidelines for general medical and specialised mental

    health care settings. Bengaluru, India; National Institute of Mental Health &

    Neurosciences; Department of Psychiatry. http://nimhans.ac.in/ wp-

    content/uploads/2020/04/MentalHealthIssuesCOVID-19NIMHANS.pdf.

Manzano-García, G., & Ayala-Calvo, J.C. (2021). The threat of COVID-19 and its influence on nursing staff burnout. *Journal of Advanced Nursing, 77*(1*)*, 832–844. doi:10.1111/jan.14642

Marek, M. W., Chew, C. S., & Wu, W-C. V. (2021). Teacher experiences in converting classes to distance learning in the COVID-19 pandemic. *International Journal of Distance Education Technologies*, *19*(1), 89-109. https://doi.org/10.4018/IJDET.20210101.oa3

Marteau, T. M., & Bekker, H. (1992). The development of a six-item short-form of the state scale of the Spielberger State—Trait Anxiety Inventory (STAI). *British Journal of Clinical Psychology*, *31*(3), 301–306. https://doi.org/10.1111/j.2044-8260.1992.tb00997.x

Miguel-Puga, J. A., Cooper-Bribiesca, D., Avelar-Garnica, F. J., Sanchez-Hurtado, L. A., Colin-Martínez, T., Espinosa-Poblano, E., & Jáuregui-Renaud, K. (2021). Burnout, depersonalization, and anxiety contribute to post-traumatic stress in frontline health workers at COVID-19 patient care, a follow-up study. *Brain and Behavior*, *11*(3), e02007. https://doi.org/10.1002/brb3.2007

Morin, K. (2020). Nursing education after COVID-19: Same or different? *Journal of Clinical Nursing, 29*(17-18), 3117–3119. https://doi.org/10.1111/jocn.15322

Nabolsi, M., Abu-Moghli, F., Khalaf, I., Zumot, A., & Suliman, W. (2021). Nursing faculty experience with online distance education during COVID-19 crisis: A qualitative study. *Journal of Professional Nursing*, *37*(5), 828-835. https://doi.org/10.1016/j.profnurs.2021.06.002

National Council of State Boards of Nursing (NCSBN). (2020). Changes in education

    requirements for nursing programs during COVID-19. Available at:

    https://www.ncsbn.org/Education-Requirement-Changes_COVID-19.pdf

National League for Nursing (NLN). (2021). *NLN faculty census survey, 2020-2021*.

    Default. Retrieved October 16, 2022, from https://www.nln.org/nln-faculty-

    census-survey-2020-2021

Navarro-Espinosa, J. A., Vaquero-Abellan, M., Perea-Moreno, A. J., Pedros-Perez, G.,

    Aparicio-Martinez, P., & Martinez-Jimenez, M. P. (2021). The influence of

    technology on mental well-being of STEM teachers at university level: COVID-

    19 as a stressor. *International Journal of Environmental Research and Public

    Health, 8*(18), 1-24. https://doi.org/10.3390/ijerph18189605

Nowell, L., Dhingra, S., Andrews, K., & Jackson, J. (2021). Perceptions and nursing

    demands and experiences in the midst of an international crisis (PANDEMIC): A

    qualitative study of nurse educators' experiences. *Quality Advancement in

    Nursing Education*, *7*(2), 1-15. https://doi.org/10.17483/2368-6669.1291

Özad, B. E., Jamo, M. S., & Uygarer, G. (2022). COVID-19 restrictions, lifestyles, and

    marital conflicts: An empirical analysis of marital sustainability. *Sustainability,

    14*(18), 1–13. https://doi.org/10.3390/su141811249

Özdede, M., & Sahin, S. (2020). Views and anxiety levels of Turkish dental students

    during the COVID-19 pandemic. *Journal of Stomatology*, *73*(3), 123-128.

Özmete, E., & Pak, M. (2020). The relationship between anxiety levels and perceived

    social support during the pandemic of COVID-19 in Turkey. *Social Work in

    Public Health*, *35*(7), 603–616. https://doi.org/10.1080/19371918.2020.1808144

Pedrozo-Pupo, J. C., Pedrozo-Cortés, M. J., & Campo-Arias, A. (2020). Perceived stress

associated with covid-19 epidemic in Colombia: An online survey. *Cadernos De

Saúde Pública*, *36*(5), e00090520. https://doi.org/10.1590/0102-311x00090520

Pomeroy, I., Clark, C., & Philip, I. (2001). The effectiveness of very short scales for

depression screening in elderly medical patients. *International Journal of

Geriatric Psychiatry, 16,* 321-326.

Roney, L.N., Beauvais, A. M., & Bartos, S. (2020). Igniting Change: Supporting the

well-being of academicians who practice and teach critical care. *Critical Care

Nursing Clinics of North America, 32*(3), 407-419.

https://doi.org/10.1016/j.cnc.2020.05.008

Sacco, T. L., & Kelly, M. M. (2021). Nursing faculty experiences during the COVID-19

pandemic response. *Nursing Education Perspectives*, *42*(5), 285-290.

https://doi.org/10.1097/01.NEP.0000000000000843

Scott, I. (2020). Education during COVID-19: Pivots and consequences. *The Clinical

Teacher, 17*(4), 443–444. https://doi.org/10.1111/tct.13225

Selye, H. (1950). Stress and the general adaptation syndrome. *British Medical Journal,

1*(4667), 1383–1392. https://doi.org/10.1136/bmj.1.4667.1383

Silva, A. F., Estrela, F. M., Soares, C. F., Magalhães, J. R., Lima, N. S., Morais, A. C.,

Gomes, N. P., & Lima, V. L. (2020). Marital violence precipitating/intensifying

elements during the COVID-19 pandemic. *Ciência Saúde Coletiva, 25*(9), 3475–

3480. https://doi.org/10.1590/1413-81232020259.16132020

Singh, M.D., Patrick, L., & Pilkington, B. (2016). An exploration of the pre-tenure and
tenure process experiences of Canadian nursing faculty. *Quality Advancement in
Nursing Education Scholarship, 2*(2), 1-10.

Singh, M.D., Pilkington, B., & Patrick, L. (2014). Empowerment and mentoring in
nursing academia. *Nursing Education Scholarship, 11*(1), 101-111.

Spielberger, C. D. (1983). State-Trait Anxiety Inventory for Adults (STAI-AD)
[Database record]. APA PsycTests. https://doi.org/10.1037/t06496-000

Spielberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. (1983).
Manual for the State-Trait Anxiety Inventory. Consulting Psychologists Press.

Straus, E., Uhlig, L., Kühnel, J., & Korunka, C. (2022). Remote workers' well-being,
perceived productivity, and engagement: which resources should HRM improve
during COVID-19? A longitudinal diary study. *The International Journal of
Human Resource Management*, *33*(1), 1-31.
https://doi.org/10.1080/09585192.2022.2075235

Stress. (n.d.). Retrieved October 2, 2022, from
https://www.britannica.com/summary/stress-psychology-and-biology

Sullivan, V., Hughes, V., & Wilson, D. R. (2022). Nursing burnout and its impact on
health. *Nursing Clinics of North America*, *57*(1), 153–169.
https://doi.org/10.1016/j.cnur.2021.11.011

Tourangeau, A., Saari, M., Patterson, E., Ferron, E. M., Thomson, H., Widger, K., &
MacMillan, K. (2014). Work, work environments and other factors influencing
nurse faculty intention to remain employed: A cross-sectional study. *Nurse
Education Today*, *34*(6), 940–947. https://doi.org/10.1016/j.nedt.2013.10.010

Tourangeau, A. E., Thomson, H., Saari, M., Widger, K., Ferron, E. M., & MacMillan, K. (2012). Determinants of nurse faculty intention to remain employed. *Open Journal of Nursing*, *2*(3), 254–261. https://doi.org/10.4236/ojn.2012.23039

Tourangeau, A. E., Wong, M., Saari, M., & Patterson, E. (2015). Generation-specific incentives and disincentives for nurse faculty to remain employed. *Journal of Advanced Nursing*, *71*(5), 1019–1031. https://doi.org/10.1111/jan.12582

U.S. Bureau of Labor Statistics. (2022, April 18). *Registered Nurses: Occupational Outlook Handbook*. https://www.bls.gov/ooh/healthcare/registered-nurses.htm

Vandyk, A., Chartrand, J., Beké, É., Burlock, L., & Baker, C. (2017). Perspectives from academic leaders of the nursing faculty shortage in Canada. *International Journal of Nursing Education Scholarship, 14*(1), 286-299.

Vazquez, C., Valiente, C., García, F. E., Contreras, A., Peinado, V., Trucharte, A., & Bentall, R. P. (2021). Post-traumatic growth and stress-related responses during the COVID-19 pandemic in a national representative sample: The role of positive core beliefs about the world and others. *Journal of Happiness Studies*, *22*(7), 2915–2935. https://doi.org/10.1007/s10902-020-00352-3

Watson, M. (2021). *Psychological distress during the COVID-19 pandemic in nursing students: A mixed methods study* (Publication No. 1947) [Doctoral dissertation, The University of Southern Mississippi]. The Aquila Digital Community. https://aquila.usm.edu/dissertations/1947

Wittenberg, Goldsmith, J. V., Chen, C., Prince-Paul, M., & Capper, B. (2021). COVID 19-transformed nursing education and communication competency: Testing

COMFORT educational resources. *Nurse Education Today, 107*(2021), 105105–105105. https://doi.org/10.1016/j.nedt.2021.105105

World Health Organization (WHO). (2020*). State of the world's nursing 2020: Investing in education, jobs and leadership.* https://www.who.int/publications/i/item/978924

World Health Organization (WHO). (2021). *Coronavirus disease (COVID-19).* https://www.who.int/health-topics/coronavirus#tab=tab_1

Wright, B. J., Wilson, K.-E., Kingsley, M., Maruff, P., Li, J., Siegrist, J., & Horan, B. (2022). Gender moderates the association between chronic academic stress with top-down and bottom-up attention. *Attention, Perception, & Psychophysics*, *84*(2), 383–395. https://doi.org/10.3758/s13414-022-02454-x

Xiong, J., Lipsitz, O., Nasri, F., Lui, L., Gill, H., Phan, L., Chen-Li, D., Iacobucci, M., Ho, R., Majeed, A., & McIntyre, R. S. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders*, *277*(SI), 55–64. https://doi.org/10.1016/j.jad.2020.08.001

Youngblut, J., & Casper, G. (1993). Focus on psychometrics single-item indicators in nursing research. *Research in Nursing and Health, 16,* 459-465.

Zhang, Y., & Ma, Z. F. (2020). Impact of the COVID-19 pandemic on mental health and quality of life among local residents in Liaoning Province, China: A cross-sectional study. *International Journal of Environmental Research and Public Health, 17*(7), 2381-2392. https://doi.org/10.3390/ijerph17072381

Zhang, X., Tai, D., Pforsich, H., & Lin, V. W. (2018). United States Registered Nurse

    workforce report card and shortage forecast: A revisit. *American Journal of*

    Medical Quality, *33*(3), 229–236. https://doi.org/10.1177/1062860617738328

Zhou, Y., MacGeorge, E. L., & Myrick, J. G. (2020). Mental health and its predictors

    during the early months of the COVID-19 pandemic experience in the United

    States. *International Journal of Environmental Research and Public Health*,

    17(17), 6315. https://doi.org/10.3390/ijerph17176315