

STRESSORS AND COPING MECHANISMS
OF ASSOCIATE IN SCIENCE IN NURSING STUDENTS:
A RETROSPECTIVE PHENOMENOLOGICAL STUDY

by

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ABSTRACT

Nursing students experience increased amounts of stress during their educational experience, which can affect their mental and physical well-being. This impact can result in students who drop out of nursing school or failure of nursing courses. Stress is an experience most individuals experience in their lives. Learning to manage the stress can improve the chances for student success and increased graduation rates. If these students are unable to manage stress, their chances of becoming a practicing registered nurse decreases.

There have been few studies on the incorporation of coping mechanisms that associate degree nursing students have utilized, aiding in their success. The purpose of this study was to examine the causes of the stress in associate degree nursing students and ultimately identify the coping mechanisms that successful students utilized. This research study explored the lived experiences of nine former associate degree nursing students who have graduated and are currently practicing nursing in the southeastern United States, providing a retrospective view of the phenomena of stress and coping.

The results of this phenomenological study identified the main stressors of the former students and identified the coping mechanisms they used. The study found that the main stressors were examinations, clinical, simulation, and skills check off. The coping mechanisms the students used to manage their stress included a determination to succeed and relying on others to help them cope with the stress. Identification of the causes of stress and helpful coping mechanisms may allow for improved retention in nursing school, thus allowing more nurses to enter the workforce.

DEDICATION

I lovingly dedicate this dissertation to my children, Jacob and Avery. This educational journey often took time away from them; they never complained and enjoyed their time with dad, Granny, and Papa. I thank my husband, Chad, for encouraging me to pursue my dreams and for his patience through this long process. Finally, this dissertation is dedicated to my dad and mom, Ronnie and Darlene Avery, also known as Papa and Granny. They were always supportive of me and I am grateful for their encouragement and support (and for their many days and nights of babysitting!).

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CONTENTS

ABSTRACT	ii
DEDICATION	iii
ACKNOWLEDGMENTS	iv
LIST OF TABLES	viii
CHAPTER ONE INTRODUCTION	1
Statement of the Problem	3
Relevant Research	4
Purpose of the Study.....	8
Research Questions	8
Theoretical Framework	9
Methodology	10
Trustworthiness	11
Significance of the Research	13
Summary	14
Definition of Terms	15
CHAPTER TWO REVIEW OF RELATED LITERATURE	17
Associate Degree Nursing	18
Stress	26
Coping	37
Lazarus and Folkman’s Transactional Model of Stress and Coping.....	40

Gaps in the Literature	44
Summary	46
CHAPTER THREE METHODOLOGY.....	47
Phenomenology.....	47
Research Method.....	49
Research Design	52
Setting and Participants	52
Recruitment and Selection.....	53
Researcher Positionality	63
Conclusion.....	64
CHAPTER FOUR RESULTS.....	66
Research Sample	66
Meet the Participants.....	68
Findings.....	72
Fundamental Structures.....	76
Lazarus and Folkman Findings Guided by the Transactional Model of Stress and Coping	92
Summary	99
CHAPTER FIVE DISCUSSION	101
Research Question 1	102
Research Question 2.....	110
Findings: Stress and Coping Related to Lazarus and Folkman.....	116
Implications for Associate Degree Nursing Programs	117
Limitations.....	121

Recommendations for Future Research	122
Conclusion.....	124
REFERENCES.....	126
APPENDIX A PRELIMINARY INTERVIEW QUESTIONS.....	139
APPENDIX B INFORMED CONSENT	141
APPENDIX C SOCIAL MEDIA RECRUITMENT POST	145
APPENDIX D SOCIAL MEDIA POST APPROVAL.....	147
APPENDIX E IRB APPROVAL	149
APPENDIX F SEMI-STRUCTURED INTERVIEW QUESTIONS/GUIDE.....	155
APPENDIX G FOLLOW-UP INTERVIEW QUESTIONS.....	157
APPENDIX H DATA ANALYSIS	159

LIST OF TABLES

1. Comparison of BSN and ADN Curriculum Requirements23

2. Preliminary Interview Question Results.....67

3. Description of Participants69

4. Excerpt of Combined Data Analysis74

5. Coping Mechanisms Identified by Participants.....98

CHAPTER ONE

INTRODUCTION

The transition to college reflects multiple changes in an individual's life, including social changes, environmental changes, and changes in personal responsibilities. With these changes, all college students experience some level of stress. Many factors influence a college student's experience and intensity of stress. From school obligations and rigorous class demands, to home, family and personal demands, the stressors are limitless. Associate degree nursing students often complain of being "overwhelmed" or "stressed out." These complaints are supported by an abundance of research documenting the presence of stress among these students (Birks et al., 2013; Darch, 2014; Dvorakova, Greenberg, & Roesere, 2018; Farquharson et al., 2013). High degrees of stress have been reported (Cruz et al., 2018; Del Prato, Bankert, Grust, & Joseph, 2011; Gibbons, Dempster & Moutray, 2009; Turner & McCarthy, 2017; Yosetake, Camargo, Luchesi, Gherardi-Doonato, & Teixeira, 2018). However, less is known about managing the stress and coping mechanisms nursing students use to help them manage their stress and be successful in completing the demanding requirements of graduating from an associate degree registered nursing program and becoming a licensed, registered nurse (Parveen & Inayat, 2017). An exploration of the lived experiences of successful associate degree nursing graduates offers nurse educators, along with current and future nursing students, insight and unique perspectives about how these students experienced stress and utilized coping mechanisms to manage their stress successfully. Successfully handling their stress made it possible for them to complete course work and graduate from their associate degree nursing program. Stress has

been associated with increased student attrition. Increased attrition can have long-term effects on healthcare in the United States (Birks et al., 2013; Chernomas & Shapiro, 2013; Reader, 2015).

The retention of associate degree nursing students is important to our population and warrants further investigation of any hindrances to their retention. According to the National League for Nursing (2013), there are 1,084 associate degree nursing programs in the United States, with 418 of these programs in the South. Rates of retention and graduation within the associate degree nursing programs are generally lower than in 4-year universities. This contributes to a higher attrition rate (Tinto, 2012). According to the Health Resources and Services Administration (HRSA), within the next 10 to 15 years, more than 1 million registered nurses will enter retirement. This will leave a major deficit in the nursing workforce (HRSA, 2013).

Stress is

a natural phenomenon that everyone experiences in [a] lifetime and is a normal physical response to events that make (one) feel threatened or upset (one's) balance . . . [a] state of emotional or mental strain resulting in a number of normal bodily reactions to retain self-preservation (and) causes behavioral, psychological, and physiological changes in the body. (Yehia, Jacoub, & Eser, 2016, p. 149)

Stress is part of daily life, with everyone experiencing some sort of stress during their day, week, or life in general. Stress does not discriminate and is felt by individuals regardless of race or cultural background across all socioeconomic statuses. Associate degree nursing students face both academic and personal stress. Any stress has the potential to halt their nursing career journey (Ah Kim, Kim, & Kim, 2015; Labrague, McEnroe-Petitte, Al Amri et al., 2017; Labrague, McEnroe-Petitte, Papathanasiou et al., 2017, Manocchi, 2017). Coping is understood as “an individual’s conscious or subconscious actions to control stressful situations that are unavoidable” (Ah Kim et al., 2014, p. 457; Lazarus & Folkman, 1984). Development of coping

mechanisms to alleviate stress is imperative to ensure academic success. In addition to ensuring academic success, stress management can help meet the growing health care needs of the increased demand for more registered nurses in the workforce in the years to come (Lewis, Swanzy, Lynch, & Dearmon, 2019; Mooring, 2016; Urwin et al., 2010).

This study is a phenomenological study investigating the lived experiences of the stressors students faced during their academic career and the coping mechanisms they used to successfully manage their stress. Identification and implementation of coping mechanisms in the nursing curriculum may contribute to improved student retention (Farquharson et al., 2012). Controlling stress would not only allow for increased retention in nursing programs, but ultimately could lead to more nurses entering into the profession and the work force (Lewis et al., 2019; Melnyk et al., 2018).

Statement of the Problem

Students who enroll in nursing as a college major experience higher levels of pressure than typical higher education students, leading to an increase in physiological and psychological symptoms of stress (Parveen & Inayat, 2017). The problem is if a student is unable to cope with the stress of nursing school, the chance for successful completion of the program of study is minimized. With attrition rates of nursing schools between nine and twenty-one percent, any measures to retain these students and help them to be successful will allow for more nursing graduates to enter the workforce (Cogburn, Carter-Templeton, Horton, Toliver, & Platt, 2015). The role of the associate degree nursing student is complex and often overwhelming. These students, once successful in obtaining licensure in nursing, enter a world of continued stress in the profession.

An extensive review of the literature reveals an abundance of research documenting the increased amounts of stress experienced and reported by nursing students, as well as practicing nurses. What the research lacks is information regarding the coping mechanisms these students incorporated to aid in their successful completion of the nursing program and entrance into the profession. Identification and implementation of coping mechanisms in the nursing curriculum may contribute to improved student retention and follow the students into the workforce. Stress remains present in the workforce (Farquharson et al., 2012). Controlling stress would not only allow more nurses to stay in the profession, but increase positive patient outcomes (Melnyk et al., 2018). Exploration of the causes of stress and coping mechanisms used by successful students can help to provide insight into the problem and provide possible solutions.

Relevant Research

Associate Degree in Nursing

Successful completion of an associate degree in nursing is extremely challenging for many students. The associate degree nursing student population is important to consider because associate degree nursing students constitute more than half of the registered nurse enrollment and workforce in the United States (National Council of State Boards of Nursing [NCSBN], 2018a; Sabio, 2019). These students, upon completion of an associate degree program, have met the requirements of the degree in 4 to 5 semesters of college (Birks et al., 2013; Sabio, 2019). (These requirements will be discussed further in Chapter Two.) They will take the same national licensure examination that bachelor's degree prepared nurses take. Upon passing the national licensure examination, these students may enter the workforce as a registered nurse.

Student Population. Retention and graduation rates for 2-year or associate degree programs are generally lower than 4-year universities (Tinto, 2012). These students are often

classified as “non-traditional” students. Non-traditional students are not the typical straight out of high school students. These students, as defined by Staykova (2012), are “older than 24 years, adults with dependents, the first generation attending college, and minorities” (p.94). As many as 95% of non-traditional students “were either self-supporting, funded by loans, scholarships, etc. or were supported by a spouse” (Nicholas, 2008, p. 3). Many students who are enrolled in a 2-year degree program are categorized as “at-risk.” Being classified as “at-risk” means they have an increased risk for failure or non-completion of the program. “At-risk” students are more likely to have a lower grade point average (GPA) than 4-year University students, more past withdrawals and failures from other programs, limited financial resources, less outside support, and work a full-time or part-time job outside of school hours (Harding, Bailey, & Stefka, 2017; Higgins, 2005; Jeffrey, 2012; Porter, 2008; Zhai & Monzon, 2001). Today’s 2-year college students experience greater stress than those past students as they are balancing work, academic, and family responsibilities (Gibbons, 2010; Karsten & DiCicco-Bloom, 2014; Turner & McCarthy, 2017).

Stress

Stress in nursing education often begins before a student first begins a class. Competitive admission requirements into an associate degree program often causes stress. In the 2014 Biennial Survey of Schools of Nursing, associate degree programs in the United States reported turning away qualified students. Eighty-four percent of associate degree nursing programs turned away qualified applicants in 2012 and 78% in 2014, thus making admission to a nursing program very competitive. Once students are admitted to a nursing program and begin classes, they enter an environment of lecture, clinicals, and simulation. Lecture often lays the foundation for the students to think critically. Lecture leads to examinations, which are more complex than

memorization of facts, which can lead to increased stress in an individual. Clinical practices are stressful for students, as the environment cannot be fully controlled by the student or the instructor. Learning in the clinical environment, a healthcare facility like a hospital, clinic, or community agency, places the student under the watchful eyes of the instructor, patient, and any other healthcare team members present during the care. This leads to increased stress for the student (Oermann & Standfest, 1997). Simulation is another stressor and has been added into nursing curricula in recent years. The purpose of simulation is to counteract increasing shortages for clinical sites (Cantrell, Meyer, & Mosack, 2017). Students participating in simulations are provided a safe environment in which to be engaged in the learning process through an imitation of a patient and/or a healthcare setting. Simulations are designed to challenge the student's ability to process complex clinical scenarios while under the supervision and guidance of nursing instructors. Simulations often occur in small groups. The experience of simulation has the potential to increase the student's level of stress (Cantrell et al., 2017).

Once students have graduated from nursing school, they must face a licensure exam to officially become a registered nurse, adding additional stress on the student (Ah Kim et al., 2014). Finally, once the national licensure exam is completed and the student enters the workforce, stress follows them. The nursing profession is well recognized as stressful (Gatchel, 2018; McVicar, 2003; Nurses in double trouble, 2019). Research suggests that throughout the nursing vocation, from application to a nursing program to entering the workforce, worry is present.

Coping

Nursing students must cope effectively with their stress for a better college experience and to help prepare them for their future careers in the nursing profession (Ah Kim et al., 2014).

Inadequate coping skills increases a student's risk for poor college adjustment, failure of courses, substance abuse, or other mental and physical conditions (Dvorakova et al., 2018). There are numerous reports that health promoting behaviors to deal with the stressors of nursing. This may be a key factor in the success of the student while in nursing school and upon entrance into the profession. Nurse educators can play a key role in encouraging health promoting behaviors while the students are enrolled in nursing courses (Bryer, Cherkis, & Raman, 2013). By implementing positive-coping skills into the curriculum, nursing faculty can assist nursing students in strengthening their managing skills (Labrague, McEnroe-Petitte, Al Amri et al., 2017; Labrague, McEnroe-Petitte, Papathanasiou et al., 2017). Few studies have identified exact coping skills that are beneficial for students. One study by Labrague, McEnroe-Petitte, Papathanasiou et al. (2017) in *The Journal of Mental Health* found that nursing students incorporated problem-based coping methods, such as problem-solving, along with seeking social support and self-confident approaches as main strategies of alleviating stress. In an additional study, Yehia et al. stated, "venting, self-distraction and denial coping strategies were identified as predictors of coping among the nursing students" who participated in the study (2016, p. 149).

Incorporating coping mechanisms into daily life will assist in the alleviation of stress. To increase retention rates within a school of nursing, educators must identify ways to promote retention and reduce pressure in students. Initiatives to support students from day one of their nursing journey are likely to have immediate benefits in enhancing the well-being of the student, leading to higher retention rates (Gibbons, 2010). Identification of specific coping mechanisms that nurse educators may utilize in nursing curricula will allow students to incorporate these coping mechanisms into their daily life. This will prepare them for their advanced professional

role and empower them to ease their perceived stress level in their future healthcare role (Stillwell, Vermeesch, & Scott, 2017).

Purpose of the Study

The purpose of this study was to identify coping mechanisms applied by graduates from an associate degree nursing program during their college experience. Immersion into a new learning environment causes a reported increase in stress among nursing students (Chipas et al., 2012). This qualitative, phenomenological study investigated the experiences of stress and the coping mechanisms used by associate degree nursing students who have graduated from an associate degree program. In addition, this study (a) identified the sources of stress during their nursing education, and (b) identified and explored coping mechanisms the students may have utilized to help them complete nursing school. Without stress reduction techniques, students face the risk of being unsuccessful in the high demanding, fast-paced nursing curricula (Al-Gamal, Alhosain, & Alsunaye, 2017). Nursing research is saturated with the concept that stress and nursing school are related, but the gap in the research is data that would be most beneficial to students: how to cope with the stress.

Research Questions

To explore the lived experiences of successful associate degree nursing program graduates, the research questions include

1. What are the stressors that affected students during their associate degree nursing education?
2. What coping mechanisms did associate degree nursing students utilize to overcome stress throughout their associate degree education?

Theoretical Framework

A cognitive approach using the theoretical framework from Lazarus and Folkman's Transactional Model of Stress and Coping will be incorporated as a guiding framework for this study. Lazarus "was a pioneer in stress and coping research and the transactional model developed by Lazarus and Folkman (1984) is a benchmark for the measurement of stress and coping that is widely employed in research" (Lim, Hepworth, & Bogossian, 2011, p.1023; Lavee & Ben-Ari, 2008; Machleit, Meyer, & Eroglu, 2005). Incorporation of this framework incorporates a framework that has been used from its development to the present. It is considered a golden standard when researching stress and coping. This model focuses on the imbalance between factors of demand in the environment and the individual's resources to meet these demands: stress and coping. The relationship of the individual and the environment elicits an emotional reaction of stress when the demands of the environment exceed the individual's perceived resources (coping mechanisms) available (Lazarus & Folkman, 1987). This theoretical framework allowed a scaffolding approach to examine how individuals, in this study former nursing students, recognized their stress, how they coped with the stress, and whether their way of coping aided in their successful completion of the nursing curricula.

In the Lazarus and Folkman Transactional Model of Stress and Coping (TMSC), any response to a stressor has two main components. These components are an appraisal of the severity of a stressor which is encountered, and an appraisal of how well the stressor can be managed by the individual. The model emphasizes how the individual subjectively assesses the stressful event or situation, as well as their abilities and options in coping with it (Lazarus & Folkman, 1984). There are four steps to using this approach which will be discussed in more detail in Chapter Three. According to Lazarus and Folkman's 1987 theory, coping skills may be

learned and stress reduction occurs in individuals who improve their coping methods. However, the individual must first recognize that they are experiencing stress. Then, they must decide in which manner to cope with the stressor, incorporating coping strategies to reduce stress levels (Lazarus & Folkman, 1987). Taking into consideration the four steps of the TMSM will allow a thorough investigation and guide for interview questions. This research will allow for an understanding of what stressors nursing students face and which coping mechanisms were formed to alleviate stress.

Methodology

The most appropriate method for this study is phenomenological methodology. Phenomenology emphasizes examination of a phenomenon. The phenomenon in this study is stress and coping mechanisms (van Manen, 1997, 2014). Using phenomenology for this study allows the participants to focus on their experiences during nursing school and relive that experience. Examining their experiences will allow the participants to look back and reflect on the stressors they experienced during nursing school and reveal the coping mechanisms they utilized. Lazarus and Folkman's Transactional Model of Stress and Coping allowed for a concrete approach and analysis of the study. The specific steps of identifying their stressors, analyzing whether they dealt with the stressor, and thinking about whether they incorporated problem-based or emotional-based coping allows for better understanding of the phenomenon and inform the analysis of the study. During the interviews, participants discussed their stressors experienced during nursing school and elaborate on the nature of their chosen coping mechanisms. Both phenomena will be examined in conjunction with the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984).

Qualitative research expands upon findings, and participants were encouraged to elaborate on what their sources of stress were during their nursing education, the coping mechanisms they utilized that they thought were effective, and how the coping mechanisms enabled them to overcome the stress of nursing school. Phenomenology asks individuals to reflect and make sense of an experience, making this particular phenomenon vital to this study (van Manen, 1997, 2014). Asking former students who have successfully completed an Associate of Science in Nursing degree to reflect on their nursing education through an interview process allowed the researcher to begin understanding their experiences.

Trustworthiness

Measures to ensure trustworthiness were taken in the study. Key components of trustworthiness were utilized in this study: credibility, transferability, dependability, and confirmability (Creswell, 2014; Shenton, 2004). The Colaizzi method of data analysis, in conjunction with Lazarus and Folkman's Transactional Model of Stress and Coping, was used in the study. Both the method and the model are well-known analysis tools and provided the study with credibility, which is a desire to represent reality in a study (Lazarus & Folkman, 1987; Shenton, 2004). I have experience in the phenomenon, as I am a practicing registered nurse who graduated initially from an associate degree nursing program. I am also a nursing instructor working with pre-licensure associate degree nursing students.

The participants participated in the study voluntarily, with the knowledge that they could stop or withdraw from the interview or study at any time. Participants were encouraged to answer interview questions honestly and candidly and they were assured their identity would remain private by choosing a pseudonym that would only be known by them and the researcher (Shenton, 2004).

Transferability assisted in ensuring trustworthiness in the study. Participants in the study were informed that persons with similar experiences would be participating in the study. This was ensured by the requirements of the preliminary interview. Description of criteria for participation in the study was outlined in the preliminary interview session.

Dependability encompasses the opportunity for further research to develop from other studies, with or without the same results. The methods of research should be conveyed to others in a manner that would allow repetition of the study with different participants (Shenton, 2004). This study, a phenomenological retrospective qualitative study, included details of all interviews and methods of data analysis. This will allow for additional researchers who are interested in stress and coping among any nursing program to conduct a similar study.

Confirmability is best described as an accurate representation of the lived experiences of the participants without bias from the researcher (Shenton, 2004). The findings of this study were communicated to the participants and verified by the participants. Previous examples and quotes used earlier in this chapter reflect the participant's feelings and opinions of their participation in the study.

Steps to ensure trustworthiness in the study included each interview transcription being checked and rechecked for accuracy by the researcher and by the participants, the researcher read and checked transcripts for accuracy prior to the transcripts being sent to the participants for verification. This allowed for confirmation that no mistakes were present and the participant's experiences were captured in the interview.

Validity was ensured in the research process. Member checking and audit trails were done during the analysis process. Analytic memos were done after interviews. This allowed the

researcher to have a more detailed recollection tool when reading and validating the interview transcriptions.

Member Checks

Member checking and audit trails were done. Member checks were incorporated to ensure the accuracy and trustworthiness of the study. Member checking was done during the interview process and at the conclusion of the study. During interviews, I restated or summarized the information to determine accuracy. After the study was completed, the sharing of the findings with the participants involved was done. The participants gave feedback confirming that the findings reflected their views, feelings, and experiences. These steps allowed for reliable research (Creswell, 2014).

Analytical Memos

Analytical memos provided an audit trail for thinking and reiterated the environment where the interviews occurred. Analytic memos were done after interviews, allowing the researcher to have a more detailed recollection tool when reading and validating the interview transcriptions. Completing thorough analytical memos during and after the interview process also ensured the trustworthiness of the study.

Significance of the Research

Research has indicated increased levels of stress can cause a higher drop-out rate for student nurses (O'Regan, 2005). Nursing students experience higher levels of stress. These students have higher levels of physiological and psychological symptoms than students in any other health field (Alzayyat & Al-Gamal, 2014; Beanlands et al., 2019; Moridi, Khaledi, & Valiee, 2014). To keep patients healthy, safe, and well, nurses themselves must be healthy and safe. A main occupational safety risk in the work environment for nurses, identified by the

American Nurses Association's HealthNurse™ health risk appraisal, was stress (Carpenter & Dawson, 2015). Stress in nurses has been linked to reduced physical and psychological health, decreased job satisfaction, increased absences from work related to sickness, decreased nurse retention, and poor job performance (Farquharson et al., 2013). If students could incorporate stress reduction techniques, beginning in nursing school, they can carry these techniques into the profession. Carrying the learned stress reduction methods into the workforce could reduce stress levels and contribute to increased job satisfaction, decreased absences from work, increased retention and enhance patient outcomes.

Associate degree nursing programs play a vital role in educating the nursing workforce in the nation. With the nursing shortage affecting healthcare across the United States, associate degree programs are a valuable asset to the healthcare community. These programs allow for students to complete the program in as little as 18 to 24 months, allowing them to enter the workforce much sooner than higher degree programs (associate degree nursing is discussed further in Chapter Two). It is imperative to identify coping mechanisms that may prevent nursing students from ending their nursing journey before finishing school. This could ultimately become one resolution to the nursing shortage. For these students to take these learned coping mechanisms with them after graduation, this could help retain them in the profession.

Summary

It is crucial for nurse educators to identify the sources of stress for the nursing student. This would allow the instructors to assist the students in coping with the stress or exploring a variety of coping mechanisms. In the literature review, researchers identified nurse educators as a potential asset in helping students to learn health coping mechanisms. Due to time constraints,

teaching, and research workloads, instructors lack in this area of student support. Changes in how educators interact with students can have dramatic effects contributing to improvements in student well-being and learning (Gibbons, 2010). Educators can help students by “integrating intervention programs into the educational curriculum that target management of stress and anxiety” (Ratanasiripong, Park, Ratanasiripong, & Kathalae, 2015, p. 523). If nurse educators could incorporate stress management strategies at the beginning of the nursing curricula and reinforce these strategies throughout the program, students will benefit academically and emotionally. While learning important stress-management skills, students would become aware of the stressors and take supportive action to alleviate the stress. These learned stress-management skills may continue to be incorporated in the nursing profession upon graduation. Finding a solution to allow for improved adaptation in nursing school and in nursing practice will allow for all around improvement within the nursing profession.

Definition of Terms

Stress: “Psychological stress is a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (Lazarus & Folkman, 1984, p. 19)

Stressor: a stimulus that causes stress; “any situation in which internal and/or external demands are appraised as taxing or exceeding the adaptive or coping resources of an individual” (Lazarus & Folkman, 1984, p. 19)

Coping: “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 141)

Coping Mechanism: an act that controls aversive environmental conditions, lowering psychophysiological disturbance (Lazarus & Folkman, 1984)

Retention: The Accreditation Commission for Education in Nursing (ACEN) defines retention as the “number of students who complete the program within 150% of the stated program length” (ACEN, 2013).

Attrition: a reduction in numbers as a result of resignation or failure of a course (Merriam-Webster, n.d.)

Associate’s Degree in Nursing (ADN):

The Associate’s degree in Nursing, or ADN, is a 2-year degree and is the minimum amount of school required to become licensed as a registered nurse, or RN. Once the student graduates, he or she is eligible to take the NCLEX-RN examination which must be passed to become licensed by the State. A RN must be licensed to be able to work. (Registerednursing.org, 2019).

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Internet searches within The University of Alabama Library's website with online databases utilized including CINAHL Plus with Full Text, Cochrane Collection Plus, Nursing & Allied Health Database, ProQuest, PubMed, and Wiley Online Library. Google Scholar was also utilized in the search. Search terms related to the problem and significance of the study included nursing students, stress, coping, stress management, coping mechanisms, higher education stress, two-year degree student demographics, characteristics of students, nursing curricula and stress and patient outcomes. Terms associated with the theoretical framework include Lazarus and Folkman, Stress, Appraisal, and Coping, coping mechanisms, learned coping, primary appraisal, secondary appraisal, and Transactional Model of Stress and Coping. The process for this literature review has been ongoing.

Stress during nursing school begins before admission into a nursing program, increases as classes begin and continues through graduation into nursing practice. Coping, if learned early, may contribute to retention in higher education and in the workforce, leading to positive patient outcomes (Elfering, Gerhardt, Grebner, & Muller, 2017; Farquharson et al., 2013; Gelinas, 2019; Sanko, Mckay, & Rogers, 2016). Research finds that nursing, in all aspects, is stressful, but research lacks identification of how these students and future nurses cope with the stress. Effective coping mechanisms may contribute to increased retention rates in both the educational setting and the nursing profession.

Successful graduates of an associate degree nursing program report experiencing academic, social, environmental, and/or financial stressors (Al-Gamal et al., 2017; Birks et al., 2013; Cantrell et al., 2017; Del Prato et al., 2011; Yosetake et al., 2018). It is important to determine what different factors help some students cope better than others. With most associate degree nursing programs, students complete the degree in four to five semesters (Sabio, 2019). The degree requirements are rigorous with a saturated curriculum. How each successful student chooses to cope with their stressors may aid in the successful completion of the program in which they were enrolled (Fontaine, 2014). These successful students can carry the learned coping mechanisms into the professional nursing environment where stress continues to be present. Unless coping mechanisms are mastered, not only will the nurse be affected, but patient outcomes may be negatively affected, as well (Farquharson et al., 2013).

Associate Degree Nursing

Nursing is the largest profession in healthcare. Associate degree education has become a major supplier of registered nurses across the country due to its accelerated pathway to a career in nursing (Staykova, 2012). The associate degree in nursing (ADN) has been a benchmark credential for obtaining a nursing job for the past 40 years, with most programs being around 21 months of study (Nursinglicensure.org, n.d.). Associate degree nursing (ADN) programs developed in the 1950s as an alternative to diploma nursing and Bachelors of Science in Nursing (BSN) programs offered at the time and was created to address the shortage of nurses in the United States (Andrist, Nicholas, & Wolf, 2006; Mahaffey, 2002). From the time of development, the success of early programs became a stimulus for growth, and associate degree programs in the United States went from a total of 7 to nearly 700 in a span of approximately 25

years (Mahaffey, 2002). The National Organization for Associate Degree Nursing (N-OADN) (2001) described the ADN program as

Associate degree programs provide a sound foundation for the delivery of safe client care in the current complex health care delivery system. The programs are a reasonable investment of time and money for the student, allowing for licensure and employment in two years from the time of admission to the nursing program. Evidence of this can be seen by: the number of students who seek associate degrees in nursing; the strong passage rate on the NCLEX-RN exam by associate degree nursing graduates, which exceeds or equals that of other graduates; and the success of the associate degree graduates in nursing practice.

Colleges offering a 2-year degree option play a critical role in American higher education in helping to service the workforce with training needs and academic preparation for those who desire a degree in higher education, however, this group of students often are the most difficult ones to retain (Dougherty, 1992; Hawley & Harris, 2005; McKinney, Novak, Hagedorn, & Luna-Torres, 2019; Zhai & Monzon, 2001). Two-year degree program missions are typically built upon low tuition, location convenience, flexible scheduling, a less strict admissions policy, and programs or services to aid enrolled students who are struggling with academic or social barriers they may face (Calcagno, Bailey, Jenkins, Kienzl, & Leinbach, 2008; Dougherty, 1992). The missions of the 2-year universities identify that their student demographics are more non-traditional students than the traditional 18-year-old, recently out of high school students. According to the National Center for Education Statistics (NCES), 1 million associate degrees were earned in the 2015-2016 academic year, which is an increase of 74% from the 2000-2001 academic year. Of those 1 million degrees awarded, 61% of those degrees were awarded to females (NCES, 2018). Students enrolling in a 2-year degree program are typically more diverse than university students, particularly in terms of age, employment status, ethnicity, personal responsibilities, and academic preparation and goals (Hawley & Harris, 2005; McKinney et al., 2019; Welch, 2014).

ADN programs have become popular routes for aspiring nurses due to lower cost and decreased completion time when compared to a 4-year degree. Accessibility is another contributing factor to the popularity of ADN programs, as they are usually in smaller cities and towns or easier accessible than larger universities (Sabio, 2019). The convenience of a more accessible location makes returning to school easier for the ADN seeking student. Without 2-year degree programs, many individuals would not enroll in postsecondary education, making these avenues for education a crucial access for those who would not otherwise seek out higher education (Calcagno et al., 2008). Associate degrees in nursing provide competent nursing graduates for entry into practice (Hodgson, 2007; Starr, 2010). As the founders of the Texas Organization for the Advancement of Associate Degree Nursing (T-OAADN) stated in their early motto, they stated: “Associate Degree Nursing—You Can’t Argue With Success” (Hodgson, 2007, p. 44).

Importance of Associate Degree Nurses

ADN programs are a significant option for those desiring to enter into a healthcare profession, but may not have the financial resources or otherwise unable to enter a traditional BSN program at a 4-year university (Starr, 2010). This is one avenue that aspiring nurses may take to enter into the nursing profession. By taking the ADN route, these students will finish nursing school 2 years earlier than BSN students enrolling in nursing during the same time. This avenue allows for nurses to enter the profession and work as a registered nurse while obtaining a BSN degree online, if desired. Hospitals need all the capable nurses they can get, with a nationwide nursing shortage currently. The ADN allows for these students to enter the workforce much sooner than the BSN students. ADN programs are critical to the healthcare community they serve, providing an affordable education. The proven success of ADN

programs and their graduates make ADN programs critical to healthcare. This demographic of nurses has been an important aspect of healthcare since the beginning of their establishment (Nursinglicensure.org, n.d.; Starr, 2010).

Two-Year Degree Student Characteristics

Students who opt for a 2-year degree instead of a 4-year degree are a unique group of individuals. They possess a variety of characteristics. Students entering into an Associate Degree program often are “hampered by weaker academic skills, less certain plans, and shakier confidence than four-year college entrants” (Dougherty, 1992, p.188). Many times, 2-year colleges often tend to enroll more underprepared students than 4-year universities (Fike & Fike, 2008; Mertes & Jankoviak, 2016). The profile of the typical student who enrolls in a 2-year degree may include living off campus, holding down a full- or part-time job, balancing families, and/or taking classes part-time (Cantor, 2019; McKinney et al., 2019). A revelation released by the State Public Interest Research Group’s Higher Education Project (King & Bannon, 2002) revealed that of those students who worked while enrolled in higher education, 46% of them worked more than 25 hours each week. Of these students who are working, a majority of them stated that working is a detriment to their academic achievements and their college experience (Hawley & Harris, 2005; King & Bannon, 2002). On average, these students in a 2-year degree program are from a lower socioeconomic status, a minority, less ambitious, and less likely to enroll in higher education full time (Craig & Ward, 2008; Dougherty, 1992). Many of these students face a smaller chance of graduation before they ever begin their education, with the odds of success not in their favor.

Today’s ADN students are comparable to the students of the 1950s when comparing statistics. Students enrolled in a two-year degree program are often older and have more real-

world responsibilities than those students in a 4-year university, indicating a reason they delayed entering into college after high school. They are older than traditional college students, more likely to have dependents, be self-supporting, and work full-time while balancing home, family, and school (Sabio, 2019). The added responsibilities in addition to nursing school, contribute to increased stress in these student's lives. These students have family responsibilities, in addition to school responsibilities (Fike & Fike, 2008; Mertes & Jankoviak, 2016). Students who delay entry into college are more prone to poor study habits and lack retention of content knowledge from high school (Craig & Ward, 2008). These students are often over the age of 25 and have an increased need for remediation of basic knowledge (Hawley & Harris, 2005). Due to the many responsibilities of these students, when compared to 4-year university students, drop-out rates are increased for them. Two-year degree entrants are 10% to 18% more likely to drop out of higher education, especially for those students who are from a minority ethnicity, low socioeconomic status, or those who struggle with the academic work (Calcagno et al., 2008; Dougherty, 1992).

Nursing Curricula

Nursing curricula are designed to provide an organized manner in which students build a foundation of nursing knowledge. This foundational knowledge is necessary to continue to build upon throughout the courses. These nursing courses are taken in specific sequences and arranged with pre- and/or co-requisite courses (Karsten & DiCicco-Bloom, 2014). A student who fails a course must repeat the course before they may progress in the program. With some programs offering the failed course only once or twice a year, this is a difficult progression reality. This means students who are not successful in a semester, may be required to take other classes or postpone classes until the failed class is offered again. Policies outlining criteria for repeating a course are strictly enforced and often include readmission requirements, along with

conditions that constitute failure and dismissal from the program (Hrobsky & Kersbregen, 2002; Karsten & DiCicco-Bloom, 2014; Newton, Smith, & Moore, 2007).

Students who are not achieving a final course grade above a “C” have an increased probability of failing future courses and failing the NCLEX-RN® their first attempt, identifying the student as “at-risk” (Schrum, 2015). The accelerated time in which a student begins and finishes a 2-year nursing degree is encompassed in a rigorous timeline that many students find difficult to manage (Chen & Lo, 2015). During the nursing curricula, students are required to attend class, participate in simulation laboratories, and complete clinical hours in a healthcare facility. When comparing an ADN course of study with a BSN course of study, there is a vast difference in the timeframe allotted to complete the courses, allowing for ADN students to complete the courses in 4 to 5 semesters. Table 1 below illustrates a comparison of a public 4-year university’s BSN course of study with a public school’s ADN course of study.

Table 1

Comparison of BSN and ADN Curriculum Requirements

Year	BSN	ADN
1st Year (Fall Semester)	CH 104: Intro to Chemistry EN 101: English Composition PY 101: Intro to Psychology NUR 102: Freshman Compass Nursing Fine Art HD 101: Life Span Human Development <i>*17 total hours</i>	EH 101: Written English I PY 100: General Psychology BY 231: Anatomy & Physiology I Fine Art/Humanity Elective XX 104: Freshman Seminar for Nursing <i>*15 total hours</i>

Year	BSN	ADN
1st Year (Spring Semester)	CH 105: Intro to Organic Chemistry EN 102: English Composition II MH 110 or higher: Finite Mathematics History CS 102: Microcomputer Applications <i>*16 total hours</i>	BY 232: Anatomy & Physiology II PY 310: Developmental Psychology NS 101: Pharmacology NS 102: Foundations of Nursing I <i>*15 total hours</i>
1st Year (Summer Semester)	No classes required	BY 240: Applied Microbiology NS 103: Foundations of Nursing II <i>*9 total hours</i>
2nd Year (Fall Semester)	BSC 215: Human Anatomy & Physiology I ANT 102 or SOC 101: Intro to Cultural Anthropology or Intro to Sociology NHM 101: Intro to Human Nutrition Literature Foreign Language or Computer Science <i>*16 total hours</i>	NS 201: Maternal-Child Nursing NS 202: Adult Health Nursing <i>*14 total hours</i>
2nd Year (Spring Semester)	BSC 216: Human Anatomy & Physiology II BSC 242: Microbiology and Man PHL 223 or 292: Medical Ethics or Intro to Ethics Statistics Lit or History <i>*17 total hours</i>	NS 203: Mental Health Nursing NS 204: Advanced Adult and Critical Care Nursing NS 205: Preparation for Licensure <i>*15 total hours</i>

Year	BSN	AND
2nd Year (End of Spring Semester)		**Graduation**
3rd Year (Summer or Fall Semester): BSN	<p>NUR 305: Human Pathophysiology NUR 308: Conceptual Foundations for Professional Nursing NUR 310: Health Assessment for Professional Nursing Practice</p> <p><i>*9 total hours</i></p>	
3rd Year (Fall Semester): BSN	<p>NUR 309: Nursing Informatics NUR 324: Fundamentals of Professional Nursing Practice NUR 326: Pharmacology for Nursing Practice</p> <p><i>*13 total hours</i></p>	
3rd Year (Spring Semester): BSN	<p>NUR 328: Inquiry for Evidence Based Practice in Nursing NUR 372: Professional Nursing Practice: Adults NUR 374: Professional Nursing Practice: Mental Health</p> <p><i>*13 total hours</i></p>	
4th Year (Fall Semester): BSN	<p>NUR 418: Professional Nursing Practice: Childbearing Family NUR 420: Professional Nursing Practice: Children NUR 422: Professional Nursing Practice: Community Health</p> <p><i>*12 total hours</i></p>	

Year	BSN	AND
4th Year (Spring Semester): BSN	NUR 471: Professional Nursing Practice: Complex Client NUR 473: Leadership in Professional Nursing Practice NUR 475: Preparation for Licensure <i>*12 total hours</i>	
4th Year (End of Spring Semester) BSN	**Graduation**	

Stress

Stress in a learning environment can be critical to the positive motivation of a student. Stress beyond a motivational level can be detrimental to a student’s mental and physical health. Eustress is defined as a certain amount of stress necessary for psychological and physical well-being that is needed in life (Del Prato et al., 2011). Eustress offers motivation and enhanced performance as side effects, leading to positive outcomes (Chipas et al., 2012; Shin, Park, & Kim, 2015). It is when stress no longer enhances performance that it becomes a hindrance. Stress can manifest and effect individuals in many ways, causing unpleasant or negative manifestations (Al-Gamal et al., 2017; Chipas et al., 2012; Del Prato et al., 2011; Edwards et al., 2010).

Excessive stress negatively impacts students physically, mentally, and socially (Del Prato et al., 2011). Harmful levels of stress can lead lack of coordination in complex tasks, learning performance hindrances, and a decrease in productivity (Chipas et al., 2012; Edwards et al., 2010). Further impacts of stress may include anxiety, tardiness, absences from class, inability to sleep during normal sleep hours or in relation to their normal sleep patterns, “forgetfulness,

preoccupation, depression, headaches, fatigue, diarrhea, and other similar adverse manifestations” (Al-Gamal et al., 2017; Chipas et al., 2012, p. S50). When the student’s experiences lead them to feel vulnerable and unable to cope with the stressors of nursing school, they may experience negative side effects, leading to a potential obstruction in their journey to success (Al-Gamal et al., 2017).

Defining stress and determining if stress is a motivator or detriment is important in the perceptions of the individual (Yehia et al., 2016). Stress can have many physical and emotional effects on individuals. If this stress is carried into the nursing profession, patient outcomes may be affected. Additional workplace effects may include decreased nurse retention and a decreased number of nurses furthering their education towards a bachelor’s degree or higher in nursing (Carpenter & Dawson, 2015; Farquharson et al., 2012; Parveen & Inayat, 2017). Recognizing detrimental effects of stress is a step in attempting to control or cope with the stress.

Stress in Nursing Education

Stress in nursing education begins early in the admission process and continues through graduation. Upon graduation, there are more stressors that present before these students may practice nursing, especially in passing the national licensure examination. After passing the national licensure exam, stress does not disappear. It follows them into the nursing profession. Stress can potentially follow these students throughout their lives as both a student and a nursing professional (Reeve, Shumaker, Yearwood, Crowell, & Riley, 2012). Nursing students may experience increased stress due to “competing demands and challenges of nursing education, assessment, placements, and worries about employment prospects” (Watson & Ali, 2017).

Admission Process

Stressors of nursing school often begin before the student enters in the classroom. Immersed in a highly competitive field where only a select few students are admitted into nursing programs, these potential students feel the stress and pressure of nursing before their academic journey begins (DelPrato et al., 2011; Watson & Ali, 2017). Admission criteria for nursing programs are often strict, with multiple components that potential students must meet to be considered for admission. These components may include overall or specific grade point average, minimum standardized examination scores, entrance examinations, interviews, and recommendation letters (Chen & Lo, 2015; Fontaine, 2014; Karsten & DiCicco-Bloom, 2014). The competitive nature of the admission process and the fear of the unknown as to whether the individual will be accepted into a program is, many times, the beginning of a demanding nursing journey. With many schools of nursing only admitting students once or twice a year, a potential student is faced with dwindling time and waiting to find out if they have been admitted into a nursing program (Karsten & DiCicco-Bloom, 2014). Then, if they are not admitted, dreams are shattered; if they are admitted, they enter a foreign world that they must travel through over the course of 4 to 5 semesters.

Foundations of Nursing and Beyond

Most students, once admitted into a nursing program, start a course of study with little knowledge of the professional nurse role and job description. They are faced with not knowing what to expect during the duration of the courses (Demir, Sevil, Hulya, & Filiz, 2014). They enter a world where test-taking is not memorization of facts, but application of knowledge in real life-situations. They must first build a foundation for all future nursing courses and master the content before moving on to the next course. For most, they have never felt this degree of stress

during their academic career (Chipas et al., 2012; Karsten & DiCicco-Bloom, 2014). The students attend lecture where they must take notes on the content being covered and learn the content in a manner where they can apply the knowledge in a patient situation or scenario.

Most nursing curricula start with the foundations of nursing, moves into adult health conditions and into more specific populations and subjects like pediatrics, elderly, critical care, and mental health. As the courses progress, the material becomes more complex requiring the students to remember information from all prior course, think even more critically and apply their knowledge on examinations, in simulation, and when providing patient care (Karsten & DiCicco-Bloom, 2014). Prioritization of patient care, critically thinking through patient scenarios, and combining previous knowledge contribute to nursing examinations, increasing the difficulty of the exams (Manocchi, 2017). Despite the hours the students must dedicate to attending class and preparing for examinations, there is still a great fear of being unsuccessful and failing (Edwards et al., 2010). Examinations in the nursing curricula are created to mimic the format of the national licensure examination, requiring students to think critically and test their clinical implication knowledge (Rogers, 2009). Many students find it difficult to move from a knowledge-based way of thinking to thinking critically and applying their knowledge in health care scenarios (Edwards et al., 2010; Manocchi, 2017; Rogers, 2009).

The first classes held within the nursing program are the basis for which all other nursing courses are built: Fundamentals of Nursing. The student must have a solid foundational basis for nursing in order to build upon this content as they progress through the nursing program (Harrison, 2018; Karsten & DiCicco-Bloom, 2014). If a student is unable to grasp the material in the foundations courses, it is likely they will struggle academically and potentially not be successful in future courses. Content that is covered in the foundations courses is reinforced

throughout the curriculum, however, it is not re-taught. This makes retention of course material vital (Harrison, 2018; Mahaffey, 2002). These classes, as they progress, aid in the formation of “the development of perceptual abilities, the ability to draw on knowledge and skilled know-how, and a way of being and acting in practice and in the world” (Benner, Sutphen, Leonard, & Day, 2010, p. 166).

Clinical

Immersion into a new learning environment, such as the clinical setting, has caused a reported increase in stress among nursing students (Chipas et al., 2012; Sun et al., 2015). Not only are the nursing courses built upon in the classroom, but they are the focus of clinical practice (Bodys-Cupak, Majda, Zalewska-Puchala, & Kaminska., 2016). In a study by Rafati, Nouhi, Sabzevari, & Dehghan-Nayeri (2017), it was revealed that the “clinical part of nursing education is more stressful than the theoretical part . . . nursing students experienced moderate to severe stress in the clinical setting” (p. 6120). In the clinical setting, students are placed in a healthcare setting, typically a hospital or clinic, and required to provide care for patients under the supervision of a nursing instructor. Often, the first clinical experience is the first encounter a student has in a hospital setting. Many times, these students are experiencing adjusting to caring for the sick, interacting with family members of the patient, and communicating with the other members of the health care team. These activities are carried out under the scrutiny of the nursing instructor (Chipas et al., 2012; Rafati et al., 2017).

Stressors in the clinical setting may include being a witness to human pain and suffering, coming face-to-face with declining patients, exposure to bodily fluids, and death. For some, simply touching a patient causes increased stress. Mastering clinical procedures and learned skills are additional stressors in the clinical setting. This includes initiating an intravenous

catheter, administering medications, inserting an indwelling urinary catheter, or any other procedures a patient may need performed by the nurse (Birks et al., 2013; Rafati et al., 2017; Sun et al., 2015). Gaps between theory and practice further add to the stressors of clinical, leaving students feeling unprepared for practice and fearful of making mistakes. Unfamiliarity of the hospital settings and other clinical sites also adds to the student's worry in the clinical realm (Rafati et al., 2017; Turner & McCarthy, 2017). These clinical stressors can lead to students providing less than optimal care to their patients, putting patients' lives in jeopardy (Williams, 2014).

Critical thinking skills are the drive behind nursing education and must be utilized by nursing students in both clinical and classroom. Students must successfully complete the clinical component of the nursing course in order to pass the course, often requiring a satisfactory grade in the clinical component. Between all that students must participate in during clinical rotations, in addition to adding a grade to the course, student's stress during clinical is increased even further.

Simulation

In addition to students caring for patients in the clinical setting, most nursing curricula incorporates simulation laboratory sessions. During simulation laboratory sessions, students perform in critical thinking scenarios that models a real-life healthcare setting. (Parveen & Inayat, 2017). Students may perform in a variety of clinical simulation activities. The students may receive a change of shift report from a nursing faculty, then enter into the simulation room, which is a replication of a hospital setting. They then perform patient care and interact with the "patient" and other members of the health care team (Shin et al., 2015). The students are required to treat simulations as a real experience and must communicate with a high-fidelity

simulator, human patient simulator, or a real-life person portraying a patient. In addition to communication, students must perform assessments, administer medications, collaborate with other disciplines, and perform interventions needed related to the patient and the scenario (Levett, Hoffman, Roche, Lapkin, & Arthur, 2011).

While the students are participating in simulation, members of the nursing faculty observe the students and provide them with feedback, or debriefing, at the conclusion of the simulation. Such a scenario may cause stress related to the types of scenarios, observation and evaluation by nursing faculty, and feeling of a lack of knowledge (Birks et al., 2013). Nurses in the clinical setting, where direct patient care is taking place, must make quick, life or death decisions when caring for patients. Nursing students are educated regarding how to make these decisions and act on them in simulation experiences. Oftentimes, these quick, life or death decisions are cultivated in the simulation lab. From the beginning semester of nursing school throughout, the student must “uniquely figure out how to gather, process information, and make safe decisions” when caring for their patients, in the classroom, clinical setting and in simulation (Manocchi, 2017, p. 298).

Faculty Incivility

Nurse educators play an important role in a student’s learning environment, especially in fostering a positive formation of nurses. However, studies have shown that nurse instructors/faculty can be a cause of stress in the student’s life (Del Prato et al., 2011; Eka & Chambers, 2019; Koharchik, 2018; Lasiter, Marchiondo, & Marchiondo, 2012). Incivility in nursing education is a phenomenon that affects some nursing students during their educational experience. Incivility “is consistently linked to the stress of the nursing education environment” with a large majority of the incivility being faculty to student (Koharchik, 2018, p. 64).

Koharchik defines incivility as “rude or disruptive behavior . . . which may result in psychological or physiological distress” (2018, p. 64). Incivility between nurse educators and students in nursing academia can cause many detrimental consequences. Consequences may include absenteeism, decreased student success, interfering with safe clinical performance, learning hindrances, decreased retention and program satisfaction, and negative health effects, such as headaches, inability to sleep, and a weakened immune system (Eka & Chambers, 2019; Ibrahim & Qalawa, 2015; Lasiter et al., 2012; Meires, 2018; Palumbo, 2017).

In a study by Del Prato et al. (2011) of “[t]he lived experience of faculty incivility as a barrier to professional formation in associate degree nursing education,” it was revealed that faculty incivility towards students was a major stressor for students. Students reported four distinct areas of incivility in an associate degree program. The four areas are 1. favoritism and subjective evaluations, 2. strict expectations for perfectionism, 3. targeting and “weeding out,” and 4. disillusionment with nursing. Further revelation of negative faculty behavior included instructors speaking about the students negatively in front of others and making the students feel belittled (Del Prato et al., 2011, Lasiter et al., 2012; Palumbo, 2017). Displaying arrogance toward students and being unfair further support ways faculty have been reported as being discourteous toward students (Lasiter et al., 2012). It is imperative that civil behavior be experienced from nursing faculty to students to promote health and provide a safe learning environment for students (Clark & Kenski, 2017; Meires, 2018).

Many students enter the field of nursing with the ideation that nurses encompass caring values and that nursing is a caring profession. *The Code of Ethics for Nurses* “obliges nurses to demonstrate caring, respect for human dignity, autonomy, beneficence (doing good for another), non-maleficence (doing no harm), and justice in all professional relationships” (American

Nurses Association, 2001). When students enter into nursing school and experience faculty who are being uncivil, they experience nurses not encompassing the code of ethics, not modeling behavior they should. As leaders, nursing faculty should create a culture of civility and provide a safe learning environment for these future nurses (Eka & Chambers, 2019). Faculty play a pivotal role in the formation of these students and should not be an additional source of stress in the already stress laden world of nursing school (Clark et al., 2014; Del Prato et al., 2011; Ibrahim & Qalawa, 2015; Koharchik, 2018; Meires, 2018; Randle, 2003; Schaeffer, 2013).

National Licensure Examination

Unlike other disciplines, nursing school graduates bear the additional stress of preparing for a national licensure examination to verify competency to practice nursing. Ultimately, students must be successful on exams in order to graduate from nursing school, but they must also pass the National Council Licensure Examination for Registered Nurses® (NCLEX-RN®) to receive their license to practice nursing (National Council State Board of Nursing (NCSBN, 2018a). Failure to pass the NCLEX-RN® renders their nursing degree useless. If students are not successful on their first attempt in taking the NCLEX-RN®, they are not allowed to re-take the exam for a minimum of 45 days (NCSBN, 2018b). Failing the first attempt leads to a longer timeframe the student must wait to become employed as a RN and an additional amount of time they must prepare and study. This leads to increased pressure and stress to pass on the first attempt. This leads stress to follow them, even after they have passed the nursing courses and have graduated from a nursing program.

Stress and the Nursing Profession

Studies have shown that nurses experience stress. A study by Wu, Fox, Stokes, and Adam (2012) revealed in a comparison of stressors experienced and years of work experience,

the nurses who experienced the most stress were those who had been in practice less than two years. In addition to the increased levels of stress, safe patient care is jeopardized when nurses experience this increased stress (Burger & Lockhart, 2016). It is inevitable that stress follows students into the nursing workforce.

High levels of stress are reported throughout the nursing profession, leading to decreased physical and psychological health, resulting in poor job performance (Burger & Lockhart, 2016; Gelinas, 2019; Gelsema, van der Doef, Maes, Akerboom, & Verhoeven, 2005; Jordan, Khubchandani, & Wiblishauer, 2016). This high level of strain has been linked to negative patient outcomes, making it difficult “to maintain patient safety, high quality of care, and to deliver evidence-based practice,” including sub-optimal care of the patient, increased safety violations, and frequent medication and cognitive errors (Farquharson et al., 2012, p. 2328; Gatchel, 2018; Gelsema et al., 2005; Jordan et al., 2016). Research has confirmed that stress can attribute to an increased number of medical errors, decreased patient satisfaction, reduced productivity with increased turnover rates, and higher healthcare costs (Gelinas, 2019; Gelsema et al., 2005). Increased stress levels for nurses have been directly correlated with hospital malpractice suits. In addition to correlations with malpractice suits, patient mortality increases when nurses do not perform at their optimal level (Gatchel, 2018; Gelinas, 2019).

Causes of Stress in the Nursing Profession

There are many causes of stress within the nursing profession. Many nurses are exposed to unfavorable working conditions. A physically and psychologically demanding workload of patients and a national nursing shortage are major causes of stress within the nursing profession. Nurses are faced with the responsibility of providing care for an increased number of patients, leading to increased responsibility and stress (Chachula, Myrick, & Yonge, 2015; Wu et al.,

2012). In addition to the increased workload, nurses are faced with dealing with demanding and difficult patients. This includes patient and/or family demands, difficulty distancing themselves emotionally from patients, and patient death (Chachula et al., 2015). Difficult working conditions adds to the strain on nurses. Improper equipment, lack of equipment or working equipment, or limited resources are included in this stress (Wu et al., 2012). Lack of support from superiors and relationship conflicts among colleagues have been reported by nurses as causes of work stress (Chachula et al., 2015; Wu et al., 2012). Death and dying is another cause. Nurses are faced with caring for patients each day when they enter their health care facility. They are constantly assessing the patient for potential complications that could ultimately result in death. From managing basic health care needs to more complicated conditions and maintaining overall human health, nurses lead demanding lives within the profession (Cruz et al., 2018). In conclusion, stress within the nursing profession encompasses a great realm of causes. To summarize the main causes of stress within the nursing profession include, but are not limited to

1. Working in an uncivil or harassing environment (Deery, Walsh, & Guest, 2011; Katsifaraki, & Tucker, 2013; Spence Laschinger, Leiter, Day, & Gilin, 2009).
2. Caring for dying or chronically sick patients and their families (Chang et al., 2006; Katsifaraki & Tucker, 2013).
3. Subserviance and incivility experienced from physicians (Turner, Keyzer, & Rudge, 2007).
4. Moral distresses, including “implementing decisions that are incompatible with their personal beliefs” (Katsifaraki & Tucker, 2013, p. 627; Elpern, Covert, & Kleinpell, 2005; Meltzer & Huckabay, 2004).

5. Compassion fatigue (Coetzee & Klopper, 2010; Shingler-Nace, 2018).
6. Working extended, long hours with few to no breaks (Burger & Lockhart, 2016; Gelinas, 2019; Spence Laschinger et al., 2009).

Coping

In attempts to reduce stress levels, nursing students may adapt coping mechanisms. Coping is “a dynamic, behavioral and cognitive effort in controlling internal and external stress” (Rafati et al., 2017, p. 6120). Health promotion behaviors used by nursing students vary. Although student nurses are exposed to the concepts of health promotion and maintenance in the curriculum of the nursing program, many do not incorporate health promotion into their own lives (Bryer et al., 2013). Coping mechanisms implemented may contribute to reduced stress levels (O’Regan, 2005; Stillwell, et al., 2017). Some students incorporate time management and organizational tools into their daily routine to help them deal with the time constraints and stressors of the rigorous demands of school. Others may incorporate use of a social support system, establishing study groups within the cohort (Phillips, 2010). Other methods of coping utilized by some nursing students include “talking to friends, sports, crying, ignoring stress, feelings of sadness/misery, and the use of alcohol” (Rafati et al., 2017, p. 6121). Because nursing students are not able to avoid school stressors, it is imperative that they incorporate coping mechanisms to manage the stress (Rafati et al., 2017; Stillwell et al., 2017).

Coping with the pressure of being a student nurse is an ongoing process aimed at survival, growth, and maintenance as they journey through the steps to becoming a registered nurse (Mahfouz & Alsahli, 2016). Using methods to help balance the stressful life helps to alleviate some of the unhealthy stress many students have. This is beneficial to the health and well-being of students (Phillips, 2010; Zhang, Chernaik, & Hallet, 2017). Finding healthy

coping mechanisms to help relieve the strain of nursing school may be beneficial in helping students be more successful both in school and nursing practice (Darch, 2014; Rafati et al., 2017). Coping mechanisms are “of utmost importance in order to avoid the negative impacts of stress” (Reeve et al., 2013, p. 423).

By incorporating coping strategies into nursing curricula, the nursing profession could benefit. Ultimately, quality care of patients would be optimized leading to better patient outcomes (Al-Gamal et al., 2017). Stress reduction in the nursing profession has potential to increase job satisfaction and retention of nurses while improving patient care (Farquharson et al., 2013). When nurses perform at a paramount level with reduced stress levels, professional competency is upheld, while optimal patients care is attained (Ah Kim et al., 2015).

Nurse Educators as Resources for Stress Management

Research has indicated that drop-out rates for nursing students increase when excessive levels of stress are present. It has been discovered that nursing students who identify coping mechanisms early in their education will have a higher probability of successful completion of their degree (Handwerker, 2018; O’Regan, 2005). Nurse educators can be a potential asset in helping students to form effective coping mechanisms (Gibbons et al., 2009; Manocchi, 2017; Reeve et al., 2012). Identifying beneficial coping mechanisms will reveal to nurse educators stress management techniques that may be introduced in early nursing education. Incorporating stress management within the nursing curriculum may aid in the success of students academically, promoting retention in the program (Demir et al., 2014; Farquharson et al., 2013).

It is important for nurse educators to identify the sources of stress for the nursing student so that they may help the students cope with the stress (Levett et al., 2011). In all of the articles researched for this paper, only two articles identified how nurse educators might be a

potential asset in helping the students learn healthy coping mechanisms. Nurse educators manage considerable teaching and research workloads, however, small changes in how educators interact with students can have dramatic effects contributing to improvements in student well-being and learning (Gibbons et al., 2009). Educators can help students by “integrating intervention programs into the educational curriculum that target the management of stress and anxiety,” which could be beneficial to students (Ratanasiripong et al., 2015, p. 523). If nurse educators could incorporate stress management strategies at the beginning of the nursing curricula and reinforce these strategies throughout the program, students will become more aware and open to the realization of the stressors. Then, they would be able to apply coping strategies to alleviate the stress. By introducing and reinforcing critical stress-management skills while in nursing school, students will then be able to take the coping mechanisms into the nursing profession (Turner & McCarthy, 2017; Williams, 2014). Before nurse educators can incorporate stress management techniques, it is essential to identify what coping mechanisms successful students used.

The nursing profession is stressful, from applying to nursing school through entering the workforce. Research supports the presence of stress among students briefly addressing the importance of incorporating coping mechanisms to manage stress. Few articles resulted in specifics on effective coping mechanisms educators may introduce and reinforce throughout the nursing curriculum (Al-Gamal et al., 2017; Bryer et al., 2013; Chipas et al., 2012; Del Prato et al., 2011; Farquharson et al., 2013; Gibbons et al., 2010; Stillwell et al., 2017). Coping mechanisms can help students manage stress and be successful registered nurses. These coping mechanisms can aid in the completion of the rigorous process of graduating from an associate

degree program and passing the state board examination that allows a nurse to practice.

However, few specific coping mechanisms are revealed (Darch, 2014; Parveen & Inyat, 2017).

Given the current global shortage of nurses and the fact that over 50% of the nursing workforce graduate from associate degree programs, the importance of developing coping mechanisms to retain associate degree nursing students from the beginning of the nursing education journey is imperative (Farquharson et al., 2012; Mahfouz & Alsahli, 2016; NCSBN, 2018b). Associate degree nursing students experience tremendous amounts of stress while progressing through the academic program. Nursing faculty should take a more active role in influencing these students and assisting them in incorporation of coping mechanisms (Alzayyat & Al-Famal, 2014; Beanlands et al., 2019; Moridi et al., 2014). To prepare students for their futures in the nursing profession, it is imperative to identify sources of stress for nursing students. Failure to identify sources of stress may prevent them from functioning optimally. Identifying a variety of coping mechanisms in addition to providing the students with program resources to control that stress is of great importance (Alzayyat & Al-Famal, 2014; Beanlands et al., 2019; Moridi et al., 2014; Reddy, Karishmarajanmenon, & Anjanathattil, 2018).

Lazarus and Folkman's Transactional Model of Stress and Coping

When researching stress and coping, Lazarus and Folkman's Transactional Model of Stress and Coping is extensively employed in research (Lim et al., 2011). Lazarus and Folkman defined stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (1984, p.19). Lazarus and Folkman have been noted as the expert researchers on the subjects of stress and coping (Carver, Scheier, & Weintraub, 1989; Hobfoll, 1989; Krohne, 2002). The Transactional Model of Stress and Coping (TMSC) views stress as a unique,

independent perception that varies by person and situation. When incorporating the Transactional Model of Stress and Coping (TMSC), emphasis is placed on the interaction between the individual and their response to the environment in which they are experiencing stress. The environment is typically the area where the causes of stress are located (Hobfoll, 1989). Coping is a potential resolution to alleviating stress in an individual and must be adapted to each individual and the resources that they have available (Hobfoll, 1989; Lazarus & Folkman, 1984).

Two concepts are the main focus of the TMSC: appraisal and coping. In the appraisal phase, the individuals must evaluate what is happening to them and the actions they take to manage the specific occurrences (Krohne, 2002). In this appraisal phase, an individual perceives the severity of the stressor, their susceptibility to the stressor, and whether there is a motivational relevance that may affect their goals (Graham, 2015; Lazarus & Folkman, 1984). Also, in the appraisal phase, the individual appraises how well the stress can be controlled or managed (Graham, 2015). In the coping phase, individuals choose to implement coping mechanisms to alleviate the stress or they choose to implement emotional based methods (this will be discussed further in Chapter Three). For individuals who are experiencing increased amounts of stress, studies incorporating identifying what individuals are actually implementing to control the stress is of importance. Instead of only observing how these individuals actually respond to the stressors within their environment, Lazarus and Folkman's TMSC (explained in detail in Chapter Three) will be a guiding source to investigate the causes of stress, realization of stress, and coping mechanisms utilized (Carver, 2013; Carver et al., 1989; Krohne, 2002).

The TMSC has been used in many studies as a guiding framework, dating back to the 1960s and 1970s to the present. However, within the associate degree nursing population there

were no specific research studies that incorporated this model. Other areas of healthcare have incorporated the model in their studies, including patient care and psychology.

In one study by Avcioglu, Karanci, and Soygur (2019), the TMSC model was used to examine the well-being of well siblings of patients diagnosed with schizophrenia. The model was used as the framework, showing that specific coping mechanisms (in this study, specifically, social support) may serve as a buffer for the negative aspects of stress. Furthermore, the TMSC model was used in the study to look directly at the responses of well/normal individuals to stressful circumstances when the stressor event was the sibling's illness and behaviors associated with the illness. The model encompassed both primary and secondary appraisals of the well individuals and included an evaluation of the coping mechanisms used (Avcioglu et al., 2019). Another study by Martin and Daniels (2014) used the TMSC in a mental health care setting, as well. This study used the model to provide a "point of departure to elucidate the processes which occur when a student nurse has an encounter with a mental health patient" (p. 521). The student demographic for this study was BSN students in their mental health course. The study went into detail to describe the individual experiencing the stressor, the setting of the experienced stress, the cause of stress (a verbally abusive mental health patient), primary appraisal, secondary appraisal and a reappraisal, where the student nurse decided that a firm approach is the most effective coping strategy when dealing with the specific stressor (Martin & Daniels, 2014). The study used the TSMC in guiding their research and findings.

Other healthcare related studies that incorporated the TMSC included researching cognitive precursors of an emotional response to cancer stress, psychological distress in caregivers of cancer patients, a Korean study analyzing the survivorship of Korean women with breast cancer, and using the TMSC as a tool for understanding HIV care (Graham, 2015;

Hulbert-Williams, Morrison, Wilkinson, & Neal, 2013; Jang & Kim, 2018; Oh, 2017). In the Hulbert-Williams et al. (2013) study, the model was used to explore the emotions and coping mechanisms of recently diagnosed cancer patients. Data were gathered on appraisals, themes and emotions in this repeated measure design that used a questionnaire at/soon after diagnosis, at 3 months post-diagnosis and 6 months post-diagnosis (Williams et al., 2013). In the 2018 study by Jang and Kim, evaluation of the stresses according to the stages of survival (how long in years the patient had survived post diagnosis: less than 2 years, 2 to 5 years, and greater than 5 years) was done, incorporating the primary appraisal of the model. In addition to the primary appraisal, the methods of coping were examined, as well. This was a study conducted in South Korea and employed over 600 participants who participated in the quantitative study (Jang & Kim, 2018). In Oh's study (2017), the TMSC was used to examine family caregivers to cancer patients stress and methods of coping in relation to communication from health care professionals. A total of 1,397 caregivers were included in the research and concluded that negative communication with health care professionals caused psychological distress in the caregivers, while self-efficacy in "health information seeking significantly mediated the relationship between communication with health professionals and psychological distress" (Oh, 2017, p. 5). Graham (2015) used the TMSC, along with another health model, as an integrative tool to address the bio behavioral influences on HIV. Using the TMSC in their research revealed other studies that showed that there is a link to stress and disease progression and that "dispositional optimism, active coping, and spirituality were most associated with slower progression of HIV disease" (Graham, 2015, p. 107). This study used the TMSC in conjunction with a health behavior model to create a new model, which could potentially guide nurses and others working with HIV patients to understand

and retain HIV patients across their lifespan by encouraging health behaviors and a positive health outcome (Graham, 2015).

Many health care studies have been conducted using the TMSC in some form, but the associate degree nursing population lacks studies using this model. By incorporating the TMSC in this research, successful students will have the opportunity to reveal their stressors while in an associate degree nursing program. Not only will they reveal their stressors, they will discuss their coping mechanisms and opinions of if they believed their chosen coping mechanism, whether problem-based or emotional-based, contributed to their success. Using the TMSC will allow for a thorough investigation of both the stressors and coping mechanisms.

Gaps in the Literature

Nurses should take every opportunity to educate and encourage patients to participate in healthy behaviors creating optimum health and decreased hospital stays. Through education, communication and role modeling, nurses encourage patients to care for themselves (Darch, 2014). To cope with stress in an effective manner, nurses must practice self-care. This includes recognizing when feelings of stress are becoming overwhelming and take steps to alleviate the feelings (Carpenter & Dawson, 2015). Literature states that nurses experience stress from the beginning: from the application process of school through entering the workforce. There is a gap in the literature showing effective coping mechanisms that nursing students utilize.

For years, the American Nurses Association (ANA) has promoted strategies to address stress in the working environment. Few effective interventions exist (Gelinas, 2019). One study by Rafati et al. (2017) identified specific coping mechanisms utilized by 20 nursing students in a nursing program in Iran, however, the focus of this study was specifically in the clinical setting. An additional study by Hirsch et al. (2015) attempted to reveal coping strategies of nursing

students in a university in southern Brazil. A third study, by Labrague, McEnroe-Petitte, Papathanasiou et al. (2017) in *The Journal of Mental Health*, looked at nursing student stress and coping mechanisms occurred in three countries: Greece, the Philippines, and Nigeria. There were no studies within the United States related to coping mechanisms for nursing students. This evidence “raises questions about whether nursing students are being properly prepared for the role that is expected of them” (Darch, 2014). Furthermore, few studies have shown that undergraduate nursing curriculum should incorporate emotional preparation and coping mechanisms. Incorporation of these management techniques will introduce the students to interventions during the educational component, allowing students to take what is learned into the professional world of nursing (Carpenter & Dawson, 2015; Darch, 2014). All studies found for this literature review identifying coping mechanisms of nursing students were studies that occurred outside of the United States, proving there is a gap within the specific demographic of the United States.

Nursing students should incorporate effective coping tools for a healthier college life and to prepare them for their future profession (Ah Kim et al., 2014). To reduce stress in nursing education, from classroom to clinical to simulation and beyond, nurse educators should provide information on stress and coping to students (Al-Gamal et al., 2017). Studies outside of the United States have identified potential beneficial coping strategies for nursing students, however no studies addressed associate degree nursing students (Hirsch et al., 2015; Rafati et al. 2017). This identifies a further gap in the research: the associate degree nursing realm. Studies have incorporated investigating stress and coping mechanisms in BSN programs, but there have not been studies investigating ADN programs.

Summary

It is inevitable that nursing students experience an increased level of stress, both in the academic setting and in the professional setting. Incorporation of coping strategies may alleviate some of the stress, while enhancing quality of life in the role of student and later in the role of health care professional. It is noted in the literature that nursing students are more exposed to stressful situations than other courses due to the numerous demands and excessive workloads of the program. When effective coping strategies are implemented, the stress may be possible to overcome, leading to more positive student, and ultimately patient, outcomes. Identifying effective coping approaches is important in both retention of nursing students and nurses, leading to retention of nurses in the classroom and workforce. Retention in the workforce can alleviate the nursing shortage and ultimately improve patient outcomes.

CHAPTER THREE

METHODOLOGY

The purpose of this retrospective, phenomenological, qualitative study was to identify sources of stress experienced by associate degree nursing students and the coping mechanisms these students utilized to aid in their successful completion of nursing school. Qualitative research employs a flexible and emergent research design. Phenomenology asks individuals to reflect and make sense of an experience, making this particular phenomenology vital to this study (van Manen, 2014). The research questions for this study were answered through interviews: a preliminary interview identifying qualified participants for the study, a face-to-face or virtual interview, and a follow-up interview for those who agreed to the follow up interview. The research questions for this study were

Research Question 1: What are the stressors that affected students during their associate degree nursing education?

Research Question 2: What coping mechanisms did associate degree nursing students utilize to overcome stress throughout their associate degree education?

Phenomenology

The most appropriate method for this study was phenomenology. Phenomenology emphasizes focus on a phenomenon. van Manen described phenomenology as the way in which an individual familiarizes themselves with the lived experiences (2014). The assumption that humans use their experiences and search for deeper meaning in them, underlies phenomenology (Gibson & Hanes, 2003). The phenomenon in this study is the experience of stress and coping.

Using phenomenology for this study allowed the participants to focus on their experiences during nursing school and re-live those experiences. Examining their experiences allowed the participants to reflect on the stressors they experienced during nursing school and reveal the coping mechanisms they utilized. Phenomenology integrated with Lazarus and Folkman's Transactional Model of Stress and Coping (TMSC) made the framework for the study. Using the model allowed participants to tell their story in a linear, progressive manner to better understand their lived experience. The TMSC allowed for a concrete approach and analysis of the study.

The specific steps taken to integrate the TMSC included:

1. Asking the participants to define stress.
2. Encouraging the participants to discuss their first recognition they were experiencing stress.
3. Examining their analysis of the stress as manageable or unmanageable.
4. Exploring the coping mechanisms they felt aided in their success.

Following the steps above allowed for a better understanding of the phenomenon and allowed the TMSC to guide the interview and analysis of the study. During the interviews, participants were asked to talk about stressors experienced during nursing school and elaborate on what their chosen coping mechanisms were, moving in conjunction with the TMSC (Lazarus & Folkman, 1984).

The primary objectives of this study were to identify and understand the stressors that successful associate degree graduates experienced and the coping mechanisms they used. Interview questions guided the participants beginning at identification of the stressors and concluded with their coping mechanisms used. For this study the experience of stress and coping in nursing school was the lived experience explored, while using the TMSC to guide the

interview and analysis of the data in chronological order of its occurrence. Using the model allowed participants to tell their story in a linear, progressive manner to better understand their lived experience.

Research Method

A cognitive approach using the theoretical framework from Lazarus and Folkman's Transactional Model of Stress and Coping (TMSC) was incorporated as a guiding framework for this study. This model focuses on the imbalance between factors of demand in the environment and the individual's resources to meet these demands: stress and coping. The relationship of the individual to the environment elicits an emotional reaction of stress. This occurs when demands of the environment exceed the individual's perceived resources (coping mechanisms) available for addressing the stress (Lazarus & Folkman, 1987). Lazarus and Folkman's model allowed for a scaffolding approach that consists of a primary appraisal and a secondary appraisal, followed by problem based coping and/or emotional based coping. In this study, former nursing students divulged what their stressors were and how they were able to recognize their need to deal with the stressors (coping). In addition to recognizing and identifying stressors, they discussed what coping mechanisms aided in their success. The scaffolding approach of the model was utilized as a guide for interview questions, follow up interview questions, and analysis of data for the study. The model was used for data exploration after employing the seven steps of Colaizzi's data analysis. Using this model allowed me to use these various components as a guide for the interviews and data analysis (Dvorakova et al., 2018).

Lazarus and Folkman's TMSC theorized a process by which an individual recognizes and responds to a stressor. First, they asserted that an individual's response to a stressor is composed of the primary appraisal and the secondary appraisal. There had to be establishment by the

individual that they had a stake in the encounter, meaning that the stressor could affect them (Carver et al., 1989; Lazarus & Folkman, 1984). The first appraisal, or primary appraisal, is a subjective assessment of the severity of the encountered stressor and if it is affecting the individual. The primary appraisal is “the process of perceiving a threat to oneself” (Carver et al., 1989, p. 267). For this study, the former students had to identify that they had “something” to lose if they were not able to deal with the stressors. For these students, the stake would be not passing nursing school.

Once the individual recognizes that the stressor does affect them, the secondary appraisal is done. In the secondary appraisal, the individual appraises internally how well they can control or manage the stressor using internal or external options (Graham, 2015; Hobfoll, 1989; Lazarus & Folkman, 1984). The secondary appraisal is an assessment of how well the individual believes that they can cope with the stress: the stress is or is not manageable by the individual. In other words, the model places emphasis on how the individual subjectively assesses the stressful event or situation, as well as their abilities and options in coping (Lazarus & Folkman, 1984). In this study, the participants recognized their stressors and made decisions on how to cope with the stressors.

Lazarus and Folkman theorized that once recognition and threat of the stressor is recognized, individuals choose options of problem-based coping or emotional-based coping. Problem-based coping is when individuals decide how they can manage the problem. During this phase, individuals aim their efforts towards problem solving or incorporating actions that alter the source of the stress (Carver et al., 1989; Lazarus & Folkman, 1984). Examples of problem-based coping may include taking control of the situation by seeking help in finding stress relief. This can include time management, relaxation activities, or recreational activities.

Problem-based coping encompasses any action that alters the stress in a positive manner for an individual (Carver et al., 1989). Lazarus and Folkman theorize that when an individual successfully manages their stressors with problem-based coping, they may not utilize emotional-based coping. If problem-based coping is not successful in dealing with the stressors or the individual feels that their stress is unmanageable, then emotional-based coping is formed according to Lazarus and Folkman. In emotional-based coping, the individual believes they have little control in a situation. This is when the individual may avoid or distance themselves from the issues. This can include distancing themselves from the situation, blaming others, and avoiding the environment that causes their stress. Emotional-based coping may not be utilized by individuals if their stress is managed by problem-based coping. During this stage, individuals feel as though they must endure the stress and are unable to control it (Carver et al., 1989; Krohne, 2002).

Combining the processes named in the TMSC allowed for a thorough investigation for this study and an understanding of how nursing students recognized their stress and identified coping mechanisms to deal with their stressors. To begin with, the primary appraisal formed the main criteria for participants in the study. In order to participate in the study, the former students identified that they experienced increased amounts of stress while in school. This was determined by the preliminary interview questions and inclusion criteria (Appendix A). The process whereby former students engaged problem-based coping strategies or emotional-based coping strategies helped me to understand their experiences with stress and coping. During the formal interview process, I asked participants questions that revealed their experiences with the stressor affecting them in the secondary appraisal. Finally, identification of problem-based coping versus emotional-based coping was carried out during the data analysis portion of the

study in order to identify whether the student was able to successfully cope with the stressor using problem-based coping or emotional-based coping.

According to Lazarus and Folkman's theory, coping skills may be learned. The theory further states that stress reduction occurs in individuals who develop coping methods. However, the individual must be able to identify stressors, recognize that the stress can affect them if they do not cope with the stress, and form problem-based coping and/or emotional-based coping. The TMSC allowed a thorough investigation and understanding of what stressors nursing students faced, if coping mechanisms were formed that alleviated stress, or if they were unable to manage the stress and relied on emotional-based coping.

Research Design

This study consisted of individual interviews with recently graduated, practicing nurses, who met specified criteria. Participants were purposefully selected according to the specific criteria met by nine participants prior to beginning the consent and interview process. Preliminary interviews were conducted with interested individuals to ensure they met study criteria (Appendix A). Once individuals met the specific criteria outlined in the preliminary interview, an interview was conducted after obtaining participation consent (Appendix B). A follow up interview was conducted with five of the eight participants for further exploration of the phenomenon.

Setting and Participants

Study participants were associate degree graduate registered nurses who graduated within the last 2 years and were currently practicing in the southeastern United States. Using this demographic of graduates within the specified graduation timeframe allowed for the participants to recall their stressors of nursing school, providing a retrospective view not clouded by current

school stressors. Incorporating graduates from the southeastern United States allowed for revelation of stressors and coping mechanisms within the region. An additional requirement to participate in the study was that the individual did experience increased levels of stress during their time in an ADN program. This was determined by guidelines outlined in the preliminary interview and by conducting the interview via telephone call (Appendix A). Purposefully selecting participants allowed for a better understanding of the problem of stress and coping in nursing school (Creswell, 2014). A combination approach to recruit participants was used: a social media recruiting post (see Appendix C for the post and Appendix D for approval of the post) and the researcher reached out to fellow associate degree colleagues seeking participants. This combination approach allowed for recruitment of various ADN programs in the southeastern United States. Targeted southeastern states were Alabama, Georgia, Mississippi, Tennessee, North Carolina, South Carolina and Florida. This allowed for varying perceptions from a variety of associate degree schools of nursing.

Recruitment and Selection

First, to recruit interested nurses, a post was placed on social media, specifically Facebook, by the researcher with information about the research, seeking participants interested in participating in the study (Appendix C). The prospective participants were asked to contact the researcher via private message, email, phone, or text. The social media post was made public and shareable by anyone who saw the post on their newsfeed. The request was made in the original post for anyone who sees the post on their timeline, to share the post publicly to their page, for a potential variety of respondents resulting in a possible snowball effect. The participant goal from the social media post was to have five to seven interested responses from the initial and shared posts. Second, in addition to the social media post, contacts with

colleagues in associate degree programs in the southeast United States were made for recruitment of their graduates, with a goal of three to four participants attained from this recruitment method. Ideally a minimum of eight participants was desired for this study. A total of fifteen individuals contacted the researcher from the social media posts, with eight of the interested individuals meeting the specified criteria. Three individuals contacted the researcher from reaching out to colleagues, with one individual meeting the specified criteria. A total of nine participants were included in the study.

Participation in the study was not limited to those who formed stress reduction techniques, but open to anyone who experienced increased stress while in nursing school. Even though all participants would have met the participation criteria during their academic career, some were successful without managing stress.

Participation in the study was strictly voluntary, and the study was free of harm. Participant's confidentiality and privacy was assured, and a letter of permission was obtained from The University of Alabama Internal Review Board (IRB) (Appendix E). Once permission was granted from the IRB, the participants were asked to verbally agree to participate in the study. Upon verbal agreement, informed consent, explaining risks, benefits, and explanation of the study was done before the interview process. Informed consent (Appendix B) was obtained from participants verbally and in writing prior to the interview process. The written informed consent documented any risks, benefits, and purpose of the research study and measures that were taken to ensure confidentiality. Participants were informed that they could withdraw or discontinue the study or interview at any time. During interviews, efforts were made to make participants feel as comfortable as possible and participants were allowed to refrain from answering any questions, if desired.

Confidentiality and privacy was maintained through the use of pseudonyms that were chosen by the participants at the beginning of the scheduled interview time. All audio recordings, virtual interview recordings, transcription documents, field notes, and analysis of data were stored in UA Box, a secure encrypted cloud storage with the researcher having sole access to the storage information.

Once potential participants contacted the researcher and it was determined that the potential participants were interested, a preliminary interview was conducted via telephone (Appendix A). The preliminary interview consisted of experiential questions related to the student's nursing school experience. To meet participation requirements, individuals must have answered "yes" to two or more of the preliminary interview questions. During the initial contact, upon verification that the individual has met the requirements of the preliminary interview, the participants verified their date of graduation, type of degree received, and location of current practice. When all participation requirements were met, the participants chose an interview method: face-to-face or virtual via Skype, Zoom, or other virtual meeting conferencing venue. This was done to ensure an environment comfortable for the participant. If the face-to-face interview method was chosen, the researcher traveled to the selected interview site. Participants were encouraged to select a public site, free of distractions. Before the interviews began, the participants were provided with information regarding the study. Then a signed informed consent was obtained, allowing the interview process to begin. For the participants who preferred a virtual interview, participants were encouraged to choose a location free from distractions, be the only person in the room, and was in view of the researcher at all times. Prior to the scheduled virtual interview session, consent was obtained. A Portable Document Format (.pdf) file of the informed consent was emailed to them for them to print, review, sign, scan, and

send back to me. Another method used was sending a facsimile (fax) of the informed consent. The participant then signed and returned the consent via scanning and emailing the document to me or sending back via facsimile. Participants received a Portable Document Format (.pdf) copy of their signed consents.

Interview questions were guided by Lazarus and Folkman's Transactional Model of Stress and Coping focusing on primary appraisal, secondary appraisal, and coping (Appendix F). Follow up interviews were conducted by email. The follow up interview questions (see Appendix G) were emailed to the participants who then they typed their responses to the questions and returned them to me via email.

In review, recruitment and selection of participants, the following steps were conducted:

1. I posted a public social media post to recruit participants AND reached out to fellow colleagues for potential participants.
2. Interested participants contacted me.
3. I verified that interested participant met study criteria by conducting a preliminary interview with interested participants meeting specified criteria, current field/location of current practice, and date of graduation/type of diploma.
4. Interested participants chose their preferred interview method and a date was set to conduct interviews.
5. Consent was obtained.
6. Interviews began.
7. Follow-up interviews were conducted.

Data Collection

Information regarding the study was given to the participants prior to the study. A preliminary interview was conducted via phone to ensure that participants met study criteria (Appendix A). Consent was obtained prior to beginning the interviews. Data for this study consisted of interviews conducted face-to-face or via a virtual meeting application. The date and time for interviews was chosen by the participant. Interviews began with brief, unrecorded introductions and conversation. Then, participants were asked for permission to begin the recording and interviews.

Interviews were recorded using a handheld, digital recording device. The recordings were deleted upon transcript verification. Transcripts are housed in UA Box. This is a secure, online data housing management system, with the researcher having sole access to the data. Once the dissertation is approved, transcripts will be deleted from UA Box after 5 years. Once member checking was complete and the follow-up interviews were completed, all participant information was deleted from the researcher's computer and phone, including email addresses and phone numbers.

The interviews consisted of 11 open-ended questions focusing on deep, lived experiences of the participants, in conjunction with the components of the TMSC (Lazarus & Folkman, 1994; Moustakas, 1994; Vagle, 2018). Interview questions inquired about specific events and actions, triggered episodic memory recollection, and tapped into the participant's episodic memory (Maxwell, 2013).

During the interviews, the researcher took field notes noting behaviors by the participants, including, but not limited to, avoiding eye contact, maintaining eye contact, body posture, as well as the environment and any distractors in the interview environment. After

initial interviews were completed, follow-up interviews were conducted via email correspondence. Once the interviews were conducted, I transcribed the recorded interviews immediately.

Analytic memos provided an audit trail. I wrote up analytic memos after each interview. The memos were documented by the researcher and included specifics of each interview, such as interesting stories, emotions, and reactions. After three or four analytic memos, I noted similar patterns or differences in the memos and continued the analysis throughout the remaining interviews.

Data Analysis

There were three sources for data interpretation: interview transcripts from preliminary interviews, scheduled interviews, and follow-up interviews, along with field notes and memos. The first step in data analysis in qualitative research is transcription of data. I transcribed each interview and printed them for my use. Each interview was reviewed several times prior to transcription, allowing me to immerse in the entire interview and conversation. Glesne (2016) stated that all data is partial and as a novice researcher, I recognize that there is a possibility for misunderstanding, as well as understanding, in this research and data analysis. For the data analysis, I employed the Colaizzi method of qualitative data analysis (Colaizzi, 1978). This method is a robust and rigorous method to analyze qualitative data that is credible and reliable while revealing emergent themes and the relationships within the themes (Colaizzi, 1978; Shosha, 2012; Wirihana et al., 2018). Colaizzi's methodology allowed for a clear, logical process of analyzing data to understand the experiences of individuals participating in research, using seven steps for analysis (Abalos, Rivera, Locsin, & Schoenhofer, 2016; Colaizzi, 1978; Riessman, 2008; Wirihana, et al., 2018). After each interview transcription, I emailed a copy of

the transcript to the participant. The participant reviewed the transcript and sent an email verification to me stating that they agreed with the transcription. This was done prior to the analytical process.

Data Analysis: Colaizzi

Seven steps recommended by Colaizzi were followed for data analysis (Colaizzi, 1978; Morrow et al., 2015; Shosha, 2012; Vagle, 2018). The Colaizzi method includes these seven steps in analyzing data:

1. Familiarization with the data.
2. Identification of significant statements.
3. Formulation of meanings.
4. Clustering of themes.
5. Development of exhaustive description themes.
6. Condensing into fundamental structures.
7. Verification of fundamental structures.

The first step is for the researcher to become familiar with the data by reading through all interview transcripts several times. I listened to each interview multiple times and also transcribed each interview recording. Upon completion of each interview transcription, I printed the interview and read the transcript numerous times to discover what each participant was revealing and communicating.

In the second step, I identified statements that were relevant to the phenomenon being studied (Colaizzi, 1978; Morrow et al., 2015; Vagle, 2018). During this step, I focused on participant statements that focused on their definition of stress, how the participant recognized

their stress, feelings of stress management, and their coping mechanisms used. Examples of significant statements identified in this step were

1. “Stress is a feeling of not knowing what to do, how to do, or where to do. Just a rollercoaster of being overwhelmed.”
2. “I identified my stress when I realized that I was not in control.”
3. “I decided that I had to do something to deal with the stress because I was determined to be successful and I was going to pass.”

Step three focused on formulating meanings relevant to the phenomenon. To do this, I bracketed pre-suppositions to maintain open to the phenomenon being studied. All relevant statements were noted, as well as each non-repetitive, non-overlapping statement (Colaizzi, 1978; Moustakas, 1994; Riessman, 2008). I attempted to avoid bias in this step, as I was aware of my personal belief that everyone can adopt healthy stress reduction measures into their lifestyle. I acknowledged this potential bias and each formulated meaning was deduced based on the relevant data chunks informing the relevant statements. Thirty-five formulated meanings emerged from this process. Examples of formulated meanings derived from the analysis are:

1. Expectations: Known and Unknown—students knew what the expectations were, but also did not know what to expect.
2. Students began to feel as though they were losing control.
3. Determination was a driving factor for them.
4. Preparation: being prepared is the key to success.

In the fourth and fifth steps, I clustered themes from the 35 formulated meanings. Thirty-one clustered themes were derived. During the fourth step, I took the formulated meanings and placed them into common categories. Once the common categories were completed, I coded

each formulated meaning from step three with key phrases. Then I used participant transcripts and significant statements in conjunction with the formulated meanings to verify accurate representation, identifying the clustered themes. Step five of data analysis consisted of creating exhaustive description themes in Colaizzi's method of qualitative analysis (Colaizzi, 1978; Morrow et al., 2015; Shosha, 2012). Exhaustive description themes were developed from the clustered themes. Key words and phrases were selected that developed from the clustering of themes. Twenty-two exhaustive description themes were identified. Some examples of exhaustive description themes were

1. I had this sense of urgency that haunted me.
2. What if I failed?
3. What if I was wasting time and money?

In step six, I condensed the exhaustive description themes to form the fundamental structures. Statements were written to capture the essential elements of causes of stress and coping mechanisms used by the participants. Three fundamental structures were identified in the study. The fundamental structures were derived from reducing the data into categories from the 22 exhaustive description themes. Initially, the reduction of data was condensed into 12 sub-categories (discussed further in Chapter Four), then into the three final fundamental structures. An example of the fundamental structures is: Fear of Failure: "*I was afraid to fail.*" with the sub-categories of *early recognition*, *losing control*, and *self-doubt*. The three fundamental structures are identified with their respective sub-categories and explained further in Chapter Four.

The final, seventh step, was verification that the fundamental structures accurately represented their recalled experience was requested of all the participants (Abalos et al., 2016; Morrow et al., 2015, Riessman, 2008; Vagle, 2018). This step was done via email

correspondence with the participants. Each participant was sent their transcripts, along with the identified structures. Responses from participants included all nine participants agreeing with their transcripts and structures identified. A few participants provided comments other than “It looks good” or “I agree with the findings.” Those comments included, “This is me 100% and I can’t wait to read your final paper,” “Please let me know if you need any more information from me about this study,” and “This is great that you are actually trying to identify ways to help future students. I sure could have used this information when I was in nursing school!”.

Data Analysis: Lazarus and Folkman’s Transactional Model of Stress and Coping

The analysis was guided using the steps in Lazarus and Folkman’s Transactional Model of Stress and Coping upon completion of the seven steps of the Colaizzi method of data analysis. Once the Colaizzi steps for data analysis was concluded, I examined interview questions and classified them into Lazarus and Folkman’s TMSC using their steps: primary appraisal, secondary appraisal, and coping. Then, I organized the questions in the data analysis chart (Appendix H), created during the steps of Colaizzi, by each of those classifications. Two questions were identified as incorporating the primary appraisal, three questions were identified for the secondary appraisal, and three questions encompassed coping. For the participants to meet the requirements to participate in the study, they must have felt stress during nursing school and met specific criteria. This was done in the preliminary interview (see Appendix A). The preliminary interview intertwined with the framework’s primary appraisal: identification of stress and the severity of the stressor, along with an internal assessment of how the individual felt they could manage the stress. The primary appraisal assisted in identification of whether the participant recognized that not dealing with the stress would affect them. For example, if they did not deal with the stress, would they be affected? The secondary appraisal allowed for

analysis of how the participant dealt with the strain. The final analysis of the phenomenon revealed utilized coping strategies. This provides important information which can be used by nurse educators, which will be discussed in Chapter Five.

Researcher Positionality

I have been a nursing student who experienced increased amounts of stress during nursing school. I can remember being stressed waiting on my acceptance letter because that one letter determined my fate: it determined if I was going to enter into nursing school or remain in a dead-end job for the next year, until time to re-apply and wait again. I remember entering into the nursing classes—naïve to the amount of note-taking and studying and being unfamiliar with the application-style testing and feeling stressed over tests and waiting on grades to post, constantly refreshing the web page that displayed grades. Clinicals were another source of stress. Until I entered nursing school, I had stepped foot in a hospital a hand full of times, and I had no idea what to expect, increasing my stress level. In all of those stressful times, never did anyone address coping mechanisms or stress management with me or my cohort, and I came from a family that you did not discuss stress, you “just dealt with it” in silence.

NCLEX-RN® was another constant stressor during my nursing education—if I did not pass the national licensure exam that would make me a registered nurse, then I would be unable to work as a registered nurse. Then, when I moved into the professional nursing world, the stress did not magically disappear. I was a young, inexperienced nurse who was “thrown to the wolves” and expected to perform as more seasoned nurses did. Six weeks after beginning my RN career, I was the sole RN on the 3 p.m.-11 p.m. shift with two licensed practical nurses, one nursing assistant, and one-unit clerk with a patient load of up to 24 patients. I was not prepared to handle those stresses.

Looking back, had I been taught coping mechanisms in nursing school, or in life in general, I may have handled the stress differently. Now, as a faculty member who sees the physical and emotional toll that stress can take on a student, I realize, even more, that coping mechanisms must be taught to our students to teach students how to cope with stress. I have been in the roles of student, nurse, and faculty and feel like my experience qualifies me to perform this research with a unique perspective.

Though impossible to eliminate all bias from a qualitative study, I made all attempts to minimize validity threats through researcher bias (Maxwell, 2013). I believe that anyone can implement stress reduction measures in their daily life. However, I know that some individuals have not been taught stress management techniques. I also believe that there are healthy and unhealthy coping mechanisms, and when/if a participant described unhealthy coping mechanisms, I could not eliminate those from my study because they are unhealthy. In addition to recognizing personal beliefs, I asked another researcher to review my themes and codes used to ensure trustworthiness of the study.

Conclusion

Associate degree nursing programs produce registered nurses in a time frame typically of 5 semesters. These nurses who graduate from an associate degree program take the same national board certification exam that a Bachelors' degree nursing program graduate does. In this short time frame of learning the basics, applying critical thinking to classroom, clinicals, and simulation, and progressing in the nursing program with the ultimate goal of graduating and passing board exams, these students experience an increased level of stress and anxiety (Fornes-Vives, Garcia-Banda, Frias-Navarro, & Rosales-Viladrich, 2015). These associate degree track students must focus on course work and clinicals all while balancing their home and social life.

Their learning is compact, as mandated by state and national agencies, to meet the requirements of an associate degree program. Lack of coping mechanisms may hinder these student's ability to be successful, while those who develop some type of coping mechanism become successful. Once successful, these students enter an even more stressful environment, with actual patient lives at stake under their care. Further study to research and analyze the methods of associate degree nursing students' coping mechanisms could be beneficial for this demographic, as well as for bachelor's degree nurses, who are under the same scrutiny to pass their national licensure exam and participate in complex testing, simulation, and clinicals. Ultimately, if coping mechanisms are learned and utilized by nursing students, these students' carry the coping mechanisms into the nursing profession and can be good role models for other struggling nursing students and nurses alleviating stress, leading to better patient care and outcomes.

CHAPTER FOUR

RESULTS

The phenomenon explored in this study was the occurrence of stress and coping experienced by successful graduates from an associate degree in nursing program. Initial analysis of data was done using Colaizzi's method of analysis which was followed by classification and analysis using Lazarus and Folkman's Transactional Model of Stress and Coping (TMSC). Both guided data analysis for answering the research questions, providing an analytical lens of the participants' lived experiences. The final step in Colaizzi's method is the formation of fundamental structures. Fundamental structures were based on the analysis completed in the prior stages from the data analysis participants offered concerning their experiences of stress and coping. Fundamental structures are defined as concise statements ensuing from the formation of exhaustive portrayals of the phenomenon explored (Colaizzi, 1978; Shosha, 2012). Once the fundamental structures were identified, the TMSC provided further analysis using the steps in the model: primary appraisal, secondary appraisal, and coping. Presentation of the data analysis is presented with the findings from Colaizzi's method, followed by the incorporation of the TMSC.

Research Sample

This study consisted of individual interviews with nine recently graduated, practicing nurses, who met specified criteria. Participants for this study were recruited via a social media post and by reaching out to fellow associate degree instructors in the southeastern United States. Interested participants who viewed the social media post sent the researcher a private message or

email stating interest in the study. Participants were purposefully selected according to the specific criteria met by participants prior to beginning the consent and interview process. Once the interested parties contacted the researcher, a preliminary interview (Appendix A) was held via telephone. Preliminary interview questions were guided by the TMSC and primary appraisal. This assessment details one’s recognition that they were experiencing stress, and that the stress was affecting them. By answering “yes” to two or more of the preliminary interview questions, the participants were verifying the primary appraisal of the TMSC (see Table 2). Once the participants met preliminary interview requirements, participants verified their date of graduation, type of degree received, and current location of practice. Individuals who met the specific criteria outlined in the preliminary interview were scheduled for an interview after obtaining participation consent. A follow-up interview was conducted with five of the eight participants for further exploration of the phenomenon.

Table 2

Preliminary Interview Question Results

Question	Number of “YES” Responses	Percentage of “YES” Responses
<i>While in your associate degree nursing program did you... :</i>		
experience generalized anxiety?	9/9	100%
experience test-performance anxiety?	9/9	100%
experience feelings of being overwhelmed?	9/9	100%
experience irritability?	9/9	100%
experience changes in sleep patterns?	7/9	78%

Question	Number of “YES” Responses	Percentage of “YES” Responses
experience changes in your diet (i.e., weight loss or weight gain)	6/9	67%
increase alcohol use?	1/9	11%
use or increase use of non-prescription drugs?	0/9	0%
obtain a prescription of anti-anxiety medication?	4/9	44%
experience any physical symptoms of stress such as, but not limited to, gastrointestinal irritation or headaches (please specify symptoms*)	7/9	78%

**Symptoms reported: headaches (3), ulcers (2), Irritable Bowel Syndrome, migraines (2), acne (2), heavier menstrual cycles, nausea, diarrhea (2), constipation, hair loss, skin rashes, worse tremors, GI upset (4), palpitations, shakiness, fidgety (some symptoms were reported by multiple participants—how many participants reported the symptom is indicated in parenthesis, if reported by more than one participant)*

Meet the Participants

A diverse group of nine participants met the inclusion criteria of the pre-interview questioning and proceeded to the main interview. The participants were all female. Five of the participants were Caucasian (55.5%), three were African American (33.4%), and one was Mexican-American (11.1%). Age ranges for the participants was from early 20s to mid-40s. All of the participants were currently working in a hospital setting, with three of the participants in the process of leaving one facility and beginning at another. Interviews were conducted in September 2019. Participants chose their own pseudonym to be used in this study at the beginning of the interview meeting (see Table 3).

Table 3

Description of Participants

Information	Max	Bethany	Riley	Jane	Brenda	Stephanie	Carpe Diem	Reese	Ashley
Age	Early 20s	Early 30s	Early 20s	Mid-20s	Mid-40s	Early 20s	Mid-40s	Mid-20s	Mid-30s
Marital Status	Significant Other, Not married	Married	Significant Other, Not married	Single	Married	Single	Married	Significant Other, Not married	Married
Employment Status During School	Part-Time	Part-time	Part-time	Part-time	Not employed	Part-time	Not employed	Not employed	Not employed
Number of Children	0	1, Age 5	0	0	4, teens to early 20s	0	0	0	2, Age 6 and 10

Max

Max is a Caucasian female, in her early 20s. She always knew that she wanted to be a part of the medical field. Prior to entering the nursing major, she was enrolled in another major within the same institution. Max made the switch to nursing when she heard the school had a “really good nursing program.” She liked the idea of being able to help people and knew that nursing was the route she should take as a career path.

Bethany

Bethany is a 30-year-old African American female. Prior to deciding to enter nursing school, she had majored in education. It was when she began her internship in education and “hated it” that a degree in nursing was considered. Bethany had watched family members die and did not know what caused their deaths or what happened. She wondered if there was something she could have done to make it better. During her transition from education, Bethany started working in a cardiologist’s office. Working in that office influenced her decision to begin a career in the health care field. That is when she decided to enroll in nursing school.

Riley

Riley is a Caucasian female in her mid-20s. She attributes two life events as to reasons she decided on nursing. First, when her younger sister was born prematurely weighing in at 15 ounces, she was amazed that she survived. Riley has always had a place in her heart for the nurses and doctors that took care of her sister in the neonatal intensive care unit. A self-described “mom of the friend group,” she is someone who likes to take care of people and make sure everyone is taken care of. Riley stated that she was passionate about nursing and ecstatic that she was able to pursue a career in nursing.

Jane

Jane is an African-American female in her mid-20s. She chose a career in nursing because she likes to help people and put others' needs before herself. When her grandmother was ill and hospitalized, Jane realized that she was called to the profession with a desire to do more and lend a hand to other people who are in need.

Brenda

Brenda is a 40-something-year-old African-American female. She simply said that even as a child growing up, she wanted to be a nurse. With a love and passion for taking care of people, she cannot remember a time in her life when she did not want to be a nurse.

Stephanie

Stephanie is a Caucasian female, in her early 20's. She has always loved the medical field and always wanted to help people. Stephanie reported having a very compassionate characteristic and always wanted to use that compassion to service others. She felt that nursing would allow her to be the listening ear for patients and be an advocate for others.

Carpe Diem

Carpe Diem is a Caucasian female in her mid-40s. She chose a career in nursing because she had worked at a job for 25 years selling mechanical supplies. Not only did she want a career that would be more rewarding, she also wanted a job that offered more equal pay for women. So, she chose nursing.

Reese

Reese is a Caucasian female, in her mid-20s. She chose nursing because she wanted to make a difference in people's lives and care for others. In high school, Reese had taken a

certified nursing assistant class, which sparked her interest. She also knew that a nurse is always needed and she would not have any trouble finding a job. So, nursing is the career she chose.

Ashley

Ashley is a 38-year-old Mexican-American female. She always wanted to be a nurse. Ashley had an aunt who was a nurse and she always thought she was “the coolest person.” Her aunt would always tell Ashley stories of patients and her nursing experiences, which fascinated Ashley. She was a role model who influenced Ashley’s decision to become a nurse. Ashley had promised her aunt that she would go back to college and complete her degree, but “life happens.” It was when her aunt passed away that she made the decision to return to school and complete her nursing degree.

Findings

Incorporation of Colaizzi and Lazarus and Folkman

For the data analysis, I employed the Colaizzi method of qualitative data analysis succeeded by an application of those findings into the TMSC model. The Colaizzi method is a robust and rigorous method that is credible and reliable while revealing emergent themes and the relationships within the themes in qualitative analysis (Colaizzi, 1978; Shosha, 2012; Wirihana et al., 2018). Colaizzi’s methodology allowed for a clear, logical process of analyzing data to understand the experiences of individuals participating in research, using seven steps for analysis (Abalos et al., 2016; Colaizzi, 1978; Riessman, 2008; Wirihana, et al., 2018).

Once the Colaizzi steps for data analysis were concluded, I reflected on the interview questions used in the data analysis, then classified them into primary appraisal, secondary appraisal, and coping, using the TMSC as a guide. Then, I organized the questions in the data analysis chart (Appendix H), created during the steps of Colaizzi, by each classification. Two

questions were identified as incorporating the primary appraisal, three questions were identified for the secondary appraisal, and three questions incorporated coping. The theoretical framework and the relevant literature aided in the presentation of the data analysis findings. The scaffolding approach followed the succession of the participants' primary appraisal and then their secondary appraisal by which they evaluated their ability to respond effectively to their recognition of the stress and then their development and practice of coping mechanisms. This scaffolding approach was used in the analysis of the findings from the Colaizzi method. An excerpt of the combined data analysis from the Data Analysis Chart (Appendix H) is below (see Table 4).

Table 4

Excerpt of Combined Data Analysis

Interview Question	Significant Statements	Formulated Meanings	Clustered Themes	Exhaustive Description Themes	Fundamental Structures
Coping					
Interview Question 8: What support system did you have while in nursing school?	<p>“I had my husband...my family, friends. It was good to have friends in nursing” (1)</p> <p>“I had my mentors there, which were great” (2)</p> <p>“I leaned on family and the school” (3)</p> <p>“My dad...and the instructors” (4)</p> <p>“I would say family” (5)</p> <p>“I got support from classmates because we was [sic] going through the same thing” (6)</p> <p>“We had the instructors and my classmates...had my family” (7)</p> <p>“My family” (8)</p> <p>“I had my husband...my parents” (9)</p> <p>“Family and classmates...my study group” (10)</p>	<p>Reliance on family members, others was important (24)</p> <p>Support from faculty/instructors (25)</p> <p>Experiencing the same stressors, “things” (26)</p> <p>Study groups were key to success— support from classmates (27)</p>	<p>Will power (1)</p> <p>Accountability (2)</p> <p>Assistance from others (3)</p> <p>Support from others (4)</p>	<p>I was determined to be successful</p> <p>I had to get out of my own head: I was going to pass</p> <p>Accountability is key, You are responsible for you and your learning</p> <p>Classmates were going through the same thing and that helped me</p> <p>Reassurance and support from study group helped get me through</p>	<p>I was afraid to fail: sources and reactions</p> <p>I was determined to succeed.</p> <p>I relied on others to help me cope with the stress.</p>

Colaizzi Findings

There were 94 significant statements derived from 102 pages of interview transcripts. From the significant statements, 35 formulated meanings were identified. Key words and phrases were derived from the formulated meanings and used to create the clustered themes. Once the clustered themes were identified, they were placed into categories that then helped shape the exhaustive description themes. The 22 exhaustive description themes were

1. I had this sense of urgency that haunted me.
2. What if I failed?
3. What if I was wasting time and money?
4. I felt as though everything in my life was out of my control
5. Expectations—both known and unknown caused me to fear I would fail.
6. It's like nursing school throws you a curveball and you blink.
7. It hits you hard: the fear and anxiety and helplessness.
8. I was afraid I was going to fail all the time.
9. Nursing school is completely different from anything else; even if you have been in school for years, it's just different.
10. I was determined to be successful.
11. I had to get out of my own head: I was going to pass.
12. Accountability is key. You are responsible for you and your learning.
13. My desire to succeed outweighed my fear.
14. I had to remove fear and doubt from my mind.
15. Self-confidence—I had to get it and keep it.

16. Ignore the outside voices: “you hear people who have been through nursing school . . . talk about how hard it is”.

17. I had a drive to really know the material and learn it to pass the tests.

18. Classmates were going through the same thing and that helped me.

19. Reassurance and support from study group helped get me through.

20. I started doing things for me.

21. My nursing instructors were great mentors. They helped calm me down and see the bigger picture.

22. Development of peer friendships that I maintain today.

Statements were written to capture the essential elements of the characteristics of the participants’ stress and coping mechanisms used, creating the exhaustive description themes. The fundamental structures were derived from reducing the data into categories from the 22 exhaustive description themes. Initially, the reduction of data from the exhaustive description themes was condensed into 12 sub-categories. The sub-categories identified were early recognition of the fear; expectations; losing control; failing again; self-doubt as a reaction to the fear; drive to know; responsible for your own learning; desire outweighs fear; self-confidence: ignore the negative; self-care; classmates, study groups, and long term peer friendships; and mentors. From the sub-categories, three fundamental structures were identified.

Fundamental Structures

Structure 1: Fear of Failure: “I Was Afraid to Fail”

The first fundamental structure is supported by exhaustive description themes that refer to the sources of the participants’ fear and their stress-filled responses to that fear. The participants identified multiple sources for the fear that seemed to underlie their stress, including a previous

experience of failing nursing school, a feeling of haunting urgency, fear of the waste of time and money, a sense of losing control, a realization that known and unknown expectations would not be met, plus the absolute difference in nursing school from any other part of their education. I present those here in three subsections, which are early recognition of the fear, fear of loss of control, and self-doubt.

Early recognition of the fear: Sources. Participants recognized their fear of failure early in their nursing school journey. They recognized stress at various times, but all had recognized their stress by second semester of nursing school: “first semester,” “second week of nursing school,” “the very first day,” “after the first nursing test,” “second week,” “second semester,” “waiting on admission,” “very first nursing exam,” and “from the time I registered for classes.” Riley recognized her fear of failure and the stress it produced early in her program. She described waking up every morning with anxiety related to the unknown expectations of each day: “I can even remember crying when waking up before even going to lecture . . . waking up with anxiety and fear going ‘oh my gosh’ . . . it’s like, literally 15 million things” and she “didn’t have a clue what to do because there was so much going on with class, clinicals, simulations, and life” (Riley). One of the participants described one nursing course where she realized that she may fail nursing: “Almost failed it . . . It wasn’t until after it was over that I realized . . . it could have gone either way” and “that was a real toss-up” (Max).

Max, who recognized increased stress in the first semester, related her stress to not knowing what to expect in the beginning, but after the first test, “the formatting is completely different than the standard multiple choice . . . even essay type tests. Just because of the format.” Others reported their recognition of the stress producing fear as “pretty early on” (Bethany) “[t]he very first day really” (Brenda) and the “second week of nursing school” once expectations

were verified and reviewed (Stephanie). One participant reflected that listening to others who had been in nursing school increased her self-doubt and fear of failure: “you hear people who have been through nursing school or who are in nursing school talk about how hard it is and . . . so many people fail out . . . that was definitely a big stressor” (Max).

A few participants were repeating nursing students who had failed a nursing course previously, returned to school, and were successful the second time. Out of the nine participants, five of them revealed during the interview that they had an unsuccessful attempt at nursing school prior to their success, indicating a loss of money and time. This failure, with no regard to the semester they were unsuccessful, filled them with self-doubt and fear of failure.

Expectations. Fear of failure resonated with participants when the expectations of passing examinations took over their thoughts. Other participants described feelings of anxiety and being overwhelmed over the expectations of the nursing courses. Some wondered if they would be able to meet all of the requirements to pass each course. Participants reflected on many aspects of nursing school and the expectations that went along with each one. From classroom lectures, examinations, skills check offs, simulation, and clinical rotations, fear of failure coincided with each component. This fear was not specific only to those who had failed a nursing course previously, but identified by all participants.

Even though participants were informed of the expectations of nursing school up front, the fear of not knowing and meeting those expectations fed the fear of failure that still lurked in the back of their minds. The compacted nature of the ADN curriculum exacerbated their fears. One remarked, “it’s like nursing school throws you a curveball and you blink” (Stephanie). One participant described ending one module exam’s content and beginning another module before being tested on the first module. She reflected that as an example of blinking and being hit with

a curveball, along with “it’s just like 15 million things as soon as I woke up” (Riley). Another participant reflected on her time in nursing school and said that she did not realize how much is expected of students. She continued to discuss the difficulties in balancing tests and clinicals. “It becomes really hectic . . . I feel like I didn’t prepare myself for that” (Stephanie). From the first semester, one participant divulged that not knowing what to expect overall and on examinations caused fear of failure. She went on to say that she did not know what stress really was until she entered nursing school and was afraid she would not be successful (Bethany). In most cases, however, the fear of failure was consistently operating throughout their nursing journey, but felt most during the time leading up to admission and first semester.

Fear of losing control. This structure speaks to the fear of losing control experienced by many of the former students began to feel overwhelmed by helplessness. Fear is a human emotion that is triggered by a perceived threat. In this study, the perceived threat is not being successful. Fear at any level can produce a stress response in the body, including when individuals are nervous, concerned, worried, or fretful—all characteristics of emotions the participants were feeling. Riley recalled being bombarded with feelings of anxiety and helplessness, with others echoing those feelings. Even before entering into a nursing program, some students had a sense of loss of control—they described their fear of their unknown future and the helplessness related to the waiting process verifying their acceptance into the selected nursing program. Ashley and Carpe Diem described investing time and money into prerequisite classes, not knowing if they would be accepted into the program, and playing the “waiting game.”

Another source of fear came from the difference in nursing school from previous educational experiences. Participants recalled their lack of experience with nursing exams,

clinicals, check offs, and simulation as adding to their sense of helplessness. One participant told me that she was not familiar with the hospital setting: “The first time we had clinicals . . . I think the longer clinicals and not being comfortable in a hospital setting really caused anxiety for me” (Riley). She further commented that she had no prior knowledge of clinicals or hospitals. Max reflected on her hospital experience, “it was completely new to me, patients that sick and umm like seeing first codes . . . I went out to my car and cried the first time we coded somebody.”

Failing again. Fear of failure resonated with those who were novice nursing students, as it did with those who were returning students who had failed a nursing course previous to graduating. Out of the nine participants, five of them had failed nursing school previously, at various times of the program. Fear of failure was engrained in them, supplementing their fears of not being in control. One stated, after failing summer semester, “I ended up failing that semester . . . that really, really, really brought on the stress. From the time I saw my average, I cried” (Jane). These revealed feelings created the exhaustive description theme *I was afraid I was going to fail all the time*. Other returning participants described “freaking out” after failing a final examination. She described leaving classmates behind and facing a new cohort as adding to her fear of failure: “So, it was like . . . I’m going to have to sit out for a whole year, get a job, go back, redo all of this, all my friends in my class have passed and will go on ahead of me” (Riley). These feelings increased her stress when she thought about failing upon returning to nursing school.

Self-doubt as a reaction to the fear. At various times during the interviews, participants indicated feelings of fear of failure that related to self-doubt during nursing school. However, the reasons for the self-doubt varied. Some of the participants, who had failed nursing courses previously, recalled that they doubted their abilities to be successful, since they had failed before.

Others realized that nursing school was difficult and began to have feelings that they “may not be smart enough” or “not be able to make it,” while others began to experience feelings of self-doubt when they were unsuccessful on an assignment, skill, or exam. Self-doubt supplemented the fear of failure, a response marked by many participants, indicated by the exhaustive description themes of *I had to get out of my own head: I was going to pass* and *I had to remove fear and doubt from my mind* contributing to the fundamental structure of *I was afraid to fail*. Self-doubt took a toll on the participants. These feelings of incompetence became ingrained within the participants. Self-doubt was one of their major obstacles that contributed to their fears of failure. Their inner voices told them they were not smart enough, not good enough, and incapable of being successful. Over time, continued self-doubt led to increased anxiety, stress, and some physical symptoms for the participants. Participants described various situations where they were their own worst enemy. Brenda realized she must do a self-check and remove all fear and doubt of failure from her mind: “I knew I could do it . . . I just had to do a self-talk and remove the fear and doubt.” One participant described the self-doubt she felt when she failed the first nursing examination: “I think I failed it and I was like oh my God. I’m not finna [*sic*] pass nursing school . . . I gotta pick up a book . . . I’ve gotta make sure I know this information” (Jane).

Self-doubt began for some because they had not been successful in the past. One participant explained that upon returning to nursing school the next year following her failure, she was afraid she would not be successful and doubted her ability to be successful. Jane recalled the day she was unsuccessful her first time in nursing school. She stated that she could not believe she had failed at first and cried all the way home. “It really, it really took a toll on me. Oh, goodness.” Another participant remarked that the day she failed an adult health course,

in the next to last semester of school, was a day she will never forget and a memory that still haunted her upon returning to nursing school and still causes fear today: “It’s making me have anxiety and doubts of myself now thinking about it” (Riley).

The participants who experienced thoughts of self-doubt realized that they must have faith in themselves that they could achieve their dreams of becoming a registered nurse. Brenda was the most vocal in regard to her experiences with self-doubt. She believed that if she could believe herself that she could be successful, she could achieve success. The fear of failure for the participants was a real and raw emotion that some still carry with them vividly today. Overall, the participants were able to overcome self-doubt to be successful. Ways the participants responded to their fears of failure are further discussed with Structures Two and Three.

Responses to the Fear of Failure: Fundamental Structures Two and Three

Determination, preparation, self-talks, faith, and the support of others were factors that allowed the participants to work through their self-doubt and fears of failure. Structures Two and Three refer to participants’ responses to Structure One, fear of failure. Structure Two displayed a drive that all of the participants possessed: a determination to succeed.

Determination was a driving factor that aided in the student’s response to the fear of failure. The determination that participants embodied included a natural drive to want to learn by taking responsibility for their learning. Their desire to succeed outweighed their fears, allowing their determination to shine through. Ignoring negativity helped the participants to continue their determination while incorporating self-care into their life.

Structure Three continued to identify their responses to their fear of failure through dependence on others. Classmates within their cohort and study groups helped participants to gain lifelong friendships while helping them get through nursing school. Mentors played a vital

role in their success, with many participants identifying the positive aspects of faculty within the nursing school.

Structure 2: Determination: “I Was Determined to Succeed”

The second fundamental structure identified, *I Was Determined to Succeed*, was supported by the exhaustive description themes that referred to the ideas and sources to respond to their fears of failure. The participants identified multiple sources for their determination that seemed to underlie their fears, including a desire to be successful, not listening to their inner negative voices and replacing those voices with positive affirmations, taking responsibility and accountability for their learning, desires overruling fear, removing negativity, gaining self-confidence, disregarding others’ opinions, and desiring to learn and applying the learning to assignments and examinations. Participants all had a desire to be successful in their academic classes. Although the participants had various experiences in the time frames during which they completed the courses and graduated, each one of them expressed their determination to become a registered nurse. Participants believed their determination to succeed was an immense asset to their successful completion of nursing school, creating the second fundamental structure of this study. Many believed their determination was driven by a sense of urgency and desire for success that aided in the development and incorporation of their coping mechanisms.

Accountability. Participants described ways in which they held themselves responsible and accountable for their learning, contributing to their success. To be responsible, participants realized that their success was achievable, but they had to be responsible learners by being accountable. They described being accountable by accepting their responsibilities as a student. From studying in advance for exams, completing clinical assignments in a timely manner, and being proactive by taking “good” notes in class to practicing skills over and over prior to skills

checkoffs, participants emphasized that preparation and responsibility for their own learning played a vital role in managing their stress. No one can be responsible for or accountable to others, only themselves. The participants realized they were responsible for only themselves early in their journey, allowing them to contribute their responsibility and accountability to a part of their success. *Accountability is key* and *You are responsible for you and your learning* were two exhaustive description themes that led to fundamental Structure Two: *I Was Determined to Succeed*. Reese studied like there was “no tomorrow” in preparation for examinations, taking responsibility for her learning and determination to succeed. Many participants expressed that their anxiety and fear of failure was lessened when they had adequately prepared. Others voiced that “staying on top of my studying” and “never getting behind” attributed to their determination to succeed. One participant recognized that in order for success to be in the plans, she had to make sure she recognized her feelings and made sure she was calm and prepared for the examinations. She emphasized her determination was met with preparation: “I went into the test knowing that I had prepared myself” (Brenda). Echoes of taking responsibility for studying and being accountable for their learning filtered through in many interviews contributing to the participant’s determination to succeed.

Drive to succeed. I had a drive to really know the material and learn to pass the tests characterized participant’s reflections of their determination to succeed. The participant’s drive to succeed assisted in their persistence and sustained effort needed to be successful. This drive to succeed assisted in their accomplishment of their final goal of becoming a registered nurse. Participants were able to contribute time, effort, energy, and focus to the demanding requirements of nursing school due to their desire and drive to be successful. They reminisced on being prepared for exams, class, clinicals, and simulation as the key to being successful. The

determination to succeed was their drive to study and prepare for each day. Max even offered advice to future students by encouraging them by reflecting on her experience: “Don’t wait until the weekend before the test to study” and to prepare some each day. Without the drive to want to succeed, success will be harder to achieve.

Many participants described that once they realized their accountability was their own responsibility, and no one else’s, their desire to really learn and know the material increased, leading to their success. Max described a natural drive as an asset to her determination to succeed, while others stated they knew they could be successful, they just had to “do it.” Brenda discussed the importance of preparing for class, an exam, or clinicals because it gave her more confidence going in to the situations. For example, she discussed test preparation as being very important. When she prepared well in advance for an exam,

I was calm, making sure I had prepared myself . . . it kind of made me more comfortable knowing that when I studied . . . I knew the information. So, instead of going into a test anxious and scared, I went into the test comfortable and prepared. (Brenda)

Another participant described her natural drive to be successful and how she incorporated that drive into nursing school. “I think the fact that I had . . . my kind of natural drive . . . to me there was no other option . . . than to graduate. I was gonna get through it, pass the NCLEX and I did” (Max). Ashley emphasized the importance of learning and understanding the material rather than memorizing the material because “everything builds as you progress through.”

Desire outweighs fear. *My desire to succeed outweighed my fear* was another exhaustive description theme that contributed to fundamental Structure Two: *I Was Determined to Succeed*. The story of anyone who has achieved success is one of desire: they wanted to succeed. Desire is the burning internal quality that pushes individuals and empowers them to meet the challenges they face hindering their wants. Being focused on the end product, in this

study, graduating from nursing school, allowed participants to see the bigger picture. The more interest the participants displayed and felt toward wanting to succeed, the less threatening the fear became.

All of the participants had a desire to succeed that outweighed their fears. They all had a fear of failure, but those fears were overcome by their determination. They realized that failure would not be an option as long as their determination to succeed was stronger than their fears. Reese recalled, “I must have dealt with it good enough to keep it from letting me fail” when asked if she felt that she dealt successfully with her stress, allowing that desire to succeed trump her fears. Several participants reflected that even though they were scared of failure, the fear was overcome by their determination and drive to become nurses. Bethany discussed the times she was in a clinical setting and having a “light bulb moment” when she was able to connect what she was learning in the classroom and apply it to a patient. Little by little, her fears were replaced with confidence and determination to succeed. Being able to apply classroom learning to clinical content allowed participants to feed their desires while pushing out their fears. Ultimately, participants realized that they were afraid of failure, however, they had an inner desire to succeed that far outweighed their fears.

Self-confidence: Ignore the negative. *Self-Confidence—I had to get it and keep it and Ignore the outside voices: “you hear people who have been through nursing school . . . talk about how hard it is”* were the exhaustive description themes that were categorized into the second fundamental structure. When individuals are exposed to negativity, their mindset can be altered to reflect the negativity surrounding them. Several participants described distancing themselves from negative individuals and avoiding negativity as much as possible. Ashley said there were people that she avoided simply because they never had positive comments about

nursing school, even though they were practicing nurses. Brenda was her own worst enemy when it came to self-reflection and confidence. She stated that her determination to succeed was hindered by her self-doubts. “I had to remove the fear and doubt. I knew I wasn’t a dumb person . . . I knew I could do it, it’s just I had to figure out a way” (Brenda).

Listening to others and their negative experiences had to be eliminated in order for the determination to succeed to not be clouded. Participants expressed that listening to others, by either reading comments online or hearing former students discuss their experiences, the negative expressions lowered their self-confidence and they had to learn to ignore the voices, taking one day at a time. Max reported,

Don’t fall victim the thinking that nursing school is all you can do; all you’re going to think about. That you are not gonna have time for friends or family because that just stresses you out more. People say that, you know. I looked it up online before I started school, like what to expect and all and it said you’re not going to see your family for however long. I think the more you think that stuff, the more you fall into it more and more. I couldn’t do that. I had to ignore those and try to get it out of my head.

Gaining self-confidence and ignoring the negative thoughts and outside opinions contributed to their determination to be successful.

Self-care. Taking time away from studying and incorporating activities that the participants felt cleared their minds was important in their determination to succeed. *I started doing things for me* emerged as exhaustive description theme contributing to the fundamental structure: *I Was Determined to Succeed*. Self-care is important to maintain a healthy relationship with oneself. Self-care produces positive feelings and can boost confidence and self-esteem. Making sure one’s own needs are met aids in feelings of positivity and aids in stress reduction. Self-care is not only about mental health, but physical health, as well. From eating healthy, adequate sleep patterns, personal hygiene needs, and exercise to participating in activities of interest, self-care can involve any necessities one feels they require or need. Max

described taking time for herself to do the things she enjoyed was one of the reasons she was able to be successful. When asked to elaborate, she stated rumors “that you are not gonna have time for friends or family because that stresses you more.” Others echoed in their responses that time for oneself is an important factor, but they felt they must take time for themselves in order to be successful, incorporating their determination to succeed attitude. Max summed up many of the participant’s feelings toward the importance of self-care: “Time for yourself is important. You know, self-care.” Taking one day at a time and incorporating self-care into a daily routine encompassed their desires and determination to be successful.

Structure 3: Reliance on Others: “I Relied on Others to Help me Cope With the Stress”

The third and final fundamental structure is supported by exhaustive description themes that refer to the individuals who aided the participants in succeeding. The participants identified multiple sources to deal with the stressors, including students in their cohort, friends within their classes, study groups, nursing faculty and instructor mentors. I present those here in three subcategories: classmates, study groups, and mentors.

Participants were descriptive when discussing their reliance on others to help them cope with their nursing school experience. Family and friends, members of their class cohort, and faculty mentors were topics of discussion for this structure. All nine participants discussed their reliance on family and friends to aid in their success. Family and friends impacted the participant’s success by offering support and encouragement. A majority, six out of nine, of participants discussed their reliance on their cohort classmates because even though family and friends outside of school were important, the outside support did not fully understand what the students were experiencing in school. Several participants echoed that classmates knew what they were experiencing and it was helpful to interact and study with them because they “get it.”

Nursing faculty played a part in the participants' lives. Four out of the nine participants discussed their reliance on nursing faculty and their support. Additionally, the fear of failure and determination to succeed, reliance on others emerged as the final structure of the study.

Classmates. *Classmates were going through the same thing and that helped me* was a repetitive statement participants discussed, leading to an exhaustive description theme.

Classmates are an important community of people, serving as a great asset to each other, as they are a group who are experiencing many of the same obstacles and experiences. Classmates can learn from each other and share thoughts and ideas with one another to enhance the educational experience. One participant revealed that her family was an important aspect of helping her to cope, however, "your family . . . can listen to you vent and be like, you know, 'I'm sorry' or 'that sucks' but they don't really get it" like your classmates do (Max).

Discussions during the interview entailed how the classmates were important in the nursing education journey simply because they all knew what each other was experiencing. It was beneficial to vent and interact with others with the same feelings and goals. Riley stated, "I had friends in nursing school. And they were my support system because I was so stressed, but they were, too." Feelings shared by classmates aided the participants in coping with the stress and helped to eliminate feelings of being alone. Jane divulged that prior to nursing school, she was more of a self-described loner and was someone who kept to herself. However, once she began to reach out to classmates, she felt as though some of her stress did dissolve simply because she had someone who understood what she was experiencing.

Long-term peer friendships. The next exhaustive description theme supporting the fundamental structure of *I relied on others to help me cope with the stress* was the *Development of peer friendships that I maintain today*, coinciding with the exhaustive description theme of the

importance of classmates and study groups. Building friendships with classmates helps to increase individuals' comfort levels in a classroom, leading to better communication within the class and with instructors. For example, if an individual does not understand material covered in class, if the individual was familiar and friendly with classmates, they may feel more comfortable asking for clarification. Befriending classmates also allows for the opportunity to work together and be sources of encouragement for each other.

Many participants revealed that the friendships they made during nursing school are still maintained today. Participants discussed the friendships and support received from the friendships made in nursing school laid a foundation for continuing friendship. Many are still in contact with classmates today, even talking to them about their current stressors in the workplace. Participant 5 discussed that she is still in contact with some of her study group members: "I have a few of the members of my study group . . . I talk to them. I talk things over with them" when she is feeling the stress of the profession. Peer friendships played a vital role in each participant's success, with many of the participants confirming that those friendships are continuing to be a support system today.

Study groups. Classmates played an important role in the lives of the participants during school, but many participants emphasized the importance of their study group within their cohort. *Reassurance and support from study group helped get me through* emerged as the second exhaustive description theme of Structure Three. Effective study groups can assist in the learning process, allowing for a deeper, more concrete learning experience. Groups that are effective can generate positive energy and instill discipline all while requiring a commitment from the study group members. Students are able to hear different perspectives on the subject material being studied, therefore allowing for a more detailed, focused understanding of the

material. By reading, summarizing, and studying the material, students gain a deeper understanding of the material they may not have achieved on an individual level. Study groups have a tendency to motivate the members to do well and be successful. Participants in this study identified the importance of their study group experience.

Jane described her study group experience:

I got support from classmates because we was [*sic*] going through the same thing. Everybody [*sic*] anxiety was high. The stress level was high and we needed a way to cope, so becoming friends and making a study group, studying the material that we needed to study. It made us a stronger study group and a support group because we would encourage each other, like, ‘you know this information.’ Apply it. Use it in a scenario. When you still don’t understand it, write it down. You have to put this information in your head. And we . . . held each other to a standard. If one person didn’t know it [the material] after group, we stayed on that subject until they knew it. Until everybody knew what we needed to know on that subject. And that’s what made a big support group for me.

Continuing to emphasize the importance of peer study groups, participants described their peer study groups as “helpful,” “a stress reliever,” and as a contributing factor to dealing with their stress and being successful. Study groups were described by a few participants as a way to keep them “on task” and “on my toes” because the group had set standards that everyone in the group had to meet. With the support and encouragement from the study groups, many participants felt the group provided them with a tool to be successful.

Mentors. Mentors to the participants played a role in helping the students deal with the stress of nursing school, with the exhaustive description theme *My nursing instructors were great mentors. They helped calm me down and see the bigger picture*, contributing to fundamental Structure Three. In higher education, mentoring is important because the mentors have knowledge that could benefit the students, contributing to their success. Quality mentoring greatly enhances a students’ chance for success, while providing professional socialization with the mentors. Mentors can give insight to students who are struggling academically and provide

the students with constructive criticism so the student can improve in those areas. In addition to providing constructive criticism, mentors offer encouragement and guidance that can give students hope and confidence.

Brenda attributed her success in completing nursing school and passing NCLEX® to “the instructors, number one.” Bethany described the mentor relationship she had with the nursing faculty as attributing to her success. She stated that faculty played a role in decreasing her stress: the faculty “just don’t know how much it helps to hear ‘Hey’ or ‘Good morning’ . . . a smile . . . It doesn’t take much; it’s just knowing that somebody is there for you” (Bethany). Riley reflected the sentiments of Bethany, attributing her desire to teach to her nursing faculty mentors: “I was going to come back and teach one day because y’all (nursing instructors) were so important . . . the instructors . . . I would walk in their office and just be crying” and the nursing mentors would offer support and encouragement.

Nursing faculty/mentors who made themselves available to students and talked to them, providing guidance during the participant’s education played a pivotal role in their stress reduction. Brenda attributed her success in nursing school to the instructors, along with her study group. Other participants, when asked what attributed to their success, listed mentors within their program as one contributor.

Lazarus and Folkman Findings Guided by the Transactional Model of Stress and Coping

Once the Colaizzi method of data analysis was completed, the TMSC provided further analysis using the steps in the model: primary appraisal, secondary appraisal, and coping. These steps allowed for further categorization and organization of information presented in Appendix H. The identification of the categorization is shown in a highlighted row within the Data Analysis Chart.

Lazarus and Folkman defined stress as “a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (1984, p. 19). The duo further defined a stressor as a stimulus that causes stress (Lazarus & Folkman, 1984). The first assessment of the TMSC is the primary appraisal. This is where individuals recognize they are experiencing stress and that the stress is affecting them. The secondary appraisal is where individuals decide if they are able to manage the stress. If the individual recognizes they can manage the stress, then coping is incorporated. The first assessment begins the scaffolding approach from the primary appraisal to the secondary appraisal and ending with coping, guiding the presentation of findings.

Primary Appraisal

Participants divulged their experiences of stress identified in encompassing this step from the model during the preliminary interview questioning. During this questioning, individuals interested in the study participated in answering a series of nine questions related to stress and their experiences. To meet study criteria, they must have answered at least two questions with “yes” responses. All interested participants answered “yes” to more than two questions. All nine participants said “yes” to experiencing generalized anxiety while in nursing school, had test anxiety, felt overwhelmed, and experienced feelings of irritability. They realized that the stress was affecting them in various ways. Some had changes in sleep patterns, while others experienced changes in their diet from not eating to increasing eating. Four of the participants experienced stress and its effects and required anti-anxiety medication to control the effects. Seven of the individuals felt physical symptoms of stress, as outlined in Table 1. For the primary appraisal of the TMSC, all participants recognized they were experiencing stress and that the stress was affecting them, as outlined in the preliminary interview questions.

Continuation of how participants experienced their primary appraisal of stress occurred in the scheduled interviews. Once preliminary interviews were concluded and individuals met the participation criteria, they further shared their experiences in recognizing stress and its effects on them. Many of the participants recalled their stress beginning in their first semester of nursing school, with the few outliers identifying their stress as beginning before even starting nursing school. Bethany recalled, “The second week of nursing school when lectures got pretty intense we were flying through stuff . . . I kinda got a little bit of anxiety. . . . it really, really hit me.” Riley said her stress started “from day one.” Others had their stress begin after their first examinations, when they realized they had not prepared correctly or they did not realize the expectations of the exams. Ashley, one participant whose stress began before classes started, stated that her stress began while awaiting her acceptance letter and increased more once she began classes. Overall, each participant recognized their stress and that it was affecting them early in in their nursing journey.

Identification of stressors. Stressors of the former nursing students varied, but all of the stressors discussed involved occurrences within the nursing program. Examinations were discussed by many participants as a major source of their stress. Max commented that the formatting of the exams and exams were “completely different than the standard multiple choice or . . . even essay type tests.” Riley shared that her heightened levels of stress were triggered by exams: “I used to hyperventilate before tests.” Brenda and Stephanie simply stated that they noticed a pattern of increased stress “before tests.” Bethany experienced physical symptoms of stress before exams and

I ended up going to the doctor because I was having some burning pain and all that stuff and he ended up putting me on propranolol for my heart rate because it was sky high and I ended up on Nexium for ulcers and stomach upset.

Others discussed the requirements of passing grades being “out of the normal.” For example, most of the participants stated that a minimum grade of 75%-80%, depending on their school, was required to pass the nursing courses, while other college courses were passable with a much lower percentage.

Clinical rotations and preceptor rotations were identified as stressors. Clinical rotations occurred in a healthcare facility under the instruction of clinical nursing instructors, with each instructor managing a group of students, while preceptor rotations occurred in a healthcare facility under the instruction of a registered nurse who worked for the healthcare facility. Typically, clinical rotations occurred each semester, with the final semester consisting of a preceptorship. Max described her clinical experience as

there is only so much you can do in clinical really and then, all of a sudden, you are doing your preceptor and your preceptor is like ‘ok, go’ and basically take care of the patient and I was like, whoa, hold up . . . this was completely different from what we were used to with clinicals.

Clinical paperwork was identified as a stressor within the clinical setting. “The paperwork though, was stressful to know you had to do all that paperwork, plus study for your test and sleep at some point” (Riley). Even fear of the unknown with clinicals and preceptorship was discussed. Ashley shared, “I really got stressed out during clinicals because of the unknown about the facility, nurses, instructors.” She went on to talk how she had only been inside of a hospital twice in her life, both times to visit a sick relative. Furthermore, her lack of exposure to a hospital environment caused increased stress in her life simply because she did not know much about the setting. Then, as if the lack of exposure was not enough to cause her stress, she discussed that her clinical instructor was not a faculty member from the school, but someone that the school had hired to instruct the clinical group. Not knowing her instructor, or being introduced to the instructor, prior to the first clinical caused increased stress. In addition to the

environment and instructor causing stress, she briefly discussed that the nurses at the hospital caused her stress. The nurses were described as angry, belittling, and rude to the nursing students and acted “like we were in their way all the time” (Ashley).

Simulations and skills check-offs were described as stressors by several participants: “We had to be watched by the instructors and they were just waiting for us to screw up. That was horrible. I know it was supposed to be a learning experience, but it was hell” (Ashley). Many identified simulations and skills check-offs as sources of stress. Participants felt as though instructors were watching and scrutinizing students during the experiences. When Carpe Diem was asked to discuss her most stressful experience in nursing school, she simply stated “check offs.” Reese agreed that clinical checkoffs were her most stressful experience, finding it difficult to “not to throw up, crap on yourself, or pass out while doing the checkoffs” and continued to recall “it was something about performing such steps in front of the instructors without messing up or forgetting the next step.”

All participants described various reasons for their stress in nursing school exams, clinicals and preceptor experiences, simulations, and skills check offs were identified as the main stressors participants discussed during the interviews. Examination styles and rigor were identified as stressors by the participants. Clinicals and simulation experiences further added to the stress due to the demands and precision.

Secondary Appraisal

During the secondary appraisal of the TMSC, individuals assess whether they can manage the stressor(s) (Graham, 2015; Lazarus & Folkman, 1984). When participants were asked to discuss their feelings related to how they felt their stress was manageable or unmanageable, eight of the nine participants stated that they felt they managed their stress. One

participant felt her stress was unmanageable at all times and still struggles with stress management in the profession today. Max stated that there was not a time she ever felt that the stress was unmanageable and several others echoed with similar responses. Max described her natural drive to be successful as a contributor to managing her stress. She felt as though that drive helped to force away any stress because of her confidence. Riley, however, felt that her stress was unmanageable at times, but would “step away from it all and not study for the rest of the day” to regroup and manage the feelings of unmanageability. Brenda reflected that once she realized that she was experiencing stress, she felt she could manage it. She revealed that utilizing self-talks and preparing for her exams ahead of time helped her to manage her stress. By studying every day and not at the “last minute” Brenda said she was able to manage her stress. Then, when it was examination day, she performed self-talks reinforcing to herself that she had prepared and knew the content and that she could be successful. Overall, the participants expressed confidence that they could manage their stressors, an assessment that coincided with the secondary appraisal of the TMSC.

Identifying Coping Mechanisms

Lazarus and Folkman defined coping as “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 141). They defined coping mechanisms as an act that controls aversive environmental conditions, lowering psychophysiological disturbance (Lazarus & Folkman, 1984). Furthering the definition, a coping mechanism is considered any strategy that a person uses in the face of stress that assists the individual with adjustment to a stressful event (Coping Mechanisms, n.d.; Young, 2012). Those who used problem-based coping seemed to express more self-confidence in dealing with stress

on the job. The participant whose stress was “never” managed, according to her, expressed feelings of continued stress on the job. As identified in the Data Analysis Chart (Appendix H), students relied on others to help them cope with the stress, placing the “coping” category in the chart. In alignment with the next steps of the TMSC, identification of coping mechanisms the participants utilized while in their nursing programs are revealed in Table 2.

Coping mechanisms used. Participants identified various coping mechanisms they used to deal with the stressors of nursing school, ranging from preparing to participating in activities of interest to sleeping, eating, drinking alcohol, smoking cigarettes, and taking prescribed anti-anxiety medications. The specific coping mechanisms discussed by each participant varied greatly. Some coping mechanisms the participants utilized dealt with the symptoms they were experiencing related to the stress, while others dealt with the actual stress. For example, Riley’s coping mechanisms (see Table 5 below) dealt mainly with her symptoms of stress. Max used a combination of preparations to deal with the stress and assure she was prepared and ready for any challenge, and dealing with the symptoms by doing things she enjoyed to treat the symptoms. Coping mechanisms identified by each participant is listed individually:

Table 5

Coping Mechanisms Identified by Participants

PARTICIPANT	COPING MECHANISMS USED
ASHLEY	<ol style="list-style-type: none"> 1. I ran a lot 2. Do stuff I liked (spend time with family, kid’s extracurricular activities) 3. Study Groups/Classmates
MAX	<ol style="list-style-type: none"> 1. Preparation 2. “Do stuff I liked” (watch TV, hang out with friends, weekend trips out of town)

PARTICIPANT	COPING MECHANISMS USED
BETHANY	<ol style="list-style-type: none"> 1. Sleep 2. Drank a lot of coffee 3. Study Groups/Classmates
RILEY	<ol style="list-style-type: none"> 1. Cigarettes . . . lots of cigarettes 2. Xanax 3. Wine 4. Take a bath 5. Music 6. Study Groups/Classmates
JANE	<ol style="list-style-type: none"> 1. Do stuff I liked (spend more time with family, movies) 2. Study Groups/Classmates
BRENDA	<ol style="list-style-type: none"> 1. Preparation 2. Study Groups/Classmates
STEPHANIE	<ol style="list-style-type: none"> 1. I ate 2. I cried
CARPE DIEM	None; “I was unable to overcome the stress, I just tried to deal with it day by day”
REESE	<ol style="list-style-type: none"> 1. Preparation

Summary

The analysis was guided using the steps in Lazarus and Folkman’s Transactional Model of Stress and Coping upon completion of the seven steps of the Colaizzi method of data analysis. From 102 pages of interview transcripts, 94 significant statements were extracted. A gradual reduction of data from identification of significant statements to fundamental structures, a thorough investigation of the phenomenon was done. From the 94 significant statements, 35 formulated meanings were identified. Then, 31 clustered themes were formed and merged into 22 exhaustive description themes. The exhaustive description themes lead to the identification of three fundamental structures. All of the steps were followed using the seven-step method of data analysis informed by Colaizzi. Once the final step was done using the Colaizzi method, Lazarus

and Folkman's TMSC was used to identify classifications in relation to the model. The interview questions related to the data analysis were classified into primary appraisal, secondary appraisal, and coping and organized in the data analysis chart (Appendix H).

The findings in this study revealed that although the participants expressed a fear of failure, they all were determined to be successful. All of the participants recognized their increased levels of stress at different times, but they all felt the increased stress early on in their journey. The students felt as though they were losing control, leading to feelings of self-doubt that resonated in fears of failing. However, their determination to be successful through their drive to know and being responsible for their own learning helped those fears diminish, in addition to relying on others to help them cope with the stress. Classmates, study groups, formation of friendships in the class, and nursing faculty mentors all aided in their success. The findings provided me with valuable data that may benefit associate degree nursing programs and will be discussed further in Chapter Five.

CHAPTER FIVE

DISCUSSION

Students who enroll in nursing as a college major experience higher levels of stress than typical higher education students, leading to an increase in physiological and psychological symptoms of stress (Parveen & Inayat, 2017). With attrition rates of nursing schools between 9 and 21%, any measures to retain these students and help them to be successful will allow more nursing graduates to enter the workforce (Cogburn et al., 2015). The role of the associate degree nursing student is complex and often overwhelming, and these students, once successful in obtaining licensure in nursing, enter a world of continued stress in the profession. An extensive review of the literature revealed an abundance of research documenting the increased amounts and levels of stress experienced and reported by nursing students, as well as practicing nurses. What the research lacks is information concerning the coping mechanisms these students incorporate to aid in their successful completion of the nursing program and entrance into the profession. Identification and implementation of coping mechanisms in nursing programs may contribute to improved student retention and follow the students into the workforce, where stress remains present (Farquharson et al., 2013).

This study examined the lived experience of stress and coping during nursing school of nine registered nurses who graduated from an associate degree nursing program within the last 2 years. The study results identified the stressors they faced while in nursing school and coping mechanisms that aided in their success. The discussion offered in this final chapter explores the relationships found between the findings and the relevant literature. In this chapter, I offer a

discussion of the qualitative data analysis and answers to the research questions as indicated by the findings. Then I will offer implications for nursing education and identify study limitations. I conclude Chapter Five with the recommendations for future research into the phenomenon of coping mechanisms and for preparing nursing students to cope with the challenges of nursing school, including how faculty may assist in stress reduction and aid the students in adopting or developing coping mechanisms.

Research Question 1

What are the stressors that affected students during their associate degree nursing education?

According to the participants, the journey to becoming a licensed, registered nurse was a complex, stressful process. Insight in to their experiences was gained from the information obtained in their interviews. In the following segments, the findings as they relate to answering the first research question are reported using the participants' portrayals of their experiences with stress and incorporating the linear model of the framework used for the study: Lazarus and Folkman's Transactional Model of Stress and Coping (TMSC). Identification of the stressors for this research question is guided by the TMSC, specifically the primary appraisal and the secondary appraisal: recognizing their stressors and identifying ways to potentially manage their stress.

Stressors Identified

The stressors identified by the students coincided with those identified in the literature findings. Stressors identified in literature were expectations, lecture-style instruction, exam rigor, clinical experiences, simulation, and faculty incivility (Chen & Lo, 2015; Chipas et al., 2012; DelPrato et al., 2011; Demir et al., 2014; Eka & Chambers, 2019; Koharchik, 2018; Lasiter et al., 2012; Manocchi, 2017; Parveen & Inayat, 2017; Rafati et al., 2017; Shin et al.,

2015; Turner & McCarthy, 2017; Watson & Ali, 2017). These were the same stressors identified by the students as will be presented in the following sections.

Notably, one stressor named in the literature was not identified by the participants, faculty incivility. Literature revealed that faculty incivility was reported as a major cause of student stress. However, the participants in this study identified faculty as mentors and a contributing factor to their success. This suggests that the climate in these schools is more supportive to students and invites further exploration of how supportive climates can support students; this will also be discussed in the Further Recommendations section.

Dealing with the expectations of nursing school. Expectations of nursing school were identified as the stressors all the participants faced, in various forms. “They always say stress is one of the biggest killers and I honestly believe that because I was at a point that I was about to lose my mind” (Bethany). Participants described feelings of knowing the expectations of nursing school, explaining that course requirements and expectations were reviewed, but that they did not fully understand the actual realities or know exactly what to expect.

Progression criteria, a course of stress also confirmed in the literature, was named as a source of expectation stress with nursing students. Many times, in associate degree programs, a nursing course is offered once per year. This can cause students who are not successful to be required to halt their education for up to a year, while waiting to be reinstated in the failed course. The competitive nature and progression policies of the associate degree programs offer increased stress for students (Chen & Lo, 2015; Fontaine, 2014; Karsten & DiCicco-Bloom 2014). Exploration into the expectations, both known and unknown, that participants experienced gives further insight into the stressors they faced.

Stress starting the first semester. All of the participants in the study reported that their stress began early in nursing school. As a whole, all of their stress began early on and continued throughout, varying from awaiting acceptance into the first semester, to the first day of class, to the first test, to the first clinical, and the final examination. Jane described her stress as beginning after her first nursing examination. The exam was difficult and not like any other multiple choice exams she had ever taken. She walked out of the exam thinking “I’m not finna [*sic*] pass nursing school . . . I gotta pick up a book, an extra book . . . I gotta make sure I know this information.”

The participants entered into their first nursing class not knowing what to expect over the next several semesters. They entered a world where test-taking is not memorization of facts, but application of knowledge in real life-situations. They had to first build a foundation for all future nursing courses and master the content before moving on to the next course. For most, they had never felt this degree of stress during their academic career (Chipas et al., 2012; Karsten & DiCicco-Bloom, 2014). Max reflected on this concept: “You don’t really know what to expect and it’s just completely different from anything else.”

Programmatic characteristics were repeatedly identified as sources of stress. Participants emphasized the time commitment needed to meet the nursing school expectations. Additionally, participants named lecture style and exam rigor as stressors, as were clinicals and simulation experiences.

Time commitment. Many students enter nursing school not knowing the time commitment that would be required. From attending class, studying, and participating in clinicals and simulation labs, nursing school requires a large time commitment. Despite the hours the students must dedicate to attending class and preparing for examinations, there was

still a great fear of organizing their time to manage the requirements of nursing school (Edwards, et al., 2010). Participants reflected on their lack of knowledge of how time consuming nursing school would be. When Riley discussed the first day of class and the review of the calendar for the semester, she left class that day “after lecture looking at that calendar and seeing everything and the tests, like, that piece of paper alone, that calendar . . . seeing all that on paper . . . I was stressed from day one.” Time spent studying for exams increased stress in many of the participants’ lives. Stephanie discussed the time she spent preparing for an exam:

It was just like the night before I just lost it. I didn’t sleep at all. I stayed up studying I think until around 5 . . . I was so worked up . . . I knew I had to make this, a certain grade, just to, just to pass. And, like, I was just overcome with this feeling of just complete anxiety and helplessness almost.

Classroom instruction. As with most higher education classes, lecture is a component of teaching. With nursing school, many of the lectures last for several hours. In addition to taking notes, paying attention to the instructor, and maintaining classwork, students must take what they are learning in the class and apply this knowledge in the real world in clinicals. In addition to the material covered in class, students are expected to build upon previous knowledge from prior nursing courses, and even some pre-requisite courses such as Anatomy and Physiology. The first classes held within the nursing program are the basis from which all other nursing courses are built: Fundamentals of Nursing. The student must have a solid foundational basis for nursing in order to build upon this content as they progress through the nursing program (Harrison, 2018; Karsten & DiCicco-Bloom, 2014). If a student is unable to grasp the material in the foundations courses, it is likely they will struggle academically and potentially not be successful in future courses. Content that is covered in the foundations courses is reinforced throughout the curriculum; however, it is not re-taught. This makes retention of course material vital and some struggle with the lecture style due to this lack of review of concepts (Harrison,

2018; Mahaffey, 2002). These classes, as they progress, aid in the formation of “the development of perceptual abilities, the ability to draw on knowledge and skilled know-how, and a way of being and acting in practice and in the world” (Benner et al., 2010, p. 166). Riley described sitting in class and becoming overwhelmed with the information:

I would be fine at the starting of the lecture and as soon as I got to something that I felt like was so complex, I felt like I needed a break. Like, say that we had just jumped into something that was so intense and I was thinking like “oh my gosh! I’ve got to . . . you know . . . I was almost trying to focus too hard, so it was stressing me out because I knew how important it was to listen, but I was trying so hard that I was stressing out, you know. That was definitely a trigger, sitting in lecture.

Other students echoed Riley’s sentiments. Ashley discussed that, after leaving lectures, she would remain stressed over the content that was covered in class. “I would be standing in line at the grocery store thinking about everything that we had covered in class that day and become anxious and nauseated because I couldn’t remember what we had covered.” Bethany discussed trying to “keep up and write down every detail of a lecture” was stressful, in addition to waking up panicked some mornings thinking that she had missed class.

Exam rigor. Examinations were a cause of stress, as noted in the literature by Manocchi (2017) and Rogers (2009) and identified by the study participants. One participant described the formatting of the exams as a cause of stress. She reflected that the exams were different from any other she had experienced in higher education. Prioritization of patient care, critically thinking through patient scenarios, and combining previous knowledge contribute to nursing examinations, increasing the difficulty of the exams (Manocchi, 2017). Prior to nursing school, she stated that essay type exams were stressful, but those tests were easy when compared to the application of knowledge questions paired with alternate format questions. The alternate format questions were not the typical multiple choice questions. Nursing examinations consisted of multiple choice questions, but there were also the alternate format questions on the exams. The

alternate format questions varied and increased the stress of the participants. Examples of alternate format questions participants found particularly stressful were

1. Select all that apply: These questions were described as an enhanced multiple choice question. Answer choices given could be from five to seven options, with at least two answers correct, but up to all of the answers correct.

2. Hot spot: These questions were questions where students had click on an image, chart, or any other request give to answer the question. An example of this given by one of the participants was being asked to click on the exact anatomical spot on a picture of a person's torso to listen to a specific heart sound.

3. Fill in the blank: These questions were described as the participant entering an answer in a blank. These questions were described by one participant as being a dosage question on most occasions.

4. Drag and drop: These questions were described as being the steps required for a particular skill being put in the order to complete the skill. One student gave the example of ranking a list of patients from most critical to least critical.

5. Charts: These questions required the test-taker to read through a mock chart for a patient and then answer a question related to what the student was able to analyze from the chart. These are just a few of the alternate format questions that the participants identified on in their interviews, but are not limited to the only styles of alternate format questions.

Riley described that a trigger for her stress was just before an exam: "Right before the test was always a trigger. I used to hyperventilate before tests." Jane felt as though she was always rushing to complete assignments or studying. She experienced a pattern of increased stress when preparing for an exam.

The pattern that I started to notice was like when I, when I studied from the time I wake up. And I usually wake up at like seven in the morning. I would study from seven in the morning until like 11 or 12 that night. All day every day until the morning of the test. Even the morning of the test I would wake up at least at five o'clock instead of seven o'clock going over the same information makin' sure I knew it.

Stephanie reported a pattern of increased anxiety in the days prior to an exam.

like a day or two before is when . . . I would notice that it would start to get increased . . . my heart would start beating real fast while I was studying . . . it was like my brain would go in overdrive. And it was like I was thinking so hard, that is when all the anxiety . . . would creep up.

Eight of the nine participants described examinations as a stressful portion of nursing school, verifying literature findings that examinations are a contributing factor to student stress.

Clinical and simulation experiences. The clinical and simulation experiences were the additional stressors of nursing school named by the participants, again, verifying findings in the literature (Chipas et al., 2012; Sun et al., 2015). Clinical experiences often occurred in a hospital setting, while simulations were designed to mimic a hospital setting, taking place within the school. Both experiences are an important aspect of applying their classroom knowledge in real-life experiences. Connecting the classroom to clinical is an important transition for nursing students.

Reese was one participant who vividly recalled her most stressful experience in nursing school as part of the simulation portion: clinical check offs. She described the check offs as tasks that were performed in the simulation labs that a student must complete prior to being allowed to perform that task on a patient. For check offs, faculty would observe the student performing the task. Stephanie described her check off experience as “one of the worst experiences of my life because the instructor just stared at me with this stern look on her face.”

Most participants identified clinicals and the large amount of paperwork that must be completed to participate in clinicals as a stressor, agreeing with the literature (Chipas et al., 2012;

Rafati et al., 2017). While attempting to balance class, clinicals, and the paperwork that goes along with clinicals with trying to study in addition to trying to find time to sleep, made clinicals a big stressor for many. Brenda discussed her increased stress during the clinical experience. She related the stress during this time to not knowing the facility, nurses, and instructors. She described the clinical nursing instructor as not being a faculty member at the school of nursing, but an adjunct clinical instructor. Not knowing what to expect from a “new” instructor increased her stress. She also discussed the increased stress she felt during simulations: “It was just awful. That two-way mirror. Everybody watching you and waiting on you to mess up. It was just awful” (Brenda). Ashley reflected on her most stressful experience of nursing school, detailing an interaction with an adjunct clinical instructor.

It was the first time that I was to give a shot in the hospital. It was an insulin shot. No big deal, right? (laughs). Whatever! It was the first shot I had ever given and me and the instructor had the medicine ready and I went into the hospital room to give the shot. The patient was sitting up in the bedside chair with family everywhere. I mean, everywhere! Sitting on the bed, in chairs, in the windowsill . . . everywhere! I looked at my instructor like ‘what do I do?’ because I couldn’t get to the patient- her chair was between the wall and the bed and I had to go by at least 20, not really (laughs) to get to her. Well, my instructor said, ‘go ahead . . . go give her shot now’. So, I went over to the patient, sweating bullets because all these eyes were on me. One of the family members asked me if it was my first shot and my instructor said, ‘It sure is and she’s not impressing me yet.’ I felt like I could throw up at that moment. So I asked the patient if she wanted the shot in her belly or arm and she wanted it in her belly. Great. She pulled her gown up and her stomach was so big I thought if I stuck it, it would pop like a balloon! My instructor kept on saying ‘go ahead. Give her the insulin,’ standing over me. I went to give her the shot and the needle bounced back off her stomach like a trampoline! I looked with fear at my instructor. She snatched the needle from my hand, gave the patient her shot, and told me to get in the hallway. I got a good chewing out in the hallway about being incompetent and that better not happen again or I would fail clinically. I was mortified.

Clinicals and simulation experiences played a major part in the participants increased levels of stress while in nursing school, verifying literature findings (Bodys-Cupak et al., 2016).

In a study by Rafati et al. (2017), faculty incivility was identified as a major stressor of nursing students. Faculty behaviors labeled as incivility, in the literature ranged from judging and labeling students, impeding student progress, picking on students, putting students on the spot, withholding instruction, and forcing students into no-win situations to use of intimidation and humiliation and being rigid and inflexible. However, the participants in my study emphasized the importance of their instructors listening to student concerns and offering study tips. This indicates the value of nursing faculty attention and efforts in helping students recognize and manage their stress and points to an area for further research, thus indicating that faculty can be resources for helping students cope with their stress.

Research Question 2

What coping mechanisms did associate degree nursing students utilize to overcome stress throughout their associate degree education?

Identification of the coping mechanisms named in this research question revealed the former students' experiences with stress and coping. They explained how they dealt with the stress and coping mechanisms used in multiple ways in their responses to the interview questions. In this section, I offer identification of coping mechanisms and offer explanations for each. The literature review provided an abundance of information identifying the stressors students face. However, there is very little literature identifying coping mechanisms enacted to deal with these stressors.

Coping

Coping is important for stress management and varies between individuals. Coping is a process, rather than an event and individuals may employ several methods to cope with stress. Incorporation of coping mechanisms allows individuals to adapt to stress and enhances control over a situation. Whenever stress occurs, the demands of individuals have surpassed their

resources to deal with the demands. Therefore, coping mechanisms can be beneficial. Coping mechanisms increase resilience in individuals by allowing them to effectively deal with stressors, allowing translation of fear into confidence. Individuals with the ability to implement coping mechanisms to deal with stress are able to perform better and maintain positive attitudes. The use of effective coping skills can help to improve mental and emotional well-being leading to positive outcomes for a stressful situation.

One participant, Carpe Diem, revealed that she felt as though her stress was always unmanageable. However, she was able to finish school and continue on to pass the NCLEX-RN® and obtain employment within a small, rural hospital. Even though she denies managing her stress while in school, she incorporated behaviors that other participants described as stress management, such as preparing for exams and studying “nonstop” and volunteering at a local animal shelter, contributing to doing things one enjoys. Others spoke openly of behaviors and actions they took to manage their stress. The participants discussed specific actions they took to decrease their stress.

Overall, a majority of the participants felt their stress was unmanageable at times, but were still able to manage it most of the time. Each student reported using a variety of coping mechanisms to deal with the stress, with many of their strategies overlapping. Coping strategies identified included preparation ahead of expectations, self-care such as doing things that interested them, and reliance on support systems, using classmates for friendship and study groups.

Preparation: Prepare Yourself

If I wouldn'ta [*sic*] dealt with stress . . . I probably wouldn'ta passed nursing school. Prolly wouldn'ta got a job. Um . . . ain't no telling what my mental health would be like. Ummm . . . or just getting into drugs or alcohol and just doing, just doing ungodly things. (Jane)

Preparation is key. All of the participants in the study emphasized the importance of studying every day and preparing for all assignments and experiences ahead of time. One participant viewed preparation as one way to manage the stress. She described that “. . . there wasn’t anything I could do about that other than just study and be prepared and telling myself that I was prepared for a test” (Max). A few participants reflected on a time where they did not prepare as they should have, and they had consequences from that lack of preparation. Jane reminisced on a time in nursing school when she realized she had to study more after she failed an exam. “After the first nursing test . . . I failed it . . . I’ve got to do better. I gotta pick up a book, an extra book . . . I gotta make sure I know this information.” Reese recalled the stress she experienced during her first nursing exam due to lack of preparation; “The very first time I realized I hadn’t studied enough for the very first nursing exam . . . I knew what percentage I had to make. I knew that if I didn’t pass the next test, I probably wouldn’t pass the semester.”

Several participants simply stated that persistent studying was key to stress reduction. Reflections on attributions to success in completing nursing school included making sure to stay on top of studying and never getting behind, along with trying to learn and understand rather than memorize the material because everything builds as you progress through. Max reflected that preparing for exams ahead of time, and not waiting until the last minute helped to relieve some of the stress. For this group of participants, one behavior that contributed to reduced stress was preparation.

Time management. Managing time effectively was identified as a way to reduce stress. Participant 1 revealed that prior to entering nursing school, she read blogs and articles online telling the world that once someone enters nursing school, they do not have a life outside of nursing school. She found that organizing her time effectively was a measure she incorporated

to reduce stress. Max said, “I would take time away from studying, and just . . . do whatever it was that I enjoyed at the time,” but she admitted to having a “natural drive to get through school” and organizing her time in a manner that balanced studying and outside interests. Incorporation of breaks into study time helped Brenda and her study group to reduce stress. She discussed taking breaks in between studying. For example, she said that she would study for an hour, then take a quick break, even if it was just 5 minutes to get up and walk around outside. Then they would go back to studying. Effective organization of time was a stress reducer in several of the participants’ journeys.

Take Care of You

Self-care. Participants discussed the importance of self-care, both mentally and physically, as a means of coping with their stress. Max talked about how important self-care was for individuals, including herself. She further discussed that she felt she dealt successfully with the stress by taking time away from studying and “just taking my mind off of it.” Even though Bethany reported burning pain and increased heart rate as a result of her stress while in nursing school, she knew she had to take care of herself and went to a health care provider. The result from that visit was “he ended up putting me on propranolol for my heart rate because it was sky high and I ended up on Nexium for ulcers and upset stomach” (Bethany). Bethany added that once she was treated for the symptoms she was experiencing, her stress decreased. Brenda discussed an important aspect of her self-care was performing positive self-talks. She realized that she was an intelligent person, however, she had to perform frequent self-talks affirming this belief. Other participants reported simply taking a break from studying, going to a movie, exercising (specifically running), or talking and visiting with family and friends as stress relievers.

Do things you love. Taking time for activities outside of nursing and studying was another coping mechanism used. Carpe Diem managed her stress by volunteering at a local animal shelter, which she continues to do today. Others took time out of studying to do things that interested them. From watching movies, to hanging out with friends, exercising, and traveling to see family on long weekends, many enjoyable activities were identified as coping mechanisms. Taking brief breaks from the demands of school allowed participants to focus better once they returned to their studies. Riley admitted to smoking cigarettes and drinking wine each night as her go-to self-treatment for managing her stress. In addition to cigarettes and wine, she “would always take a bath. I take a bath every night regardless . . . there is nothing like sitting in a bath tub.” A few participants laughingly described their development of a love for eating as their coping. “Anytime I was studying, it was just like if I could eat, I could calm down a little bit, but I was always eating” (Stephanie). Others incorporated sleeping, with one stating that when she slept, “all stress [went] away!” (Reese). Many of the participants incorporated activities they loved as means of coping, from taking brief breaks, to eating, drinking, smoking, and sleeping.

Support Systems

All of the participants stressed the importance of having a support system. Some discussed family support; some discussed peer support through friendship development and study groups; and a few discussed the importance of both family and peer support.

Outside support. Some participants emphasized the importance of having support from family and friends. Participants discussed having support from significant others, family, and friends outside of nursing school. One participant discussed the support from her family, stating their support “was just normally what normal family do . . . just support you in any anything you

do” (Participant 4). Some reported emotional support from family aided in their coping, while a few reported financial support from family helped to alleviate the stress of worrying about bills while in school. Overall, the participants included support outside of nursing school was a critical factor in their coping mechanisms and stress relief measures.

Nursing program support. Support from students in their cohort and nursing faculty played a role in dealing with the stress of school. Six of the nine participants reflected on the importance of peer support. They shared that their peers in the nursing classes understood their struggles because they were experiencing the same stressors and struggles. Brenda commented that “I had friends in nursing school. And they were also my support system because I was so stressed, but they were, too.” Many other participants reflected Brenda’s opinions on the importance of friends in the program.

In addition to peer support, many participants reflected that nursing faculty played a role in their stress reduction. One remembered that being able to talk with the assigned mentors, which consisted of nursing faculty, was a stress reducer. Several reminisced about faculty who were available to calm them down or talk to them when they were feeling stressed. Having an open communication relationship with faculty allowed the students to verbalize their stress and frustrations and receive positive feedback. Encouraging statements from the nursing faculty “were the best” and being able to walk into any instructor’s office at any time and receive an encouraging word or a listening ear aided in their stress management. Brenda attributed her success partly to the instructors and their support. Contradicting the literature, these participants identified nursing faculty as a positive aspect of their nursing education.

Findings: Stress and Coping Related to Lazarus and Folkman

Students, upon entering nursing school, inevitably face stressors. It is how these students choose to deal with the stressors that may aid in their success. In relation to the Lazarus and Folkman Transactional Model of Stress and Coping, the experiences shared by participants in this study verified the scaffolding process of the model. The participants were able to identify when they were experiencing stress and realize that the stress could affect them negatively if they did not manage it. Then, according to the study findings, eight out of the nine students felt they were able to manage the stress through problem-based coping, while one moved into emotional-based coping with “just doing the best I could.” This model says that individuals experiencing stress can go down two roads: the problem-based coping road or the emotional-based coping road. Those who choose to manage their stress with problem-based coping seem to have better outcomes than those who progress to emotional-based coping methods.

The TMSC has been used in many studies as a guiding framework, dating from the 1960s and 1970s to the present, but has not been used within the associate degree nursing population. This framework was valuable in this study as it provided a scaffolding approach to viewing the data and analysis. However, the model was inadequate in offering ways to differentiate between healthy versus unhealthy coping mechanisms. Many students identified some coping mechanisms utilized that many would consider unhealthy, but according to the model, any coping mechanism that aids in stress reduction is considered problem-based coping. In addition to lacking differentiation of specific coping mechanisms, the TSMC only provides a subjective assessment for the primary and secondary survey, as it is what the individual reveals they experienced. There is no tool or guide for verification of a primary and secondary survey. Without a tool or guide for verification of a primary and secondary survey, researchers must rely

on the participants being honest and truthful with their experiences and subjectivity. In addition, the researcher must decide exactly what constitutes a primary and secondary survey in the study in which they are incorporating the model. This could allow for errors or misinterpretation of some of the data. Overall, the model provided a guiding tool to investigate a unique, independent perception of participants.

Implications for Associate Degree Nursing Programs

Successful graduates of an associate degree nursing program report experiencing academic, social, environmental, and/or financial stressors (Al-Gamal et al., 2017; Birks et al., 2013; Cantrell et al., 2017; Del Prato et al., 2011; \Yosetake et al., 2018). Associate degree programs produce quality nurses in a compressed amount of time, when compared to higher degree nursing programs. Without 2-year degree programs, many individuals would not enroll in postsecondary education, making these avenues for education a crucial access for those who would not otherwise seek out higher education (Calcagno et al., 2008). Associate degrees in nursing provide competent nursing graduates for entry into practice (Hodgson, 2007; Starr, 2010). These students enter the workforce after graduating and passing the national licensure exam. Associate degree nursing programs, as studies have shown, provide a stressful environment for students (Reeve et al., 2012; Watson & Ali, 2017). Any measures that nursing faculty may take to incorporate stress reduction into the curriculum will be beneficial for both the student and for the program's attrition.

For each stressor reported in this study, I will offer my suggestions as to how they may be dealt with in nursing programs.

Expectations

Taking into account that the participants noticed stress early on, an orientation to nursing school could be done early on to explain and reinforce the rigorous expectations of nursing school. This measure could be done in an introductory nursing course or even in a nursing orientation event scheduled prior to classes beginning for those programs that do not currently have an introductory nursing course or orientation process. This would allow the students to be given information regarding classroom, clinicals, and simulations prior to beginning them. In addition to an orientation early in the experience, nursing faculty could be more transparent in their expectations in the classroom, simulation, skills labs, and clinicals. If the students are given a guideline of expectations up front, with time to absorb and review the expectations, this could allow for a more open communication between faculty and students.

Time Commitment

When comparing an ADN course of study with a BSN course of study, there is a vast difference in the timeframe allotted to complete the courses, allowing for ADN students to complete the courses in 4 to 5 semesters. Time is not on the side of the students who choose the ADN route; however, if nursing faculty could give examples of how other successful students balanced the demands of school and life, then students may feel more prepared and less stressed in relation to the time commitment. Faculty could show students how to plan a day, week, or semester. Simply providing a printable calendar with a schedule may help some students manage their time better, while others may prefer an electronic method. Anyway, whichever modality is chosen by the student, it could aid in time management skills, a valuable skill for anyone to have.

Lecture Style

Long lecture days seemed to be the standard when interviewing the participants. Some participants defined a lecture day as 3 to 4 hours of lecture in one sitting. Providing frequent breaks could help break up the monotony of long lectures. In addition, incorporating more active learning styles in the classroom could benefit students with various learning styles. Providing students with an outline of the day's lecture and activities may help to reduce the stress of the student trying to decipher what is important versus what is "nice to know."

Exam Rigor

There is no decreasing the rigor of nursing examinations due to the rigor of the national licensure exam that these students must take in order to practice nursing. However, the more students are exposed to alternate-style questions and nursing-style questions, the more comfortable they feel entering into an examination. One of the participants stated that even though the exams were hard, faculty had given them practice questions, reviewed questions in class, played questioning games in class, and the student was required to spend a certain amount of time each week in computer-based questioning. Any of these activities could be incorporated by faculty in the classroom to reduce stress in relation to exam rigor. Also, a test-taking tips mini-class may help students become more familiar and comfortable with the formatting of exams.

Clinicals and Simulation

I will address both the clinicals and simulation aspect of the stressors together. Clinicals actually take place in a healthcare setting, while simulation is a simulated healthcare setting and both were identified as causing stress related to the environment and scrutiny of faculty. Providing a brief orientation to the facility or simulated laboratory could significantly decrease

stress related to fear of the unknown or unfamiliarity of the environment. Giving the students an opportunity to meet their clinical or simulation instructor prior to the experience could help to decrease stress and anxiety. A simple meet and greet and tour of the environment may make a huge difference, if conducted prior to the assigned experience.

Overall Suggestions

If nurse educators could incorporate stress management strategies at the beginning of the nursing courses and reinforce these strategies throughout the program, students could become aware of the stressors and take supportive action to alleviate the stress. This would allow students to master important stress-management skills. There was no literature found identifying specific coping mechanisms for associate degree students; however, any strategy educators may take could vastly improve the outcomes for the students. These learned stress-management skills may continue to be incorporated in the nursing profession upon graduation.

Additionally, the participants did not voice a critique of their chosen nursing programs; however, associate degree nursing schools could offer more flexible ways to tailor their programs towards more vulnerable students. For example, offering a variety of days and times for required classes, clinicals, simulations, or skills. This would allow the students to create a schedule most convenient to them and their work schedule or lifestyle. Another suggestion would be to seek out grants and funding for more scholarships and financial assistance for the students, allowing them to decrease the hours they need to work while in school. Flexibility in contact requirements and assistance with financial obligations would help to decrease stress in these students.

Fundamentally, these former students had a fear of failure very early on in their nursing education, however, the participants in this study realized that they were ultimately responsible

for their own actions and fate. These successful individuals realized that if they wanted control of what was occurring outwardly, they must first control their inner thoughts and feelings, which they did, with the exception of one participant. The realizations moved in conjunction with the TMSC—they realized they were experiencing stress and they took actions to reduce or manage the stress they were feeling. Nurse educators are responsible for giving students the tools necessary to pass the courses, and ultimately pass the licensure exam, but the students must take those tools and utilize them in order to be successful. Nurse educators can tell students the importance of using the tools but cannot make the students use them. Students must have that innate desire and drive to want to be successful. The previous sentiments lead to one final suggestion. The final suggestion is for nurse educators to be sure they are providing the tools necessary for their students to be successful. We can hand them the keys, but it is up to them to drive.

Limitations

Limitations for this study were recognized prior to gathering and analyzing data and included the limiting of the study to associate degree nursing graduates. Another limitation to this study recognized prior to data gathering included the area in which the study occurred, the southeastern US. This study limited participants to those who had finished nursing school within the last 2 years. Limitations discovered during the research included the various settings for experiences of the nursing students; participants in the study were from three different nursing programs. There were no male participants in the study. In addition, the study was limited to nine participants. Another limitation was whether participants had developed coping mechanisms prior to attending nursing school. It is unknown if participants entered into higher

education with previous stressors or coping mechanism knowledge, or if they previously incorporated coping mechanisms into their lives on a regular basis.

Recommendations for Future Research

Nursing literature is saturated with studies identifying what stressors nursing students face in their educational endeavors. However, there are very few studies identifying actual coping mechanisms that are beneficial for associate degree nursing students. Findings from this study identified reliance on others as a coping mechanism used by the participants, in the form of classmates, peer friendships, and study groups. Future research implementing peer study groups would provide valuable information regarding the impact of study groups and passing the nursing courses, and ultimately the NCLEX-RN®. Future studies could include following a study group from the first semester through their degree curriculum and licensure exam and compare them to a group of participants who studied independently. Is there an impact on nursing school retention and attrition when students utilize peer study groups? Is there an impact on pass rates on the national licensure examination when students utilize peer study groups when compared to students who study independently? More information could be valuable in nursing education realm.

One finding in the literature is that nursing faculty incivility was a cause of stress in nursing students. However, this study revealed that the participants believed nursing faculty mentors to have aided in their success. In addition to further investigation on peer study groups, another future study could investigate the impact of positive role modeling and mentoring from nursing faculty/student relationships. Contrary to the popular belief that nursing “eats the young,” a future study identifying positive ways that nursing faculty may aid in reducing stress in students would be beneficial for the reputation of faculty, along with helping students to cope.

Even though one participant described an uncivil interaction with an adjunct clinical instructor, she identified that nursing faculty helped to reduce her stress. Nursing faculty should be seen in a positive light and display role model appropriate behavior that students may take into the profession with them. Future studies may allow faculty to realize the impact they actually do have on students.

Additionally, considering a need not addressed in this study, nor by the guiding framework, is future research identifying healthy versus unhealthy coping mechanisms of nursing students. The TMSC utilizes the four steps of stress and coping, however, it does not identify healthy versus unhealthy ways to deal with stress. It simply states that, in step three, individuals deal with the stressor, or in step four, they do not manage the stress and form emotional-based coping skills, such as avoidance or denial. A future study identifying healthy coping mechanisms may be beneficial.

With stress contributing to decreased success rates and fewer students graduating from nursing programs, a beneficial study would be researching students who drop out of nursing programs solely due to stress. Identifying an actual number of students who are in this category would signify the importance of incorporating stress management into nursing programs. In addition to identifying the number of students who drop out of nursing programs related to stress, attrition rates for specific programs could be studied along with the dropout rates.

The TMSC did not identify if coping mechanisms addressed the symptoms of stress or the actual cause of stress. The model simply identifies whether individuals incorporate coping mechanisms. A future study could research specific coping mechanisms and correlate those with treating symptoms or the cause. In addition, categorization into problem-based coping strategies

and emotional-based coping strategies could be identified. This would allow for more specific identification of useful coping mechanism that future students may incorporate into their lives.

Other studies that could be done related to this study include incorporation of male participants, a comparison of 1st semester and final semester students, BSN students, 1st generation students, and minority students. In addition, some studies incorporating actual problem-based coping activities, such as exercise programs, aromatherapy, or incorporation of an orientation program for pre-licensure nursing could provide additional information and be beneficial in the nursing education realm.

Conclusion

Participants provided a retrospective view of their thoughts and experiences during their time in an associate degree nursing program, which helped form an understanding of the stressors in school and coping mechanisms successful students utilized. All but one participant felt they managed their stress well during school. The one participant who was the exception simply stated that she did not manage her stress and still struggles today.

The data helped to provide an understanding of their lived experiences of the stress they faced and the coping mechanisms they incorporated while in nursing school. Participants conveyed that they have carried some of their coping mechanisms used in nursing school into the workforce. They shared how they are incorporating stress reduction measures today. To keep patients healthy, safe, and well, nurses themselves must be healthy and safe. A main occupational safety risk in the work environment for nurses, identified by the American Nurses Association's HealthNurse™ health risk appraisal, was stress (Carpenter & Dawson, 2015). Stress in nurses has been linked to reduced physical and psychological health, decreased job satisfaction, increased absences from work related to sickness, decreased nurse retention, and

poor job performance (Farquharson et al., 2013). Identification of coping mechanisms used by successful graduates may prevent future nursing students from ending their nursing journey before finishing school. This could ultimately become one resolution to the nursing shortage, in addition to providing students with resources that may follow them into the nursing profession. Finding a solution to allow for improved adaptation in nursing school in coping with the stress and in nursing practice will allow for overall improvement within the nursing profession.

REFERENCES

- Abalos, E., Rivera, R., Locsin, R., Schoenhofer, S. (2016). Husserlian phenomenology and Colaizzi's method of data analysis: Exemplar in qualitative nursing inquiry using nursing as caring theory. *International Journal for Human Caring*, 20(1), 19-23. doi: 10.20467/1091-5710.20.1.19
- Accreditation Commission for Education in Nursing (ACEN). (2013). Glossary. *ACEN Accreditation Manual*. <http://www.acenursing.net/manuals/Glossary.pdf>
- Ah Kim, M., Kim, J., & Kim, E. (2015). Effects of rational emotive behavior therapy for senior nursing students on coping strategies and self-efficacy. *Nurse Education Today*, 35, 456-460. <http://dx.doi.org/10.1016/j.nedt.2014.11.013>
- Al-Gamal, E., Alhosain, A., & Alsunaye, K. (2017). Stress and coping strategies among Saudi nursing students during clinical education. *Perspectives in Psychiatric Care*, 54, 198-205. doi:10.1111/ppc.12223
- Alzayyat, A., & Al-Gamal, E. (2014). A review of the literature regarding stress among nursing students during their clinical education. *International Nurse Review*, 61(4), 406-415.
- American Nurses Association. (2001). Code of Ethics for Nurses. http://nursingworld.org/ethics/code/protected_nwcoe813.htm#preface
- Andrist, L., Nicholas, P., & Wolf, K. (2006). *A history of nursing ideas*. Sudbury, MA: Jones and Bartlett Publishers.
- Attrition. (n.d.) Retrieved from <https://www.merriam-webster.com/dictionary/attrition>
- Avcioglu, M.M., Karanci, A.N., & Soygur, H. (2019). What is related to the well-being of the siblings of patients with schizophrenia: an evaluation within the Lazarus and Folkman's transactional stress and coping model. *International Journal of Social Psychiatry*, 63(5), 252-261. doi: 10.1177/0020764019840061
- Benner, P., Sutphen, M., Leonard, V., & Day, L. (2010). *Educating nurses: a call for radical transformation*. Stanford, CA: The Carnegie Foundation for the Advancement of Teaching.
- Beanlands, H., McCay, E., Fredericks, S., Newman, K., Rose, D., Santa Mina, E., Martin, L.S. . . . Wang, A. (2019). Decreasing stress and supporting emotional well-being among senior nursing students: a pilot test of an evidence-based intervention. *Nurse Education Today*, 76, 222-227. <https://doi-org.libdata.lib.ua.edu/10.1016/j.nedt.2019.02.009>

- Birks, M., Chapman, Y., Ralph, N., McPherson, C., Eliot, M., & Coyle, M. (2013). Undergraduate nursing studies: The first-year experience. *Journal of Institutional Research, 18*(1), 26-35. <https://files.eric.ed.gov/fulltext/EJ1094101.pdf>
- Bodys-Cupak, I., Majda, A., Zalewska-Puchala, J., & Kaminska, A. (2016). The impact of a sense of self-efficacy on the level of stress and the ways of coping with difficult situations in Polish nursing students. *Nurse Education Today, 45*, 102-107. <http://dx.doi.org/10.1016/j.nedt.2016.07.004>
- Bryer, J., Cherkis, F., & Raman, J. (2013). Health-promotion behaviors of undergraduate nursing students: a survey analysis. *Nursing Education Perspectives, 32*(6), 410-416. doi: 10.5480/11.614
- Burger, K., & Lockhart, J.S. (2016). Meditation's effect on attentional efficiency, stress, and mindfulness characteristics of nursing students. *Journal of Nursing Education, 56*(7), 430-434. doi: 10.3928/01484834-20170619-08
- Calcagno, J.C., Bailey, T., Jenkins, D., Kienzl, G., & Leinbach, T. (2008). *Economics of Education Review, 27*, 632-645. doi: 10.1016/j.econedurev.2007.07.003
- Cantrell, M.L., Meyer, S.L., & Mosack, V. (2017). Effects of simulation on nursing student stress: an integrative review. *Journal of Nursing Education, 56*(3), 139-144. <https://doi-org.libdata.lib.ua.edu/10.3928/01484834-20170222-04>
- Cantor, M.R. (2019). Retention of Long Island millennials at a suburban community college: Are they college ready? *Journal for Leadership and Instruction, 18*(1), 36-41. <https://search-ebshost-com.libdata.lib.ua.edu/login.aspx?direct=true&db=eric&AN=EJ1222242&site=eds-live&scope=site>
- Carpenter, H., & Dawson, J. (2015, September). Keeping nurses healthy, safe, and well. *American Nurse Today, 10*(9), 24-26. <https://www.americannursetoday.com/keeping-nurses-healthy-saft-well/>
- Carver, C.S. (2013). COPE Inventory. Measurement instrument database for the social science. <http://www.midss.org/sites/default/files/cope.pdf>
- Carver, C.S., Scheier, M.S., & Weintraub, J.K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*(2), 267-283.
- Chachula, K.M., Myrick, F., & Yonge, O. (2015). Letting go: How newly graduated registered nurses in Western Canada decide to exit the nursing profession. *Nurse Education Today, 35*(7), 912-918. <https://doi-org.libdata.lib.ua.edu/10.1016/j.nedt.2015.02.024>
- Chang, E.M., Daly, J., Hancock, K.M., Bidewell, J.W., Johnson, A., Lambert, V.A., & Lambert, C.E. (2006). The relationships among workplace stressors, coping methods, demographic characteristics, and health in Australian nurses. *Journal of Professional Nursing, 22*, 30-38.

- Chen, H.C., & Lo, H.S. (2015). Nursing student satisfaction with an associate nursing program. *Nursing Education Perspectives*, 36(1), 27-33, doi: 10.5480/13-1268
- Chernomas, W.M., & Shapiro, C. (2013). Stress, depression, and anxiety among undergraduate nursing students. *International Journal of Nursing Education Scholarship*, 10(1), 255-266. <http://dx.doi.org/10.1515/ijnes-2012-0032>
- Chipas, A., Cordrey, D., Floyd, D., Grubbs, L., Miller, S., & Tyre, B. (2012). Stress: Perceptions, manifestations, and coping mechanisms of student registered nurse anesthetists. *AANA Journal*, 80(4), S49-S55. <https://pdfs.semanticscholar.org/28ab/95c2955219073a5cc9ae6913156b83334c0f.pdf>
- Clark, C., & Kenski, D. (2017). Promoting civility in the OR: An ethical imperative. *AORN Journal*, 105(1), 60-66. <https://doi.org/10.1016/j.aorn.2016.10.019>
- Clark, C.M., Nguyen, D.T., & Barbosa-Leiker, C. (2014). Student perceptions of stress, coping, relationships, and academic civility: a longitudinal study. *Nurse Education*, 39(4), 170-174.
- Coetzee, S.K., & Klopper, H.C. (2010). Compassion fatigue within nursing practice: A concept analysis. *Nursing and Health Sciences*, 12, 235-243.
- Cogburn, M., Carter-Templeton, H., Horton, R., Toliver, T., & Platt, M. (2015). Attrition of medical students and nursing students with anxiety and depression: A systematic review. *Annals of Behavioral Science and Medical Education*, 21(1), 30-37. <https://doi.org/10.1007/BF03355306>
- Colaizzi, P.F. (1978). Psychological research as a phenomenologist views it. In R.S. Valle & M. King (Eds.), *Existential phenomenological alternatives for psychology* (pp. 48-71). New York: Oxford University Press.
- Coping Mechanisms (n.d.). <https://www.goodtherapy.org/blog/psychpedia/coping-mechanisms>
- Craig, A., & Ward, C. (2008). Retention of community college students: Related student and institutional characteristics. *Journal of College Student Retention*, 9(4), 505-517. doi: 10.2190/CS.9.4.f
- Creswell, J.D. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles, CA: SAGE Publications.
- Cruz, J.P., Felicida-Reynaldo, R.F.D., Lam, S.C., Contreras, F.A.M., Cecily, H.S.J., Papatthaniou, I.V., Fouly, H.A. . . . Colet, P.C. (2018). Quality of life of nursing students from nine countries: a cross-sectional study. *Nurse Education Today*, 66, 138-142. <https://doi.org/10.1016/j.nedt.2018.04.016>
- Darch, J. (2014). Seeking stress relief. *Nursing Standard*, 28(52), 66. <https://eds-a-ebSCOhost-com.libdata.lib.ua.edu/eds/pdfviewer/pdfviewer?vid=2&sid=9981190e-0392-4176-8b6f-d3a44f4e2d4b%40sessionmgr4010>

- Deery, S., Walsh, J., & Guest, D. (2011). Workplace aggression: The effects of harassment on job burnout and turnover intentions. *Work, Employment and Society, 25*, 742-759.
- Del Prato, D., Bankert, E., Grust, P., & Joseph, J. (2011). Transforming nursing education: A review of stressors and strategies that support students' professional socialization. *Advances in Medical Education and Practice, 2*, 109-116. doi: 10.2147/AMEP.S18359
- Demir, S., Sevil, G., Hulya, B., & Filiz, H. (2014). Effect of mentoring program on ways of coping with stress and locus of control for nursing students. *Asian Nursing Research, 8*, 254-260. <http://dx.doi.org/10.1016/j.anr.2014.10.004>
- Dougherty, K. (1992). Community colleges and baccalaureate attainment. *The Journal of Higher Education, 63*(2), 188-214. <https://www.jstor.org/stable/1982159>
- Dvorakova, K., Greenberg, M., & Roesere, R. (2018). On the role of mindfulness and compassion skills in students' coping, well-being, and development across the transition to college: A conceptual analysis. *Stress and Health, 35*, 146-156. doi: 10.1002/smi.2850
- Edwards, D., Burnard, P., Bennett, K., & Hebden, U. (2010). A longitudinal study of stress and self-esteem in student nurses. *Nurse Education Today, 30*(1), 78-84. <https://doi.org/10.1016/j.nedt.2009.06.008>
- Eka, N.G.A., & Chambers, D. (2019). Incivility in nursing education: A systematic literature review. *Nurse Education in Practice, 39*, 45-54. <https://doi-org.libdata.lib.ua.edu/10.1016/j.nepr.2019.06.004>
- Elfering, A., Gerhardt, C., Grebner, S., & Muller, U. (2017). Exploring supervisor-related job resources as mediators between supervisor conflict and job attitudes in hospital employees. *Safety and Health at Work, 8*, 19-28. <http://dx.doi.org/10.1016/j.shaw.2016.06.003>
- Elpern, E.H., Covert, B., & Kleinpell, R. (2005). Moral distress of staff nurses in a medical intensive care unit. *American Journal of Critical Care, 14*, 523-530.
- Farquharson, B., Bell, C., Johnston, D., Jones, M., Schofield, P., Allan, J., Ricketts, I. . . . Johnston, M. (2013). Nursing stress and patient care: real-time investigation of the effect of nursing tasks and demands on psychological stress, physiological stress, and job performance: Study protocol. *Journal of Advanced Nursing, 2327-2334*. doi: 10.1111/jan.12090
- Fike, D., & Fike, R. (2008). Predictors of first-year student retention in the community college. *Community College Review, 36*(2), 68-88. doi: 10.1177/0091552108320222
- Fontaine, K. (2014). Effects of a retention intervention program for associate degree nursing students. *Nursing Education Perspectives, 35*(2), 94-99. doi: 10.5480/12.815.1

- Fornes-Vives, J., Garcia-Banda, G., Frias-Navarro, D., & Rosales-Viladrich, G. (2015). Coping, stress, and personality in Spanish nursing students: A longitudinal study. *Nurse Education Today*, *36*, 318-323. <http://dx.doi.org/10.1016/j.nedt.2015.08.011>
- Gatchel, R.J. (2018). The importance of the profession of nursing in health care: Current and future issues. *Journal of Applied Biobehavioral Research*, *1*. <https://doi-org.libdata.lib.ua.edu/10.1111/jabr.12127>
- Gelinas, L. (2019). Promoting clinician well-being. *American Nurse Today*, *14*(4), 4.
- Gelsema, T., van der Doef, M., Maes, S., Akerboom, S., & Verhoeven, C. (2005). Job stress in the nursing profession: the influence of organizational and environmental conditions and job characteristics. *International Journal of Stress Management*, *12*(3), 222-240. doi: 10.1037/1072-5245.12.3.222
- Gibbons, C. (2010). Stress, coping and burn-out in nursing students. *International Journal of Nursing Studies*, *47*, 1299-1309. doi: 10.1016/j.ijnurstu.2010.02.015
- Gibbons, C., Dempster, M., & Moutray, M. (2009). Surveying nursing students on their sources of stress: A validation study. *Nurse Education Today*, *29*, 867-872. doi:10.1016/j.nedt.2009.04.008
- Gibson, S., & Hanes, L. (2003). The contribution of phenomenology to HRD research. *Human Resources Development Review*, *2*(2), 181-205.
- Glesne, C. (2016). *Becoming qualitative researchers: an introduction*. Boston: Pearson.
- Graham, L. (2015). Integration of the interaction model of client health behavior and transactional model of stress and coping as a tool for understanding retention in HIV care across the lifespan. *Journal of the Association of Nurses in AIDS Care*, *26*(2), 100-109. <http://dx.doi.org/10.1016/j.jana.2014.11.009>
- Handwerker, S. (2018). Challenges experienced by nursing students overcoming one course failure: A phenomenological research study. *Teaching and Learning in Nursing*, *13*, 168-173. <https://doi.org/10.1016/j.teln.2018.03.007>
- Harding, M., Bailey, M., & Stefka, S. (2017). Factors influencing nursing student success after readmission. *Teaching and Learning in Nursing*, *12*(3), 191-194. <https://doi.org/10.1016/j.teln.2017.03.004>
- Harrison, C. (2018). Predicting success for associate degree nursing students in a concept-based curriculum. *Teaching and Learning in Nursing*, *13*, 135-140. <https://doi.org/10.1016/j.teln.2018.01.005>
- Hawley, T., & Harris, T. (2005). Student characteristics related to persistence for first-year community college students. *Journal of College Student Retention*, *7*(1-2), 117-142.

- Health Resources and Services Administration. (2013). The U.S. nursing workforce: Trends in supply and education. <https://bhwa.hrsa.gov/sites/default/files/bhw/nchwa/projections/nursingworkforcetrendssoct2013.pdf>
- Higgins, B. (2005). Strategies for lowering attrition rates and raising NCLEX-RN pass rates. *Journal of Nursing Education, 44*(12), 541-547.
- Hirsch, C.D., Barlem, E.E.D., Almedia, L.K., Tomaschewski-Barlem, J.G., Figueira, A.B., & Lunardi, V.L. (2015). Coping strategies of nursing students for dealing with university stress. *Revista Brasileira de Enfermagem REBEn, 68*(5), 501-508. <http://doi.org/10.1590/0034-7167.2015680503i>
- Hobfoll, S.E. (1989). A new attempt at conceptualizing stress. *American Psychologist, 44*(3), 513-524.
- Hodgson, C. (2007). From whence we came—A look at the history of the National Organization for associate degree nursing. *Teaching and Learning in Nursing, 2*, 43-35.
- Hrobsky, P., & Kersbregger, A. (2002). Preceptors perceptions of clinical performance failure. *Journal of Nursing Education, 41*(12), 550-553.
- Hulbert-Williams, N.J., Morrison, V., Wilkinson, C., & Neal, R.D. (2013). Investigating the cognitive precursors of emotional response to cancer stress: Re-testing Lazarus's transactional model. *British Journal of Health Psychology, 18*, 97-121. doi: 10.1111/j.2044-8287.2012.02082.x
- Ibrahim, S.A., & Qalawa, S.A. (2015). Factors affecting nursing students' incivility: as perceived by students and faculty staff. *Nurse Education Today, 36*, 118-123. <http://dx.doi.org/10.1016/j.nedt.2015.08.014>
- Jang, M., & Kim, J. (2018). A structural model for stress, coping, and psychosocial adjustment: A multi-group analysis by stages of survivorship in Korean women with breast cancer. *European Journal of Oncology Nursing, 33*, 41-48. <https://doi.org/10.1016/j.ejon.2018.01.004>
- Jeffreys, M.R. (2012). *Nursing student retention understanding the process and making a difference* (2nd ed.). New York: Springer Publishing Company.
- Jordan, T., Khubchandani, J., & Wiblishauser, M. (2016). The impact of perceived stress and coping adequacy on the health of nurses: a pilot investigation. *Nursing Research and Practice, 1*-11. <http://dx.doi.org/10.1155/2016/5843256>
- Karsten, K., & DiCicco-Bloom, B. (2014). Acknowledging the academic rigor of associate degree nursing education: a grounded theory study of overcoming failure. *Teaching and Learning in Nursing, 9*, 153-163. <http://dx.doi.org/10.1016/j.teln.2014.04.003>
- Katsifaraki, M. & Tucker, P. (2013). Alexithymia and burnout in nursing students. *Journal of Nursing Education, 52*(11), 627-633. doi: 10.3928/01484834-20131014-04

- King, T. & Bannon, E. (2002). *At what cost? The price that working students pay for a college education*. Washington, DC: The State PIRG Higher Education Project.
- Koharchik, L. (2018). Nursing instructor incivility toward students. *American Journal of Nursing, 118*(7), 64-66.
- Krohne, H.W. (2002). Stress and coping theories. Johannes Gutenberg-Universitat Mainz Germany. <http://burnout.nl/docs/krohne-stress-history-overview.pdf>
- Labrague, L., McEnroe-Petitte, D.M., Al Amri, M., Fronda, D.C., & Obeidat, A.A. (2017). An integrative review on coping skills in nursing students: implications for policymaking. *International Nursing Review, 65*, 279-291.
- Labrague, L., McEnroe-Petitte, D., Papathanasiou, I.V., Edet, O.B., Tsaras, K., Leocadio, M., Colet, P. . . . Velacaria, P. (2017). Stress and coping strategies among nursing students: an international study. *Journal of Mental Health, 27*(5), 402-408. <https://doi.org/10.1080/09638237.2017.1417552>
- Lasiter, S., Marchiondo, L., & Marchiondo, K. (2012). Student narratives of faculty incivility. *Nursing Outlook, 60*(3), 121-126. doi: 10.1016/j.outlook.2011.06.001
- Lavee, Y., & Ben-Ari, A. (2008). The association of daily hassles and uplifts with family and life satisfaction: Does cultural orientation make a difference? *American Journal of Community Psychology, 41*, 89-98.
- Lazarus, R., & Folkman, S. (1984). *Stress, Appraisal, & Coping*. Springer Publishing Company: New York, NY.
- Lazarus, R.S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality, 1*, 141-170.
- Levett, T., Hoffman, K., Roche, J., Lapkin, S., & Arthur, C. (2011, November). Examining the impact of high and medium fidelity simulation experiences on nursing students' knowledge acquisition. *Nurse Education in Practice, 11*(6), 380-383. <http://doi.org/10.1016/j.nepr.2011.03.014>
- Lewis, C., Swanzy, D., Lynch, C., & Dearmon, V. (2019). GROWTH: A strategy for nursing student retention. *Journal of Nursing Education, 58*(3), 173-177. doi: 10.3928/01484834-20190221-09
- Lim, J., Hepworth, J., & Bogossian, F. (2011). A qualitative analysis of stress, uplifts and coping in the personal and professional lives of Singaporean nurses. *Journal of Advanced Nursing, 67*(5), 1022-1033. doi: 10.1111/j.1365-2648.2010.05572
- Machleit, K.A., Meyer, T., & Eroglu, S.A. (2005). Evaluating the nature of hassles and uplifts. *Journal of Business Research, 58*(5), 655-663.

- Manocchi, P. (2017). Fostering academic success in nursing students through mindfulness: A literature review. *Teaching and Learning in Nursing, 12*, 298-303. <http://dx.doi.org/10.1016/j.teln.2017.05.002>
- Mahaffey, E. (2002). The relevance of associate degree nursing education: Past, present, future. *Online Journal of Issues in Nursing, 7*(2). <http://www.nursingworld.org/ojin/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume72002/No2May2002/RelevanceofAssociateDegree.aspx>
- Mahfouz, R., & Alsahli, H. (2016). Perceived stress and coping strategies among newly nurse students in clinical practice. *Journal of Education and Practice, 7*(23), 118-128. <https://files.eric.ed.gov/fulltext/EJ1112924.pdf>
- Martin, P.D., & Daniels, F.M. (2014). Application of Lazarus's cognitive transactional model of stress-appraisal-coping in an undergraduate mental health nursing programme in the Western Cape, South Africa. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD), Supplement 1*(2), 513-522.
- Maxwell, J. (2013). *Qualitative research design: An interactive approach*. Los Angeles: SAGE Publications.
- McKinney, L., Novak, H., Hagedorn, L.S., & Luna-Torres, M. (2019). Giving up on a course: an analysis of course dropping behaviors among community college students. *Research in Higher Education, 60*(2), 184-202. <http://dx.doi.org.libdata.lib.ua.edu/10.1007/s11162-018-9509-z>
- McVicar, A. (2003). Workplace stress in nursing: A literature review. *Journal of Advanced Nursing, 44*(6), 633-642.
- Melnyk, B.M., Orsolini, L., Tan, A., Arslanian-Engoren, C., Melkus, G.D., Dunbar-Jacob, J., Rice, V.H. . . . Lewis, L.M. (2018). A national study links nurses physical and mental health to medical errors and perceived worksite wellness. *Journal of Occupational Environmental Medicine, 60*(2), 126-131. doi: 10.1097/JOM.0000000000001198
- Meires, J. (2018). The essentials: Nursing faculty who bully students and colleagues. *Urologic Nursing, 38*(6), 303-306. doi: 10.7257/1053-816X.2018.38.6.303
- Meltzer, L.S., & Huckabay, L.M. (2004). Critical care nurses' perceptions of futile care and its effect on burnout. *American Journal of Critical Care, 13*, 202-208.
- Mertes, S.J., & Jankoviak, M.W. (2016). Creating a college wide retention program: a mixed methods approach. *Community College Enterprise, 22*(1), 9-27. <https://search-ebscohost-com.libdata.lib.ua.edu/login.aspx?direct=true&db=eric&AN=EJ1106958&site=eds-live&scope=site>
- Mooring, Q.E. (2016). Recruitment, advising, and retention programs—Challenges and solutions to the international problem of poor nursing student retention: A narrative literature review. *Nurse Education Today, 40*, 204-208.

- Moridi, G., Khaledi, S., & Valiee, S. (2014). Clinical training stress inducing factors from the students' viewpoint: A questionnaire-based study. *Nurse Education Practice, 14*(2), 160-163.
- Morrow, R., Rodriguez, A., & King, N. (2015). Colaizzi's descriptive phenomenological method. *The Psychologist, 28*(8), 643-644.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: SAGE Publications.
- National Center for Education Statistics. (2018). Integrated postsecondary education data system glossary. Retrieved from <http://www.nces.ed.gov/ipeds/glossary/?charindex=s>
- National Council State Board of Nursing (NCSBN). (2018). Before the exam. <http://ncsbn.org/before-the-exam.htm>
- National Council State Board of Nursing (NCSBN). (2018). NCLEX and other exams. <http://ncsbn.org/nclex.htm>
- National League for Nursing. (2013). Number of basic RN programs in the United States by state and region. <http://nln.org/research/slides/index.htm>
- National League for Nursing. (2014). Graduations from basic RN programs and percentage change from previous year by program type: 1985-86 to 1994-95 and 2001-02 to 2007-08. http://nln.org/docs/default-source/newsroom/nursing-education-statistics/AS0708_T04.pdf-pdf.pdf
- National Organization for Associate Degree Nursing [N-OADN]. (2001). Policy statement: Associate degree nursing response to the nursing shortage. <http://www.noadn.org/NursingShortage.pdf>
- Newton, S., Smith, L., & Moore, G. (2007). Baccalaureate nursing program admission policies: Promoting success or facilitating failure? *Journal of Nursing Education, 46*(10), 439-444.
- Nicholas, S. (2008). *Nontraditional older students*. EBSCO Research Starter, 1-7. Upswitch, MA: EBSCP Publishing, Inc.
- Nurses in double trouble: Antecedents of job burnout in nursing profession. (2019). *Pakistan Journal of Medical Sciences, 4*. <https://search-ebsochost-com.libdata.lib.ua.edu/login.aspx?direct=true&db=edsgao&AN=edsgcl.598200616&site=eds-live&scope=site>
- Nursinglicensure.org. (n.d.). <https://www.nursinglicensure.org/articles/how-to-become-an-rn.html>
- Oh, Y.S. (2017). Communications with health professionals and psychological distress in family caregivers to cancer patients: A model based on stress-coping theory. *Applied Nursing Research, 33*, 5-9. <http://dx.doi.org/10.1016/j.apnr.2016.09.008>

- O'Regan, P. (2005). Students under pressure. *World of Irish Nursing and Midwifery*, 13(9), 16-18.
- Oermann, M.H., & Standfest, K.M. (1997). Differences in stress and challenge in clinical practice among ADN and BSN students in varying clinical courses. *Journal of Nursing Education*, 35(5), 228-233.
- Parveen, A., & Inayat, S. (2017). Evaluation of factors of stress among nursing students. *Advanced Practices in Nursing*, 2(2), 1-4. doi: 10.4172/2573-0347.1000136
- Phillips, J. (2010). Exploring student nurse anesthetist stressors and coping using grounded theory methodology. *AANA Journal*, 78(6), 474-482. <https://pdfs.semanticscholar.org/b516/85cdb93cea2478d02ba7d6de29ec62bcd638.pdf>
- Piko, B.F (2006). Burnout, role conflict, job satisfaction and psychosocial health among Hungarian health care staff: A questionnaire survey. *International Journal of Nursing Studies*, 43, 311-318.
- Porter, K.B. (2008). Current trends in student retention: A literature review. *Teaching and Learning in Nursing*, 3(1), 3-5.
- Palumbo, R. (2018). Incivility in nursing education: an intervention. *Nurse Education Today*, 66, 143-148. [https://doi.org/10.1016.j.nedt.2018.03.024](https://doi.org/10.1016/j.nedt.2018.03.024)
- Rafati, F., Nouhi, E., Sabzevari, S., & Dehghan-Nayeri, N. (2017). Coping strategies of nursing students for dealing with stress in clinical setting: a qualitative study. *Electronic Physician*, 9(12), 6120-6128. doi: <http://dx.doi.org/10.19082/6120>
- Randle, J. (2003). Bullying in the nursing profession. *Journal of Advanced Nursing*, 43(4), 395-401.
- Ratanasiripong, P., Park, J., Ratanasiripong, N., & Kathalae, D. (2015). Stress and anxiety management in nursing students: Biofeedback and mindfulness meditation. *Journal of Nursing Education*, 54(9), 520-524. doi:10.3928/01484834-20150814-07
- Reader, R. (2015). Students' experiences in associate degree nursing programs: A qualitative study looking at moral distress. *Teaching and Learning in Nursing*, 10, 118-123. <http://dx.doi.org/10.1016.j.teln.2015.05.001>
- Reddy, K.J., Karishmarajanmenon, M.S., & Anjanathattil. (2018). Academic stress and its sources among university students. *Biomedical and Pharmacology Journal*, 1, 531. <https://doi-org.libdata.lib.ua.edu/10.13005/bpj/1404>
- Reeve, K., Shumaker, C., Yearwood, E., Crowell, N., & Ridley, J. (2012). Perceived stress and social support in undergraduate nursing students' educational experiences. *Nurse Education Today*, 33, 419-424. doi: <http://dx.doi.org/10.1016/j.nedt.2012.11.009>

- RegisteredNursing.org (2019). AND—Associate degree in nursing. Retrieved from <https://www.registerednursing.org/degree/adn/>
- Riessman, C. (2008). *Narrative methods for the human sciences*. Thousand Oaks, CA: Sage Publications.
- Rogers, T.L. (2009). Prescription for success in an associate degree nursing program. *Journal of Nursing Education, 49*(2), 96-100. doi: 10.3928/01484834-20091022-03
- Sabio, C. (2019). Associate degree nursing students' perceived barriers to baccalaureate nursing education and intentions to enroll in a baccalaureate-only nursing environment. *Teaching and Learning in Nursing, 14*, 9-14. <https://doi.org/10.1016/j.tekb,2018.08.004>
- Sanko, J., Mckay, M., & Rogers, S. (2016). Exploring the impact of mindfulness meditation training in pre-licensure and post graduate nurses. *Nurse Education Today, 45*, 142-147. <http://dx.doi.org/10.1016/j.nedt.2016.07.006>
- Schaeffer, A. (2013). The effects of incivility on nursing education, *Open Journal of Nursing, 3*, 178-181. <http://dx.doi.org/10.4236/ojn.2013.32023>
- Schrum, R.A. (2015). Nursing student retention in an associate degree nursing program utilizing a retention specialist. *Teaching and Learning in Nursing, 10*, 80-87. <http://dx.doi.org/10.1016/j.tkeb,2014.09.002>
- Shenton, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22*, 63-75.
- Shin, S., Park, J-H, & Kim, J-H. (2015). Effectiveness of patient simulation in nursing education: meta-analysis. *Nurse Education Today, 35*(1), 176-182. <https://doi-org.libdata.lib.ua.edu/10.1016/j.nedt.2014.09.009>
- Shingler-Nace, A. (2018). Conquering compassion fatigue: Lessons learned for the nurse manager. *Nursing Management, 49*(12), 38-45. <https://doi-org.libdata.lib.ua.edu/10.1097/01.NUMA.0000547836.02707.ee>
- Shosha, G.A. (2012). Employment of Colaizzi's strategy in descriptive phenomenology: A reflection of a researcher. *European Scientific Journal, 8*(27), 31-43.
- Spence Laschinger, H.K., Leiter, M., Day, A., & Gilin, D. (2009). Workplace empowerment, incivility, and burnout: impact on staff nurse recruitment and retention outcomes. *Journal of Nursing Management, 17*, 302-311.
- Starr, S.S. (2010). Associate degree nursing: Entry into practice—link to the future. *Teaching and Learning in Nursing, 5*, 129-134. doi: 10.1016/j.teln.2009.03.002
- Staykova, M.P. (2012). Community college education through the looking glass of associate degree nursing. *Teaching and Learning in Nursing, 7*, 93-97. doi: 10.1016/j.teln.2012.01.005

- Stillwell, S., Vermeesch, A., & Scott, J. (2017). Interventions to reduce perceived stress among graduate students: a systematic review with implications for evidence-based practice. *Worldviews on Evidence-Based Nursing, 14*(6), 507-513. doi: 10.1111/wvn.12250
- Sun, F.K, Long, A., Tseng, Y.S., Huang, H.M., You, J.H., & Chiang, C.Y. (2015). Undergraduate student nurses' lived experiences of anxiety during their first clinical practicum: A phenomenological study. *Nurse Education Today, 37*, 21-26. doi: <http://dx.doi.org/10.1016/j.nedt.215.11.001>
- Tinto, V. (2012). *Completing college rethinking institutional action*. Chicago: The University of Chicago Press.
- Turner, C., Keyzer, D., & Rudge, T. (2007). Spheres of influence or autonomy? A discourse analysis of the introduction of nurse practitioners in rural and remote Australia. *Journal of Advanced Nursing, 59*, 38-46.
- Turner, K., & McCarthy, V.L. (2017). Stress and anxiety among nursing students: A review of intervention strategies in literature between 2009 and 2015. *Nurse Education Practice, 22*, 21-29. doi: 10.1016/j.nepr.2016.110.002
- Urwin, S., Stanley, R., Jones, M., Gallagher, A., Wainwright, P., & Perkins, A. (2010). Understanding student nurse attrition: learning from the literature. *Nurse Education Today, 30*(2), 202-207. <https://doi.org/10.1016/j.nedt.2009.07.014>
- Vagle, M. (2018). *Crafting Phenomenological Research*. New York, NY: Routledge.
- van Manen, M. (1977). *Researching lived experience* (2nd ed.). London, Canada: Althouse Press.
- van Manen, M. (1997). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany, NY: State University of New York Press.
- van Manen, M. (2014). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany, NY: State University of New York Press.
- Watson, R., & Ali, P.A. (2017). Stressors affecting nursing students in Pakistan. *International Nursing Review, 64*, 536-543.
- Welch, J. (2014). HOPE for community college students: the impact of merit aid on persistence, graduation, and earnings. *Economics of Education Review, 43*, 1-20. <http://dx.doi.org/10.1016/j.econedurev.2014.08.001>
- Williams, K. (2014). An exploratory study: reducing nursing students stress levels facilitate perceived quality of patient care. *Open Journal of Nursing, 4*, 512-519. <http://dx.doi.org/10.4236/ojn.2014.47054>
- Wirihama, L., Welch, A., Williamson, M., Christensen, M., Bakon, S., & Craft, J. (2018). Using Colaizzi's method of data analysis to explore the experiences of nurse academics

teaching on satellite campuses. *Nurse Researcher*, 25(4), 30. doi:<http://dx.doi.org/10.7748/nr.2018.e1516>

Wu, T-Y., Fox, D.P., Stokes, C., & Adam, C. (2012). Work-related stress and intention to quit in newly graduated nurses. *Nurse Education Today*, 32, 669-674. doi: 10.1016/j.nedt.2011.09.002

Yehia, D., Jacoub, S., & Eser, S. (2016). Predictors of coping strategies among nursing college students at AL-Zaytoonah University of Jordan. *Journal of Education and Practice*, 7(15), 149-154. <https://files.eric.ed.gov/fulltext/EJ1103144.pdf>

Young, J. (2012). Common maladaptive coping responses. <http://www.schematherapy.com/id71.htm>

Yosetake, A.L., Camargo, I.M., Luchesi, L.B., Gherardi-Doonato, E.S., & Teixeira, C.A.B. (2018). Perceived stress in nursing undergraduate students. *SMAD, Rev. Eletronica Saude Mental Alcool Drog*, 14(2), 117-124. doi: 10.11606/issn.1806-6976,snad,2918,000336

Zhai, L. & Monzon, R. (2001). *Community college student retention: student characteristics and withdrawal reasons*. Los Angeles: ERIC Clearinghouse for Community Colleges.

Zhang, Y., Chernaik, M., & Hallet, K. (2017). Relationship issues among college nursing students: Associations with stress, coping, sleep, and mental disorders. *Teaching and Learning in Nursing*, 12, 246-252. [http://dx.doi.org/10.1016.j.teln.2017.06.005](http://dx.doi.org/10.1016/j.teln.2017.06.005)

APPENDIX A
PRELIMINARY INTERVIEW QUESTIONS

Participants must answer “yes” to two or more of the following preliminary interview questions to meet the requirements to participate in the study:

While in your associate degree in nursing program did you:

1. experience generalized anxiety?
2. experience test-performance anxiety?
3. experience feelings of being overwhelmed?
4. experience irritability?
5. experience changes in sleep patterns?
6. experience changes in your diet (i.e. weight loss or weight gain)
7. increase alcohol use?
8. use or increase use of non-prescription drugs?
9. obtain a prescription of anti-anxiety medication?
10. experience any physical symptoms of stress such as, but not limited to, gastrointestinal irritation or headaches (please specify symptoms)?

APPENDIX B
INFORMED CONSENT

Informed Consent

Please read this informed consent carefully before you decide to participate in the study.

Consent Form Key Information: You are being asked to participate in a research study. This study is called “Stressors and Coping Mechanisms of Associate in Science in Nursing Students: A Retrospective Phenomenological Study”. This study is being done by Mrs. Rhonda Gonzalez. Mrs. Gonzalez is a student at the University of Alabama pursuing a Doctorate in Education (EdD) for Nurse Educators degree.

- Participate in one or two one to two hour interviews
- No information collected will reveal your identity
- Information you may provide has the potential to reveal helpful information to associate degree nursing students all over the world

This study is a phenomenological study investigating the lived experiences of the stressors students faced during their academic career and the coping mechanisms they used to successfully manage their stress. Identification and implementation of coping mechanisms in the nursing curriculum may contribute to improved student retention (Farquharson, et al., 2012). Controlling stress would not only allow for increased retention in nursing programs, but ultimately could lead to more nurses entering into the profession and the work force (Melnik, et al., 2018; Lewis, et al., 2019).

Purpose of the research study: The purpose of this study is to identify coping mechanisms utilized successfully by graduates from an associate degree nursing program during their nursing program experience. Immersion into a new learning environment causes a reported increase in stress among nursing students (Chipas, et.al, 2012). This qualitative, phenomenological study will investigate the experiences of stress and the coping mechanisms used by associate degree nursing students who have graduated from an associate degree program and 1. Identify the sources of stress during their nursing education, 2. Identify and explore coping mechanisms the students may have utilized to help them complete nursing school. Without stress reduction techniques, students face the risk of being unsuccessful in the high demanding, fast-paced nursing curricula (Al-Gamal, Alhosain, & Alsunaye, 2017). Nursing research is saturated with the concept that stress and nursing school are related, but the gap in the research is data that would be most beneficial to students: how to cope with the stress.

What you will do in the study: If you agree to participate in the study, you will be asked to participate in an initial interview and possibly a follow-up interview. You will also be asked to read your transcribed interview for accuracy.

Time required: The study will require about one to two hours of your time. Initial interviews will last approximately one hour. If a follow up interview is needed, follow up interviews will require about one hour of your time.

Risks: There are minimal to no risk involved in participating in this study.

Benefits: There are no direct benefits to participating in the study. However, you may feel good knowing that you contributed to the possible betterment for future nursing students.

Confidentiality: You will be asked to provide a pseudonym of your choice for use in the research reporting. All interview transcriptions will be kept in a password protected computer, with the researcher being the only accessor.

Data linked with identifying information: The information that you give in the study will be handled confidentially. Your information will be assigned a pseudonym chosen by you. The list connecting your name to this pseudonym will be kept in a locked file, UA Box. When the study is completed, and the data have been analyzed, this list will be destroyed. Your name will not be used in any report. If you are using audio taped recorded interviews will be transcribed and housed in UA Box.

Voluntary participation: Participation in this study is strictly voluntary. You may choose not to participate in this study. .

Study implementation and records can be reviewed by the University of Alabama Institutional Review Board (IRB). IRB is a committee that watches out for the ethical treatment of people in research studies. The IRB strives to protect people in research studies and ensure that the study is implemented as planned.

Right to withdraw from the study: You have the right to withdraw from the study at any time without penalty at any time during the study. If you choose to withdraw from the study after interviews are conducted, any audio recorded interviews and/or transcribed interviews will be destroyed.

How to withdraw from the study: If you chose not to participate in the study, you may notify the researcher of your decision to withdraw from the study prior to the interviews. If you decide during the interview that you no longer want to participate in the study, tell the researcher to stop the interview and you are withdrawing from the study. If you decide that you no longer want to participate after the initial interview, notify the researcher via email or phone that you no longer want to participate in the study.

Compensation/Reimbursement: You will receive no payment for participating in the study.

Using data beyond this study: The researcher would like to make the information collected in this study available to other researchers after the study is completed. Your information will be stored, used and shared for future research studies, including but not limited to (describe examples of potential future studies). Researchers of future studies will not ask your permission for each new study. However, the information you provide will be combined with the information provided by others to create a large data set. Your name and other information that could potentially identify you will not be connected to the information shared with other researchers nor will they attempt to identify you.

If you have questions about the study or need to report a study related issue please contact, contact:

Principal Investigator: Rhonda Gonzalez
Title: Graduate Student
Department Name: The University of Alabama
Telephone: 334-341-7060
Email address: ragonzalez@crimson.ua.edu

Faculty Advisor: Dr. Becky Atkinson
Department Name: Educational Leadership, Policy and Technology Studies
Telephone: 205-348-0357
Email address: atkin014@ua.edu

If you have questions about your rights as a participant in a research study, would like to make suggestions or file complaints and concerns about the research study, please contact: Ms. Tanta Myles, the University of Alabama Research Compliance Officer at (205)-348-8461 or toll-free at 1-877-820-3066. You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach Website at <http://ovpred.ua.edu/research-compliance/prco/>. You may email the Office for Research Compliance at rscompliance@research.ua.edu.

Agreement:

- I agree to participate in the research study described above.
- I do not agree to participate in the research study described above.
- I agree to audio recordings in the research study described above.
- I do not agree to audio recordings in the research study described above.

Signature of Research Participant

Date

Print Name of Research Participant

Signature of Investigator or other Person Obtaining Consent

Date

Print Name of Investigator or other Person Obtaining Consent

APPENDIX C

SOCIAL MEDIA RECRUITMENT POST

“ISO: Research participants! Are you a registered nurse who graduated from an ADN program within the last two years? Would you be willing to participate in a study about nursing school and STRESS?! If you experienced increased amounts of stress during nursing school and would be willing to share your story, PM, email (ragonzalez@crimson.ua.edu), or text me (334-341-7060) to participate in the study. Your story could potentially help others. All information will be confidential.”

APPENDIX D
SOCIAL MEDIA POST APPROVAL

Hi Rhonda –

Thank you for reaching out. This post is approved by Strategic Communications. If there is anything else I can do to assist you, please let me know.
All the best on your research!

Jennifer

Jennifer Rodrigues

Director of Brand Strategy

Division of Strategic Communications

The University of Alabama

Rose 117

Tuscaloosa, AL 35487

Phone 205-348-5768

jennifer.rodrigues@ua.edu | <http://strategiccommunications.ua.edu>



Twitter | Facebook | YouTube | Instagram

From: Rhonda Gonzalez <ragonzalez@crimson.ua.edu>

Sent: Thursday, September 5, 2019 10:16 AM

To: Rodrigues, Jennifer <jennifer.rodrigues@ua.edu>

Subject: Social Media Post Approval

Good morning!

I just spoke with you on the phone regarding my IRB application (Protocol ID 19-07-2536) and the Facebook post that I would like to use to recruit participants. In my IRB return notes, they are requesting documentation that this post has been reviewed and approved by UA Strategic Communications.
Please let me know if there are any additions/changes I need to make to the post, or if I can use as it is below.

Thank you for your assistance.

Rhonda Gonzalez

This is the post that I would like to use from my personal page:

Appendix A: Social Media Recruitment Post

“ISO: Research participants! Are you a registered nurse who graduated from an ADN program within the last two years? Would you be willing to participate in a study about nursing school and STRESS?! If you experienced increased amounts of stress during nursing school and would be willing to share your story, PM, email (ragonzalez@crimson.ua.edu), or text me (334-341-7060) to participate in the study. Your story could potentially help others. All information will be confidential.”

APPENDIX E
IRB APPROVAL

September 10, 2019

Rhonda Gonzalez
Dept of ELPTS
College of Education
Box 870302

Re: IRB # EX-19-CM-196: "Stressors and Coping Mechanisms of Associate in Science in Nursing Students: A Retrospective Phenomenological Study"

Dear Rhonda Gonzalez:

The University of Alabama Institutional Review Board has granted approval for your proposed research. Your application has been given exempt approval according to 45 CFR part 46. Approval has been given under exempt review category 2 as outlined below:

(2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

(ii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

The approval for your application will lapse on September 9, 2020. If your research will continue beyond this date, please submit the annual report to the IRB as required by University policy before the lapse. Please note, any modifications made in research design, methodology, or procedures must be submitted to and approved by the IRB before implementation. Please submit a final report form when the study is complete.

Please use reproductions of the IRB approved informed consent form to obtain consent from your participants.

Sincerely,



Director & Research Compliance Officer

Informed Consent

Please read this informed consent carefully before you decide to participate in the study.

Consent Form Key Information: You are being asked to participate in a research study. This study is called “Stressors and Coping Mechanisms of Associate in Science in Nursing Students: A Retrospective Phenomenological Study”. This study is being done by Mrs. Rhonda Gonzalez. Mrs. Gonzalez is a student at the University of Alabama pursuing a Doctorate in Education (EdD) for Nurse Educators degree.

- Participate in one or two one to two hour interviews
- No information collected will reveal your identity
- Information you may provide has the potential to reveal helpful information to associate degree nursing students all over the world

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Purpose of the research study: The purpose of this study is to identify coping mechanisms utilized successfully by graduates from an associate degree nursing program during their nursing program experience. Immersion into a new learning environment causes a reported increase in stress among nursing students (Chipas, et.al, 2012). This qualitative, phenomenological study will investigate the experiences of stress and the coping mechanisms used by associate degree nursing students who have graduated from an associate degree program and 1. Identify the sources of stress during their nursing education, 2. Identify and explore coping mechanisms the students may have utilized to help them complete nursing school. Without stress reduction techniques, students face the risk of being unsuccessful in the high demanding, fast-paced nursing curricula (Al-Gamal, Alhosain, & Alsunaye, 2017). Nursing research is saturated with the concept that stress and nursing school are related, but the gap in the research is data that would be most beneficial to students: how to cope with the stress.

What you will do in the study: If you agree to participate in the study, you will be asked to participate in an initial interview and possibly a follow-up interview. You will also be asked to read your transcribed interview for accuracy.

Time required: The study will require about one to two hours of your time. Initial interviews will last approximately one hour. If a follow up interview is needed, follow up interviews will require about one hour of your time.

Risks: There are minimal to no risk involved in participating in this study.

Project Title: Stressors and Coping Mechanisms of Associate in Science in Nursing Students: A Retrospective Phenomenological Study

Benefits: There are no direct benefits to participating in the study. However, you may feel good knowing that you contributed to the possible betterment for future nursing students.

Confidentiality: You will be asked to provide a pseudonym of your choice for use in the research reporting. All interview transcriptions will be kept in a password protected computer, with the researcher being the only accessor.

Data linked with identifying information: The information that you give in the study will be handled confidentially. Your information will be assigned a pseudonym chosen by you. The list connecting your name to this pseudonym will be kept in a locked file, UA Box. When the study is completed, and the data have been analyzed, this list will be destroyed. Your name will not be used in any report. If you are using audio taped recorded interviews will be transcribed and housed in UA Box.

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Compensation/Reimbursement: You will receive no payment for participating in the study.

Using data beyond this study: The researcher would like to make the information collected in this study available to other researchers after the study is completed. Your information will be stored, used and shared for future research studies, including but not limited to (describe examples of potential future studies). Researchers of future studies will not ask your permission for each new study. However, the information you provide will be combined with the information provided by others to create a large data set. Your name and other information that could potentially identify you will not be connected to the information shared with other researchers nor will they attempt to identify you.

Project Title: Stressors and Coping Mechanisms of Associate in Science in Nursing Students: A Retrospective Phenomenological Study

If you have questions about the study or need to report a study related issue please contact,

contact: Principal Investigator: Rhonda Gonzalez

Title: Graduate Student

Department Name: The University of Alabama

Telephone: 334-341-7060

Email address: ragonzalez@crimson.ua.edu

Faculty Advisor: Dr. Becky Atkinson

Department Name: Educational Leadership, Policy and Technology Studies

Telephone: 205-348-0357

Email address: atkin014@ua.edu

If you have questions about your rights as a participant in a research study, would like to make suggestions or file complaints and concerns about the research study, please contact:

Ms. Tanta Myles, the University of Alabama Research Compliance Officer at (205)-348-8461 or toll-free at 1-877-820-3066. You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach Website at <http://ovpred.ua.edu/research-compliance/prco/>. You may email the Office for Research Compliance at rscompliance@research.ua.edu.

Agreement:

I agree to participate in the research study described above.

I do not agree to participate in the research study described above.

I agree to audio recordings in the research study described above.

I do not agree to audio recordings in the research study described above.

Signature of Research Participant

Date

Print Name of Research Participant

Signature of Investigator or other Person Obtaining Consent

Date

Print Name of Investigator or other Person Obtaining Consent

Page 3 of 4

UNIVERSITY OF ALABAMA IRB
CONSENT FORM APPROVED: 9/10/19
EXPIRATION DATE: 9/9/2020

Project Title: Stressors and Coping Mechanisms of Associate in Science in Nursing Students: A Retrospective Phenomenological Study

UNIVERSITY OF ALABAMA IRB
CONSENT FORM APPROVED: 9/10/19
EXPIRATION DATE: 9/9/2020

APPENDIX F

SEMI-STRUCTURED INTERVIEW QUESTIONS/GUIDE

1. Tell me why you chose a career in nursing.
2. When you hear the term “stress” what are five terms or words that come to mind?
3. When did you first recognize that you were experiencing stress?
4. Did you notice a pattern to when you experienced stress?
5. How did the increased amounts of stress make you feel in relation to whether the stress was manageable or unmanageable?
6. What means did you feel that you had to deal with your stress?
7. Tell me about your most stressful experience in nursing school.
8. What support system did you have while in nursing school?
9. Looking back at your time as a nursing student, do you feel you dealt successfully with your stress? If yes, how*? If no, how?
10. To what do you attribute to your success in completing school and passing the NCLEX-RN®?
11. How are you dealing with the stress in your workplace?

****probe/investigate further to see if the participant will elaborate on coping mechanisms.***

APPENDIX G
FOLLOW-UP INTERVIEW QUESTIONS

1. What is your definition of stress?
2. How did you identify that you were experiencing stress while in nursing school?
3. What were some stressful moments, academically or/and personal, that you experienced while in nursing school?
4. How did you decide that you were able to deal with your stress?
5. What is your definition of coping?
6. What resources did you identify that helped you deal with your stress?
7. Was there ever a time that you felt you were unable to control or manage your stress? If so, can you tell me more about that?
8. Looking back at your time in nursing school, how do you feel about the stress you experienced?
9. Looking back at your time in nursing school, do you feel that your chosen methods of coping were beneficial?
10. Any other information you would like to share? If so, please do!

APPENDIX H
DATA ANALYSIS CHART

Data Analysis Incorporation of Colaizzi's 7 Steps to Data Analysis and organized by Lazarus & Folkman's Transactional Model of Stress & Coping	Significant Statements (94)	Formulated Meanings (35)	Clustered Themes (31)	Exhaustive Descriptions (22)	Fundamental Structures (3)
Primary Appraisal					
Interview question 3: When did you first recognize that you were experiencing stress in nursing school?	<p>“First semester” (1)</p> <p>“More stressful at the beginning because you don't really know what to expect” (2)</p> <p>“Pretty early on” (3)</p> <p>“Second week of nursing school” (4)</p> <p>“The very first day really” (5)</p> <p>“I was stressed from day one” (6)</p> <p>“After the first nursing test” (7)</p> <p>“Second week of school” (8)</p>	<p>Stress beginning due to unknown expectations (1)</p> <p>Stress resulting from the beginning (2)</p> <p>Expectations: Known and Unknown- students knew what the expectations were, but also did not know what to expect (3)</p>	<p>Fear (1)</p> <p>Lack of confidence (2)</p> <p>Unknowing (3)</p> <p>Expectations (4)</p>	<p>I had this sense of urgency that haunted me.</p> <p>What if I failed?</p> <p>What if I was wasting time and money?</p> <p>I felt as though everything in my life was out of my control</p>	<p>I was afraid to fail.</p>

	<p>“investing time and money into pre-requisite classes not even knowing if I was even going to be accepted into the program” (9)</p> <p>“The very first time I realized I hadn’t studied enough for the very first nursing exam” (10)</p> <p>“From the time I registered for classes...It was last minute finding out. Then it continued throughout nursing school” (11)</p> <p>“stress is a feeling of not knowing what to do, how to do, or where to do. Just a rollercoaster of being overwhelmed” (12)</p> <p>“I identified my stress when I realized that I was not in control” (13)</p>	<p>Students began to feel as though they were losing control (4)</p> <p>The waiting game-life was out of control waiting to see if they were admitted to nursing school (5)</p>		<p>Expectations-both known and unknown caused me to fear I would fail</p> <p>It hits you hard: the fear and anxiety and helplessness</p>	
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<p>Interview question 4: Did you recognize a pattern to when you experienced stress?</p>	<p>“The closer we got to tests” (1) “I had a baseline level of stress at all times” (2) “Preparing for a test” (3) “Trying to balance everything” (4) “Lecture...I was almost trying to focus too hard, so it was stressing me out” (5) “Leaving lecture” (6) “Right before the test” (7) “Waiting for grades “Clinicals” (8) “Simulation, I was always nervous” (9) “After the first nursing test” (10) “Before tests” “Check offs” (11) “Clinical checkoffs” (12) “Before a test or during a test” (13)</p>	<p>Fear of failure: exams, simulation, clinical check offs, clinicals (6)</p> <p>Expectations: Known and Unknown-students knew what the expectations were, but also did not know what to expect (7)</p> <p>Stress began early in their journey (8)</p>	<p>Not the same as other higher education classes (1)</p> <p>Fear (2)</p> <p>Unexpected expectations (3)</p>	<p>Nursing school is completely different from anything else, even if you have been in school for years, it’s just different.</p> <p>I was afraid I was going to fail all the time</p> <p>It’s like nursing school throws you a curveball and you blink</p> <p>What if I failed?</p>	<p>I was afraid to fail.</p>
<p>Secondary Appraisal</p>					

<p>Interview question 5: How did the increased amounts of stress make you feel in relation to whether the stress was manageable or unmanageable?</p>	<p>“I don’t know if I would say that I ever felt that my stress was unmanageable” (1) “I really felt like it was unmanageable at times” (2) “It was just hard to cope with” (3) “Waking up with anxiety...we are going to finish this and start a new one and we haven’t even had a test on the other one yet. So it’s just like 15 million things as soon as I woke up” (4) “When I first started...I would say the stress was unmanageable...but as I continued to go through the program, I learned to manage the stress” (5) “I felt I could manage it once I realized what it</p>	<p>Expectations: Known and Unknown- students knew what the expectations were, but also did not know what to expect (9) Overcoming fear: determination (10) Doing “what it takes” to pass (11) Desires: to be successful and pass (12) Have faith that you can be successful (13)</p>	<p>Determination (1) Confidence (2) Desire is greater than fear (3) Remove the negative (4) Natural drive (5)</p>	<p>I was determined to be successful I had to get out of my own head: I was going to pass Accountability is key You are responsible for you and your learning My desire to succeed outweighed my fear I had to remove fear and doubt from my mind Self-confidence- I had to get it and keep it</p>	<p>I was afraid to fail. I was determined to succeed.</p>
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	<p>was” (6) “I was never at peace with like, ok, I studied this, I can handle it, I can calm down” (7) “My stress was always unmanageable” (8) “I managed it” (9)</p>			<p>Ignore the outside voices: “you hear people who have been through nursing school...talk about how hard it is”</p> <p>I had a drive to really know the material and learn it to pass the tests</p>	
<p>Interview Question 6: What means did you feel that you had to deal with your stressors?</p>	<p>“Study and be prepared” (1) “I made sure I took time to do stuff that I liked” (2) “I would mostly sleep” (3) “My parents were a good support system” (4) “My husband” (5) “I slept and drank a lot of coffee” (6) “I smoked cigarettes...lots of cigarettes” (7) “I had a</p>	<p>Preparation is key (14) Determination was a driving factor (15) Seeking out support and coping mechanisms (16) Reliance on family, others (17) Coping</p>	<p>Responsibility (1) Remove the negative (2) Natural drive (3) Desires (4) Resolve (5)</p>	<p>Accountability is key You are responsible for you and your learning I had a drive to really know the material and learn it to pass the tests Ignore the outside voices: “you hear people</p>	<p>I was afraid to fail. I was determined to succeed. I relied on others to help me cope with the stress.</p>

	<p>prescription for Xanax...I did get addicted to it” (8) “I would drink every night” (10) I would always take a bath...nothing like sitting in a bath tub” (11) “Coping with music, which I use a lot now, too” (12) “The study group itself.” (13) “Family. I was able to spend time with family” (14) “Self talks. I had to remove the fear and doubt because number one, I knew I wasn’t a dumb person” (15) “I ate. That was my coping mechanism all through nursing school” (16) “I had my husband which was my boyfriend at the time, and my parents” (17)</p>	<p>mechanisms: healthy or unhealthy: what worked for each individual (18)</p>		<p>who have been through nursing school...talk about how hard it is” I was determined to be successful</p>	
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	<p>“Venting to family and classmates” (18)</p> <p>“I ran. I ran a lot! I was like Forrest Gump. I started running, and running, and running” (19)</p> <p>“I decided that I had to do something to deal with the stress because I was determined to be successful and I was going to pass” (20)</p>				
<p>Interview Question 7: Tell me about your most stressful experience in nursing school</p>	<p>“Probably last semester with mental health. Almost failed it” (1)</p> <p>“Preceptor was stressful” (2)</p> <p>“All the tests. I thought it would get better because we had preceptorship and all that, but nope. It was a test every week and it was</p>	<p>Expectations: Known and Unknown- students knew what the expectations were, but also did not know what to expect (19)</p> <p>Fear of failure. Preparation is key to success (20)</p> <p>Fear during</p>	<p>Distress (1)</p> <p>Unaware (2)</p> <p>Unknown expectations (3)</p>	<p>What if I failed?</p> <p>What if I was wasting time and money?</p> <p>Expectations- both known and unknown caused me to fear I would fail</p> <p>I was afraid I</p>	<p>I was afraid to fail.</p> <p>I was determined to succeed.</p>

	<p>tough to prepare” (3) “Third semester when I had to make a 74 on the final to pass and I had what I did was I was taking the final and I sat there and marked on my paper how many I thought I had missed...I had gotten past that number and I freaked out” (4) “Summer...And I ended up failing that semester...that really, really, really brought on the stress. From the time I saw my average, I cried. I really couldn’t believe it at first” “”I made like a 72 or something on the second one (test). Knowing that you need an 80 or better, that kind of put me in a position</p>	<p>examinations was real. “I freaked out” (21) Fear of failure related to expectations (22) Performance expectations of self and others (faculty, family) (23)</p>		<p>was going to fail all the time. Nursing school is completely different from anything else, even if you have been in school for years, it’s just different.</p>	
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	<p>of oh my God that's not good. I'm failing or I can't to that again" (5)</p> <p>"The day before I took my final exam for third semester. I was borderline then. I knew I had to make a certain grade and it was just like the night before it was like I just lost it...I was just over overcome with this feeling of complete anxiety and helplessness almost" (6)</p> <p>"Check offs" (7)</p> <p>"Clinical checkoffs...It was something about performing such steps in front of the instructors without messing up or forgetting the next step" (8)</p> <p>"It was the first time that I was to give a shot in the</p>				
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	hospital...I got a good chewing out in the hallway about being incompetent ant that better not happen again or I would fail clinically...I was mortified.” (9)				
Coping					
Interview Question 8: What support system did you have while in nursing school?	<p>“I had my husband...my family, friends. It was good to have friends in nursing” (1)</p> <p>” I had my mentors there, which were great” (2)</p> <p>“I leaned on family and the school” (3)</p> <p>“My dad...and the instructors” (4)</p> <p>“I would say family” (5)</p> <p>“I got support from classmates because we was going through the same thing” (6)</p> <p>“We had the</p>	<p>Reliance on family members, others was important (24)</p> <p>Support from faculty/instructors (25)</p> <p>Experiencing the same stressors, “things” (26)</p> <p>Study groups were key to success- support from classmates (27)</p>	<p>Will power (1)</p> <p>Accountability (2)</p> <p>Assistance from others (3)</p> <p>Support from others (4)</p>	<p>I was determined to be successful</p> <p>I had to get out of my own head: I was going to pass</p> <p>Accountability is key, You are responsible for you and your learning</p> <p>Classmates were going through the same thing and that helped me</p>	<p>I was afraid to fail.</p> <p>I was determined to succeed.</p> <p>I relied on others to help me cope with the stress.</p>

	<p>instructors and my classmates...had my family” (7) “My family” (8) “I had my husband...my parents” (9) “Family and classmates...my study group” (10)</p>			<p>Reassurance and support from study group helped get me through</p> <p>My nursing instructors were great mentors. They helped calm me down and see the bigger picture,</p> <p>Development of peer friendships that I maintain today</p>	
<p>Interview Question 9: Looking back at your time as a nursing student, do you feel you dealt successfully with your stress? HOW?</p>	<p>“I think I handled it well. I just always made sure to, if I was feeling very overwhelmed...I would take time away from studying...and do whatever it was that I enjoyed at the time” (1)</p>	<p>Expectations: Known and Unknown- students knew what the expectations were, but also did not know what to expect (28)</p> <p>Friendship</p>	<p>Assistance from others (1)</p> <p>Strength of mind (2)</p> <p>Self-confidence (3)</p>	<p>Reassurance and support from study group helped get me through</p> <p>I was determined to be successful</p>	<p>I relied on others to help me cope with the stress.</p> <p>I was determined to succeed.</p>

	<p>“Ummmm...no” (2) “I think successfully because I passed” (3) “I think I dealt with the stress...in a positive way because I was able to make and continue to have long lasting friendships with the people that I studied with” (4) “Yes. Making sure that I was calm, making sure I prepared myself readily after I knew exactly to test” (5) “Probably not.... I feel like I let my stress get, like take over because it would carry over into my test taking” (6) “I was unable to overcome the stress, I just tried to deal with it day by</p>	<p>development that continue today and were important in school (29) Preparation is key to dealing with the stress (30)</p>		<p>My desire to succeed outweighed my fear I had to get out of my own head: I was going to pass</p>	
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	<p>day” (7) “That’s hard to answer, I’m not sure if I did” (8) “I guess successfully because I passed nursing school and passed NCLEX” (9)</p>				
<p>Interview Question 10: To what do you attribute to your success in completing school and passing NCLEX?</p>	<p>“I had a lot of support” (1) “my natural drive to get through school” (2) “The mentors, that’s for sure. I will tell anybody, don’t complain about it, just do it, it’s worth it (when discussing mentor suggestions)” (3) “God” (4) “It goes back to the study group.... we all wanted to see each other excel and accomplish the ultimate goal” (5) “the instructors, number one. And my study group”</p>	<p>Family support (31) Natural drive to succeed (32) Support from others: classmates, instructors (33) Study groups (34) Preparation: being prepared is key (35)</p>	<p>Self Care (1) Maintenance of health (2) Reassurance (3) Mentors (4)</p>	<p>Classmates were going through the same thing and that helped me Reassurance and support from study group helped get me through I started doing things for me My nursing instructors were great mentors. They helped calm me down</p>	<p>I was determined to succeed. I relied on others to help me cope with the stress.</p>

	<p>(6) “Being prepared”</p> <p>(7) “Persistent studying” (8) “Studying like there is no tomorrow! I kept my head in my notes” (9) “Staying on top of studying and never getting behind”</p> <p>(10) “My study group and classmates. They were a life saver!” (11)</p>			<p>and see the bigger picture</p> <p>Development of peer friendships that I maintain today</p>	
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