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Amber Lynn Johnson

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STRESS AND COPING STRATEGIES: PERCEPTIONS OF STUDENT REGISTERED NURSE ANESTHETISTS

by

Amber L. Johnson
Bachelor of Nursing, University of North Dakota, 1999
Master of Science, University of North Dakota, 2006

A Dissertation
Submitted to the Graduate Faculty
of the
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in partial fulfillment of the requirements

for the degree of
Doctor of Philosophy

Grand Forks, North Dakota
December
2018
This dissertation, submitted by Amber L. Johnson in partial fulfillment of the requirements for the Degree of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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This dissertation is being submitted by the appointed advisory committee as having met all the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

Dr. Grant McGimpsey
Dean of the School of Graduate Studies

Date
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Title: Stress and Coping Strategies: Perceptions of Student Registered Nurse Anesthetists

Department: Teaching and Learning

Degree: Doctor of Philosophy

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Amber L. Johnson
December 15, 2018
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ABSTRACT

The purpose of this study was to better understand the way Doctor of Nursing Practice (DNP) students perceive stress and during which period of their program they tend to encounter the most stress, compared to students enrolled in a Master’s program. As each nurse anesthesia program transitions to a DNP curriculum, it will be beneficial to determine how DNP students perceive stress, and during which period of their program they encounter the most stress, in comparison to those students who are enrolled in a master’s program.

Participants for this mixed methods online study included a convenience sample of 237 nurse anesthesia students currently enrolled in a nurse anesthesia educational program in the United States. Measures in this study explored how nurse anesthesia students perceived stress and how they coped with stress in their academic career. The Pearson Chi-square test, Cramer’s V association index and thematic analysis were utilized to analyze data. An alpha level of .05 was maintained for all statistical analyses.

How master and doctoral students experience stress and cope with stress was not found to be significantly different. However, both master and doctoral students indicated they were exposed to a tremendous amount of stress with school being the major stressor. They identified several factors that they believed contributed to their stress. This study provides suggestions for nurse anesthesia programs to implement in their curriculums to decrease the amount of stress experienced by students.
CHAPTER I

INTRODUCTION

Stress is present in all aspects of life and is considered to be an essential motivator. However, too much stress can have negative impacts on an individual. Healthcare professions are stressful in nature, and nurse anesthetists are not excluded from this stress. Due to the stressful nature of their career, personality type, their extensive knowledge of medications, and enabling of colleagues, an estimated 10-15% of CRNAs are addicted to the narcotics they administer to their patients (Valdes, 2014, p. 95).

There are approximately 80,000 anesthesia providers in the United States, which translates to 8,000 – 12,000 practitioners who may be abusing the very drugs they are administrating to their patients (Valdes, 2014). However, one must be mindful that determining the actual number of providers who are abusing drugs is impossible. Due to possible harsh consequences a provider will experience, most will not willingly admit to their addiction.

Often impaired anesthesia providers are difficult to identify. They are well educated regarding signs and symptoms of impairment and conceal their own symptoms well. The anesthesia profession requires a practitioner be alert and respond rapidly to hemodynamic changes within a patient. When a provider is impaired, their alertness and
responsiveness are altered. Therefore, addiction in a provider is often not discovered until the afflicted practitioner or a patient in their care is severely injured or dies.

Drug use and abuse have been identified as coping mechanisms to deal with the stress many Certified Registered Nurse Anesthetists (CRNAs) encounter. Intervening early, while an individual is in school, to provide them with knowledge and skills for coping with stress in a healthy fashion will ideally decrease the amount of addiction as well as other health related issues within the nurse anesthesia profession.

Providing Student Registered Nurse Anesthetists (SRNAs) with the tools to effectively manage stressful encounters while in school and during their career will hopefully decrease the amount of addiction in the profession. The goal of this project is to determine how stress impacts the lives of students in Doctor of Nursing Practice (DNP) and Master of Science (MS) nurse anesthesia programs.

Rationale for Study

As each nurse anesthesia program within the United States transitions to a Doctor of Nursing Practice (DNP), which is mandated by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA), it will be necessary to determine the way DNP students perceive stress, and during which period of their program they encounter the most stress, compared to students enrolled in a master’s program. Furthermore, this information will provide nurse anesthesia program faculty with valuable information on types of healthy coping strategies that should be implemented, as well as which time each mechanism will be most useful in the new doctoral curriculum.

Established in 1978, the COA provides educational standards for nurse anesthesia programs in the United States, its territories, and protectorates (Council on Accreditation
of Nurse Anesthesia Educational Programs, 2012). The COA board consists of 12 members who represent nurse anesthesia educators and practitioners, nurse anesthesia students, health care administrators, universities, and public members (Council on Accreditation of Nurse Anesthesia Educational Programs, 2012). The purpose of these educational standards are to ensure that nurse anesthesia programs have developed and implemented essential strategies to comply with five standards: “(I) governance, (II) resources [sic] (III) program of study, (IV) program effectiveness, and (V) accountability” (Council on Accreditation of Nurse Anesthesia Educational Programs, 2012, p. viii).

Statement of Problem

According to previous research studies, the population comprised of Student Registered Nurse Anesthetists in the United States has encountered a tremendous amount of stress while enrolled in their master’s programs, which has negatively impacted their lives. Therefore, this researcher hypothesizes that students will continue to experience stress at alarmingly high rates while enrolled in their respective DNP nurse anesthesia programs.

The Council on Accreditation of Nurse Anesthesia Educational Programs (COA) for nurse anesthetists has recognized a need for creating awareness and educating students about wellness and substance abuse. During the January 2011 COA meeting, a draft of Standard III, Criterion c21e6, regarding implementing wellness and substance use disorder education within nurse anesthesia curriculum, was presented with a call for comments and further revisions. On January 1, 2013, the criterion under (Standard III,
Criterion c21e6) became a new requirement for all accredited nurse anesthesia programs (S. Monsen, personal communication, September 21, 2017).

The COA has mandated that all accredited programs are to include wellness and substance abuse topics within their curriculum. After having nurse anesthesia program administrators attend numerous “Assembly of School Faculty” conferences, and after discussing the issue with several program administrators from across the country, program administrators arrived at a consensus that schools did not have enough allotted time within their already compressed curriculum to allow for more than an hour for lectures on each topic. The transition from a master’s program to a DNP program will add an additional three months of education; although more classes will be added, the hope is more time will be dedicated to educating students about wellness and substance abuse on a continuous basis.

**Statement of Purpose**

The purpose of this mixed methods research study is to explore how nurse anesthesia students perceive, experience, and cope with stress during their academic career. Determining several factors (e.g., how students perceive stress; how stress affects the lives of students; during which period of their academic careers students experience the most stress, and how they deal with it) will provide nurse anesthesia program faculty with information required to strategically implement healthy coping strategies/resources throughout nurse anesthesia curricula. Providing students with the knowledge and skills to handle stress in a healthy manner during their education may help them be successful during their academic career and also help them cope with stressful situations they will most likely encounter during their professional career. Ideally, when a stressful situation
is encountered, a student will apply knowledge and skills they have acquired in school to deal with the stress, rather than turning to unhealthy behaviors.

It is evident that a substantial amount of research has been conducted regarding stress and its effects, both positive and negative, on college students. In fact, research has been done specifically on nurse anesthesia students regarding stress, coping mechanisms, and program structure. According to Perez and Carroll-Perez (1999): “Several studies have reported that students frequently have sleep difficulties before an examination or clinical experience. Factors affecting students include authoritarianism, lack of support and understanding, unrealistic study loads, intensive testing, and harsh grading systems” (p. 79).

**Research Questions**

The primary research questions chosen for this research study were as follows:

1. Is there a difference between how Doctor of Nursing Practice (DNP) and master students:
   a. Perceive and experience stress in their educational programs?
   b. Cope with stressful events?
2. How do DNP and master students self-report:
   a. What they consider to be causing them the most stress?
   b. How they coped with each stressful situation?
   c. What their educational programs could implement that would help them cope with stress in a healthy manner?
Key Terminology

For readers to be able to better understand this study, they must know what terminology is associated with nurse anesthesia education and the nurse anesthesia profession. A list of terms and their definitions follow.

American Association of Nurse Anesthetists (AANA)

Founded in 1931, the American Association of Nurse Anesthetists is the professional association representing more than 50,000 Certified Registered Nurse Anesthetists (CRNAs) and student registered nurse anesthetists nationwide. The AANA promulgates education and practice standards and guidelines, and affords consultation to both private and governmental entities regarding nurse anesthetists and their practice. (American Association of Nurse Anesthetists [AANA], 2017b, para. 1)

Certified Registered Nurse Anesthetist (CRNA)

For the purpose of this dissertation, a CRNA is defined as an advanced practice nurse who . . .

. . . administers anesthesia for all types of surgical cases, from the simplest to the most complex. CRNAs provide anesthesia in collaboration with surgeons, anesthesiologists, and other qualified health care professionals and practice in every setting in which anesthesia is delivered, including traditional hospital surgical suites and obstetrical delivery rooms, ambulatory surgical centers, dentists’ offices, pain management clinics, and more. They have long held an important role on the battlefield as well. (Kansas University Medical Center, 2016)
Council on Accreditation of Nurse Anesthesia Educational Programs (COA)

The COA provides educational standards and is the accrediting agency for nurse anesthesia programs in the United States, its territories, and protectorates (Council on Accreditation of Nurse Anesthesia Educational Programs, 2012). The twelve member board represents nurse anesthesia educators and practitioners, nurse anesthesia students, health care administrators, universities and public members.

Front Loaded Program

“. . . all or most of the didactic portion of the program was presented before the clinical experiences” (Chipas et al., 2012, p. S51).

Integrated Program

“. . . students were in the classroom and receiving clinical education simultaneously” (Chipas et al., 2012, p. S51).

Student Registered Nurse Anesthetist (SRNA)

For the purpose of this dissertation, an SRNA is defined as a registered nurse with a minimum of 1 year of experience in an intensive care unit, who is currently enrolled in an accredited nurse anesthesia program (Council on Accreditation of Nurse Anesthesia Educational Programs, 2012).

Assumptions

1. Participants answered survey questions truthfully and to the best of their ability.

2. Participants had a sincere interest in participating in the research project and did not have any other motives for participating.
3. Participants experienced stressful events during the course of their nurse anesthesia education.

4. Each participant met the qualifications indicated in the research study for being eligible to participate.

5. There are unknown factors at each institution where students are enrolled in a nurse anesthesia program that could bias their responses.

6. A participant could be experiencing an unusual event in their life at the time of the study that could influence their responses.

7. The study focuses solely on nurse anesthesia students; therefore, generalizability to other professions is limited.

**Delimitations**

1. The survey was sent electronically to nurse anesthesia students utilizing Qualtrics®.

2. The research study was limited to two groups: nurse anesthesia students enrolled in a DNP nurse anesthesia program and nurse anesthesia students enrolled in a master’s degree program.

**Organization of Study**

In chapter I an introduction, statement of the problem, statement of the purpose, rationale for the study, research questions, key terminology, assumptions, and delimitations of the study were provided. Chapter II contains a review of the literature for wellness and stress experienced by students in nurse anesthesia educational programs. Methodology, including research design, survey instrument description, participants, and procedures for data collection and analysis, are discussed in Chapter III. Research
findings and data analysis are reported in Chapter IV. Finally, a discussion of the findings, implications for best practices, and suggestions for future research will be provided in Chapter V.
CHAPTER II

LITERATURE REVIEW

The purpose of this study was to better understand the way Doctor of Nursing Practice (DNP) students perceive stress and during which period of their program they tend to encounter the most stress compared to students enrolled in a master’s program. To understand the rationale behind the study, a review of literature current at the time of the study was necessary.

This chapter will include the conceptual framework for this study as well as a synthesis of the main topics in the literature reviewed that pertain to the goal of this study. Literature regarding stress, the effects of stress, and nurse anesthesia education will be reviewed.

Conceptual Framework

The conceptual framework that provides the foundation for this research is Hans Selye’s *Evolution of the Stress Concept*. During his studies relating to hormone production, Hans Selye, an endocrinologist, discovered his subjects reacted in a predictable biological pattern to a variety of external stimuli. In an attempt to restore and maintain homeostasis, a body utilizes hormones in response to external stressors. Based on physiological and psychobiological bodily transformations, Hans explained his stress model known as the General Adaptation Syndrome (GAS). The GAS is comprised of three stages of physiological responses that a body goes through in response to stress: the
alarm stage, the resistance stage, and the exhaustion stage (Selye, 1973). In figure 1 an illustration of the General Adaptation Syndrome is provided.

![Selye's General Adaptation Syndrome](image)

**Figure 1.** The General Adaptation Syndrome. Reprinted with permission (Appendix A) from *General Adaptation Syndrome (GAS) Stages* by H. Lucille, August 31, 2016, para. 6. Copyright 2016 by Integrative Therapeutics.

### The Alarm Stage

Upon encountering a stressor, a body reacts by activating the sympathetic branch of the autonomic nervous system, also known as the “fight-or-flight” reaction (Selye, 1973). In response, the adrenal gland secretes the stress hormone cortisol, as well as catecholamines such as adrenaline and noradrenaline, which provides a body with energy to handle a stressor a body has met (Selye, 1973).

However, excess amounts of these hormones for a prolonged period of time can cause harm to a body. Adrenaline and noradrenaline increases blood pressure predisposing the brain and heart vessels to injury, ultimately increasing the risk of a heart attack or stroke (Selye, 1973). Cortisol influences blood sugar, metabolism, immune response, anti-inflammatory actions, blood pressure, heart and blood vessel contraction,
and central nervous system activation (Selye, 1973). Prolonged exposure to cortisol can lead to cardiovascular injuries, sleep disturbances, increased blood pressure, gastric disorders, and impaired cognitive performance amongst several other conditions (Selye, 1973).

The alarm stage is important and crucial for an initial response to a perceived stressor. However, excessive hormones responding to an alarm over an extended period of time can have devastating effects on the health of an individual.

**The Resistance Stage**

After the initial reaction to a stressor subsides, the parasympathetic nervous system attempts to restore a body to a state of homeostasis (Selye, 1973). Although blood glucose levels, cortisol, and adrenaline continue to circulate at increased levels for a time, a body attempts to restore balance and a period of renewal and repair emerges (Selye, 1973).

However, if the stressful condition persists, a body continues to fight and continues to remain in a state of arousal (Selye, 1973). After a prolonged period of time with little to no recovery, problems begin to manifest leading a body into the final stage of the General Adaptation Syndrome, exhaustion.

**The Exhaustion Stage**

A body reaches this stage when a stressor has persisted beyond a body’s ability to adapt (Selye, 1973). Resources are exhausted leading to health problems if the stress is not resolved. Increased levels of stress hormones for a prolonged period of time causes damage to nerve cells in tissues and organs resulting in impaired thinking, memory loss,
anxiety, depression, disease, or even death (Selye, 1973). Often, this stage is referred to as burnout or stress overload (Selye, 1973).

**Background**

Work-related stress and coping strategies begin while an individual is in school. In a study by Chipas et al. (2012), “Stress was reported to be 7.2 (on a 10 point Likert scale) for all students” (p. S51). Çivitci (2015) stated, “According to the Social Readjustment Rating Scale, all SRNAs are in at least a state of moderate life crisis because of changes in financial status, a new line of work, beginning school, and change in social activities” (p. 134). Therefore, it is imperative that students are taught and encouraged to regularly practice healthy coping strategies while in school.

Determining how students perceive stress, how stress impacts their lives, when they encounter the most stress, and what coping strategies would be most beneficial to them is essential for a student’s health while in school and as a practitioner. Chipas et al. (2012) suggested the following for wellness:

1. Provide peer support.
2. Formulate an exercise program that will “get me out of the house.”
3. Suggest ways to find affordable gyms for SRNAs.
4. Provide personal health and stress management tips.
5. Offer guidelines to promote healthy stress-free lifestyle.
6. Show videos on interacting with difficult people.
7. Propose integrating wellness into anesthesia school as an advertised resource.
8. Describe different types of stress relief that individuals or cultures use, from the perspective of someone using them, such as meditation.

9. Ensure affordable insurance coverage for all students enrolled in health professions. (“Half of my classmates do not have insurance because they can’t afford it, yet we take care of the sick.”)

10. Require schools to integrate wellness into the curriculum in a more routine way.

11. Reach out to students in anesthesia school more often.

12. Incorporate some of the researchers’ ideas to help minimize stress to students.

13. Give large discounts toward massage. (pp. S52-S53)

However, determining when in an academic program these suggestions should be applied to be most beneficial is essential.

**Nurse Anesthesia Profession**

Certified Registered Nurse Anesthetists (CRNAs) are advanced practice nurses who have delivered high quality, cost-effective anesthesia all over the United States for the past 150 years (American Association of Nurse Anesthetists [AANA], 2016). CRNAs work in collaboration with surgeons, obstetricians, anesthesiologists, dentists, and many other healthcare providers to deliver safe and effective anesthesia (AANA, 2017). Many rural communities depend solely on CRNAs for their anesthesia needs (AANA, 2016). Each year, CRNAs deliver approximately 43 million anesthetics throughout different cities and districts of the United States (AANA, 2016). According to the AANA (2016), “CRNAs practice with a high degree of autonomy and professional
respect. They carry a heavy load of responsibility” (Autonomy and Responsibility section, para. 1). The responsibilities allocated to CRNAs also create an enormous amount of stress within the profession.

The incidence of addiction in the anesthesia profession is estimated to be 10-15% of the population and is considered to be the primary occupational hazard (Valdes, 2014). In the United States, there are approximately 80,000 anesthesia providers (Valdes, 2014). Research has revealed that 10-15% of the anesthesia providers are abusing the same drugs they are administering to their patients, which equates to approximately 8,000 – 12,000 practitioners who abuse the same drugs they provide to their patients (Valdes, 2014). However, it is essential to be mindful that determining the exact number of anesthesia providers who are abusing drugs is impossible to know. Due to the harsh consequences a provider could experience should their addiction be discovered, most of them would not willingly admit to their addiction.

Addiction in the healthcare sector is more common than in many other professions (Valdes, 2014). Within the healthcare sector, substance abuse is more prevalent among anesthesia providers because of the stressful nature of their career, their adventurous personalities, and easy access to addictive potent narcotics (Valdes, 2014).

Often, impaired anesthesia providers, including students, are difficult to identify. They are well versed in regard to the signs and symptoms of impairment and can conceal it efficiently. The anesthesia profession requires a practitioner to be alert and respond rapidly to hemodynamic changes in a patient. When providers are impaired, their alertness and responsiveness are altered. Therefore, providers’ addiction is often not discovered until a practitioner or a patient in their care is severely injured or dies.
Drug and alcohol use and abuse have been identified as coping mechanisms to deal with the stress that many CRNAs and Student Registered Nurse Anesthetists (SRNAs) encounter. Early intervention, while students are enrolled in school, may provide them the knowledge and skills to cope with stress in a healthy fashion, ideally decreasing the degree of addiction within the nurse anesthesia profession.

**Stress**

Stress is a response that most individuals face on a daily basis; however, what may be stressful for one person may not cause the same degree of stress in another, and may not trigger the same response in another individual, depending upon their stress tolerance (Bland, Melton, Welle, & Bigham, 2012; Chipas & McKenna, 2011). Patnaik (2014) stated, “It is the imbalance between the perceived demand of the situation and the individual’s ability to meet the demand” (p. 281). There are two categories of stress: positive and negative (Civitci, 2015; Chipas & McKenna, 2011). It has been shown that a positive amount of stress in college students motivates them, providing a sense of accomplishment, happiness, satisfaction, and self-respect (Civitci, 2015). Negative stress has a detrimental impact on students and can lead to issues such as anxiety, depression, alcohol and drug addiction, and possibly, thoughts of suicide (Civitci, 2015).

Students typically experience a tremendous amount of stress after enrolling in a grueling graduate program such as nurse anesthesia. Previous research has ascertained that, typically, stress stems from, “concerns about academic achievement, uncertainty about their future, economic hardship, family-related problems, difficulties in relations with the opposite sex, and interpersonal relations” (Civitci, 2015, p. 566). A study conducted by Chipas et al. (2012) stated, “three major types of stressors may be present...
During nurse anesthesia education: academic stressors, clinical stressors, and external stressors” (p. S49).

During the first several semesters of nurse anesthesia school, students are provided with a substantial amount of new information they need to comprehend as well as memorize (Chipas et al., 2012). They are also expected to be able to articulate their mental processes during simulations in the laboratory that can be quite stressful (Phillips, 2010). While adjusting to and dealing with the academic stress placed upon them, external stressors such as financial hardships, difficulties in maintaining relationships, and other social concerns do not diminish for a student (Chipas et al., 2012).

Throughout their education, students are required to acquire clinical experience from a variety of clinical sites. At each clinical rotation, a student is assigned to multiple preceptors who perform anesthesia in ways that are different from one another. Students are encouraged to embrace each experience with the intention of learning a variety of methods to induce anesthesia. Learning the process at each clinical site creates its own stress; however, in addition to this stress, adjusting to the personality of new preceptors on a daily basis creates a unique stress upon each student. As stated by Elisha and Rutledge (2011): “Dissatisfying factors reported by students include inconsistent feedback and evaluation, lack of interest from the clinical educator, poor teaching skills of the preceptor, limited access to the preceptors, inadequate or unprofessional communication, and instances of intimidation or harassment” (p. S42).

A study completed by Chipas et al. (2012), indicated that based on a ten-point Likert scale, SRNA’s reported their overall stress level at 7.2. Çivitci (2015) stated: “According to the Social Readjustment Rating Scale, all SRNAs are in a state of
moderate life crisis, at the minimum, because of changes in financial status, a new line of work, beginning school, and a change in social activities” (p. 134). The stress encountered by SRNAs is significant, and many nurse anesthesia programs do not have adequate stress management resources available (Bozimowski, Groh, Rouen, & Dosch, 2014).

Types of Stress

Student Registered Nurse Anesthetists clearly face a significant amount of stress during their nurse anesthesia programs. Research conducted by Chipas et al. (2012), identified three types of stressors that students encounter during their education: academic stressors, clinical stressors, and external stressors.

Academic stressors. Upon entering a nurse anesthesia program, students have to transition from being an expert in their field to once again being a novice, which has proven to be challenging (Chipas & McKenna, 2011). A classroom setting is often stressful due to students having to learn a tremendous amount of new knowledge and skill challenges at a face pace (Chipas & McKenna, 2011). “In addition to the stressors brought on by school, external stressors common to all nurse anesthesia students, including financial and social concerns, do not go away when the student is in the classroom or operating room” (Chipas & McKenna, 2011, p. 122).

It has been shown that during the first five semesters of a program, a student’s stress level progressively increases and levels off during the final three semesters (Chipas et al., 2012). Students enrolled in front-loaded programs tend to have less stress than students enrolled in integrated programs (Chipas et al., 2012).
Clinical stressors. While in a nurse anesthesia program, students are required to go to various clinical facilities to gain anesthesia skills and develop self-awareness, critical thinking, and professionalism (Elisha & Rutledge, 2011). The personalities of clinical educators in clinical settings have been found to directly impact a student’s learning of appropriate clinical knowledge and skills (Elisha & Rutledge, 2011). “Researchers were surprised by the large numbers of students who experienced behaviors exhibited by their CEs [clinical educators] that were not conducive to learning or were inappropriate” (Elisha & Rutledge, 2011, p. S35).

Environmental (external) stressors. Chipas and McKenna (2011) found that finances and social concerns are common stressors amongst all nurse anesthesia students. Nurse anesthesia school is expensive, which creates a financial burden on students. In addition to the financial stress placed on students, they must also learn to balance their time between a demanding program and friends/family. Often, programs do not provide students with tools necessary to accomplish those tasks; therefore, creating more stress on a student.

Effects of Stress

The effect stress has on individuals is dependent upon how they perceive a stressor, the amount of time they have been exposed to stress, and their ability to overcome a demand (Patnaik, 2014). According to Bozimowski et al. (2014), 73 percent of nurse anesthesia students were considered to be “in the major life crisis category as measured by the Social Readjustment Rating Scale (SRRS), putting them at increased risk for illness, injury, or other adverse outcomes” (p. 278).
When an individual is exposed to stress for a prolonged period of time and is not equipped with tools to adapt in a healthy manner, negative consequences often occur. According to Çivitci (2015): “Consequences of stress among students acquiring nursing education include sleep difficulties and high anxiety, and may result in failure to complete their education” (p. 134).

**Constructs of Stress**

**Physiological stress.** Physiological stress is well known, as that causes the fight or flight system to kick in. Activation of the sympathetic nervous system and endocrine system, which release adrenaline and noradrenaline, are a body’s way of protecting itself against a perceived threat (Patnaik, 2014). A body’s release of these neurotransmitters causes vasoconstriction, which can lead to increased blood pressure, feelings of anxiousness, headaches, aggravation, and digestive issues (among other physiological responses) (Patnaik, 2014).

**Behavioral stress.** When humans are exposed to uncontrollable stressful experiences, it has an impact on their behavior. Kim, Foy, and Thompson (1996) established the following:

Behavioral stress impairs an organism’s subsequent ability to acquire and retain information, a phenomenon that is known as learned helplessness. When events are perceived to be uncontrollable, the organism learns that its behavior and outcomes are independent; this learning seems to produce cognitive, emotional, and motivational deficits. (p. 4750)

The concept of the General Adaptation System, created by Selye (1956), suggests there are three phases to approaching a stressor (Patnaik, 2014), which are as follows:
1. The individual is prepared to address the threat, which is also known as the alarm phase.

2. The individual thoroughly examines the situation and develops a plan to try to cope with the stressor; this is known as the resistance phase.

3. If the individual depletes their physical and environmental resources in an effort to overcome the stressor, they become exhausted.

**Cognitive stress.** Physical and psychological stress causes an increase in the production of cortisol, a glucocorticoid, from the adrenal glands, which are located on top of each kidney (Staufenbiel et al., 2013; Newcomer et al., 1999). An individual who is exposed to stress daily for a significant period of time may experience an increase in their cortisol levels (Staufenbiel et al., 2013; Newcomer et al., 1999). Several days of exposure to cortisol at high levels has an impact on cognitive ability and may cause some impairments, including memory and concentration problems, procrastination, and depressive symptomology in an otherwise healthy individual (Dickerson & Kemeny, 2004; Radley et al., 2004; Newcomer et al., 1999).

While there are several studies regarding stress in the nurse anesthesia profession and masters educational programs, there is a significant gap in the literature related to stress student nurse anesthetists experience specifically in the Doctor of Nursing (DNP) educational program.
CHAPTER III

METHODS AND PROCEDURES

Several studies have been conducted regarding stress in nurse anesthesia students enrolled in a masters educational program and nurse anesthetists who are currently practicing in the profession. This research study addressed the identified gap in the literature regarding Doctor of Nursing Practice (DNP) nurse anesthesia students using a mixed methods methodology. Chapter III includes a description of the research design, participants, survey instrument, and procedures for data collection and statistical analyses. The following research questions directed this study:

1. Is there a difference between how Doctor of Nursing Practice (DNP) and master students:
   a. Perceive and experience stress in their educational programs?
   b. Cope with stressful events?

2. How do DNP and master students self-report:
   a. What they consider to be causing them the most stress?
   b. How they coped with each stressful situation?
   c. What their educational programs could implement that would help them cope with stress in a healthy manner?
Purpose of the Study

The purpose of this study was to explore how students in DNP and MS nurse anesthesia programs perceive, experience, and cope with stress during their academic career. As each nurse anesthesia program transitions to a DNP curriculum, it will be beneficial to determine how DNP students perceive stress, and during which period of their program they encounter the most stress in comparison to those students who are enrolled in a master’s program. Furthermore, this information will provide nurse anesthesia program faculty with valuable information on types of healthy coping strategies that should be implemented and when in a new DNP curriculum each mechanism would be most useful.

Research Design

According to Creswell (2015): “In a cross-sectional survey design, the researcher collects data at one point in time” (p. 380). This design will allow a researcher to “examine current attitudes, beliefs, opinions, or practices” (Creswell, 2015, p. 380). Utilizing a cross-sectional design will provide current information regarding when nurse anesthesia students experience stress during their education, stress-related symptoms they encounter, and if stressful external factors have had a significant influence on them. The methodology for this study was guided by previous research which demonstrated a lack of information about this current population. Quantitative as well as qualitative, open-ended questions were used to elicit information from subjects.

Final questions on the study survey are open-ended questions. The information gathered was intended to be utilized in a subsequent longitudinal study, implementing coping strategies suggested in a smaller population.
Participants

An online survey was sent to approximately 3,000 nurse anesthesia students who were enrolled in 120 accredited programs within the United States during a specified period of time. The population was accessed through the American Association of Nurse Anesthetists database, which made provisions for a large population size. Based on responses, several areas of comparisons were made; for example, do DNP students experience more stress characteristics and chronic illnesses than those students who are in a master’s program; what stress symptoms are students experiencing; what coping strategies are students utilizing; during which semester(s) do students experience greater symptoms of stress; what is causing students the most stress, etc.

The initial survey was launched March 9, 2018. Following the initial invitation, a reminder email was sent 3 weeks later. The survey closed on April 6, 2018. During this four week timeframe, 247 respondents logged onto a Qualtrics® system to complete the survey. Of those participants, one respondent was excluded, because consent was not obtained. Nine other respondents were excluded, because they did not complete the demographic survey questions or failed to complete further questions after answering demographic questions. Elimination of these respondents prior to data analysis, left a sample size of 237 participants, for a response rate of 7.9%.

Participant Characteristics

Demographic information collected included gender, age, marital status, race, body mass index (BMI), and if they continued to work while in school. Participant demographic data is provided in Table 1.
A higher percentage of females participated in the survey compared to males, 65.8% and 34.2% respectively. The majority of participants (76.7%) were between 25 years old and 34 years old. Most participants (83.1%) were White (non-Hispanic). Over half the students (54.9%) indicated they were married or in a partnership with children or others at home. Very few students (16%) continued to work while enrolled in school, and of those students, 81.1% worked less than 20 hours/week. Half the participants (50%) stated they had a BMI less than 25. Over two-thirds of participants (88.6%) took 0-2 sick days per year.

Table 1. Demographic Characteristics of Participants.

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**Program Characteristics**

It is important to understand when students experience stress. So, participants were asked to indicate the type of program they were enrolled in, DNP or masters, if the program was front-loaded or integrated, length of program, semester they were enrolled in at the time they completed their survey, most stressful semester experienced, if they were in a clinical phase of their program, whether they experienced more stress in the
didactic semester or clinical semesters, and how many hours of substance use and wellness education they had received.

A slight majority (54.0%) of participants were enrolled in Doctor of Nursing Practice (DNP) programs versus master’s programs (44.7%). Most participants (57.8%) were enrolled in front-loaded programs where they were receiving didactic information prior to clinical education/experiences. Of students enrolled in front-loaded programs, almost half (49.3%) were in the didactic portion. Nearly half the participants (49.8%) indicated their program was 9 months in length. Overall, participants reported didactic and clinical experiences as equally stressful.

In January, 2013, the COA mandated that all accredited nurse anesthesia programs include substance use and wellness education within their curriculum. However, it was not specified how many hours of education each topic should be allotted. Interestingly, over half the participants (51.7%) indicated they had received 0-1 hours of wellness education, and 29.1% stated they received 0-1 hours of substance use education. Table 2 shows characteristics of programs participants were enrolled in at the time they completed the survey for this study.

Table 2. Characteristics of Programs Participants Were Enrolled In.

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<td>Type of Program Front-Loaded</td>
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Table 2. cont.

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<td>1(^{st})</td>
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<td>If You Are in the Clinical Phase of Your Program – Where Did You Experience the Most Stress</td>
<td>Didactic</td>
<td>24</td>
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<td></td>
<td>Clinical</td>
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<td>Both Equal</td>
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<td>Hours of Substance Use Education</td>
<td>0-1 hours</td>
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<td>35</td>
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<td>2-3 hours</td>
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<td>4-5 hours</td>
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<td></td>
<td>6-7 hours</td>
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Table 2. cont.

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<tr>
<td><strong>Hours of Wellness Education</strong></td>
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<tr>
<td>0-1 hours</td>
<td>48</td>
<td>69</td>
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<td>2-3 hours</td>
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<td>4-5 hours</td>
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<tr>
<td>6-7 hours</td>
<td>2</td>
<td>4</td>
<td>6</td>
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<tr>
<td>&gt;7 hours</td>
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</table>

**Survey Instrument**

**Original Survey Instrument**

A survey instrument titled, *Wellness and Stress in Nurse Anesthesia 2010*, was developed by Dr. Anthony Chipas. The instrument was designed to identify stressors and physical manifestations of those stressors in Certified Registered Nurse Anesthetists (CRNAs) and Student Registered Nurse Anesthetists (SRNAs). It also examined coping strategies commonly utilized by these individuals to manage the effects of stress.

The survey was presented in two parts: stress symptoms, and how you handle stress. The first part sought information indicating participants’ stress levels. Participants were asked:

1. To identify how often stress symptoms were manifested in their lives. There were a total of 43 activities or behaviors listed, and participants were asked to rate their frequency as follows: weekly, monthly, intermittent, or N/A (not applicable).
2. About life changes they had experienced within the last year. There were 23 life-changing events listed, and participants were asked to select all that applied.

3. To assess their stress levels.

4. How satisfied they were in their personal and professional life.

The second part of the survey asked respondents to indicate how they coped with stress. Participants were asked:

1. To identify how often they participated in a particular activity to cope with stress. There were a total of 24 activities listed, and participants were asked to rate their frequency as follows: very frequently, frequently, occasionally, rarely, very rarely, or never.

2. How often they exercised, had seen a physician, or went to the dentist.

3. If they suffered from a chronic illness. There were a total of 19 chronic illnesses listed, and participants were asked to mark all that applied.

4. If they or a family member had a history of chemical dependency.

5. If they had feelings of depression, thoughts of suicide or had ever sought professional help for stress.

6. If they were taking any medications to help them manage their stress. There were 13 classes of medications listed, and participants were asked to select all that applied.

The final questions in the original survey asked about wellness programs. The authors sought information regarding wellness programs in the workplace and also in
educational programs. They wanted to know what types of programs were available and their effectiveness.

**Reliability of instrument.** Reliability and internal consistency ensure that items within each construct measure the same information each time they are used under the same conditions (Creswell, 2015). Creswell stated: “When an individual answers certain questions one way, the individual should consistently answer closely related questions in the same way” (p. 158).

A Cronbach alpha calculation is a measure of reliability and internal consistency among responses within a construct (Warner, 2013). Polit and Beck (2004) stated: “For group-level comparison, coefficients in the vicinity of .70 are usually adequate, although coefficients of .80 or greater are highly desirable” (p. 421). When the Cronbach alpha for a construct is below .80, a researcher can increase the reliability by: (a) adding more items to the construct, as long as the mean of the correlations does not decrease, or by (b) increasing the mean of the correlations by deleting items from the construct or writing new items (Warner, 2013).

To determine the reliability of the instrument they used, Chipas et al. (2012) calculated “the averages of split-half correlations using statistical analysis software” (p. S50). A Cronbach alpha \(r = 0.80\) verified internal consistency in the survey (Chipas et al., 2012).

**Validity of instrument.** The validity of an instrument ensures that a value observed and recorded reflects the concept being measured (Field, 2013). The instrument utilized in Chipas et al.’s (2012) research study appeared to measure what it was intended to measure. Published research results measured by the survey were as expected. For
example: “Exercise is a known stress reliever. Students who exercised more frequently (daily or several times per week) had significantly lower reported stress scores” (Chipas et al., 2012, p. S52).

**Dissertation Study Survey Instrument**

Permission to use and modify the *Wellness and Stress in Nurse Anesthesia 2010* survey was sought and obtained from Dr. Chipas in April of 2017 (see Appendix B). The purpose of modifying the instrument was to include questions only relevant to students enrolled in Doctor of Nursing Practice (DNP) and Master’s of Nurse Anesthesia courses. The original survey included practitioners who were currently in practice.

**Modifications.** Demographic questions were added to identify if a student was enrolled in a DNP program or a master’s program and if a participant continued to work while they were in school. If a respondent indicated they continued to work during their academic career, they were asked how many hours per week they were employed. The purpose of adding demographic items to the survey was two-fold. First, it was necessary to have information regarding the type of program a respondent was enrolled in so comparisons could be made. Second, working while in a nurse anesthesia education program has been hypothesized as a significant stressor for students. Gathering data regarding a student’s work habits while in school allowed this researcher to refute or support this supposition.

Items inquiring if a participant was involved in a previous survey were deleted. The population surveyed for this research would not have been exposed to a previous survey. Demographic questions related to practicing CRNAs were also deleted.
Practicing professionals were not the focus of this research; therefore, they were not invited to participate in the dissertation survey.

**Sampling Error**

When engaging in research, gaining access to an entire population is not realistic (at least not conventionally). Therefore, a sample of the population being investigated is often sought. The subset of a population has individual differences, which may not be representative of an entire population. The difference between an individual “value of $M$ and the population mean, $\mu$, is attributable to sampling error” (Warner, 2013, p. 64). This error can be reduced by increasing the size of a sample.

In this study, to assure an optimal response rate for a representative sample, the researcher took the following steps:

1. Inclusion of a cover letter in the invitation email emphasizing the importance of potential participants completing their surveys so the researcher could better understand students’ lives during school and attempt to assist nurse anesthetist program administrators in implementing healthy coping strategies to increase wellness of students.

2. A reminder email three weeks after the initial contact was made.

3. During the 2018 Assembly of School Faculty AANA conference, the researcher provided an explanation of the study to several program administrators who were in attendance and asked them to encourage their students to participate when they received their surveys.
**Measurement Error**

Researchers strive to have their instrument accurately reflect a concept being measured. However, when trying to measure psychological characteristics, such as stress, errors are more likely to occur than when measuring physical features, such as blood pressure (Warner, 2013). For example, in the case of the instrument used in this research, how one individual interprets a question may be different than how another responds. The life situation of participants during the time when a survey is completed can also impact how a participant responds. For example, did a student recently return from a vacation? This type of error can also be reduced by increasing a sample size.

**Instrument Validity**

When modifying an established instrument, it is important to ensure content validity and face validity are maintained. Content validity “involves the question whether test items represent all theoretical dimensions or content areas” (Warner, 2013, p. 939). Prior to data collection, assessment of content validity first began by evaluating the modified instrument for face validity. According to Warner (2013), face validity refers to whether an instrument appears to measure what it is intended to measure.

**Faculty participants.** A total of five faculty members reviewed the modified *Wellness and Stress in Nurse Anesthesia 2010* instrument. Three faculty members were in the education profession, one faculty member was in the nursing profession, and one faculty member was a statistician. Upon agreeing to participate in a review of the modified survey, an email message containing instructions, the purpose of the study, and an electronic link to the survey instrument was sent to each reviewer. The reviewers were asked to provide feedback regarding the length of the survey, flow, design,
readability, and clarity. In addition, based on their experience working with students, reviewers were asked to provide feedback regarding the applicability of the survey to student stress and coping mechanisms.

Based on feedback from faculty reviewers, additional modifications were made to the survey instrument. At the end of the survey, four items were added.

1. It would be helpful if you would be willing to share your story. Please be as specific as possible.

2. What do you consider to be causing you the most stress?

3. How have you coped with each stressful situation?

4. What could educational programs implement in their curriculum that would help you cope with stress in a healthy manner?

**Student participants.** Two students enrolled in nurse anesthesia educational programs reviewed the modified *Wellness and Stress in Nurse Anesthesia 2010* survey instrument. Once a student agreed to participate in reviewing the modified instrument, an email message containing instructions, the purpose of the study, and an electronic link to the survey instrument was sent to each reviewer. Reviewers were asked to provide feedback regarding the length of the survey, flow, design, readability, and clarity. Also, based on their educational experiences, reviewers were asked to provide feedback regarding the applicability of the survey concerning student stress and coping. Based on student feedback, no additions or eliminations were made to the survey.

Accordingly, the modifications to the demographic portion of the tool and the removal of questions related to practicing CRNAs did not affect the tool’s face validity.
On the contrary, it made the tool’s content more applicable to the population being studied.

**Research Procedures**

Prior to recruiting participants and distributing the study survey to ensure “the rights and welfare of human subjects in social behavioral and biomedical research are protected” (University of North Dakota, 2018, para. 1), the primary investigator obtained approval from the Institutional Review Board (IRB) at the University of North Dakota (see Appendix C). Located within the informed consent letter, at the beginning of the survey, was a link to the IRB approval letter for respondents to review prior to giving consent to participate (see Appendix D to view participants’ consent form). In addition to IRB approval, a separate application and fee were required by the AANA to access their student membership database.

Upon IRB and AANA approval for this study, an invitation to participate (Appendix E) was sent by the AANA to 3,000 Student Registered Nurse Anesthetists in their database. The initial invitation to participate in this study was sent on March 9, 2018. A reminder email (Appendix F) was sent 3 weeks later on March 30, 2018, and the survey closed on April 6, 2018. Prior to beginning the *Wellness and Stress in Nurse Anesthesia Education* survey, each participant was given an informed consent statement. Compensation or incentives were not offered for participation in the study.

**Survey Provider**

Qualtrics®, a web-based, password protected survey software was utilized for survey administration and data collection. In addition to password security, Qualtrics® “uses Transport Layer Security (TLS) encryption for all transmitted Internet data”
Students accessed the survey by clicking on a link provided in their invitation email and completed their survey using their own electronic device.

**Data Collection**

At the completion of data collection, survey instrument codes were developed for each item within Qualtrics®. Following coding, data were exported into IBM’s Statistical Package for the Social Sciences (SPSS®), Version 24.0, statistical software for analysis.

**Missing Data**

Missing data resulted from participants not providing consent, failing to complete demographic questions, or not responding to questions after answering demographic questions. As previously mentioned, 10 respondents were excluded due to missing data. All surveys selected for exclusion were omitted prior to data analysis.

**Qualitative Data**

Traditional qualitative data analysis of open-ended question responses will be presented in Chapter IV. Responses to open-ended questions were reviewed and listed per question. (see Appendix G).

**Summary**

This chapter described the research design, participants, instrument for data collection, data collection procedures, and statistical analysis. Data were analyzed using IBM® SPSS® Statistics (Version 24.0). Specific tests and results are presented in the next chapter.
CHAPTER IV

RESULTS

The purpose of this mixed methods research study was to better understand the ways Doctor of Nursing Practice (DNP) students perceive stress, deal with it, and during which period of their programs they tend to encounter the most stress compared to students enrolled in a master’s program. The following research questions guided this study:

1. Is there a difference between how Doctor of Nursing Practice (DNP) and master students:
   a. Perceive and experience stress in their educational programs?
   b. Cope with stressful events?

2. How do DNP and master students self-report:
   a. What they consider to be causing them the most stress?
   b. How they coped with each stressful situation?
   c. What their educational programs could implement that would help them cope with stress in a healthy manner?

Data Analysis

After gathering data received from survey responses into a Qualtrics® database, the data was moved to IBM® SPSS® Statistics (Version 24.0; IBM Corp, 2016) where it was coded and analyzed. In chapter III basic demographic statistics on participants was
provided. This chapter presents research findings and necessary data analyses to answer each research question. The Pearson Chi-square test and Cramer’s V association index were utilized to analyze data. An alpha level of .05 was maintained for all statistical analyses. Findings are assembled by research question, including tables and an abbreviated narrative of quantitative and qualitative findings where appropriate. Qualitative responses are provided in detail in Appendix G. Quotations are given exactly as respondents entered them; no alterations have been done to spelling or grammar. If identifiers (e.g., names) were noted, they were blackened out.

**Pearson Chi-Square Test**

A Pearson Chi-square test was used to determine associations, if any, between two categorical variables. Categorical data “means that the data has been counted and divided into categories” (Light, 2008, para. 2). The Pearson Chi-square test only works for counted data (such as organizing data into “yes” or “no” data, “pass” or “fail” data, or MS or DNP students), as opposed to continuous data (e.g., height in inches or an individual’s weight over time) (Light, 2008). For this study, Pearson Chi-square tests were conducted to determine MS and DNP relationships, with specified variables where cell expected frequencies were greater than 5. In other words, there has be more than five instances occurring of each variable in order to use a Chi-square test (Light, 2008).

**Cramer’s V Coefficient**

Cramer’s V coefficient is used to determine strength of association between variables, after Chi-square has determined variables are significantly related. This test is utilized as a way of calculating correlation when there are more than 2 x 2 rows and columns to a data table: (when 2 x 2 matrices are tested, another coefficient, such as phi,
is used). Typically, Cramer’s V has a maximum value of 1 (variables are perfectly related). When there is a strong relationship between variables, Cramer’s V will have a larger value; conversely, when there is no relationship, Cramer’s V will be 0.

**Research Question 1a:**
Is There a Difference Between How Doctor of Nursing Practice (DNP) Students and Master Students Perceive and Experience Stress in Their Educational Programs?

**Quantitative Analysis of Stress Symptoms**

Symptoms of stress vary in frequency according to each individual and their reaction to a given situation. To determine if master’s students in this study experienced stress more often than DNP students, a Pearson Chi-square test \((df = 1)\) was applied to index MS and DNP relationships with variables where cell expected frequencies \((f)\) were greater than 5 (thus meeting assumptions of a Chi-square test). Expected frequencies would be number of responses expected when variables are completely independent of each other. Cramer’s V was used as an association index, because analyses were of 2 x 3 matrices. Table 3 shows MS students did not report experiencing most stress symptoms significantly more or less than DNP students. However, there was a significant association between program of study (MS or DNP) and the following variables: “annoyed by trivial things” \((X^2(2) = 21.427, p = <.001)\), “confusion” \((X^2(2) = 10.975, p = .004)\), and “overuse of alcohol” \((X^2(2) = 7.026, p = .030)\). Compared to MS students, DNP students were 1.19 times more likely to report being annoyed by trivial things, 1.16 times more likely to report confusion, and 1.07 times more likely to report overuse of alcohol.
Table 3. MS and DNP Student Responses to Stress Symptoms Compared to Expected Frequencies.

<table>
<thead>
<tr>
<th>Stress Symptom</th>
<th>MS Intermittent n/f</th>
<th>MS Monthly n/f</th>
<th>MS Weekly n/f</th>
<th>DNP Intermittent n/f</th>
<th>DNP Monthly n/f</th>
<th>DNP Weekly n/f</th>
<th>Cramer’s V</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td>Agitated/Anxious/ Irritable</td>
<td>13 / 12.0</td>
<td>20 / 17.8</td>
<td>66 / 69.3</td>
<td>14 / 15.0</td>
<td>20 / 22.2</td>
<td>90 / 86.7</td>
<td>.065</td>
<td>.625</td>
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<tr>
<td>Annoyed by trivial things</td>
<td>15 / 6.6</td>
<td>21 / 20.5</td>
<td>58 / 66.9</td>
<td>21 / 8.4</td>
<td>26 / 26.5</td>
<td>74 / 86.1</td>
<td>.316</td>
<td>&lt;.001</td>
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<td>Avoiding interactions with others</td>
<td>22 / 24.3</td>
<td>29 / 22.9</td>
<td>33 / 36.8</td>
<td>32 / 29.7</td>
<td>22 / 28.1</td>
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<tr>
<td>Arrhythmias</td>
<td>17 / 14.9</td>
<td>16 / 14.9</td>
<td>10 / 13.2</td>
<td>17 / 19.1</td>
<td>18 / 19.1</td>
<td>20 / 16.9</td>
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<td>.366</td>
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<td>Confusion</td>
<td>19 / 14.5</td>
<td>18 / 13.7</td>
<td>12 / 20.8</td>
<td>16 / 20.5</td>
<td>15 / 19.3</td>
<td>38 / 29.2</td>
<td>.305</td>
<td>.004</td>
</tr>
<tr>
<td>Cravings/ Compulsions</td>
<td>18 / 20.2</td>
<td>18 / 16.8</td>
<td>41 / 40.0</td>
<td>30 / 27.8</td>
<td>22 / 23.2</td>
<td>54 / 55.0</td>
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<td>.741</td>
</tr>
<tr>
<td>Decreased ability to concentrate</td>
<td>23 / 23.3</td>
<td>24 / 19.4</td>
<td>44 / 48.3</td>
<td>31 / 30.7</td>
<td>21 / 25.6</td>
<td>68 / 63.7</td>
<td>.111</td>
<td>.274</td>
</tr>
<tr>
<td>Decreased work accomplishments even though working hard</td>
<td>23 / 20.9</td>
<td>28 / 26.1</td>
<td>23 / 27.0</td>
<td>25 / 27.1</td>
<td>32 / 33.9</td>
<td>39 / 35.0</td>
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Table 3. cont.

<table>
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<tr>
<th>Stress Symptom</th>
<th>MS intermittent</th>
<th>MS monthly</th>
<th>MS weekly</th>
<th>DNP intermittent</th>
<th>DNP monthly</th>
<th>DNP weekly</th>
<th>Cramer’s V</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digestion problems (includes heart burn /GERD)</td>
<td>15 / 16.5</td>
<td>19 / 16.5</td>
<td>26 / 27.0</td>
<td>23 / 21.5</td>
<td>19 / 21.5</td>
<td>36 / 35.0</td>
<td>.084</td>
<td>.617</td>
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<tr>
<td>Dizziness</td>
<td>10 / 11.3</td>
<td>09 / 8.7</td>
<td>07 / 6.1</td>
<td>16 / 14.7</td>
<td>11 / 11.3</td>
<td>07 / 7.9</td>
<td>.094</td>
<td>.768</td>
</tr>
<tr>
<td>Eating disorders/over or under eating</td>
<td>14 / 14.8</td>
<td>17 / 15.2</td>
<td>29 / 30.0</td>
<td>17 / 16.2</td>
<td>15 / 16.8</td>
<td>34 / 33.0</td>
<td>.065</td>
<td>.768</td>
</tr>
<tr>
<td>Educational performance sub-par</td>
<td>37 / 32.4</td>
<td>08 / 10.7</td>
<td>03 / 4.9</td>
<td>42 / 46.6</td>
<td>18 / 15.3</td>
<td>09 / 7.1</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Finger tapping/ nail biting</td>
<td>12 / 9.7</td>
<td>07 / 5.3</td>
<td>21 / 25.1</td>
<td>12 / 14.3</td>
<td>06 / 7.7</td>
<td>41 / 36.9</td>
<td>.174</td>
<td>.224</td>
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<tr>
<td>Forgetting deadlines and appointments</td>
<td>35 / 31.1</td>
<td>11 / 11.2</td>
<td>05 / 8.6</td>
<td>37 / 40.9</td>
<td>15 / 14.8</td>
<td>15 / 11.4</td>
<td>.174</td>
<td>.168</td>
</tr>
<tr>
<td>Frequent back or neck spasms/pain</td>
<td>11 / 13.4</td>
<td>19 / 23.1</td>
<td>43 / 36.5</td>
<td>19 / 16.6</td>
<td>33 / 28.9</td>
<td>39 / 45.5</td>
<td>.160</td>
<td>.124</td>
</tr>
<tr>
<td>Frequent sick days</td>
<td>22 / 21.4</td>
<td>04 / 4.2</td>
<td>00 / 0.5</td>
<td>24 / 24.6</td>
<td>05 / 4.8</td>
<td>01 / 0.5</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Frequent tardy days</td>
<td>13 / 11.0</td>
<td>02 / 3.0</td>
<td>01 / 2.0</td>
<td>09 / 11.0</td>
<td>04 / 3.0</td>
<td>03 / 2.0</td>
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<td>*</td>
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<tr>
<td>Stress Symptom</td>
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<td>MS monthly n/f</td>
<td>MS weekly n/f</td>
<td>DNP intermittent n/f</td>
<td>DNP monthly n/f</td>
<td>DNP weekly n/f</td>
<td>Cramer’s V</td>
<td>p</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
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<td>--------------</td>
<td>----------------------</td>
<td>----------------</td>
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<tr>
<td>Hives</td>
<td>07 / 05 / 01 / 07 / 05 / 03</td>
<td>6.5 / 4.6 / 1.9 / 7.5 / 5.4 / 2.1</td>
<td>* / *</td>
<td>* / *</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td>11 / 06 / 04 / 14 / 07 / 11</td>
<td>9.9 / 5.2 / 5.9 / 15.1 / 7.8 / 9.1</td>
<td>* / *</td>
<td>* / *</td>
<td></td>
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<td></td>
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<tr>
<td>Impatient with others</td>
<td>23 / 30 / 32 / 37 / 32 / 47</td>
<td>25.4 / 26.2 / 33.4 / 34.6 / 35.8 / 45.6</td>
<td>.084</td>
<td>.489</td>
<td></td>
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<td></td>
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<tr>
<td>Impotence</td>
<td>07 / 03 / 02 / 06 / 08 / 07</td>
<td>4.7 / 4.0 / 3.3 / 8.3 / 7.0 / 5.7</td>
<td>* / *</td>
<td>* / *</td>
<td></td>
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</tr>
<tr>
<td>Infertility</td>
<td>02 / 00 / 00 / 00 / 01 / 01</td>
<td>1.0 / 0.5 / 0.5 / 1 / 0.5 / 0.5</td>
<td>* / *</td>
<td>* / *</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jaw pain</td>
<td>10 / 12 / 11 / 13 / 13 / 10</td>
<td>11.0 / 12.0 / 10.0 / 12.0 / 13.0 / 11.0</td>
<td>.071</td>
<td>.840</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Loss of appetite</td>
<td>16 / 10 / 08 / 26 / 14 / 17</td>
<td>15.7 / 9.0 / 9.3 / 26.3 / 15.0 / 15.7</td>
<td>.075</td>
<td>.776</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Low libido</td>
<td>19 / 20 / 20 / 29 / 21 / 31</td>
<td>20.2 / 17.3 / 21.5 / 27.8 / 23.7 / 29.5</td>
<td>.087</td>
<td>.592</td>
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</table>
### Table 3. cont.

<table>
<thead>
<tr>
<th>Stress Symptom</th>
<th><strong>MS</strong></th>
<th></th>
<th></th>
<th><strong>DNP</strong></th>
<th></th>
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<th></th>
<th><strong>Cramer’s V</strong></th>
<th><strong>p</strong></th>
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<tbody>
<tr>
<td></td>
<td>Intermittent</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Intermittent</td>
<td>Monthly</td>
<td>Weekly</td>
<td></td>
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<tr>
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<td><em>n/f</em></td>
<td><em>n/f</em></td>
<td><em>n/f</em></td>
<td><em>n/f</em></td>
<td><em>n/f</em></td>
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<tr>
<td>Menstrual irregularities/</td>
<td>13 / 06 / 05</td>
<td>11 / 09 /</td>
<td>07 / 07</td>
<td>0.135</td>
<td>0.629</td>
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<tr>
<td>Amenorrhea</td>
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<td>12.7 / 7.9 /</td>
<td>6.4</td>
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<td></td>
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<tr>
<td>Mistakes at school</td>
<td>35 / 14 / 06</td>
<td>55 / 15 /</td>
<td>07 / 07</td>
<td>0.083</td>
<td>0.633</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>37.5 / 12.1 / 5.4</td>
<td>52.5 / 16.9 /</td>
<td>7.6</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mood swings</td>
<td>18 / 27 / 30</td>
<td>25 / 34 /</td>
<td>42 / 41.3</td>
<td>0.024</td>
<td>0.949</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>18.3 / 26.0 / 30.7</td>
<td>24.7 / 35.0 /</td>
<td>41.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nervousness/Tremors</td>
<td>27 / 17 / 26</td>
<td>26 / 24 /</td>
<td>33 / 19.7</td>
<td>0.122</td>
<td>0.377</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>29.2 / 18.6 / 22.3</td>
<td>25.8 / 16.4 /</td>
<td>19.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nightmares/Sweats</td>
<td>22 / 18 / 28</td>
<td>18 / 18.9</td>
<td>16 / 16.8</td>
<td>0.059</td>
<td>0.812</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23.7 / 17.1 / 16.8</td>
<td>26.3 / 18.9 /</td>
<td>16.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overuse of alcohol</td>
<td>26 / 11 / 03</td>
<td>21 / 18 /</td>
<td>13 / 9.0</td>
<td>0.276</td>
<td>0.030</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20.4 / 12.6 / 7.0</td>
<td>26.6 / 16.4 /</td>
<td>9.0</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Rapid breathing/Shortness of breath</td>
<td>18 / 07 / 05</td>
<td>21 / 13 /</td>
<td>07 / 6.9</td>
<td>0.098</td>
<td>0.713</td>
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<tr>
<td></td>
<td>16.5 / 8.5 / 5.1</td>
<td>22.5 / 11.5 /</td>
<td>6.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sad, discouraged</td>
<td>24 / 31 / 31</td>
<td>31 / 33 /</td>
<td>39 / 35.3</td>
<td>0.096</td>
<td>0.436</td>
<td></td>
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<tr>
<td></td>
<td>23.7 / 27.6 / 26.7</td>
<td>31.3 / 36.4 /</td>
<td>35.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Sleep disturbances/insomnia/over-sleeping</td>
<td>16 / 24 / 45</td>
<td>26 / 21 /</td>
<td>60 / 58.5</td>
<td>0.108</td>
<td>0.328</td>
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<tr>
<td></td>
<td>18.6 / 19.9 / 46.5</td>
<td>23.4 / 25.1 /</td>
<td>58.5</td>
<td></td>
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</tr>
</tbody>
</table>
Table 3. cont.

<table>
<thead>
<tr>
<th>Stress Symptom</th>
<th>MS</th>
<th></th>
<th>DNP</th>
<th></th>
<th>Cramer’s $V$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>intermittent</td>
<td>monthly</td>
<td>weekly</td>
<td>intermittent</td>
<td>monthly</td>
<td>weekly</td>
</tr>
<tr>
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<td>$n$/$f$</td>
<td>$n$/$f$</td>
<td>$n$/$f$</td>
<td>$n$/$f$</td>
<td>$n$/$f$</td>
<td>$n$/$f$</td>
</tr>
<tr>
<td>Smoking excessively</td>
<td>02/1.5</td>
<td>01/1.2</td>
<td>02/2.3</td>
<td>02/2.5</td>
<td>04/3.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teams I am involved with don’t work well</td>
<td>13/13.7</td>
<td>08/8.9</td>
<td>06/6.4</td>
<td>19/18.3</td>
<td>08/9.1</td>
<td>09/8.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teeth grinding</td>
<td>07/10.5</td>
<td>09/8.0</td>
<td>19/18.5</td>
<td>19/15.5</td>
<td>11/12.0</td>
<td>22/24.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoughts of death or suicide</td>
<td>08/8.2</td>
<td>03/1.9</td>
<td>00/0.9</td>
<td>18/17.8</td>
<td>03/4.1</td>
<td>03/2.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too busy for things I used to do</td>
<td>16/12.7</td>
<td>12/3.6</td>
<td>66/67.8</td>
<td>13/16.3</td>
<td>19/17.4</td>
<td>89/87.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Use of illegal substances</td>
<td>00/2.0</td>
<td>00/2.0</td>
<td>00/2.0</td>
<td>02/2.0</td>
<td>02/2.0</td>
<td>02/2.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of prescription drugs not prescribed to me</td>
<td>00/3.0</td>
<td>00/2.0</td>
<td>00/1.0</td>
<td>03/3.0</td>
<td>02/2.0</td>
<td>01/1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: In each cell in Table 3 there are two responses, the first gives actual number of responses ($n$) received from participants, the second gives number of responses you would expect if variables were completely independent of each other – the “expected cell frequency” ($f$).

* In some cells, no Cramer’s $V$ value or $p$ value exist because expected frequencies ($f$) in some relevant cells were under five, and you need more than five responses to perform “a viable Chi-square test” (Light, 2008, para. 15).
Qualitative Analysis of Stress Symptoms

Students were asked to specify other stress symptoms they experienced that were not listed in the survey. Eighteen students replied indicating feelings of depression, thoughts of suicide, panic attacks, trouble with personal relationships, and physical symptoms such as shoulder pain, throat tightness, dry eyes, and biting their cheeks. Contributing to the symptoms of stress one student stated: “ Couldn’t help thinking about clinical challenges and discouraging experiences when precepted by extremely mean and unprofessional CRNAs.”

Quantitative Analysis of Chronic Illness

A Pearson Chi-square test was conducted to determine if chronic illnesses were more common in masters or DNP students (i.e., to determine if occurrence of chronic illnesses depended to some extent on program of study). In this case, the Chi-square test was used to compare actual responses to an expected number of responses (responses we would see if variables were completely independent – i.e., presence of chronic illnesses did not depend on program of study). According to Light (2008), “Wherever the observed data doesn’t fit the model, the likelihood that the variables are dependent becomes stronger” (para. 4).

For expected frequencies of responses (that is, if responses were completely independent of program of study), all cells showed expected frequencies (f) greater than five, thus meeting assumptions for using Pearson’s Chi-square test (df = 1); phi was used for an association index, because analyses were of 2 x 2 matrices. Shown in Table 4, MS students did not report experiencing “chronic pain,” “depression,” “digestive disorders,” or “other” chronic illnesses significantly more or less often than DNP students.
However, there was a significant association between the program of study (MS or DNP) and those who reported suffering from “obesity.”

Table 4. MS and DNP Student Responses to Chronic Illnesses Compared to Expected Frequencies.

<table>
<thead>
<tr>
<th>Illness</th>
<th>MS</th>
<th>DNP</th>
<th>phi</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic pain</td>
<td>8</td>
<td>11</td>
<td>.020</td>
<td>.760</td>
</tr>
<tr>
<td>Depression</td>
<td>10</td>
<td>13</td>
<td>.013</td>
<td>.841</td>
</tr>
<tr>
<td>Digestive disorders</td>
<td>10</td>
<td>13</td>
<td>.003</td>
<td>.969</td>
</tr>
<tr>
<td>Obesity, BMI &gt; 25</td>
<td>13</td>
<td>29</td>
<td>.136</td>
<td>.037</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>13</td>
<td>.003</td>
<td>.969</td>
</tr>
</tbody>
</table>

\[ n = \text{actual number of responses received (observed responses)} \]
\[ f = \text{number of responses expected if variables were independent of each other} \]

**Qualitative Analysis of Chronic Illness**

Students were asked to write in chronic illnesses they suffered not given as options in the survey. Twenty-five students responded; several indicated they suffered from anxiety, attention deficit hyperactive disorder (ADHD), obsessive-compulsive disorder (OCD), migraines, and allergies. Less common illnesses reported by students were: gout, infertility, Hashimoto’s thyroiditis, and tuberculosis.

**Quantitative Analysis of Life Events**

A Pearson Chi-square test was conducted to determine if major life events were more common in masters students or DNP students. Pearson’s Chi-square test \((df = 1)\) was applied to index relationships between program of study (masters students versus
DNP students) and selected life event variables with cell expected frequencies \( (f) \) greater than 5 (thus meeting Chi-square assumptions). As mentioned earlier, expected frequencies are the number of responses a person would see, if program of study did not impact or influence life event variables in any way; also, \( \phi \) was used as an association index, because analyses were of 2 x 2 matrices. Shown in Table 5, MS students did not report experiencing most life events significantly more or less often than DNP students. But there was a significant association between program of study (MS or DNP) and “changing jobs” \( (\chi^2(1) = 5.723, p = .017) \). Compared to MS students, DNP students were 3.88 times more likely to report changing jobs.

In Table 2, 70 students indicated the most stressful semesters they experienced were one of the first four semesters. As shown in Table 5 many students (DNP and MS) noted they had experienced salary/benefits decreases, moved, quit jobs, and started school within the last year. For the 70 students that indicated they were in their first four semesters of study, we could speculate there may be a correlation between semester of study and life event. Experiencing a major life event is stressful, and many students are encouraged to cut down on career work, because coursework is heavy.

Table 5. MS and DNP Student Responses to Life Events Items.

<table>
<thead>
<tr>
<th>Life Event</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MS</td>
<td></td>
<td>DNP</td>
<td></td>
<td>(\phi)</td>
<td>(p)</td>
</tr>
<tr>
<td></td>
<td>observed</td>
<td>expected</td>
<td>observed</td>
<td>expected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary/benefits decreased</td>
<td>47</td>
<td>50.5</td>
<td>64</td>
<td>60.5</td>
<td>.060</td>
<td>.361</td>
</tr>
<tr>
<td>Bankruptcy/financial crisis</td>
<td>5</td>
<td>5.0</td>
<td>6</td>
<td>6.0</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Birth of a child</td>
<td>7</td>
<td>5.9</td>
<td>6</td>
<td>7.1</td>
<td>-0.041</td>
<td>0.532</td>
</tr>
<tr>
<td>Life Event</td>
<td>MS</td>
<td></td>
<td></td>
<td>DNP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----</td>
<td>----------</td>
<td>----------</td>
<td>-----</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Caring for debilitated/chronically ill loved one</td>
<td>6</td>
<td>5.5</td>
<td>7</td>
<td>7.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change jobs</td>
<td>3</td>
<td>7.7</td>
<td>14</td>
<td>9.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Death of a spouse/partner/child                 | 0  | 0.0      | 0        | 0.0 |          |          | *    | *
| Death of a family member/close friend           | 20 | 16.4     | 16       | 19.6|          |          | -.087| .185|
| Divorce                                         | 2  | 1.0      | 0        | 1.0 |          |          | *    | *
| Marital/Partner reconciliation                  | 0  | 1.0      | 2        | 1.0 |          |          | *    | *
| Marital/Partner separation                      | 7  | 7.7      | 10       | 9.3 |          |          | .024 | .713|
| Marriage/Legal union                            | 8  | 7.7      | 9        | 9.3 |          |          | -.009| .890|
| Military deployment – self                      | 0  | 0.0      | 0        | 0.0 |          |          | *    | *
| Military deployment – significant other/friend   | 1  | 0.9      | 1        | 1.1 |          |          | *    | *
| Moved                                           | 35 | 39.5     | 52       | 47.5|          |          | .082 | .215|
| Personal illness or injury                      | 14 | 11.8     | 12       | 14.2|          |          | -.062| .362|
| Pregnancy                                       | 2  | 3.2      | 5        | 3.8 |          |          | *    | *
| Quit a job                                      | 37 | 38.2     | 47       | 45.8|          |          | .021 | .745|
| Started school                                  | 39 | 49.5     | 62       | 55.1|          |          | .121 | .066|

n = actual number of responses received (observed responses)

f = number of responses expected if variables were independent of each other

* In some cells, no phi value or p value exist because expected frequencies (f) in some relevant cells were five or less, and you need more than five responses to perform “a viable Chi-square test” (Light, 2008, para. 15).
Quantitative Analysis of Student Satisfaction, Stress Level, and Empowerment

Pearson Chi-square tests were conducted to determine if students in a master’s program were more satisfied with their school and their life outside of school than DNP students (Tables 6-7), how master’s students rated their stress level compared to DNP students (Tables 8-9), and how empowered master’s students felt compared to DNP students in regards to making changes in their school and their life (Tables 10-11).

Pearson Chi-square tests (df = 1) were used to index relationships for selected variables with cell expected frequencies (f) greater than 5 (thus meeting Chi-square assumptions); phi was used as an association index because analyses were of 2 x 2 matrices. As shown in Tables 6-11, master students did not respond significantly different than DNP students.

Both DNP and master students appeared satisfied with their school and life outside of school. However, according to their responses, they considered themselves to have high daily stress, with school being the major contributor.

Table 6. Satisfaction of MS and DNP Students With School.

<table>
<thead>
<tr>
<th>Satisfaction Level</th>
<th>MS</th>
<th></th>
<th>DNP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>expected f</td>
<td>n</td>
<td>expected f</td>
</tr>
<tr>
<td>Satisfied with school</td>
<td>76</td>
<td>71.2</td>
<td>86</td>
<td>90.8</td>
</tr>
<tr>
<td>Dissatisfied with school</td>
<td>8</td>
<td>12.8</td>
<td>21</td>
<td>16.8</td>
</tr>
</tbody>
</table>

\[ phi = -.140, \ p = .052 \]

\(n\) = actual number of responses received (observed responses)
\(f\) = number of responses expected if variables were independent of each other
Table 7. Satisfaction of MS and DNP Students With Life Outside School.

<table>
<thead>
<tr>
<th>Satisfaction Level</th>
<th>MS</th>
<th>DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>observed $n$</td>
<td>expected $f$</td>
</tr>
<tr>
<td>Satisfied</td>
<td>43</td>
<td>42.5</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>18</td>
<td>18.5</td>
</tr>
</tbody>
</table>

$\phi = -.013, \ p = .868$

$n =$ actual number of responses received (observed responses)

$f =$ number of responses expected if variables were independent of each other

Table 8. How MS and DNP Students Rated Their Stress Level on an Average Day.

<table>
<thead>
<tr>
<th>Stress Level</th>
<th>MS</th>
<th>DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>observed $n$</td>
<td>expected $f$</td>
</tr>
<tr>
<td>1-4 Low stress</td>
<td>11</td>
<td>10.6</td>
</tr>
<tr>
<td>6-10 High stress</td>
<td>70</td>
<td>70.4</td>
</tr>
</tbody>
</table>

$\phi = .012, \ p = .863$

$n =$ actual number of responses received (observed responses)

$f =$ number of responses expected if variables were independent of each other

Table 9. MS and DNP Student Responses on Percentage of Stress From School.

<table>
<thead>
<tr>
<th>Percentage of Stress From School</th>
<th>MS</th>
<th>DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>observed $n$</td>
<td>expected $f$</td>
</tr>
<tr>
<td>50 – 70%</td>
<td>13</td>
<td>15.0</td>
</tr>
<tr>
<td>80 – 100%</td>
<td>85</td>
<td>83.0</td>
</tr>
</tbody>
</table>

$\phi = -.051, \ p = .451$

$n =$ actual number of responses received (observed responses)

$f =$ number of responses expected if variables were independent of each other
Table 10. MS and DNP Student Responses to: Do You Feel Empowered to Make Changes at Your School?

<table>
<thead>
<tr>
<th></th>
<th>MS</th>
<th>DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>observed n</td>
<td>expected f</td>
</tr>
<tr>
<td>Yes</td>
<td>31</td>
<td>33.7</td>
</tr>
<tr>
<td>No</td>
<td>59</td>
<td>56.3</td>
</tr>
</tbody>
</table>

$\phi = .055, p = .432$

$n =$ actual number of responses received (observed responses)

$f =$ number of responses expected if variables were independent of each other

Table 11. MS and DNP Student Responses to: Do You Feel Empowered to Make Changes in Your Personal Life?

<table>
<thead>
<tr>
<th></th>
<th>MS</th>
<th>DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>observed n</td>
<td>expected f</td>
</tr>
<tr>
<td>Yes</td>
<td>63</td>
<td>59.8</td>
</tr>
<tr>
<td>No</td>
<td>26</td>
<td>29.2</td>
</tr>
</tbody>
</table>

$\phi = -.068, p = .332$

$n =$ actual number of responses received (observed responses)

$f =$ number of responses expected if variables were independent of each other

**Qualitative Analysis of Student Empowerment**

Students were asked to elaborate on whether they felt empowered to make changes at their school and in their personal life. Twenty-two students responded regarding their perspective about making changes at school. Responses varied from “Professors are very close to the students, and I feel they would listen if a true problem
did arise that needed addressed” to “They absolutely will not listen to anything the students are saying.”

Twenty-two students responded regarding whether they felt empowered to make changes in their personal life. Nearly all students felt they did not have enough time to make changes in their personal life while in school. One student stated, “I don’t have time for anything outside of school due to time constraints from the rigorous course load and test schedule.”

**Research Question 1b:**

**Is There a Difference Between How Doctor of Nursing Practice (DNP) and Master Students Cope With Stressful Events?**

**Quantitative Analysis of Coping Strategies**

Pearson’s Chi-square was used to determine if there was a difference between how DNP students and masters students coped with stress. Pearson’s Chi-square ($df = 1$) was applied to index program of study (MS or DNP) relationships with selected variables with cell expected frequencies ($f$) greater than 5 (thus meeting Chi-square assumptions); $phi$ was used for an association index because analyses were of 2 x 2 matrices. As shown in Table 12, masters students did not report coping with stress significantly differently than DNP students. But there was a significant association between program of study (MS or DNP) and using alcohol ($X^2(1) = 6.443, p = .011$); and between program of study and finding comfort in religion ($X^2(1) = 4.525, p = .033$). Compared to MS students, DNP students were 4.08 times more likely to report frequently “using alcohol or other drugs to make myself better.” Compared to DNP students, MS students were 1.43 times more likely to report frequently “trying to find comfort in my religion or spiritual beliefs.”
### Table 12. MS and DNP Student Responses to Coping Strategies.

<table>
<thead>
<tr>
<th>Coping Strategies</th>
<th>MS</th>
<th></th>
<th>DNP</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequently n/f</td>
<td>Rarely n/f</td>
<td>Frequently n/f</td>
<td>Rarely n/f</td>
<td>phi</td>
<td>p</td>
</tr>
<tr>
<td>Turning to work</td>
<td>18 / 19.6</td>
<td>20 / 18.4</td>
<td>32 / 30.4</td>
<td>27 / 28.6</td>
<td>-.067</td>
<td>.509</td>
</tr>
<tr>
<td>Doing household projects</td>
<td>17 / 17.3</td>
<td>35 / 34.7</td>
<td>25 / 24.7</td>
<td>49 / 49.3</td>
<td>-.011</td>
<td>.898</td>
</tr>
<tr>
<td>Doing things to make the situations better</td>
<td>38 / 36.7</td>
<td>5 / 6.3</td>
<td>55 / 56.3</td>
<td>11 / 9.7</td>
<td>.070</td>
<td>.468</td>
</tr>
<tr>
<td>Getting emotional support from others</td>
<td>55 / 55.3</td>
<td>14 / 13.7</td>
<td>70 / 69.7</td>
<td>17 / 17.3</td>
<td>-.009</td>
<td>.907</td>
</tr>
<tr>
<td>Using alcohol or other drugs to make myself</td>
<td>4 / 8.9</td>
<td>33 / 28.1</td>
<td>16 / 11.1</td>
<td>30 / 34.9</td>
<td>-.279</td>
<td>.011</td>
</tr>
<tr>
<td>better</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giving up trying to deal with it</td>
<td>9 / 9.4</td>
<td>33 / 32.6</td>
<td>13 / 12.6</td>
<td>43 / 43.4</td>
<td>-.021</td>
<td>.834</td>
</tr>
<tr>
<td>Refusing to believe these things happen</td>
<td>3 / 3.2</td>
<td>27 / 26.8</td>
<td>6 / 5.8</td>
<td>49 / 49.2</td>
<td>-.014</td>
<td>.896</td>
</tr>
<tr>
<td>Saying things (gossip) to let my unpleasant</td>
<td>15 / 13.5</td>
<td>25 / 26.5</td>
<td>20 / 21.5</td>
<td>44 / 42.5</td>
<td>.064</td>
<td>.512</td>
</tr>
<tr>
<td>feeling escape</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting help or advise [sic] from healthcare</td>
<td>9 / 12.2</td>
<td>24 / 20.8</td>
<td>21 / 17.8</td>
<td>27 / 30.2</td>
<td>-.168</td>
<td>.131</td>
</tr>
<tr>
<td>professionals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping Strategies</td>
<td>MS</td>
<td>DNP</td>
<td>( \phi )</td>
<td>( p )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>------------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trying to see things in a more positive light</td>
<td>66 / 65.4</td>
<td>87 / 87.6</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criticizing myself</td>
<td>48 / 50.5</td>
<td>77 / 74.5</td>
<td>-0.089</td>
<td>0.273</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giving up on coping</td>
<td>7 / 7.7</td>
<td>10 / 9.3</td>
<td>-0.038</td>
<td>0.709</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making jokes about things</td>
<td>53 / 51.5</td>
<td>77 / 78.5</td>
<td>0.055</td>
<td>0.494</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doing things to think less, movies, TV</td>
<td>57 / 52.9</td>
<td>59 / 63.1</td>
<td>0.132</td>
<td>0.108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Going out with family/friend</td>
<td>24 / 23.4</td>
<td>39 / 39.6</td>
<td>0.018</td>
<td>0.839</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expressing my negative feelings</td>
<td>37 / 38.9</td>
<td>49 / 47.1</td>
<td>-0.058</td>
<td>0.495</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trying to find comfort in my religion or spiritual beliefs</td>
<td>35 / 29.2</td>
<td>24 / 29.8</td>
<td>0.197</td>
<td>0.033</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meditating</td>
<td>14 / 10.0</td>
<td>9 / 13.0</td>
<td>0.208</td>
<td>0.053</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 12. cont.

<table>
<thead>
<tr>
<th>Coping Strategies</th>
<th>MS</th>
<th>DNP</th>
<th>phi</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequently</td>
<td>Rarely</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n / f</td>
<td>n / f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercising</td>
<td>42 / 38.0</td>
<td>16 / 20.0</td>
<td>49 / 53.0</td>
<td>32 / 28.0</td>
</tr>
<tr>
<td>Listening to music</td>
<td>60 / 56.9</td>
<td>8 / 11.1</td>
<td>63 / 66.1</td>
<td>16 / 12.9</td>
</tr>
<tr>
<td>Playing with my favorite pet</td>
<td>32 / 33.3</td>
<td>11 / 9.7</td>
<td>44 / 42.7</td>
<td>11 / 12.3</td>
</tr>
<tr>
<td>Reading</td>
<td>9 / 11.3</td>
<td>38 / 35.7</td>
<td>16 / 13.7</td>
<td>41 / 43.3</td>
</tr>
<tr>
<td>Having sex</td>
<td>23 / 20.4</td>
<td>25 / 27.6</td>
<td>22 / 24.6</td>
<td>36 / 33.4</td>
</tr>
<tr>
<td>Sleeping</td>
<td>43 / 42.5</td>
<td>20 / 20.5</td>
<td>44 / 44.5</td>
<td>22 / 21.5</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>1 / 2.3</td>
<td>5 / 3.8</td>
<td>0 / 1.3</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: In each cell in Table 12 there are two responses, the first gives actual number of responses (n) received from participants, the second gives number of responses you would expect if variables were completely independent of each other – the “expected cell frequency” (f).

* In some cells, no phi value or p value exist because expected frequencies (f) in some relevant cells were under five, and you need more than five responses to perform “a viable Chi-square test” (Light, 2008, para. 15).
Qualitative Analysis of Coping Strategies

Students were asked to elaborate on other ways they have dealt with stress. Six students responded indicating that they engage in the following to help relieve stress: “yoga, long drives, crying, eating candy, going outside to enjoy nature, study, and wasting time on social media to ‘turn brain off.’”

Quantitative Analysis of Stress Management

Pearson Chi-square tests were conducted to determine if there was a difference between how DNP and masters students managed stress. Pearson Chi-square \((df = 1)\) tests were applied to index MS and DNP relationships to variables with cell expected frequencies \((f)\) greater than 5 (thus meeting Chi-square assumptions); \(\phi\) was used as an association index because analyses were of 2 x 2 matrices. Shown in Tables 13, 14, 15, 16, and 17, MS and DNP students did not respond differently.

Table 13. MS and DNP Student Responses to Stress Management.

<table>
<thead>
<tr>
<th>Question</th>
<th>MS</th>
<th>DNP</th>
<th>(\phi)</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have a personal physician?</td>
<td>Yes</td>
<td>No</td>
<td>77 / 83.4</td>
<td>43 / 36.6</td>
</tr>
<tr>
<td>Are you in recovery from chemical dependency?</td>
<td>67 / 66.2</td>
<td>27 / 28.8</td>
<td>1.1</td>
<td>*</td>
</tr>
<tr>
<td>Do you have a family history of chemical dependency?</td>
<td>67 / 66.2</td>
<td>27 / 28.8</td>
<td>1.1</td>
<td>*</td>
</tr>
<tr>
<td>During the last month, have you often been bothered by feeling down</td>
<td>67 / 66.2</td>
<td>27 / 28.8</td>
<td>1.1</td>
<td>*</td>
</tr>
<tr>
<td>Alcoholic drinks?</td>
<td>67 / 66.2</td>
<td>27 / 28.8</td>
<td>1.1</td>
<td>*</td>
</tr>
</tbody>
</table>
Table 13. cont.

<table>
<thead>
<tr>
<th>Question</th>
<th>MS</th>
<th>DNP</th>
<th>phi</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes n/f</td>
<td>No n/f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During the last two months, have you often been bothered by little interest or pleasure in doing things?</td>
<td>39 / 41.5</td>
<td>54 / 51.5</td>
<td>56 / 53.5</td>
<td>64 / 66.5</td>
</tr>
<tr>
<td>Have you ever thought of committing suicide?</td>
<td>10 / 12.2</td>
<td>83 / 80.8</td>
<td>18 / 15.8</td>
<td>102 / 104.2</td>
</tr>
<tr>
<td>Do you know of a CRNA/SRNA who has committed suicide in the last 2 years?</td>
<td>4 / 3.1</td>
<td>89 / 88.9</td>
<td>3 / 3.9</td>
<td>112 / 111.1</td>
</tr>
<tr>
<td>Have you ever sought professional help for stress?</td>
<td>30 / 30.8</td>
<td>63 / 62.4</td>
<td>40 / 39.4</td>
<td>80 / 80.6</td>
</tr>
<tr>
<td>Are you currently (within the last 6 months) being treated for stress or a stress-related problem?</td>
<td>12 / 12.7</td>
<td>81 / 80.3</td>
<td>17 / 16.3</td>
<td>103 / 103.7</td>
</tr>
<tr>
<td>Do you now or have you ever used prescription drugs to help you handle stress?</td>
<td>5 / 8.8</td>
<td>76 / 72.2</td>
<td>15 / 11.2</td>
<td>89 / 92.8</td>
</tr>
<tr>
<td>Are you aware of the AANA wellness program?</td>
<td>42 / 44.1</td>
<td>51 / 48.9</td>
<td>59 / 56.9</td>
<td>61 / 63.1</td>
</tr>
<tr>
<td>Have you used any resources from the AANA wellness program?</td>
<td>6 / 4.8</td>
<td>87 / 88.2</td>
<td>5 / 6.2</td>
<td>115 / 113.8</td>
</tr>
</tbody>
</table>

NOTE: In each cell in Table 13 there are two responses, the first gives actual number of responses (n) received from participants, the second gives number of responses you would expect if variables were completely independent of each other – the “expected cell frequency” (f).

* In some cells, no phi value or p value exist because expected frequencies (f) in some relevant cells were under five, and you need more than five responses to perform “a viable Chi-square test” (Light, 2008, para. 15).
Table 14. MS and DNP Student Responses to: How Frequently Do You Exercise?

<table>
<thead>
<tr>
<th>How often do you exercise?</th>
<th>MS</th>
<th>DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>observed n</td>
<td>expected f</td>
</tr>
<tr>
<td>Daily, Several times per week</td>
<td>47</td>
<td>45.4</td>
</tr>
<tr>
<td>Weekly, Couple times per month, Infrequently</td>
<td>46</td>
<td>47.6</td>
</tr>
</tbody>
</table>

$\phi_i = .030, p = .660$

$n = $ actual number of responses received (observed responses)

$f = $ number of responses expected if variables were independent of each other

Table 15. MS and DNP Student Responses to: When Was the Last Time You Had a Physical?

<table>
<thead>
<tr>
<th>When was the last time you had a physical?</th>
<th>MS</th>
<th>DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>observed n</td>
<td>expected f</td>
</tr>
<tr>
<td>Within the last year, 1-2 years</td>
<td>81</td>
<td>81.2</td>
</tr>
<tr>
<td>3-4 years, &gt; 4 years</td>
<td>12</td>
<td>11.8</td>
</tr>
</tbody>
</table>

$\phi_i = -.006, p = .930$

$n = $ actual number of responses received (observed responses)

$f = $ number of responses expected if variables were independent of each other
Table 16. MS and DNP Student Responses to: When Was the Last Time You Went to the Dentist?

<table>
<thead>
<tr>
<th>When was the last time you went to the dentist?</th>
<th>MS</th>
<th>DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>observed n</td>
<td>expected f</td>
</tr>
<tr>
<td>Within the last year, 1-2 years</td>
<td>87</td>
<td>83.8</td>
</tr>
<tr>
<td>3-4 years, &gt; 4 years</td>
<td>6</td>
<td>9.2</td>
</tr>
</tbody>
</table>

$\phi = .101, p = .142$

$n$ = actual number of responses received (observed responses)
$f$ = number of responses expected if variables were independent of each other

Table 17. MS and DNP Student Responses to: Do You Have a Wellness Program at Your School?

<table>
<thead>
<tr>
<th>Do you have a wellness program at your school?</th>
<th>MS</th>
<th>DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>observed n</td>
<td>expected f</td>
</tr>
<tr>
<td>Yes</td>
<td>30</td>
<td>30.6</td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>17.4</td>
</tr>
</tbody>
</table>

$\phi = -.021, p = .815$

$n$ = actual number of responses received (observed responses)
$f$ = number of responses expected if variables were independent of each other

**Thematic Analysis of Open-Ended Survey Data**

Open-ended questions in the survey generated numerous significant statements and quotes related to stress, coping, and educational implementation suggestions for nurse anesthesia programs. Utilizing thematic analysis, significant statements were
reduced into codes, which were grouped into categories. From the categories, several themes emerged. Codes, categories, and themes are outlined in a table for each research question.

**Research Question 2a:**

*It Would Be Helpful if You Would Be Willing to Share Your Story. Please Be as Specific as Possible. What Do You Consider To Be Causing You the Most Stress?*

Chipas et al. (2012) stated: “Three major types of stressors may be present during nurse anesthesia education: academic stressors, clinical stressors, and external stressors” (p. S49). Responses from participants in this research study validated Chipas et al.’s assumption. Codes, categories, and themes that emerged in relation to causes of stress are outlined in Table 18.

Table 18. Thematic Analysis of Causes of Stress.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Academic Stressors</td>
<td>School is a primary source of stress in student lives.</td>
</tr>
<tr>
<td>Lack of time</td>
<td></td>
<td>The rigorous nature of nurse anesthesia educational programs does not allow time for students to participate in activities to decompress.</td>
</tr>
<tr>
<td>Fear of failure</td>
<td></td>
<td>For many students, adjusting to student life is extremely stressful.</td>
</tr>
<tr>
<td>Student role adjustment</td>
<td></td>
<td>Most students have been out of the academic arena for many years and have forgotten the skills necessary for academic success.</td>
</tr>
</tbody>
</table>
Table 18. cont.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical</td>
<td>Clinical Stressors</td>
<td>Time spent in a clinical setting is a source of stress.</td>
</tr>
<tr>
<td>Clinical personalities</td>
<td></td>
<td>Most often clinical stress stems from hostile environments created by unprofessional attitudes of preceptors (CRNAs or MDAs). Many preceptors are rude, negative, belittling, and demeaning.</td>
</tr>
<tr>
<td>Moving</td>
<td>External Stressors</td>
<td>Clinical preparation time, clinical schedule, and clinical performance contributes to student stress.</td>
</tr>
<tr>
<td>Moving for school or clinical is stressful for students.</td>
<td></td>
<td>Many nurse anesthesia educational programs have distant clinical sites that require students to move or commute each day.</td>
</tr>
<tr>
<td>Life balance (personal, social, school)</td>
<td></td>
<td>Finances and finding a balance between school and personal life places stress on students.</td>
</tr>
<tr>
<td>Family/personal life</td>
<td></td>
<td>Demands of school leaves little time to engage in personal/family activities.</td>
</tr>
<tr>
<td>Financial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commuting</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research Question 2b:
It Would Be Helpful if You Would Be Willing to Share Your Story. Please Be as Specific as Possible. How Have You Coped With Each Stressful Situation?

Stress is present in all aspects of life and is considered an essential motivator.

How an individual copes with stress can have an impact on their mental and physical
well-being. Outlined in Table 19 is how participants in this research study coped with their stress.

Table 19. Thematic Analysis of Ways of Coping With Stress.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise</td>
<td>Wellness Activities</td>
<td>Students engage in exercise to alleviate stress.</td>
</tr>
<tr>
<td>Mindfulness activities</td>
<td></td>
<td>Scheduling time for exercise is challenging, but important for personal wellbeing of students.</td>
</tr>
<tr>
<td>Optimism</td>
<td></td>
<td>It can be beneficial to practice mindfulness activities, such as meditation, to reduce stress.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Having a positive attitude helps with decreasing stress and creates motivation within a student to keep going.</td>
</tr>
<tr>
<td>Talking to others</td>
<td>Social Coping</td>
<td>Talking with family members, friends, classmates, and faculty plays a critical role in helping students cope with stressful situations.</td>
</tr>
<tr>
<td>Drinking alcohol</td>
<td></td>
<td>Having support of classmates and faculty who understand a source of stress or the objective perspective family and friends can provide appears to significantly impact a student’s ability to decompress.</td>
</tr>
<tr>
<td>Peer support</td>
<td></td>
<td>Drinking alcohol can be a stress reliever for some students.</td>
</tr>
</tbody>
</table>
Table 19. cont.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule family/friend time</td>
<td></td>
<td>Time management skills are essential to reduce the stress of nurse anesthesia school. Students need to be organized and maintain a schedule that allows adequate time for themselves, school, and family/friends.</td>
</tr>
<tr>
<td>Schedule personal time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule family/friend time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule personal time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schoolwork</td>
<td></td>
<td>Learning to live in the present, focusing on and dealing with issues as they arise, and prioritizing helps students during stressful times.</td>
</tr>
<tr>
<td>Live in the present/focusing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address the situation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being prepared</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td>Some students find it beneficial to focus on thoughts, interests, or activities other than school as a way of distracting themselves from their stressful academic situation.</td>
</tr>
<tr>
<td>Watch TV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sleep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoying the outdoors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hobbies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Research Question 2c:**

*It Would Be Helpful if You Would Be Willing to Share Your Story. Please Be as Specific as Possible. What Could Educational Programs Implement That Would Help You Cope With Stress in a Healthy Manner?*

Overall, healthcare careers are stressful in nature, and nurse anesthesia is not exempt. Providing SRNAs with tools to effectively manage stressful encounters while in school and during their careers will hopefully help them live healthy lives and decrease addiction rates in the profession. Table 20 gives respondents’ ideas on programs to incorporate into nurse anesthesia curricula that might help them cope with stress.
Table 20. Thematic Analysis of Suggested Programs to Help Students Cope With Stress.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>None/Unsure</td>
<td>Unsere</td>
<td>A majority of students did not think adding additional classes to an already overloaded curriculum would be beneficial.</td>
</tr>
<tr>
<td>Not adding more to the</td>
<td></td>
<td>Offering optional classes or stress-reducing activities that are SRNA focused may be beneficial.</td>
</tr>
<tr>
<td>curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some students feel faculty who are supportive, caring, and who encourage wellness are helpful.</td>
</tr>
<tr>
<td>Supportive Faculty</td>
<td>Faculty</td>
<td>Some students feel having breaks without schoolwork, clear classroom and clinical expectations, and scheduled social events is necessary for their wellness.</td>
</tr>
<tr>
<td>Promotion exercise</td>
<td>Focused</td>
<td></td>
</tr>
<tr>
<td>Wellness check-ins</td>
<td></td>
<td>Learning in an environment free of humiliation, belittling, and demeaning attitudes is important for a student’s wellbeing.</td>
</tr>
<tr>
<td>Breaks without schoolwork</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear/reasonable</td>
<td>Clinical</td>
<td></td>
</tr>
<tr>
<td>expectations</td>
<td>Focused</td>
<td></td>
</tr>
<tr>
<td>尊重的环境</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 20. cont.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>More time off</td>
<td></td>
<td>Curriculum adjustment is one means to student wellness. Suggestions include:</td>
</tr>
<tr>
<td>Curriculum change</td>
<td></td>
<td>- Allowing students more time off from classroom and clinical time to engage in wellness activities.</td>
</tr>
<tr>
<td>Therapy/discussion sessions</td>
<td></td>
<td>- Giving students additional study time.</td>
</tr>
<tr>
<td>Wellness activities</td>
<td></td>
<td>- Arranging the schedule so students do not have several exams in the same week.</td>
</tr>
<tr>
<td>Stress/wellness education</td>
<td></td>
<td>- Decreasing the amount of busy work.</td>
</tr>
<tr>
<td>Orientation</td>
<td></td>
<td>- Implementing therapy/discussion sessions throughout the curriculum allowing students to vent frustrations and gain support from peers and faculty members.</td>
</tr>
<tr>
<td>Mentor program</td>
<td>Curriculum</td>
<td>- Incorporating wellness activities and education into the classroom.</td>
</tr>
<tr>
<td>Scheduled health days</td>
<td>Focused</td>
<td>- Including family members into program orientations so family is informed about the rigorous curriculum and know what to expect.</td>
</tr>
<tr>
<td>Problem-solving strategies</td>
<td></td>
<td>- Providing students with an adequate orientation to each clinical site.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Instituting a mentor program where senior students can provide guidance and support to new students.</td>
</tr>
</tbody>
</table>
CHAPTER V
DISCUSSION

The primary purpose of this chapter is to provide an overview of the findings of this research study, which explored the perceptions of Student Registered Nurse Anesthetists (SRNAs) regarding stress and how they coped with that stress during their nurse anesthesia educational programs. This study was guided by two primary research questions:

1. Is there a difference between how Doctor of Nursing Practice (DNP) and master students:
   a. Perceive and experience stress in their educational programs?
   b. Cope with stressful events?

2. How do DNP and master students self-report:
   a. What they consider to be causing them the most stress?
   b. How they coped with each stressful situation?
   c. What their educational programs could implement that would help them cope with stress in a healthy manner?

Data for this study was collected during a four-week time frame using an online survey. A total of 237 SRNAs from across the United States (U.S.) completed the survey. The conceptual framework that provided the foundation for this research is Hans Selye’s *Evolution of the Stress Concept* (Selye, 1973).
This chapter is organized to first discuss notable findings per research question. A discussion of implications for practice, limitations of the study, and recommendations for future research follow.

**Summary of Notable Findings**

**Research Question 1a: Is There a Difference Between How Doctor of Nursing Practice (DNP) and Master Students Perceive and Experience Stress in Their Educational Programs?**

This section of the study was designed to determine if DNP students experienced stress differently than Master of Science (MS) students. The results of this study determined that MS students did not experience most stress symptoms significantly more or less than DNP students. However, compared to MS students, DNP students were 1.19 times more likely to report being annoyed by trivial things, 1.16 times more likely to report confusion, and 1.07 times more likely to report overuse of alcohol.

When individuals are exposed to significant stress for prolonged periods of time, they may experience symptoms of chronic illnesses. This study demonstrated that MS students did not experience chronic pain, depression, digestive disorders, or “other” chronic illnesses significantly more or less often than DNP students. However, there was a significant association between the program of study (MS, DNP) and reported suffering from obesity. (NOTE: The original survey asked respondents to indicate all chronic illnesses. For the category of “Obesity”, the criteria was a BMI of >25. Current standards indicate that a BMI of 25 to 29.9 is considered “Overweight” and a BMI of 30 or greater is needed to meet the “Obese” category.)
Doctor of Nursing Practice and masters students both indicated they were exposed to tremendous amounts of stress daily with school being their primary stressor. However, most students noted they were satisfied with their life both personally and academically.

**Research Question 1b: Is There a Difference Between How Doctor of Nursing Practice (DNP) and Master Students Cope With Stressful Events?**

This section of the study was designed to determine if DNP students coped with stress differently than Master of Science (MS) students. The results of this study determined that MS students did not cope with stress significantly different than DNP students. However, compared to MS students, DNP students were 4.08 times more likely to utilize alcohol to help them cope with stress. Master students were 1.43 times more likely than DNP students to find comfort in their religion or spiritual beliefs.

**Research Question 2a: It Would Be Helpful if You Would Be Willing to Share Your Story. Please Be as Specific as Possible. What Do You Consider To Be Causing You the Most Stress?**

This study demonstrated that school was the primary stressor for both DNP and MS students. It is challenging for students to transition from a professional role to a student role. Students entering a nurse anesthesia educational program are usually intensive care nurses who are experts in their field, have a steady income, and have adequate personal time. When entering a rigorous nurse anesthesia program, they become novices in the field of nurse anesthesia, most often are encouraged to quit working, and have high expectations placed on them with demanding coursework and clinical time.

Several students noted that clinical preceptors were the major stressor in a clinical environment. According to respondents, clinical stress stems from a hostile environment
created by unprofessional attitudes of preceptors. Some of the characteristics of preceptors stated by respondents were: demeaning, rude, belittling, negative, constantly scrutinizing student nurses, and hostile.

**Research Question 2b: It Would Be Helpful if You Would Be Willing to Share Your Story. Please Be as Specific as Possible. How Have You Coped With Each stressful Situation?**

This study demonstrated that students coped with stress in a variety of ways both negative and positive. Many students found exercise, meditation, maintaining a positive attitude, and spending time with others as beneficial in reducing their stress. They noted that being organized and cognizant of their time was essential to scheduling personal wellness activities.

A few students stated they would drink alcohol as a way to decrease their stress. Some stated that they would drink in a social environment with friends, while others indicated they drank as a means of avoidance.

**Research Question 2c: It Would Be Helpful if You Would Be Willing to Share Your Story. Please Be as Specific as Possible. What Could Educational Programs Implement That Would Help You Cope With Stress in a Healthy Manner?**

In order to implement effective strategies to help students cope with stress of nurse anesthesia education, it is essential to obtain student ideas. While some students were unsure of what administrators could incorporate into their programs of study, other students provided concrete ideas. From the respondents’ opinions, three categories emerged: (1) curriculum focused ideas, (2) clinically focused ideas, and (3) faculty focused ideas.
Implications for Practice

Curriculum Focused Implications

1. Offer a time management course to teach students the importance of time management and the way in which they can manage their time wisely. Improper time management has been noted to create an enormous amount of stress for students. A course for teaching time management skills would be beneficial to help students create a healthy work/life balance for themselves.

2. Host a family orientation night each year. A social for students and their support persons would provide knowledge about what a student’s academic life would entail throughout their program. With this knowledge, support persons can have an idea of what to expect and hopefully will encourage and support their students during difficult times. During this orientation, it will be important to explain the signs and symptoms of abuse and distress. It will also be important to provide resources that support persons could use if they detect their student is struggling.

3. Provide financial education to students early in their program may be valuable. Financial concerns have been noted to cause students significant stress. Most universities have a Financial Aid office that could host a class presentation of financial opportunities at that institution and offer financial counseling.

4. Research what resources are available to students on each campus. During their orientation, escort cohorts to each resource and explain the type of
assistance they can obtain from each department. For example, the counseling center might be a place of interest.

5. Schedule required breaks in the middle of curricula. It is important for students to have time off to regroup without any coursework.

Clinical Focused Implications

1. Develop a presentation for clinical preceptors. Discuss adult learning, effective teaching strategies, constructive feedback, respectful and productive learning environments, professionalism, and roles of a preceptor. Most clinical preceptors have not been given formal training in regards to teaching and would benefit from such education.

2. Before sending students into a clinical environment, educate them on how to deal with challenging personalities. Discuss how to engage in difficult conversations, manage their emotions, maintain professionalism, and reduce negativity.

Faculty Focused Implications

1. Developing a professional, caring relationship with students appears to impact them tremendously. Instructors who communicate with their students, promote exercise, and conduct wellness check-ins appear to be perceived by their students as caring and invested in student education.

2. A student’s perception about their instructor(s) influences them in several ways. If a student feels respected, listened to, and cared about, they appear to have a more positive outlook toward their education and their personal life. Students value instructors who are organized, provide clear
expectations, and are timely. Knowing what to expect allows students to plan and schedule personal and school activities accordingly, which appears to decrease their stress.

Limitations

The researcher recognized several limitations within this study. First, online surveys do not allow the researcher to clarify questions that may be misinterpreted, or clarify answers from respondents. Second, the cross-sectional design of this study only provided data from a population during a specified period of time. Gathering data involving personal feelings during a defined period of time is subject to personal bias. A longitudinal study may provide richer data that is not influenced by measurement error.

Recommendations

As demonstrated by this study, as well as in the literature, nurse anesthesia students experience a tremendous amount of stress during their educational programs. Students reported not having enough time to complete their educational requirements and participate in activities to decrease stress which leads to lack of sleep, anxiety, impaired thinking, depression etc. According to Hans Selye’s General Adaptation Syndrome (GAS) many nurse anesthesia students are in a state of exhaustion (Selye, 1973). If students remain in the exhaustion stage for a prolonged period of time they are more susceptible to disease and tend to have a decreased tolerance to overcome additional stress. It is important for nurse anesthesia educational programs to intervene to provide students with necessary tools for healthy living and provide them with a healthy and safe learning environment.
The first recommendation for future research is to implement the “implications for practice” presented earlier in this chapter. This study focused on determining how students experience and cope with stress during their nurse anesthesia education. However, the study did not focus on the effectiveness of implementing strategies to help students reduce stress. A qualitative study may be more appropriate for that research.

The second recommendation is to explore attitudes and educational training of clinical preceptors through additional research. Studies which focus on clinical preceptor characteristics, viewpoints and interest in teaching would be helpful as well as studying the impact of clinical preceptors’ educational programs on teaching effectiveness.
Appendix A
Permission to Use Figure on General Adaptation Syndrome

Re: General Adaptation Syndrome Question
Holly Lucille [drholly@drhollylucille.com]
Sent: Thursday, October 19, 2017 9:46 AM
To: Johnson, Amber

Yes- by all means!
Dr. Holly Lucille ND, RN

On Wednesday, October 18, 2017 at 9:47 AM, Johnson, Amber amber.johnson.5@und.edu wrote:
Good Morning, Dr. Lucille:

I am currently a student in the Teaching and Learning doctoral program at the University of North Dakota, and I have decided to pursue the topic of Stress in Nurse Anesthesia students for my doctoral dissertation. The Council on Accreditation of Nurse Anesthesia Programs have mandated that all nurse anesthesia programs transition from a master’s degree to a Doctor of Nursing Practice (DNP) degree by 2022. There has been research conducted regarding student stress in a masters program; however, no research has been done regarding students in a DNP program. Currently, there are sixty-two programs out of 120 that offer a DNP degree. I am curious to know how stress impacts students differently in a masters program compared to a DNP program. Ultimately, I would like to provide programs with healthy coping strategies to offer students throughout their schooling.

As I was exploring the literature, I came across a blog you wrote titled, General Adaptation Syndrome (GAS) Stages, retrieved from https://www.integrativeapro.com/Resources/Integrative-Blog/2016/General-Adaptation-Syndrome-Stages. Selye’s General Adaptation Syndrome will provide a fantastic conceptual framework for my dissertation.

The purpose of this email is to ask for your written permission to use Selye’s General Adaptation Syndrome figure presented in the blog in para. 7 for the purpose of my dissertation.

Please let me know if you have any questions. I look forward to hearing from you.
Appendix B
Permission to Use and Modify Survey Instrument

Re: Wellness and Stress in Nurse Anesthesia Survey
Anthony Chipas [achipas@sc.rr.com]
Sent: Wednesday, December 6, 2017 8:46 AM
To: Johnson, Amber
You have my permission to use and modify my stress instrument.
Tony Chipas

On Monday, December 4, 2017 at 12:38 PM, Johnson, Amber amber.johnson.5@und.edu wrote:
Good Morning Dr. Chipas,

I am currently a student in the Teaching and Learning doctoral program at the University of North Dakota, and I have decided to pursue the topic of Stress in Nurse Anesthesia Education for my doctoral dissertation.

During my research, I read a couple of your articles regarding stress in nurse anesthesia education as well as our profession. For the purpose of my research, I intend to determine when during nurse anesthesia education do students experience the most stress, how do they perceive stress, and what coping mechanisms they think would be most beneficial to incorporate into the nurse anesthesia curriculum. Now that our profession is transitioning to the Doctor of Nursing Practice (DNP) degree, I think it would be beneficial to compare DNP programs to master’s programs.

The purpose of this email is to ask for your written permission to use and modify your 2010 Wellness and Stress in Nurse Anesthesia survey instrument for the purpose of my dissertation research.

If you have any questions, please do not hesitate to contact me. I look forward to hearing from you.
Appendix C
Approval From the Institutional Review Board at the University of North Dakota

February 15, 2018

Principal Investigator(s): Amber Johnson
Project Title: Stress and Coping Strategies: The Perceptions of Student Registered Nurse Anesthetists
IRB Project Number: IRB-201802-203
Project Review Level: Exempt 2
Date of IRB Approval: 02/13/2018
Expiration Date of This Approval: 02/12/2021

The application form and all included documentation for the above-referenced project have been reviewed and approved via the procedures of the University of North Dakota Institutional Review Board.

If you need to make changes to your research, you must submit a Protocol Change Request Form to the IRB for approval. No changes to approved research may take place without prior IRB approval.

This project has been approved for 3 years, as permitted by UND IRB policies for exempt research. You have approval for this project through the above-listed expiration date. When this research is completed, please submit a Termination Form to the IRB.

The forms to assist you in filing your project termination, adverse event/unanticipated problem, protocol change, etc. may be accessed on the IRB website: http://und.edu/research/resources/human-subjects/

Sincerely,

Michelle L. Bowles, M.P.A., CIP
IRB Manager
ML/ab
CC: Myma Olson, Ph.D.
Appendix D
Invitation to Participate & Informed Consent Form

Dear Student Registered Nurse Anesthetist:

You are invited to participate in a research study to better understand how nurse anesthesia students perceive, experience, and cope with stress during their academic career. Your participation will provide valuable information to nurse anesthesia educators about when students encounter the most stress during their educational program and types of healthy coping strategies that should be implemented throughout the curriculum. Amber Johnson, MS, CRNA a doctoral student from the University of North Dakota is conducting this study.

Procedures

The electronic survey has 4 sections and it should take you approximately 15 minutes to complete. Specific sections include:

Part I: Demographics
Part II: Student Information
Part III: Stress Symptoms
Part IV: Coping Strategies

You will be asked to answer several questions in each section. Your honest answers are appreciated. You are free to decline to answer any particular question you do not wish to answer for any reason. The survey will be conducted on this Qualtrics website.

Risks/Discomforts

Risks are minimal for participation in this study and we do not anticipate any harm to come upon any participants. If you feel uncomfortable answering the questions, you may end your participation in the survey by closing your internet browser.

Benefits

While the information collected may not benefit you directly, the information learned from this study should provide generalizable benefits to nurse anesthesia educators, students and the profession as a whole.
Confidentiality
All data collected from participants will be kept confidential and will only be reported in an aggregate format. All questionnaires will be concealed, and no one other than the principal investigator will have access to the data. The data will be collected and stored in the HIPPA-compliant, Qualtrics-secure database until it has been deleted by the principal investigator.

Compensation
There is no direct compensation to participate in this study.

Participation
Participation in this study is voluntary. You have the right to withdraw at anytime or refuse to participate entirely. If you desire to withdraw, please close your internet browser.

Questions about the Research
If you have questions regarding this study, you may contact Amber Johnson (principal investigator), at (701) 777-4742, amber.johnson.5@und.edu. If you have questions you do not feel comfortable asking the researcher, you may contact Dr. Myrna Olson, (701) 777-3188, myrna.olson@und.edu.

Questions about your Rights as Research Participants
If you have questions regarding your rights as a research subject, or if you have any concerns or complaints about the research, you may contact the University of North Dakota Institutional Review Board at (701) 777-4279. Please call this number if you cannot reach the research staff, or you wish to talk with someone else.

I have read, understood, and printed a copy of the above consent form and desire of my own free will to participate in this study.

Yes
No
Appendix E
Student Registered Nurse Anesthetist Initial Email Message

From: AANA Research Department
Sent: March 9, 2018
To: __________________
Subject: You Are Invited to Complete a Survey on Student Stress

Dear Student Registered Nurse Anesthetist:

You are invited to participate in a study about [how] you perceive, experience and cope with stress during your academic career. The online survey can be completed anywhere you have Internet access and will take approximately 15-20 minutes. Your confidential responses will be used to better understand how students perceive, experience, and cope with stress.

Two reasons to participate include:

1. To contribute to a better understanding of how students perceive, experience, and cope with stress during their academic career.
2. To improve how nurse anesthesia educational programs implement wellness into the curriculum in the future.

To participate, simply click the link:
https://und.qualtrics.com/jfe/form/SV_bf5NnLqTfaKPYCV

The survey will be available for approximately 4 weeks. Reminders will be sent out as the closing date approaches.

Thank you for your time.

Sincerely,

Amber L. Johnson, CRNA, MS
Doctoral Candidate
University of North Dakota
amber.johnson.5@und.edu
Dear Student Registered Nurse Anesthetist:

Two weeks ago, you were invited to participate in a study about [how] you perceive, experience and cope with stress during your academic career. If you have already completed the survey, please accept my sincere thanks.

The online survey can be completed anywhere you have Internet access and will take approximately 15-20 minutes. Your confidential responses will be used to better understand how students perceive, experience, and cope with stress.

Two reasons to participate include:

1. To contribute to a better understanding of how students perceive, experience, and cope with stress during their academic career.
2. To improve how nurse anesthesia educational programs implement wellness into the curriculum in the future.

To participate, simply click the link:
https://und.qualtrics.com/jfe/form/SV_bf5NnLqTfaKPYCV

This will be your last opportunity to participate. The survey will close on April 6, 2018.

Thank you for your time.

Sincerely,

Amber L. Johnson, CRNA, MS
Doctoral Candidate
University of North Dakota
amber.johnson.5@und.edu
Appendix G
Responses to Open-Ended Questions

What semester has been the most stressful for you thus far in your program? Why? (please be as specific as possible)

- The first semester I was able to live at home. The second semester I had to move away from my children, I only see them on weekends, more in class work vs online, getting back into taking exams after being out of undergrad for 11 years.
- It is my first semester; therefore, I cannot compare it to any other semester.
- Wasn’t sure of the expectations each professor wanted needed for exams. I also traveled and the weather was an issue.
- Learning the pc system and expectations
- Started clinical
- The unknown and waiting game for DNP project approval. The lack of guidance we received with our DNP projects. The frustration of wanting/need to work on my project but having to wait for someone else.
- Starting clinical and intense didactic testing
- I’ve come to realize that my program does not have my education as their top priority and I’m entering a profession where I’ll always be seen as second rate to a physician. The politics are very real at my school and I’m very resentful of the opportunity not getting even though I’m paying top dollar.
- Not enough time to write my thesis, study adequately for the SEE exam, and prepare for clinicals.
- This was the start of clinical, so just adjusting to something brand new along with the stressors of studying for frequent exams.
- Challenges in personal life. The speed at which concepts are compiled onto one another.
- Hardest academic semester plus clinicals started once weekly. Many things are new in clinicals that I did not experience as a bedside nurse. For example, I may the dose of a drug to give, but I am not familiar with the concentration in which it is supplied, so I must calculate that on the spot.
- A large amount of anesthesia content to learn and severe anxiety about starting clinicals.
- The 7th semester/last has been the most stressful. I think there is a lot of pressure to be ready and to pass the boards exams. Some of that pressure is from outward sources and some of it is internal.
- Clinical and class
Didactic load has significantly increased compared to 1st semester

Started clinical that semester and still had difficult course work.... was an overwhelming semester with prep work/ reading for OR/ learning technical skills and studying for class exams

Started clinical and still had several classes. The DNP courses required a lot of work that took away from the anesthesia classes. Very frustrating.

front loaded program starting clinicals

The policies we agreed to when we started changed.

7th d/t major issues with DNP project and lack of support

Research paper (40 pages total) in addition to anesthesia courses and clinicals

it's the only 1 ive had

Incorporating new study habits

Death in family at the beginning of semester plus 3 heavy science courses

transition into clinical experience with little guidance from the faculty

Starting clinical while still having a heavy class load was very stressful. Along with stresses from home such as having a sick dad and work and maintaining a healthy relationship with the boyfriend.

Test every week and it feels like I’m constantly cramming

We have more clinical hours along with classes. Clinical drains me mentally and physically.

We are learning specialties and beginning specialty clinicals so it’s difficult because it’s all new experiences to things hat we haven’t fully learned yet.

Unrealistic expectations with clinical and workload on top of family responsibilities ad.

4th - Time commitment, stress, exhaustion

High workload, unfamiliar territory and classmates. First time in grad school

Major family illness, personal challenges with integrating back into school, personal health challenges

First semester combining didactic and clinical experience

Course load of 5 classes and challenging content

Acclimating to big life change, hardest classes, clinical has not yet started so you don't even know if you will like being a CRNA and you wonder why you put yourself through this

Working full time, car payments, interpersonal relationships, tuition
• 18 credit hour load
• Clinicals started this semester. It has been very stressful dealing with the different personalities, expectations, and moods of the CRNAs.
• Burn out combined with volume of material
• The third semester has increased class work responsibilities on top of already long clinical hours.
• Too many classes
• 6th because we started clinical and still had course work as well
• New professor, new leadership, WAY TOO many clinical hours and asking a tremendous amount of time and energy outside clinicals
• Amount of coursework plus personal stressors
• Trying to balance 4 clinical days a week and 5 classes meeting once a week was tough.
• The most material plus starting in clinical
• Multiple exams per week some weeks, when this occurs I do Not feel like I’m retaining important information and feel like I’ve become very sedentary trying to keep up.
• Introduction of new information learning for the first time with weekly tests
• Out of school for 8 years
• Family/relationship issues. Girlfriend broke up with me out of the blue and was cheating on me with one of my good friends. I moved Across country for my program. Made focusing on school hard and sleep difficult.
• Not stressed yet
• It’s the only semester I have had thus far
• The pace. Only had the weekend off between 2nd and 3rd semester
• Just starting clinical
• Integration into clinical with classes and DNP project beginning
• The amount of course work was stressful
• Just started
• Change in lifestyle and difficult content with subpar professor requiring much work and stress to find outside resources
• Heavy didactic load combined with the beginnings of the capstone project process
• Due to the volume of information without the guidance of what is truly important both for future career and the boards.
• all of them
• Most comprehensive material. A lot of information compiling and important.
• The exams in the medical physiology classes are tough and class is nearly every day so it’s hard to keep up with that class plus 3 others. We have exams at least every 2 weeks.
• Starting clinicals plus intense coursework
• More clinical time (8hr and 12hr shifts) with 4 days of class work
• heavy course load, lack of faculty support
• Start of clinical
• Trying to organize study time between classes, getting back into a school frame of mind.
• Adjusting to schedule, adapting to OR environment, continued class work, high expectations in clinical
• overwhelming amount of information to memorize, coupled with seemingly insurmountable debt associate with school and lack of sleep
• It's like having a full time job of clinical hours coupled with being a full time student. We also do a lot of work for the hospital but never receive any appreciation.
• 4 tests a week and a very large learning curve
• Clinical is over an hour from home
• transition into clinical phase from didactic.
• No stress other than group projects with a lack of communication and teamwork from others
• extra assignments, increased clinical stress
• Online content and ambiguous assignments
• Thinking I made the wrong choice. Being an RN was easy, scared for the level or responsibility, unknown future
• heavy academic and clinical expectations
• 1st and 2nd semesters have been extremely didactically challenging and there is a constant feeling of comparison to other students and a constant feeling of failure and stress.
• All didactic !
- Tremendous didactic workload while being in clinical 3 days per week and just learning how to navigate clinicals.
- Knowing that if I fail a test it could be what sends me into debt and put a strain on my marriage.
- Adjustment to clinical hours and routine
- Content is more difficult
- Was the beginning of clinical, felt thrown into 5 days per week in OR
- Too many classes together, different topics
- Largest class load with high number of clinical days
- 2nd We’ve had an exam every week. 15 weeks in the semester 5 without an exam. Two days of clinical a week plus class. One of those clinical days is right after class 11-7.
- Credit hours, and adjusting to the high demands
- First semester of clinical with didactic integrated- the primary stress was written care plans with the emotional stress from our primary clinical site (CRNA relations)
- Classes being taught for the first time and put together poorly
- Multiple time intensive classes combined
- 3rd. four difficult classes plus an online class stuffed into a summer semester.
- This semester included the transition from didactic to clinical. Didactic classes transitioned to an online format and continued to require a moderate amount and f studying.
- Closer to boards, higher expectations
- Course load same as first semester, plus addition of starting clinical
- Summer, fast pace, lots of content, with simultaneous integration into clinical for the first time
- Lots of travel, family changes
- Transitioning to being a full time student and a full class load was just a lot at first. Learning to be a student again took awhile.
- Academic challenges, clinical stress, personal stress.
- All 3 have been stressful; The stress compounds every semester
- Research class that took time out of actual learning anesthesia
Summer semester was very heavy both clinically and didactically. Many of our DNP projects were requiring more involvement and our time in the OR had increased significantly.

Very intense didactic schedule combined with 2 full OR days. It was stressful because that is historically the semester people fail didactically, so there was a lot of pressure. Also, it’s the second semester of clinical so you start to put more pressure on yourself, yet you’re still not very good clinically yet.

Courses require more studying

Studying for boards

The testing schedule has one to two exams every week. This leaves little time to decompress or take any sort of break without feeling guilty about not studying for the next exam a few days away.

Apex anesthesia/oral boards prep

2-3 exams a week. Incredible amount of information crammed into such a short amount of time.

I was still working and it was extremely difficult to manage.

Workload

Started clinical

It was the first semester of clinicals, and the classroom work was still pretty intense. So learning how to manage my time and level of exhaustion was really difficult.

Credit load is greater than other semesters

Having trouble getting the grade I need espresso in one of my classes

Heavy didactic requirements AP1 and pharmacology balanced with clinical 3 days a week

Start of clinicals

Just began my program after graduating 7 years ago. Transitioning back into being a student is difficult

2nd Semester Learning how to balance family and school work

Clinical is stressful in itself. Drive time + clinical hours means &lt;12 hr days everyday.

The second semester was heavily loaded with didactic class work while we also began familiarizing ourselves with the clinic areas. Extremely frequent exams and clinic days made free time near impossible.

Incredible rigor
• 6th semester - completing DNP coursework while still managing to learn complex concepts in anesthesia. DNP coursework, I feel, has taken up valuable time I would have liked to devote to learning anesthesia-related concepts.

• The volume of courses all at once - biochem, pharm, research, fundamentals, anatomy and phys

• 32 hrs of clinical at out of town location and one online, one hybrid and two face to face class, the time was not enough to meet all the requirements of the semester

• Cardiac Rotation

• Just starting clinical rotations and trying to hone clinical skills and gain clinical knowledge. Ran into some extremely mean, rude, and unprofessional preceptors who wanted to see one fail. Fortunately, there weren’t many of them.

• Learning how to study again

• Specialty rotation, DNP work and classes all happening at the same time.

• Increase in number of clinical days with prep for clinical along with having classes and test

• Very challenging classes

• Beginning the DNP project, reviewing didactic knowledge, clinical hours, as well as starting review strategies for boards

• tests plus clinical plus simulation lab, poor performance on tests

• We started our principle anesthesia courses as opposed to our more general coursework. We have pop quizzes and tests every week.

• Class load, exam stacking

• Frequent tests combined with more clinical days (which require hours of preplanning the night before)

• Clinical transition

• Heavy course load plus start of clinical

• Heaviest clinical and didactic responsibility

• 4 days of clinical plus heavy coursework

• Heavy course load while being in clinicals

• Heavy class load and clinical 4x/wk
Life role was changing. First anesthesia class was difficult; all physics, laws, chemistry, machine information jammed into 12 weeks on top of quizzes twice a week. We were also in 3 writing classes, an assessment class, and pathophysiology. First semester as a graduate student; I felt the teaching strategies were ineffective and spent more time online googling and watching youtube videos than anything else. In addition my best friend was getting married and I was dealing with wedding things.

Stress can be manifested in many ways. Some are more obvious than others. Please mark the frequency that each condition or feeling occurs to you during the last year. Other (Please specify)

- General sense of ot
- Intermittent depression
- Fights with S/O
- use of sleep aids
- Cry
- syncope
- i want to kill myself
- Take adderall to study require amount
- Throat tightness
- panic attacks, depression
- dry eyes, reading too much, and use of computer
- Need help with school, health, life
- Feeling burnt out ... weekly
- Depression
- Shoulder pain
- Biting my cheeks during sleep. Dentist reminded me that the constant regrowth of tissue puts me at risk for oral cancer. Need a mouth guard during sleep
- Feelings that I’m not good enough
- Couldn’t help thinking about clinical challenges and discouraging experiences when precepted by extremely mean and unprofessional CRNAs when hanging out with family
Do you feel empowered to make changes at your school? Comments

- Not open to this at school
- Professors extremely open to comments regarding coursework/testing and clinical preparation
- Our school makes changes and seems to take evals very seriously.
- Don't have time.
- I have comments and suggests I provide. Whether they make a difference or not or be implemented is highly unlikely.
- I feel that we have a director that cares about us, supports us, and wants our input.
- They absolutely will not listen to anything the students are saying
- Professors are very close to the students, and I feel they would listen if a true problem did arise that needed addressed
- n/a
- Many have tried to no avail
- Not at all
- If necessary but it is not at this time
- CRNA program is run by the nursing school
- School is out of state, unable to have active academic advisor present. Most concerns brought to the school are not met or addressed appropriately.
- Somewhat
- I am too tired to care at this moment in time
- I'm enroll in a Religious school, not many changes can be done.
- We currently feel empowered ONLY because we are going through COA evaluations which is giving us a voice. Until now, we felt very unempowered as a cohort
- It’s so small. If you say something then there’s a huge risk of offending someone who is directly in charge
- I relentlessly push for change, but faculty do nothing
- Yes, but feel as though I can't/am not supported to make change. Plan to make changes after I graduate.
- Fear of disciplinary action
Do you feel empowered to make changes in your personal life? Comments

- Right now, all I do is think, dream, sleep, walk, talk school so to think about making changes in my personal life just adds to an already overwhelming situation.
- Don't have time
- life changes are "on hold" until school is near completion
- The changes I would like to make are inhibited by school being the priority
- I could make changes in personal life but this would take motivation and efforts that are directed to school
- Don't have time.
- lack of time to feel as if I have power over making changes right now
- when necessary
- No, I feel like I don't have time for 'real life'. I feel like I'm always at the hospital or school or thinking about school.
- Too busy to make changes in personal life
- There is no time for any personal life
- Yes, but no time to commit to a true change
- lack of time is a barrier
- Not enough time
- Without being able to work, I am unable to change much about living or financial situations which is my greatest "outside of school" stressor.
- Not until I finish school.
- There is not time to make changes
- My life and my time is not my own until the day I graduate.
- I don’t have time for anything outside of school due to time constraints from the rigorous course load and test schedule.
- the Program is hard on my marriage
- Have tried to go to the gym more/have healthier habits to take care of myself during school
- No time
These items deal with ways you have been coping with the stresses in your life. Each item says something about a particular way of coping. I am interested in knowing to what extent you have been doing what the item indicates. How much or how frequently, not whether it seems to be working. I have been… Other (Please Specify)

- Study
- Long drives, crying a lot
- Eating candy
- Getting outside to enjoy nature
- Yoga
- Wasting time on social media to “turn brain off”

Do you suffer from any of the following chronic illnesses . . . Other (Please Specify)

- Anxiety adhd
- I’m not fat but BMI is 30
- Migraines
- Asthma, allergies
- BMI for obesity is &gt;30, not 25.
- Migraine headache, ADHD
- OCD, anxiety, insomnia
- Not officially diagnosed, but since school I’ve developed frequent reflux
- Gout
- OCPD
- Hashimoto’s thyroiditis
- Pcos, infertility
- Pre-hypertension - not on any medications
- none
- anxiety
- Add
- Anxiety
- eczema/allergies
• Tuberculosis
• HIV
• headaches
• N/A
• IBS
• migraines which were exacerbated with the stress during the 1st semester
• Migraines

Do you know of a CRNA/SRNA who has committed suicide in the last 2 years? If yes, how?
• Propofol
• social media
• don't personally know the person, just heard it mentioned
• Overdose
• Substance overdose
• not sure how, but she died

Do you now or have you ever used prescription drugs to help you handle stress? If yes, please specify
• 1yr ago after my stroke I suffered from anxiety. I was place on citalipram until I became pregnant and then was take off.
• In college
• Xanax
• Ativan
• Prescribed lexapro while in school for depression
• Once school started used atarax from my doc.
• Propanolol, Prozac, Wellbutrin
• Currently trying to find something that will work without having too many side effects.
• Zoloft since starting school
• Propranolol for clinical and test anxiety
• Got a few at Ativan from a friend to help sleep
• After nursing school was put on an SSRI
• Lexapro
• Prescription for lorazepam
cymbalta
• traumatic experience age 19, no longer an issue
• Lexapro
• Suffer from anxiety and dpn. I take Paxil and Wellbutrin.
• Medicinal cannabis: CBD/THC capsules
• Celexa
• Sleep aid
• I am prescribed a benzo for situational anxiety.
• Propranolol for public speaking or flying on airplanes which causes a lot of stress and tachycardia even though I know it’s not extremely dangerous.
• Ativan
• I took Zoloft in undergrad my sophomore and junior year.
• Xanax
• Xanax not currently
• Methylphenidate (with prescription)
• Celexa

**Do you take any of the following classes of medication to help you manage stress or sleep? Other (please specify)**

• Anxiolytic
• Benadryl, melatonin
• Magnesium for sleep
• Melatonin
• Magnesium on occasion to help me sleep. I have alcohol on occasion also but for social reasons- not to manage stress.
• melatonin - sleep
• Marijuana
- Z-Quil
- None
- Herbals (valerian root)
- sleepy time tea daily
- Medicinal cannabis: CBD/THC capsules
- None

**What resources did you use from the AANA Wellness Program and do you feel these helped?**

- I watched all the videos for the professional aspects class at school. Yes, I think the program helped. I did not know about that resource before I went to the AANA website for class. Now that I know about it, I can access it in the future if I need to.
- Support information for SRNAs, yes
- Articles for class presentation
- We had to take some of the online courses- they were very basic and common sense, I didn't really get much out of them
- modules, yes
- We had a mandatory set of six modules we had to complete. I don’t think they helped with the stress of didactics.

**What do you consider to be causing you the most stress?**

- Moving away from family/children, getting back into school mindset, weekly exams, feeling at times as though I’m barely keeping up with the schedule
- Starting anesthesia school.
- The balance of family and school.
- Ivf and school
- balance of school assignments and clinical stress
- Clinical and sleep deprivation
- My complete and utter distain for school
- Papers, the SEE exam, clinical, rude people
• The pressure of preforming well at clinical to hopefully secure a job offer there. Trying to memorize so many facts that could potentially be asked of me at clinical.
• Financial burden
• Significant other break up
• Other students in my class are not positive people. It seems it’s appropriate to make fun of people for laughs.
• Getting through school, the responsibility I have to my patients, and learning as much as I can in clinical practica before graduation, and taking board exams.
• School and clinical
• School
• The amount of classwork involved in this program is a large source of stress, however, I feel as though it is appropriate and I have appropriate support from my faculty, internally, and from my cohort, if needed. I have all-but-eliminated my social life.
• Trying to do anything I can to become the best CRNA I can be after I graduate and pass boards. Pressure of passing SEE exam and eventually certifying exam.
• the large amount of didactic information in preparation for the start of clinical rotations and the fear/anxiety surrounding entering the clinical environment for the first time
• I find it stressful to constantly be under scrutiny and evaluation in the clinical setting...especially how different expectations/ personalities can be from one day to the next. We are supposed to get daily evaluations from the attendings we work with and an occasional bad day/ bad review even if it’s 1 bad/30 good in a row can be troubling/ stressful and affect my confidence level or performance. While I understand having bad days and not clicking with every personality is part of being human, it’s hard not to focus on it being a reflection of me as both a person and clinician. I find it much easier to process comments on technical skills than those that are aimed at personality traits.
• The amount of reading and studying. Also, my 1.5 hour commute to and from school 2x per week
• School and lack of money.
• Excellence within the program.
• clinical, specifically morning report most of the time.
• School specifically the disorganization and unrealistic expectations of our school because they are on probation.
• School is a large portion, another is financial (have two kids), but the financial is also because of school.

• Frustration at clinicals when working with CRNAs who display negative attitude when working with students.

• The large amount of material I must learn prior to beginning clinical in August. I become stressed at the idea of ever appearing as if I don’t know what I am doing, whether in clinical, or class because we are frequently "pimped out" in class.

• School

• 100% from clinical preceptors who use humiliation as a teaching tool and make it known they do not like having students

• School and not enough time

• Preparation for clinical daily, studying for NCE and class exams, completing busy work

• Starting clinical and that huge initial learning curve is very stressful. In the beginning of clinical I felt inadequate even though I wasn't expected to know everything yet. It's challenging to know what different preceptors expect from you at various points in the program.

• Cumulative weight of school.

• School and needing to maintain grades

• School and clinical. Mostly clinical. Some of the personalities are incredibly hard to deal with. When I get home im too tired to study.

• The unknown. Working either different people in Clinical. Some people are nice while others try to rip you apart piece by piece to make you feel like you have no business being in this profession.

• Shook and children. Trying to satisfy both.

• Constant unfamiliar clinical circumstances with criticism involved.

• Work load, anxiety about starting clinicals. Getting good grades

• Assignments, perfectionism, responsibilities

• Early mornings for clinical and late nights doing care plans make for little time to sleep

• The "personalities" interacted with on a daily basis (CRNAs, MDs, RNs) who seem to believe that the "student" title means that I can be yelled at, belittled, and ridiculed despite being a veteran professional in nursing.

• Mom's new cancer diagnosis, fiancé's mom's new cancer diagnosis, fiancé started medical school soon and possibly having to move
Demeaning attitudes towards me from MDA's or CRNA's

CRNAs in clinical rotation who are rude, demeaning, insulting, and/or moody.

Exams and board prep, job search, driving long distances to clinical

The pressure to perform and the never ending amount of pointless and time consuming busy work that detracts from time to study

I'm sure my expectations for myself are much higher than they need to be. It's hard to be a student again rather than the person who has experience. It's a new role. I wish I could be less of a perfectionist -that would certainly reduce my stress about school performance. School has been quite isolating, too. Our group isn't big into study groups and when we are in the OR, we don't really see anyone else. It's easy to feel disconnected from everyone.

School

Lack of financial income, pressure to perform at a high level 5 days a week

School, keeping up with didactically while preparing and processing what’s happening in clinical.

Performing in clinical and being evaluated

Being away from my family and unable to enjoy them on the weekends when I am home. There is no time and the school is punishing students for not having time. Have released 3 students IN OUR SENIOR year. Very stressful.

school and various personal dressers (several family deaths in close succession)

Trying to balance school and family/social life

Uncertainty the night before clinical. If there CRNA and/or MDA will be nice, understanding, and ask questions I am prepared for

A lot of information and exams to prepare makes me feel like i do not have enough time to spend working out, cooking quality meals, or do other time consuming things I enjoy, I feel guilty if I take took much time away from studying.

School

Finding enough time in a day to study after clinical while maintaining the daily upkeep of a home, maintaining a healthy marriage, finding self time.

changes made at my school

Money to make it through finishing school and the thought of failing out of school

deadlines; working fulltime and overtime while in school

Getting school work done and finding time to study

Now clinicals. Trying to meet expectations
• Studying for boards, lack of time to care for myself, clinical, the loss of friends through the program, nervous about working at a hospital I’ve never been to before
• Academics and occasional CRNA who does not treat me well in the clinical arena.
• Lack of sleep
• family/school balance
• Lack of quality educators in our program and no accountability from the program or the dean. It is the most unhealthy situation I have ever been in. The majority of our program has had to find multiple outside resources to learn the required content, it is like indepen study for the nurse anesthetist. Papers are returned after thorough editing for professional writers and if you wait and submit the exact same paper it could get an A, it may sound like I’m a disgruntled student but there is clear pathology and serious lack of support and professionalism in the administration.
• School work load. Constant, ceaseless barrage of information.
• my parents are considering a divorce because my dad has been caught cheating on my mom; they have been married for over 40 years. My child is also going through therapy due to anger or aggressive behavior. Currently ruling out other neuro disease or disorders. Also trying to find time to study for boards...
• The volume of information without a framework of what is important for daily work and the boards. The quote I have heard many times from our directors: "It's ALL important".
• The initial start of school….quitting my job, moving, having my husband start a new job, borrowing money from family, starting a new profession that could kill someone if not done properly.
• School
• school. my program director, [REDACTED].
• The significant lifestyle change from going to a full time nurse to being unemployed. As a single person with no outside financial support, it is very challenging.
• Constant pressure to do well in all of my courses and excel. Stress of making time to go to the gym.
• Clinicals
• Stress with keeping straight A’s in class while juggling the anxiety revolving around New clinical sites each month and higher expectations. The fear of being belittled by the CRNA you are with that day who try’s to pimp you on questions.
• volume of work, high expectations
• Working, commuting, school, money
• lack of support/feeling of judgements from program director
• DNP project, studying for boards, and performing well at new clinical sites each month
• Commute times to and from clinical paired with required nightly care plan phone calls leave no free time for eating/anything until late into the night
• Getting used to the fast pace of graduate school.
• This survey is too long - major life changes and mostly stress in clinical area
• Finding the balance between doing well in school and understanding all the material we are supposed to know and enjoying and spending time with my family and friends.
• Not enough time to do the tasks that need to be done
• High expectations for myself in didactic and especially clinical situations. Wanting to excel in clinical
• preparing for SEE exam and doing well
• Workload of managing class, clinical, and study time and financial burden of unexpected clinical fees and increased tuition.
• Clinicals and didactic simultaneously along with decreased time to study/prepare for clinicals/complete course work for the DNP component
• School requirements and time management with household/family obligations
• Clinical expectations vs school expectations. The school is not involved with my clinical site and the two expectations compete for time. There is also a negative learning environment at my primary clinical site and it is not addressed by the coordinator.
• Tests
• Interactions with others. Abuse as a child left me with very low self efficacy and the beliefs others do not care for me and I’m not likable. Challenging these incorrect core beliefs daily.
• School
• inability to control the way you might be treated during clinicals or knowing you will work with a clinical instructor who can be abusive
• New clinical environment can an environment that refuses to Foster a slow enough environment for growth and lacks medical support
• School is a large stressor to me, and also having gone down to a one income household has been difficult. Plus, moving to the state for school took my wife's salary and cut it more than 50%. Money is a big stressor too, especially because I see my wife stressing about money and not being able to earn enough to provide for us during this time.

• Lack of an income

• The amount of information we have coming at us is almost insurmountable. This causes me a great deal of stress. Also, it is very stressful/discouraging to be an underperformed. Even though I am passing all of my classes &gt;83%, I am consistently in the bottom half of the class. It is hard to not compare yourself to these very high performers.

• Professor are intimidating. Not feeling prepared for clinical

• Constant work. Clinical schedule, plus academic work, plus DNP project. Trying to balance it all while still having some type of personal life is near impossible. Trying to meet expectations and feeling like no matter how hard I try I don't measure up.

• School, lack of control financial instability, feelings of failure, not having a job, living with parents, recent breakup after long term relationship, etc.

• The requirement at my school to make an 83 or above in all classes to continue in the program,

• Studying for boards.

• Balancing class, clinical, and personal life demands

• school

• I have gone through two tough break ups in the last year.

• school program, distance to hospitals, time driving, cooking, elderly caretaker-my mother

• uncertainty of CRNA assignments in clinical setting- has been major cause of distress in our program in the immediate past

• Faculty members whom put together classes without preparation (I.e., no syllabus, using online resources without looking into it themselves, etc.)

• Going through divorce in school being far away from family.

• Family health issues, school, finances etc

• school course load

• Balancing school requirements with family obligations.

• school expectations
• school
• The combination of being in clinical and the classroom while trying to work on my doctoral capstone
• School
• School
• Classes
• Exams and clinical
• School, meeting deadlines, academic performance anxiety.
• inconsistencies in the program, poorly written tests and lectures, lectures and tests contradicting our required textbooks. instructors using material from other resources not available to the student.
• Feeling inadequate / fear of failure
• School
• School
• The fact that you could be kicked out at any moment for even a small mistake
• Pending divorce, worried about children
• Studying for boards
• Tests and check offs.
• School
• School, hands down. Specifically, the fear of failing out of the program. I have already invested so much time and effort into the career, the last thing I want to do is trip at the finish line.
• School, specifically upcoming start of clinicals in one month. Finances and how much loan money I am borrowing.
• School has just become too overwhelming with the amount of hours expected to be in the clinical setting while taking emotional abuse from doctors surgeons and CRNA's. AT the same time, the expectation for didactic work has not become less to compensate for the increase in clinical hours.
• School
• Fear of being kicked out of school, running out of money before I get credentialed to start working, fear my boyfriend will not propose after graduation, failing boards
• Inconsistency of preceptors, being told to “always” do something one day then to “never” do the same thing the next day. Preceptors have a hard time encouraging
me to think on my own, so it’s scary when I’m in a situation where I have to think on my own.

- The inability to work during school and provide financially for my family. It has been difficult adjusting to the school schedule and having less time to spend with family and friends. The time I do spend with family and friends I often feel guilty that I should be studying.
- Finances Mainly investing.
- the challenge of school works and clinical
- Studying for hours each day and not getting the benefits with test scores
- Finances, Didactic Work Load
- No one besides your colleagues understanding what you are going through. Not having enough TIME for anything.
- School taking all free time.
- Financial constraints and school
- Just learning to be a student again and learning how to balance my family life and school life while giving each the time and attention they deserve. It has also been stressful learning how to live off of one income again.
- School
- Demands of school during the clinical phase and strong personalities in the staff I work with in clinical
- Time Management. Having little time to do the things I enjoy, things I used to do before entering the program.
- Constant studying, new clinical environments,
- Feelings not good enough
- School- Lack of support from directors, demanding schedule, little time off without having to make it up, CRNA/MD hostility, being put down
- Bad program, teachers not tracking well, too much to teach ourselves at one time
- trying to manage learning anesthesia concepts and how to administer while completing DNP coursework.
- consider to be most stress is school not able to work to pay for all the bills. The financial hardship that comes along with school. I feel like it can have a better plans for students
- The amount of information and the pressure to succeed, along with the expense and financial debt to complete the program.
- School and finances
• Mean, unprofessional clinical preceptors
• Family
• Balance life with the insane amount of clinical hours and school work
• Clinical and staff personalities
• School
• School work and deadlines
• School, financial issues, and not being around my kids/family as much as I used to.
• school, other classmates, former girlfriend
• pressure to perform well, and retain/remember /apply clinical info
• rigorous clinical schedule on top of required didactic work
• school, feeling of doing poorly
• I don't think I was fully prepared for the lifestyle changes that come with being enrolled in a CRNA program. Before getting accepted into school I was travel nursing. I only worked 3 12 hour shifts a week and pick up over time if I felt up to it. I spent most of my time outdoors and frequently took vacations in between my travel assignments.
• Lack of free time, parenting duties during school
• School. The high standards I hold myself to.
• school
• School, obtaining passing/good grades, time management with every class
• Hostility in clinical setting
• School and ineffective teaching strategies. Too much reading and not much material is covered in class. Unsure what to focus on for class, some teachers do not assist in guiding us to what is important. Time is commonly spent on unimportant things such as writing classes for the DNP; classes are the same assignments repeated and just a waste of time that could be spent on more important things.

COPED: How have you coped with each stressful situation?
• I make it a purpose/carve out time to exercise daily, it helps me decompress and take my focus off school for a short time each day to clear my head
• Calling and spending time with friends and family
• Handle only what I can co trial and take one task at a time. The most urgent tasks first then go down the line from there.

• Meds and exercise
• Joking and talking to classmates about them
• I have a therapist
• Go home, watch Netflix and go to sleep or go home and attempt to study
• Talking to my husband, who is a CRNA, about things, as well as SRNA friends. Constantly studying to feel more prepared and confident

• Financial Burden
• Drinking, exercise, therapy, talk with friends/famil
• Mostly lifting weights and lots of sex
• I have tried to maintain balance by treating school like a job. I try to not spend too much time on school because I realize I could get burned out and overwhelmed. I try to carve out time each day for my partner and for myself.

• Exercising, going outside, watching TV, hanging out with my friends. Addressing the situation, talking to my professors.

• Focus on improvement. Exercise
• I continue to work on school work and prepare for clinical in a few months. I also go to the gym as often as I can. My unhealthy habits surround food.

• Positive thinking, deep breathing, meditation, essential oils.
• continuing to study and keep up with coursework
• I speak to my husband, sisters, parents, classmates, and occasionally our program director. I also try to speak to people I work with directly to ask for feedback rather than just giving them the online evaluation link. I also often go for long runs or exercise classes if time allows/ especially on weekends to clear my head.

• I sleep too much and procrastinate.
• I try to take a day off of clinical every now and then to help relax. I also go out and drink with my friends a lot.

• Take it minute by minute. Make sure I reward myself with free time. Exercise is my drug.

• consult help from senior students
• I try to just continue doing well in school and hope they won’t kick me out because my performance and didactically are strong. But I constantly fear being kicked out. I’ve had 4 classmates dismissed.
• by spending time with friends, relaxing, and being outside
• Not much to do.
• Take a deep breath, and handle the challenge head on. I have a supportive family. Exercise helps as well.
• Prayers
• Cry, then move on.
• being fully prepared for any situation can decrease stress. Getting to clinical early and being fully prepared.
• I exercised several times a week during the first semester on days when we didn't have class (at this point there was no clinical). Once clinical started I reduced exercising to maybe once a week and I started stress eating.
• Clean the dishes and laundry
• Talked about it. Overeat.
• I immediately call a classmate to talk about my day, get reassurance, and exercise.
• The best I could.
• I remind myself that I have never received a negative daily evaluation so even if I fail one day I will be fine.
• Workout, step away for awhile and watch movies.
• Powered through
• I shut up and nod "yes" and often say nothing at all.
• I found being at the hospital with my mom on the weekends to make me feel better, crying makes me feel better, I continue to follow a normal exercise and diet regimen, occasionally talking to my friends is helpful
• In the moment I strive not to take things to personally. I also enjoy spending time with my family.
• Spoke with my director, other students, and family members.
• Study more, utilize drive time to listen to lecture
• Push how I feel aside and force myself to keep going
• Sometimes I call my sister so I can talk with someone NOT connected to school. Also, on Sundays I don't study. I go to church and take the day off.
• Drinking
• Exercise, family support
• Withdrawing/alone time, wine, sleep when I can.
Exercise  
Talking with my classmates. Sleep.  
Friends, family, prayer, therapy (individual and group)  
Try to prioritize, and be intentionally about setting aside time for friends/family  
Visualizing the day going well. Communicating with the CRNA and MDA the night before clinical  
Joined a new gym with my friend so we can motivate each other and still “hang” out a few times a week, try to read for pleasure occasionally, get out doors when I can. Other times when I’m stressed I find myself eating junk food or sugary things.  
Delt with it and trucked forward  
Cry, sleep, talk with husband for support  
expression, watch something funny  
Working out, tobacco, prayer, meditation, yoga, music, reading, podcasts  
trying to eat well, workout, staying in close touch with family and friends and getting sleep when I can.  
By trying to just start a project and finish if  
Focusing. But at times I can’t recover  
Talking to a classmate, eating  
Mostly exercise and Yoga. I drink alcohol on the weekends, sometimes too much.  
Trying to accept that this is how it is  
focus on one thing  
I have a great cohort, we support each other by talking about our issues as well as studying together and sharing resources  
Employ the skills I’ve learned in life and in school. Be confident in self, take time to reflect in progress, decompress with other students, and personal wellness through healthy diet, lots of exercise and plenty of sleep, I also take trips often with my wife (at least monthly) even if only for a couple days  
Cry, talk to someone close, exercising, and finally seeking professional help. Attempting to speak with a counselor so I don't go crazy.  
Exercise, cooking, complaining and yes sometimes over-indulgence in alcohol and then put my nose back to the grindstone  
Crying, sleeping, counseling, talking to husband, prescription medication
- Taking breaks, meditating
- ETOH. trying not to think about it. moving on.
- Tried time management, designating specific time for each task. Speaking with a classmate about common difficulties and stress.
- Being pre-pared
- Vented to my significant other and/or parents and try to find the positive in each situation.
- talking things out with my husband, formulating a game plan for getting everything done
- cried, talked with friends, aim to keep studying and show may abilities as a student
- Focusing and remembering it will get better after graduation
- Talking to family and classmates.
- deep breathing, alcohol, venting feelings to others
- Exercise. Prayer. Meditation. Talking to friends, classmates, and family. Spending time outside and taking breaks from school
- Talking to support systems
- studying to get better. Ignoring the situation and doing something to take my mind off of it, like watching TV/Reading
- one day at a time
- Study more, sleep less, take out more student loans
- Exercise on weekends, talk with classmates, listen to music to decompress on commute to/from clinicals, maintaining a well balanced diet
- Communication with my fiance.
- vocalizing with family friends, taking part in hobbies, reading,
- Planning dates with my husband and visiting family
- Anything that triggers my ptsd I see a therapist for.
- Meditating, talking with other students
- telling myself that i can get through the day
- Try to improve, deal c it
- Talking with my wife. When I started clinical I started having anxiety attacks during odd times. I started lexapro and it has helped a lot with the anxiety.
- Work to overcome the problem and enlist the help of family or my spouse
- Studying is the best thing to help me feel more confident and secure. Meditation is a huge way to relieve stress. Exercise is so important for me to stay balanced.
- Not think about it.
- talking to classmates, talking to friends/family. Going for long walks. Watching TV to escape for a few minutes at a time.
- I workout, stay busy, spend time with friends and family, try to find humor in situations, work as hard as I can at the only thing I can (school).
- I make sure to get adequate sleep and attempt to eat nutritious foods as often as possible. I wish I had more time to exercise as I used to exercise at high intensity 5-6x a week.
- Study a little each day
- Staying organized, talking to friends and family, remembering that life is bringing good stresses
- exercise, friends, family, wine
- I have relied on friends and family when feeling sad.
- Exercising, and trying to keep a balance diet.
- I attempt to remain professional, but have cried, lost sleep, drank alcohol, & used exercise to cope with stress of school
- Exercise
- Medication
- Not thinking about it
- Friends/family/sleep
- Reading, time with family.
- differently, how i handle things is different every day
- exercise, positive thinking
- Increased alcohol use, exercise, stress eating
- Exercising and listening to music.
- Exercise, family
- Destress by relaxing
- Exercise
- Depends, I listen to music a lot and do visualization exercises sometimes. I take my prescribed anxiolytic before exams.
- talking with family and classmates
• Exercise/sleep/Netflix
• I have just been trying to work through the issues
• family, friends, movies, exercise
• I try to be as prepared as possible, completely alert and competent each clinical day. I get advise from SRNA/CRNA friends
• Mindfulness, meditation
• Workout, lifting
• I just try to be as prepared as I can be.
• Light to the horizon
• I try and exercise. But currently my program’s curriculum is excessive and time for exercise is few and far between.
• Studying, relaxing, practicing clinicals situations, reassurance from instructors and financial advisors that loans can be paid back
• Live each day at a time, breath, get through it no matter what. Exercise, go out to eat or to a club/bar, watch movies or tv.
• Mostly exercise and just moving on and attempting to stay organized
• I just keep going. Spend money carefully but never check my account balance, lots of over the counter sleep aids at night, tell myself all these problems will disappear after I graduate, pass boards, and start working.
• Talked to my peers who can empathize with my situation. I’ve talked to my clinical coordinator when appropriate so adjustments can be made. I also talk to friends and family who aren’t involved in anesthesia to vent and seek an outside perspective. I look for problem-solving ideas and better coping strategies.
• Praying, exercising, turning to my support system to talk
• Reading, exercise, video games, occasionally alcohol.
• Exercise
• Studying longer hours and harder
• Train Brazilian Jui Jitsu, Allow for time away from school/school work
• Learning to adapt and making friends
• I make sure that I have set study hours and a strict end time so that I am able to be with my husband during the evenings. I use my breaks to spend time with family and try to keep homework to a minimum. I honestly just don't think about the finance portion and let my husband deal with it.
• Trying to find a little bit of time to relax and not do anything related to school
• Prayer, sharing with friends, personal Bible study, exercise, enjoying the outdoors.
• Yes
• Prayer, family,
• Tried to seek counsel from mentors
• Tried to stay prepared to avoid frequent criticism, sought encouragement/support and expressed negative feelings to significant other, family, classmates and friends. Tried to stay healthy/exercise and keep the rest of life organized.
• exercise, monogomous sex, alone time, religious faith
• Yes I cope with stress by working out and talking to friends
• Talking through it with classmates. I would have dropped out of the program if they didn't support me through it.
• talking with friends
• Suck it up, remain professional, and pray to God for help
• Most
• Being positive and thinking that it is only for a period of time.
• Exercise or alcohol
• Focusing on gettin through school. Talking it out with family and friends
• Exercise
• I have a great support system and use them a lot, exercise and house projects
• just try not to think about it. use ETOH
• taking things one day at a time, and learning from mistakes.
• take time for myself
• exercise, sleep, work hard, keep a positive attitude
• Spending time with my family
• Deep breathing, talked with my advisor.
• take a mental break occasionally as needed
• Talked to others, sleep a lot, gym sometimes
• Spoke with husband and classmates
• Exercise, trying to take care of myself
SUGGESTIONS: What could educational programs implement in their curriculum that would help you cope with stress in a healthy manner?

- Group physical activities and outings.
- Lunch time yoga
- More reasonable expectations
- Mentor program between senior and freshman students
- Something that doesn’t consume wasted time: make it optional and SRNA focused: safe space discussion on stress
- Unless they change the culture at this institution additional classes won’t help
- More receptive to students feedback and to students feelings, people are so rude to students
- This is a tough question because it’s so different for each person. I don’t think there is anything that could be implemented. I think I have adequate days off, people I can talk to, etc. stress just comes with a career of this magnitude
- Mandatotry Financial counseling
- Just caring about the wellness of their students.
- I’m not sure.
- I think there is a balance between motivating people to do well in clinical and didactically and also letting them figure it out. I think supporting more days off from clinical, implementing some type of required downtime where there isn't anything on the students 'plate' if you will.
- None. Don't have time for another program education
- heathly food alternatives and making physical health a priority
- Some hours of a class dedicated to providing information on ways to alleviate stress and how to deal with stress in a healthy way.
- some type of structure to clinical preparation such as low stakes (i.e. ungraded) but goal-directed simulations that progress in a step-wise fashion in terms of difficulty. One aspect my program has implemented is a very informal "shadow day" where first year students shadow a 2nd or 3rd year student for a day
- More wellness check-ins with faculty and praise for hard work... we will definitely hear from faculty of a bad review comes in but I think it’s also important to hear from them when we are doing well....everyone likes to be recognized for hard work and good performance- I think it wouldn’t help motivate and encourage. Maybe also a few extra wellness days thrown in. I am someone who never calls out sick unless absolutely necessary and often feels guilty for taking time off.
- Perhaps offer discounts to local yoga studios or massage places.
- Have more meetings with students to discuss stress levels and how things are going.
- Aid for gym memberships. Implement more scenario situation vs just memorization/spit back exams.
- 20 min rest/relaxation. American culture values hard work, but at what price to our bodies? Other cultures handle stress more effectively via meditation/rest/relaxation breaks.
- A program won’t work unless they live by it. We were given a wellness class but they don’t practice it. Nursing culture is “what happened to me should happen to you”.
- Improve clinical experience. Clarify clinical expectations with CRNAs who are working with students
- Not sure
- Structure didactics differently
- decreasing the amount of busy work, starting clinical earlier with better orientation, allowing for more study time and decreasing clinical time.
- Even if my school implemented a stress management program, I think I would still end up stress eating on occasion. I’m not sure education on stress management would really change how I cope, but maybe it would. Nursing school had lots of education on stress management, and working in the intensive care unit is extremely stressful, so it makes sense that by the time you get to CRNA school you have a good idea of how to manage stress in a way that works for you.
- Classroom limits
- I wish programs would be very upfront at the beginning about the stress and issues you may deal with at clinical.
- A free gym membership or a heavily discounted gym membership via affiliation.
- None. Less nonsense content in the curriculum.
- I think the CRNA schools in general are built on an older model of trial by fire education that has been shown to not be conducive to learning - I think the learning expectation should be high but the environment should be friendlier.
- They could teach CRNAs and ESPECIALLY MD anesthesiologists how to not be assholes.
- It was helpful when my program let me leave a distance clinical site a day early at no penalty so I could be with my mom for her surgery
- Promote exercising.
I think it would be great if educational programs initiated a re-orientation for CRNAs to remind them of the role they are playing in our education and to be aware that mutual respect and professional communication should always be adhered to.

More frequent breaks. We didn't get time off for anything other than Christmas, and it's only one week.

Change the horrible staff

I would appreciate more time to study. It would be nice to have more days off so we could focus on the didactic portion a little more. And, sometimes you just need a little time away from everything to take a mental break. Our 'spring break' and 'christmas break' simply means that we are full time in the OR and we are off from classes. That isn't a break. We are even burnt out by the end of that.

Psychiatrist

Only doing clinicals 4 days a week so we can do everyday errands like go to the doctor

Vacation Days and allow breaks from school like Spring Break and breaks between semesters

Just listen to the students and their concerns and make PRODUCTIVE changes to help

honestly I'm not sure.

Maybe a stress seminar during orientation, or during the first semester would help. Periodic check-ins during the programs duration could be helpful too.

Scheduled time for exercise, incentives for good stress management techniques

I feel it might be a little more helpful if the professors could communicate and stagger some exams a little more vs having 2 or 3 a week, I feel this is where the majority of my stress comes from and my stress or fear of doing poorly trying to multitask between the courses. Our professors have been fairly open and welcoming if we need to talk about stress and ways to manage time.

A stress management class.

Quarterly “health day”

Unsure

Bonus days off, or not working us to death with exams on top of it every few weeks. I am Not sure tho

Not sure

Maybe scheduled physical activity

Honestly, I don’t know
- Activities like arts n crafts, movies, pot lucks, field trips to a museum/Zoo/aquarium
- Not sure.
- Not sure
- involve family with education
- Wellness tactics and a faculty that promotes faculty to student relationships. Our faculty makes great efforts to meet individually with us to cultivate relationships and check in on our wellbeing.
- Allowing us to take a clinical sick day without judgment. I think it would also be beneficial for them to recognize there's a lot of us that are dealing with stressful and personal situations and for them to occasionally mention ways we can seek mental health programs and give us support.
- Have a student panel that is heard in regards to how to adjust the program to better educate their students.
- Avoiding alcohol and educating people that it is okay to be on medication for anxiety/depression.
- Nothing. It's the nature of the beast. Taking up class time would just be a waste of my time. I'd rather take that time for leisure time instead so I have more time to do exercise, hang out with girlfriend, meditate, etc.
- Guided meditation
- Stress reducing courses and/or courses
- strategies for taking control of stress and turning it into something positive
- therapeutic discussion build into curriculum time, a private or anonymous counseling service
- Ways they think will help students adjust to the rigors of the program.
- weekly meetings to hash things out
- Maybe a few more break days during the school year :)
- group meeting to share stressful situations
- Implementing days for self, where studying is not mandatory
- decreased workload or at least spread out more evenly
- Allowance of 1 personal day per semester from clinical to catch up on personal time needed during the weekdays
- More active involvement in clinical phase, especially if sites are out of the region. More frequent check ins. More concise guidelines for expectations for the clinical phase vs having it be "site specific". Less busy work and more focused work
which enhances the clinical experience and prepares for boards. (i.e instead of having a required blog post or paper due weekly, have weekly discussion meetings to discuss topics or answer questions, or practice exams that simulate board exams).

- Plan better test schedules
- So far I haven’t had stress from the program other than group work. My program does an amazing job of supporting us and it’s why I chose them.
- More resources for distant students
- i know that programs will get feedback from clinical instructors about students in a timely manner and it is addressed with us immediately. however, i am not sure how timely clinical instructors are alerted of their poor clinical behavior
- I think my school does it well. We have "lifeline" days during the school day around when class would be and they are just de-stressing activities. We also have access to free counseling through the school.
- A wellness program specific to the program
- Have a mandatory stress relieving class 3 days/week. Whether it is meditation or P.E. or discussions to help students learn to deal with stress and/or “force” them to participate in stress relieving activities.

- offer someone to talk to that is unbiased and non-judgmental. Allow us more opportunities as a class to socialize and commiserate with each other. Just acknowledge the fact that what we are going through is difficult and checking in more frequently.
- I don't know...
- my school has a professor (CRNA) who is very involved with students' wellness. She hosts breath focus and meditation sessions frequently during the semester. I have not attended but I would like to do so.
- Nothing.
- somehow encourage exercise, maybe a little less reading so there's more time for personal time
- longer program, classes to be more intertwined; themes, more online classes, less time driving to school, school's cafeteria better food selection: protein, vegetables, fruits, less sugars, less carbs.
- a way to talk to peers to know that you are not alone as a student
- Reasonable amount of homework and exams in collaboration with 40-60 clinical hours per week
• Show directly how to get in contact with counseling
• Checking in with students frequently regarding non-educational issues
• A program director who actually cares- we don't have one that cares at all
• Gym membership
• Meditation courses, mental health days built into the program
• Mediation class
• Additional wellness days
• Stress relieving strategies
• No idea.
• Give actually breaks from materials. i.e. We had a "spring break" but have 2 major tests the following Monday and Tuesday. Most of the break was spent studying. This is the last break of the program for 19 months. Yes, 19-months without even time off for holidays.
• Our program has placed stress on students for external issues between our director and a clinical site coordinator. They have also told us that our class is extremely disliked by the CRNA’s which has lead to immeasurable stress and anxiety but no definite person or behavior identified. Therefore we have been told our class “in general” will have a hard time getting jobs. This has been so stressful.
• Allow for students to express their concerns without fear for repercussions from faculty
• Helpful professors, exercise classes
• More coping strategies, stress mindfulness
• Having a counselor that was in the same building and available for short sessions I think would be useful and utilized by students. SRNAs are stressed out and strapped for time, finding the counseling office and an hour or two a week to see someone is too much time away from studying. Also, programs shouldn’t strongly recommend doing wellness modules or studying more information over “breaks” this happens in my program. It burnt you out never having a real break.
• More support from faculty would be nice. Literally for them to say “it’s okay to workout” would help. Instead of them instilling this “rise and grind” mentality
• I think my program does a good job of helping us cope with stress. I am probably 30% less stressed now than I was in undergrad
• Reducing work loads. Expectation is too much.
• It is a stressful job, school is stressful to prepare you
• Mandatory, confidential monthly sessions with a licensed mental health professional
• Better open communication between faculty and students. My program stresses open communication, but I feel like there would be repercussions for discussing certain things. So I really just want better problem-solving strategies, not coping strategies.
• Exercise programs
• Groups to talk about the stresses of life and school.
• prepare family members of the life changing event
• It would help
• Offer counseling sessions, group/private. Have a masseuse on campus
• More down
• Social hours
• Having something about finances/budgeting while in school I feel would be helpful. I also think that having some type of incentive for exercising might be useful, even in the graduate level.
• TIME OFF
• Emphasize that there is more to life than school during CRNA school. Encourage wellness activities, encourage and make it possible for students to spend time with close family and friends (i.e. be flexible to allow student to attend wedding)
• Unsure
• Unsure
• Debriefing sessions? anonymous suggestions/complaint box? Team building days built in-- more than two days off in a year for personal days.
• encourage/incentivize physical exercise, sponsor group outings unrelated to school/curriculum with/without faculty
• Well to help cope with stress by allowing each student to have make up work to improve grade if they are in a bind.
• 3 day weekends monthly
• Wellness program
• Supportive teacher who give weekly encouragement
• None
• Unsure.
• Right proportioning of school work
• I like that the professors of my education program are available to talk to and seem to be very understanding, they have been there to offer advice when needed and I think that is important
• no idea
• stress management course
• Unsure
• Having a transition course; or perhaps a wellness course designed to implement a temporary yet stress-free environment where we talk about things that are bothering us and just getting to know us individually as people, not just students.
• take mind off the stress for a short period of time
• Exercise courses. Helping to guide us more. Adult learning doesn't mean we want to fully teach ourselves everything
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