The University of Southern Mississippi The Aquila Digital Community

Doctoral Projects

Fall 9-28-2018

Implementation of a Sustainable Peer Mentor Program in Student Registered Nurse Anesthetists (SRNAs)"

Kristin Cox

Follow this and additional works at: https://aquila.usm.edu/dnp capstone

Part of the <u>Anesthesiology Commons</u>, <u>Interprofessional Education Commons</u>, and the <u>Nursing Commons</u>

Recommended Citation

Cox, Kristin, "Implementation of a Sustainable Peer Mentor Program in Student Registered Nurse Anesthetists (SRNAs)" (2018). Doctoral Projects. 95.

https://aquila.usm.edu/dnp_capstone/95

This Doctoral Nursing Capstone Project is brought to you for free and open access by The Aquila Digital Community. It has been accepted for inclusion in Doctoral Projects by an authorized administrator of The Aquila Digital Community. For more information, please contact Joshua. Cromwell@usm.edu.



IMPLEMENTATION OF A SUSTAINABLE PEER MENTOR PROGRAM IN STUDENT REGISTERED NURSE ANESTHETISTS (SRNAs)

by

Kristin Hinton Cox

A Doctoral Project
Submitted to the Graduate School,
the College of Nursing and Health Professions
and the School of Leadership and Advanced Nursing Practice
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Nursing Practice

Approved by:

Dr. Marjorie Geisz-Everson, Committee Chair Dr. Janie Butts, Committee Member Dr. Nina McLain, Committee Member

Dr. Marjorie Geisz-Everson Committee Chair Dr. Lachel Story Director of School Dr. Karen S. Coats
Dean of the Graduate School

December 2018



COPYRIGHT BY

Kristin Hinton Cox

2018

Published by the Graduate School





ABSTRACT

Evidence has shown that Student Registered Nurse Anesthetist's (SRNAs) stress is perceived as above average and is correlated with substandard patient care during clinical courses (Chipas et al., 2012). Some studies have indicated SRNAs experience low self-efficacy during clinical, which could lead to difficulty in thinking clearly or responding to clinical situations (Imus, Burns, & Weglarz, 2017). Peer mentoring has shown to result in stress reduction and improvement in self-efficacy in students (Barker et al., 2012; Giordana & Wedin, 2010). Despite the current evidence, a nurse anesthesia program in the southeastern United States did not have an organized peer mentor program for SRNAs. The primary goal of this project was implementation of a sustainable SRNA peer mentor program at The University of Southern Mississippi (USM) to possibly help alleviate stress, improve self-efficacy, and advance overall performance during the initiation of clinical. Another goal of the project was the adoption of a peer mentor policy by USM's nurse anesthesia program to assure the continuation of the mentor program.

Twenty USM SRNAs from the 2018 cohort and 20 from the 2019 cohort were participants in the program. Handouts including a program overview, expectations, and what to avoid as a mentor/mentee were given to each cohort. The students were then strategically matched and revealed to each other. After three months of implementation, a program evaluation questionnaire was sent to the participants of both cohorts.

The results of the questionnaires revealed that the majority of the mentors and mentees reported positive findings to the questionnaire sections. Mentees largely reported that the program ran smoothly and would recommend the peer mentor program



to others. Also, most mentees stated they would want to be a mentor to someone in the future. The majority of mentors also reported that the program ran smoothly, they would recommend the peer mentoring program to others and wished they had this at the start of their clinical experience. Upon receiving these positive findings, a peer mentoring policy was then proposed and accepted by the nurse anesthesia program faculty at USM. All of these results support the main goals of this project.



ACKNOWLEDGMENTS

I would like to thank Dr. Marjorie Everson, my committee chair, for taking the extra time to guide and direct me towards the completion of this doctoral project. I also would like to thank the other committee members, Drs. Janie Butts and Nina McLain, for both of your time and expertise towards compiling this doctoral project. I am grateful for each one of you.



DEDICATION

I would like to thank my parents and my husband for their love and support throughout my journey obtaining my doctoral degree. Also, I would like to thank my friends and family who have given me the strength to make it to this point in my career. I would not be where I am without all of you.



TABLE OF CONTENTS

ABSTRACTi	i
ACKNOWLEDGMENTS i	Į
DEDICATION	V
LIST OF TABLESi	ιX
CHAPTER I - INTRODUCTION	1
Background	1
Significance	2
Project/Clinical Question	3
Problem Statement	3
Purpose of Project	4
Needs Assessment	4
Theoretical Framework	5
Logic Model1	8
Essentials of the Doctoral Education for Advanced Nursing Practice	8
Synthesis of Evidence 1	9
Peer Mentoring and Self-Efficacy	ç
Peer Mentoring and Stress	. 1
Other Peer Mentoring Positive Effects	3
Success in Other Medical Disciplines	5

Conclusion	27
CHAPTER II - METHODOLOGY	28
Overview	28
Target Population	28
Methods	29
Procedures	29
Instrumentation and Data Collection	30
Data Analysis	31
Summary	31
CHAPTER III – RESULTS	32
Demographics	32
Presentation of Findings	32
Mentee Questionnaire Statistics	33
Mentor Questionnaire Statistics	40
Proposal of Peer Mentor Policy to Nurse Anesthesia Program	49
Summary	49
CHAPTER IV – DISCUSSION	51
Significance of Findings	51
Barriers	52
Recommendations for Future Programsvii	52

Conclusion	53
PPENDIX A – Logic Model	55
PPENDIX B – DNP Essentials Table	56
PPENDIX C – Literature Matrix	60
PPENDIX D – Mentor-Mentee Matching Questionnaire	70
PPENDIX E – Peer Mentoring Evaluations	71
PPENDIX F – Evaluation Tool Approval	75
PPENDIX G – Handouts	76
PPENDIX H – Policy for Peer Mentor Program	78
PPENDIX I – IRB Approval Letter	80
EEDENGEG	0.1



LIST OF TABLES

Table 1 Mentee Results for My Peer Mentor and I are Enjoying a High-Quality
Relationship
Table 2 Mentee Results for I Am Effectively Utilizing My Peer Mentor
Table 3 Mentee Results for I am Benefiting from the Mentoring Relationship
Table 4 Mentee Results for the Peer Mentoring Program Runs Smoothly
Table 5 Mentee Results for I Would Recommend the Peer Mentoring Program to Others
Table 6 Mentee Results for I Would Want to be a Peer Mentor to Someone in the Future
Table 7 Mentee Results for I am Gaining a Better Sense of How to be Successful and
Involved at USM
Table 8 Mentee Results for I am Gaining New Clinical Skills
Table 9 Mentee Results for I am Becoming More Open Minded and Able to Consider
Others' Feelings and Attitudes
Table 10 Mentee Results for I am Improving My Ability to Communicate Effectively
With Others
Table 11 Mentee Results for My Peer Mentor is Easy to Talk to
Table 12 Mentee Results for My Peer Mentor is Well Qualified to be a Mentor 39
Table 13 Mentor Results for My Mentee and I are Enjoying a High-Quality Relationship
Table 14 Mentor Results for My Mentee is Effectively Utilizing Me as a Peer Mentor. 41



Table 15 Mentor Results for Both My Mentee and I are Benefiting From the Mentoring
Relationship
Table 16 Mentor Results for the Peer Mentoring Program Runs Smoothly
Table 17 Mentor Results for I Would Recommend the Peer Mentoring Program to Others
43
Table 18 Mentor Results for I Wish I Had this at the Start of my Clinical Experience 44
Table 19 Mentor Results for I am Gaining a Better Sense of How to be Successful and
Involved at USM
Table 20 Mentor Results for I am Gaining New Clinical Skills
Table 21 Mentor Results for I am Becoming More Open Minded and Able to Consider
Others' Feelings and Attitudes
Table 22 Mentor Results for I am Improving My Ability to Communicate Effectively
With Others
Table 23 Mentor Results for It is Easy to Talk to My Mentee
Table 24 Mentor Results for I Feel Well-Prepared to be a mentor
Table A1. Logic Model
Table A2. DNP Essentials Table
Table A3. Literature Matrix



CHAPTER I - INTRODUCTION

The Institute of Medicine (IOM) (1999) reported that as many as 98,000 cases result in mortality each year due to medical errors that could have been prevented. These preventable medical errors in hospitals are just as prevalent as attributable deaths from motor-vehicle wrecks, breast cancer, and AIDS (IOM, 1999). One place in hospitals that high error rates with serious consequences are most likely to occur is in operating rooms (IOM, 1999). These mistakes can best be prevented by improving the health system at all levels to make it safer overall (IOM, 1999). This report stresses a need for enhancements in educational organizations to stimulate changes in practice, training, and education for healthcare professionals (IOM, 1999). In order to successfully achieve the goals that IOM sets, improving the experience and process of becoming a certified registered nurse anesthetist (CRNA) is important in advancing patient safety.

Background

Studies have shown that attrition rates in anesthesia programs are of utmost concern, and to the profession, it is an important educational process outcome (Conner, 2015). A way to improve attrition rates of nurse anesthesia programs is by improving the process of becoming a CRNA (Wong & Li, 2011). One way to improve the process of CRNA training, while also promoting patient safety, is by implementing a peer mentor program for student registered nurse anesthetists (SRNAs). The history of mentoring can be traced back to Greek mythology and is defined as when a respected, seasoned person engages with a beginner to ensure the success of the learner (Block & Florczak, 2017). Peer mentoring is also described as a relationship between two individuals that share common experiences in which one provides needed assistance or support to the other



(Ljungberg, Kroll, Libin, & Gordon, 2011). Mentoring focuses on relating to another's situation through relationships that promote growth, recovery, and wellness (Tunajek, 2006). Peer support is a way to ignite positive decision making that allows people to fulfill needs and complete tasks (Tunajek, 2006). The participants in peer mentoring learn how to change and control their behavior, as well as, how to define and react to problems and opportunities (Tunajek, 2006). By implementing a peer mentor program, the effects of the program on SRNAs can be evaluated.

Significance

Currently, 115 accredited nurse anesthesia programs are within the United States that graduate more than 2,400 students each year (Council on Accreditation of Nurse Anesthesia Educational Programs [COA], 2016). The COA (2016) also reported that each student completes around 2,100 clinical hours. The American Association of Nurse Anesthetists Foundation (AANAF) reported 420 closed claims from 2003-2012 where the CRNA and/or SRNA was identified as potentially contributing to the negative outcome (Jordan et al., 2015). The negative outcomes that were 93% related to anesthesia care alone included patient positioning injuries, respiratory events, and central nervous system injuries (Jordan et al., 2015). Of these events, 32.7% of the anesthesia management was deemed inappropriate and 45.5% of them could have been prevented (Jordan et al., 2015). Current evidence shows that peer mentor programs have improved the care that is delivered to patients; therefore, it is important that the SRNA's patient care be the best that it can be in order to help prevent these harmful outcomes (Giordana & Wedin, 2010).



Project/Clinical Question

This Doctorate in Nursing Practice (DNP) project had many questions that were addressed. The first was will SRNAs who participated in a peer mentor program evaluate the program positively during the first three months of clinical? Another question that was asked included, will the mentors evaluate the program positively after three months of implementation? The last clinical question asked was, will a nurse anesthesia program in the southeast United States adopt a policy for a peer mentor program within three months of the project completion? Current evidence in other healthcare provider programs has shown positive evaluations and success with peer mentor programs improving patient outcomes (Barker et al., 2012; Locken & Heather, 2005; Lopez, Johnson, & Black, 2010). Therefore, it was important for this project to be implemented in SRNA programs due to a possible improvement in the overall wellness of the students, which could ultimately affect patient care.

Problem Statement

The stress of CRNA training is evident and is correlated with substandard patient care (Chipas et al., 2012). Chipas et al. (2012) also reported that SRNAs have a markedly higher level of stress than most practitioners. Therefore, the implementation of a peer mentor program is imperative, especially with studies that have shown peer mentoring decreases stress in SRNAs whose stress levels could greatly impact clinical performance (Barker et al., 2012; Locken & Heather, 2005; Lopez et al., 2010). Evidence has also indicated that SRNAs experience low self-efficacy during clinical (Imus et al., 2017). Low self-efficacy affects the student's ability to complete the nurse anesthesia program and leads to difficulty thinking clearly and responding to clinical



situations (Imus et al., 2017). Prior to this study, a program in the southeastern United States did not have an organized peer mentor program for SRNAs. Implementation of a sustainable peer mentor program was needed to possibly help alleviate SRNA stress, improve self-efficacy, and advance overall performance during their initiation of clinical. Conner (2015) concluded that SRNAs depend and trust other SRNAs to help them cope by sharing their frustrations and concerns. Therefore, this study revealed if implementation of a peer mentor program and completion of a program evaluation results in multiple reports of positive responses to quality/satisfaction, learning, relationship, respect, and communication.

Purpose of Project

The primary aim of this DNP project was the implementation of a sustainable SRNA peer mentor program protocol. Another goal included the adoption of a peer mentor policy by a nurse anesthesia program to assure the continuation of the program. A secondary outcome was that SRNAs may have enhanced clinical performance. This project had the capability to improve SRNA wellness and knowledge and may indirectly improve patient safety. Implementation of this project could be an initial step to following the IOM recommendation to enhance education/training and could possibly impact the profession of nurse anesthesia, the country's healthcare system, and many patient populations.

Needs Assessment

Despite evidence of positive effects from peer mentoring, prior to this study, a current mentoring program did not exist nor a policy in place at a nurse anesthesia program in the southeastern United States. The previous attempts to implement a peer



mentor program have not been successful at maintaining sustainability. In 2012, Chipas et al. conducted a self-assessment questionnaire, which was sent to SRNA members of the American Association of Nurse Anesthetists (AANA). The questionnaire asked for suggestions on what the student would want to be integrated into AANA's wellness initiative. One of the main suggestions from the students was to integrate peer support into nurse anesthesia programs (Chipas et al., 2012). Lopez et al. (2010) also reported that before initiation of a peer mentor program, students reported wanting a mentor to help transition into the program. Articles also reveal that mentors, who did not have an opportunity to participate in a peer mentor program, state that it would have helped them better understand clinical (Sprengel & Job, 2004).

Chipas et al. (2012) reported that SRNAs perceive their stress as above average and have a substantially higher level of stress than do most practitioners. Conner (2015) reported that most SRNAs (77%) claim that their school does not have a stress management program. Additionally, research has shown that SRNAs as a group, reported less coping resources than CRNAs (Kendrick, 2000). SRNAs in clinical report low self-efficacy, which leads to the student's inability to perform effectively (Imus et al., 2017). SRNAs at a southeastern United States anesthesia program need implementation of a peer mentor program that could provide an opportunity to decrease stress, increase self-efficacy, and improve clinical performance.

Theoretical Framework

Imogene King was one of the first pioneers who wanted nursing professionals to focus on the organization of nursing knowledge and argued that a theoretical body of knowledge was required for nursing to advance (Butts & Rich, 2018). She first began by



studying and defining a conceptual system, and from this conceptual system, King formulated her middle-range theory of goal attainment (Butts & Rich, 2018).

With the conceptual system, King (a) presented the environment and person as a concept, (b) proposed that there are not a lot of dichotomies between health and illness, (c) changed the term from "adaptation" to "adjustment," and (d) acknowledged a person as a human being rather than as "man" (Butts & Rich, 2018, p. 466). King stated that her philosophy was that individuals strive for the end goal of happiness and flourishing and that people are motivated to understand the need for using new behaviors to facilitate the process of goal attainment (Butts & Rich, 2018). King defined health as "a process of human growth and development and relates to the way individuals deal with the stress of growth and development while functioning within the cultural pattern in a which they were born" (King, 1981, p. 4). She also believed that individuals require continuous adjustment to stress to achieve physiological stability (Butts & Rich, 2018).

King's conceptual framework, focuses on holism, and shows that the nursing process is interactional (Butts & Rich, 2018). The major concepts of this theory include: (a) communication, (b) growth and development, (c) interaction, (d) perception, (e) role, (f) space, (g) stress, (h) time, and (i) transaction (Butts & Rich, 2018). King believed that "decision making is a shared collaborative process where the nurse and client share information for the purpose of setting and attaining goals" (Butts & Rich, 2018, p. 470).

King's theory of goal attainment is applicable when implementing a peer mentor program between SRNAs. The concepts of communication, transaction, self, stress, growth and development, personal space, and time pertaining to school and/or personal



life are all important in peer mentoring (McQueen, Cockroft, & Mullins, 2017). A DNP prepared nurse must understand King's framework and work within it to guide and strengthen a peer mentor program with hopes that it will improve health outcomes in the SRNAs that are participating. Studying this theory allows understanding the needs of the SRNAs and how to successfully gear a peer mentor program to assist with goal attainment (McQueen et al., 2017).

Evidence shows that active listening and discussion through mentoring students in smaller interpersonal groups in both classroom and clinical settings assists graduates to pioneer nursing practice (Burruss, Billings, Brownrigg, Skiba, & Connors, 2009). King's theory is specific to nursing, but its emphasis on interpersonal relationships to achieve success is what is applied to the peer mentor relationship (Rittler, 2008). According to this theory, behaviors can be seen in the nurse-client interaction that are much like the interactions between a mentor and mentee (Rittler, 2008). For example, one behavior is an acknowledgment of a problem that is either a health or social issue (Rittler, 2008). Another behavior is making decisions on how to manage the problem and setting goals (Rittler, 2008). Finally, another behavior is enthusiasm in working to achieve the goals that were set (Rittler, 2008). The nurse and client, or mentee and mentor, react and make judgments about each other through these behaviors while attempting to influence illness (Rittler, 2008). The participating mentors and mentees recognize situations that put them at-risk, decide how to overcome these situations, and encourage one another to achieve their goal (Rittler, 2008). The goal of the peer mentor program is that the mentors will assist mentees in overcoming their stressors and problems and helping them succeed in becoming a CRNA.



King's theory of goal attainment is "applicable to nursing practice, education, research, and administration" (Butts & Rich, 2018, p. 470). This theory also provides support for the importance of understanding a nurse-client relationship and provides evidence for how to further develop successful peer mentor programs. The application to this DNP project provides evidence that King's theory of goal attainment can be applied to a variety of situations where individuals are collaborating to meet a mutually decided upon goal.

Logic Model

A logic model is a "systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve" (W. K. Kellogg Foundation, 2004, p. 1). The model acted to improve the effectiveness of programs through requirements for strategic planning and program evaluation (Zaccagnini & White, 2017). See Appendix A for the logic model diagram for this project. The diagram shows a picture of how the peer mentor program was strategically planned, including inputs, activities, outputs, and outcomes.

Essentials of the Doctoral Education for Advanced Nursing Practice

Eight DNP essentials were developed by the American Association of Colleges of

Nursing (AACN) to act as foundational competencies and a framework for transforming

ideas into nursing practice (Zaccagnini & White, 2017). This DNP project successfully

fulfilled all eight of the DNP essentials. See Appendix B for the DNP Essentials Table.



Synthesis of Evidence

An evidence search was conducted to explore peer mentorship's positive effects on SRNAs. The databases that were used in the search were EBSCOhost, PubMed, and CINAHL with full text to find applicable evidence. The key search terms used were *students*, *nurse anesthesia*, *stress*, *self-efficacy*, and *peer mentoring*. The initial search yielded 42 articles with the exclusion of non-English and limitation to full text only. Duplications were removed, and 23 articles were selected as most applicable to the project. A literature matrix was included with pertinent data from each article being used (See Appendix C).

Peer Mentoring and Self-Efficacy

Self-efficacy is defined as "one's sense of competence and confidence in performing certain actions to achieve desired outcomes" (Bruster & Coccoma, 2013, p. 392). The self-efficacy theory of a person's belief in his or her ability to achieve goals was originally established by Bandura and now has been established as a strong predictor of motivation, learning, and academic performance (Bandura, 1977; Imus et al., 2017). Academic self-efficacy was also found to be one of the strongest predictors of student retention and grade point average (Imus et al., 2017). Prior evidence shows that students with a strong sense of efficacy challenge themselves with difficult tasks and are motivated intrinsically to academic excellence (Bruster & Coccoma, 2013). In other healthcare provider educational programs, high self-efficacy positively influenced the students' clinical performance (Imus et al., 2017). However, students with low self-efficacy avoid academic challenges, fail assignments, and may give up easily (Bruster & Coccoma, 2013).



Research with SRNAs suggests that self-efficacy is a significant predictor of a student's clinical performance (Imus et al., 2017). Studies have indicated that SRNAs in their clinical years have lower self-efficacy compared with SRNAs in their didactic year (Imus et al., 2017). Also, some CRNA program faculty have hypothesized that selfefficacy remains a significant factor that influences how SRNAs approach academic and clinical education (Imus et al., 2017). Low self-efficacy may even lead to the student's inability to complete the nurse anesthesia program or their ability to think clearly and respond to preceptors' questions (Imus et al., 2017). Imus et al. (2017) stressed the importance of integration of interventions to improve self-efficacy into SRNA curriculum. Peer mentoring has shown to improve self-efficacy (Giordana & Wedin, 2010). It does this by increasing skills and confidence in communication and teamwork (Seenan, Shanmugam, & Stewart, 2016). Social support increases SRNA self-efficacy by promoting academic success, retention, and coping with stress (Conner, 2015). Peer mentor programs have enabled mentees to become more comfortable with their own skills, and therefore, are improving the care that is delivered to patients (Giordana & Wedin, 2010). These programs permit students to be actively involved in their own clinical learning and help them recognize their clinical skills (Sprengel & Job, 2004). Mentors help build confidence in their mentees, which allows the mentees to effectively self-manage their life and improve self-efficacy (Ljungberg et al., 2011). Using the current evidence as a guide, a peer mentor program can be developed and implemented in hopes to improve the self-efficacy in SRNAs.



Peer Mentoring and Stress

Stress is a process that is experienced by everyone (Papathanasiou, Tsaras, Neroliatsiou, & Roupa, 2015). The most common form of stress is acute stress that results from demands and pressures of the recent past and anticipated future (Chipas & McKenna, 2011). Common symptoms associated with acute stress include: (a) emotional distress, (b) anger, (c) irritability, (d) depression, (e) tension headache, (f) back pain, (g) jaw pain, (h) stomach and bowel problems, (i) elevated blood pressure, (j) rapid heart rate, and (k) dizziness (Chipas & McKenna, 2011). These symptoms result from normal biological and psychological coping responses that are mediated by hormones released by the activation of the hypothalamus-pituitary-adrenal (HPA) axis (Chipas & McKenna, 2011). Fortunately, although encountered frequently, acute stress usually is responded to quickly before long-term effects occur (Chipas & McKenna, 2011). Chronic stress, however, is insidious, more devastating, and often goes unnoticed until the damage is already done (Chipas & McKenna, 2011). Chipas and McKenna (2011) state that chronic stress leads to physical, mental, and emotional reactions, such as: (a) obesity, (b) hypertension, (c) heart attack, (d) stroke, (e) ulcers, (f) violence, (g) depression, (h) substance abuse, and (i) inability to concentrate, which ultimately results in exhaustion.

Health care and technology are constantly advancing making the clinical setting progressively more stressful (Moscaritolo, 2009). Kendrick (2000) estimated that decreased productivity increased absenteeism, and increased job turnover due to stress, costs organizations \$50 billion to \$75 billion per year. This high stress and anxiety also impede concentration, memory, and problem-solving ability causing poor academic performance and learning (Moscaritolo, 2009). A peer mentor program is a cost-effective



way of helping students manage stress in their curriculum (Lopez et al., 2010). It is important for students to find a balance between healthy and chronic stress to maintain motivation and optimal learning (Moscaritolo, 2009).

Studies have shown that poor clinical performance can be provoked greatly by stress and there is a need for more social support and stress management in SRNAs (Conner, 2015). SRNAs have many reasons to be stressed. The anesthesia field is a stressful environment with unpredictable workloads, advanced technology, requirements for life and death decision-making, long working hours, and altered sleep and eating patterns (Tunajek, 2006). Also, SRNAs must transition from the role of a registered nurse to a graduate student with changes in financial status, residence, family relationships, and personal time causing a large amount of stress (Tunajek, 2006). With these detrimental stressors, peer mentoring needs to be initiated early in anesthesia school.

An overwhelming amount of stress in SRNAs can lead to feelings of failure, low self-esteem, helplessness, and puts the student at risk for physical and mental issues (Tunajek, 2006). The clinical component of a CRNA program has been found to be significantly more stressful than the academic component (Kendrick, 2000). Reports emphasize the importance and need for a proactive, supportive, structured process designed to help nurse anesthesia students manage stressors (Tunajek, 2006). One mechanism that has shown to decrease stress in other healthcare professional students is the implementation of a peer mentor program (Barker et al., 2012; Locken & Heather, 2005; Lopez et al., 2010). This evidence provides an example of the importance for the implementation of an SRNA peer mentor program during the early stages of clinical.



The documented stress in anesthesia students provides evidence that there is a need for social support from peers (Conner, 2015). Studies have also shown that stress during CRNA training can lead to more sick days, poor health and wellness, and depression (Chipas et al., 2012). Chipas et al. (2012) reported that SRNAs perceive their stress as above average and have a substantially higher level of stress than do most practitioners. Examples of sources of stress in SRNAs include: (a) financial strains, (b) decreasing self-esteem that often comes with changing jobs, (c) strains on personal relationships because of decreasing time for self and others, and (d) stresses of starting school, which is often in an unfamiliar location requiring a move (Chipas et al., 2012). If stress is not managed, consequences can arise to affect the health of the SRNA, and possibly impair patient safety (Conner, 2015). Kendrick (2000) stated that SRNAs have been found to use four maladaptive behaviors to stress: (a) addictive behavior with alcohol and drug abuse, (b) relationship distress and conflicts with peers, (c) psychological behavior such as anxiety and depression, and (d) professional dysfunction such as making errors at work or absenteeism. SRNAs need to understand that stress leads to poor outcomes and that participation in a peer mentor program has been shown to decrease stress in students.

Other Peer Mentoring Positive Effects

One main goal of this project was to create and implement a peer mentor project due to evidence that peer mentoring greatly improves student's clinical performance and ultimately leads to improved patient outcomes. Prior studies have been conducted with similar objectives. Li, Wang, Lin, and Lee (2010) revealed various advantages to the implementation of peer mentor programs in student nurses during clinical. This study



reported that mentees expressed feelings of support and an increased sense of security when paired with a student mentor (Li et al., 2010). Additionally, Li et al. (2010) stated that the clinical faculty observed students who participated in peer mentoring had improved work ethic and desired to perform better.

Peer feedback in the clinical setting has shown to help develop collaborative skills, improve communication, and develop professional accountability (Sprengel & Job, 2004). A supportive and non-threatening learning environment is provided from the mentoring for the student (Sprengel & Job, 2004). Becker and Neuwirth (2002) studied peer mentoring in nursing students and found benefits of implementation including increased hands-on learning opportunities and increased faculty's perception of patient safety (Becker & Neuwirth, 2002). They also reported that peer mentoring provided positive role modeling and promoted collegiality among students (Becker & Neuwirth, 2002). Other studies have shown that a peer mentoring strategy provides a nurturing climate, shared learning environment, promotes caring, inspires friendships, and encourages a commitment to another students' growth (Glass & Walter, 2000). Evidence has shown that peer mentoring provides support that is different than getting support from trained professionals (Tunajek, 2006). Peer support offers empathy and understanding, tolerance of unusual behaviors, and positive role modeling (Tunajek, 2006).

Many students who need help for illness or support due to a detrimental event tend to avoid treatment because of shame or fear of the consequences (Tunajek, 2006). They may isolate themselves, emotionally shut down, and not communicate negative and irrational thoughts (Tunajek, 2006). Evidence shows that peers are often the first to see



behavioral changes in those experiencing an ongoing problem, and peers are easier to come to with a problem (Tunajek, 2006). Peer mentor programs allow opportunities for mentees to seek help when needed. In 1999, the Institute of Medicine (IOM) recommended that healthcare professional licensing bodies work with certifying and credentialing organizations to develop more effective methods of identifying unsafe care providers and to take corrective action. Peer mentor programs may fulfill this IOM recommendation if successful.

Peer mentor programs can also be beneficial for the mentors. For example, in Li et al.'s (2010) study, mentors said they learned a lot from their mentees and reported that the mentees helped expand their own critical thinking. Also, mentors benefit from participating in peer mentor programs due to improvement in communications skills and development of an increased interest in teaching (Barker et al., 2012). Peer mentor programs introduce intraprofessional communication and collaborative skills. They pair people from similar social groups and help students to learn by teaching (Seenan et al., 2016). Mentors have reported that participation provided a self-confidence boost and helped them realize how much they have transitioned (Sprengel & Job, 2004). These results provided information that was utilized to educate the mentors on the benefits of participating in a mentor program.

Success in Other Medical Disciplines

Barker et al. (2012) highlighted that student mentors play a major role in the success of hospital orientation in first-year medical students. They stated that using experienced students as mentors is ideal for inexperienced first-year students to gain the most from clinical (Barker et al., 2012). Seenan et al. (2016) conducted studies on first-



year physical therapy students, which revealed that students reported satisfaction with peer teaching and reported increased confidence in skills, especially in communication and teamwork. This article stated that faculty felt that peer teaching was beneficial for students and was an effective strategy for teaching (Seenan et al., 2016). Another study showed that dental students find a peer mentor program is an effective tool in helping to deal with stress during the transition phases of their curriculum (Lopez et al., 2010). Lopez et al. (2010) surveyed 256 dental students after initiation of a peer mentor program and 77% of respondents wanted a mentor during their first year of school to help with the transition. Additionally, they reported that 70% of the students who had a mentor agreed that it helped the transition into dental school during their first year and 58% agreed that the mentor/mentee relationship was useful beyond the first year (Lopez et al., 2010).

The effect of mentoring on student nurses has been studied as well (Becker & Neuwirth, 2002). Becker and Neuwirth (2002) surveyed nursing students and found that 87% indicated a positive response when asked if the mentors supported their clinical performance. Moscaritolo (2009) conducted an evaluation of nursing students and anxiety. They stated that there is a strong correlation between performance-avoidance and anxiety, which results in poor performance and negatively affects task performance (Moscaritolo, 2009). Additionally, this article showed that 69% of the students responded that the use of peer instructors' services helped reduce their anxiety (Moscaritolo, 2009). This evidence of successful peer mentor programs in other healthcare provider's schools validated the need to implement into nurse anesthesia curriculum.



Conclusion

Prior evidence shows that there are many positive effects of peer mentoring. Evidence revealed that implementation of a peer mentor program has shown to decrease student anxiety, improve students' clinical performance, enhance student success and self-efficacy, increase SRNA retention, and many other positive qualities (Moscaritolo, 2009). The current evidence in other healthcare provider programs have produced positive evaluations and successes with peer mentor programs (Barker et al., 2012; Locken & Heather, 2005; Lopez et al., 2010). The evidence review revealed information that highlighted the importance of implementing a peer mentor program in the nurse anesthesia curriculum. In accordance with the current evidence, this DNP project helps to support the positive effects of peer mentoring and introduces a mentoring program and policy at a nurse anesthesia program in the southeastern United States. A peer mentor program was designed, implemented, and evaluated effectively. Also, the evidence findings were applied in the development of a peer mentor program policy. The project strives to accomplish the IOM goals, by improving the process of becoming a CRNA. Understanding King's theory of goal attainment allows awareness of the nurse-client relationship while also providing evidence for how to develop successful peer mentor programs. These findings were then disseminated to SRNAs to educate about the positive effects of peer mentoring.



CHAPTER II - METHODOLOGY

Overview

The aim of this project was to implement a sustainable peer mentor program for student registered nurse anesthetists (SRNAs) of a southeastern United States nurse anesthesia program and adoption of a peer mentor policy to assure the continuation of the program. Prior to this study, a peer mentor program or policy was not in place. The evidence supported the need for a structured process designed to help SRNAs transition into professionals and the many positive effects that peer mentor programs generate.

Target Population

The population focus of this project was SRNAs enrolled in the Doctorate in Nursing Practice (DNP) prepared nurse anesthesia programs within the United States. The sample for this project included SRNAs enrolled in a southeastern United States DNP nurse anesthesia program. The eligible mentees were those students who had been accepted into the program and were in their first year of the anesthesia program. The eligible mentors were students enrolled in the program and in their second year of the anesthesia program. All were registered nurses that had at least one year of intensive care experience and were concentrating on a DNP degree. The length of the anesthesia program was three years, with the first year solely didactic and the following two years, clinical and didactic courses together. The sample used for this project included 20 mentor SRNAs from the 2018 cohort who began clinical in January 2017 and 20 mentee SRNAs from the 2019 cohort who began clinical in January 2018. Excluded from the sample were SRNAs from the 2017 and 2020 cohort. The project leader was also excused from completing a program evaluation to prevent bias in data.



Methods

Procedures

With the approval from the Institutional Review Board (IRB) at The University of Southern Mississippi (USM) (17111401), SRNAs in the 2018 cohort were invited to participate in the program via email. See Appendix I for IRB Approval Letter. Students were informed that neither grades nor faculty relationships would be affected due to participation. Twenty SRNAs from the 2018 cohort were emailed notifying them of initiation of a peer mentor program along with a handout including a program overview, expectations, and what to avoid as a mentor. Twenty SRNAs from the 2019 cohort were also notified of the start of the program and a handout with a program overview, expectations, and what not to do as a mentee was emailed. See Appendix G for handouts.

All students in the 2018 and 2019 cohort were required to participate in the peer mentor program. However, students were informed that they could opt out of completing the program evaluation without consequences. Additionally, the emails to both the mentor and mentee groups included a mentor-mentee matching questionnaire that was first used by Memorial Hospital in Belleville, Illinois (Memorial Hospital, n.d.). See Appendix D for the mentor-mentee matching questionnaire. This tool aided in matching the mentors to their mentees. Matching was done based on analogous interests and communication styles. Once students were matched, a day was scheduled between both cohorts for the reveal of the mentor and mentee matches. Additionally, that day, a program overview was given, and mentor/mentee expectations were reinforced, which included the opportunity to voice any questions related to them. From this point in the program, the participation and communication between the two groups were strictly



voluntary. Occasional email reminders to the mentors were emailed to reinforce communication. This program introduced the mentoring relationship prior to clinical initiation in the 2019 cohort and continued until the 2018 cohort graduated.

Instrumentation and Data Collection

After three months of implementation, a program evaluation questionnaire was sent to both the participants in the 2018 and 2019 cohorts via emailing a Qualtrics questionnaire to ensure anonymity. The evaluations used are presented in Appendix E. This peer mentor program evaluation tool was adopted and approved for use from Northern Illinois University (Northern Illinois University, n.d.). See Appendix F for a letter of approval to use this tool. The questions in the instrument were slightly altered to make it appropriate to the SRNAs at the southeastern United States nurse anesthesia program.

The tool consisted of a 12 item Likert-type questionnaire that evaluated quality/satisfaction, learning, and relationships/communication. Two qualitative questions were added to use for improvement of the program. One questionnaire was tailored to the mentees and one to the mentors. An email was sent to both cohorts one week prior to evaluation that informed the SRNAs that they will receive an email with a link to the evaluation. They were also communicated that their replies would be voluntary and anonymous. Students were informed that they could opt out of completing the program evaluation without consequences. This statement was included in the introductory email, questionnaire, and reminder emails.



Data Analysis

The questionnaire was open for two weeks and a follow up reminder email was sent close to the deadline. After closing the evaluation, the results were strategically analyzed. A peer mentoring policy was then proposed at completion to the nurse anesthesia program faculty to assure sustainability. The program evaluation results were used to help revise the policy.

Summary

This DNP project was followed according to the previously detailed methodology. A sustainable peer mentor program for SRNAs of a southeastern United States nurse anesthesia program was implemented and a peer mentor policy was proposed. All students were required to participate in the peer mentor program; however, the students were reminded constantly that they could opt out of completing the program evaluation without consequences. This project introduced a peer mentor program to students who have never had a program in the past and helped to assure the sustainability of that program for future SRNAs.



CHAPTER III – RESULTS

Based on current evidence, the expectation of this project was that both mentors and mentees who participated in a peer mentor program would evaluate the program positively during the first three months of clinical. Also, a nurse anesthesia program in the southeast United States would adopt a policy for a peer mentor program within three months of the project completion. The questionnaires were sent to participants following what was detailed in the methods section.

Demographics

Fifteen mentor questionnaires were initiated, and 19 mentee questionnaires initiated. Incomplete questionnaires were included in the data analysis due to small sample size. All participants were asked if they were 18 years and older. Of the 34 evaluations completed, all 34 students stated they were older than 18 years and older. The sample for this project included SRNAs enrolled in a southeastern United States DNP nurse anesthesia program. All are registered nurses concentrating on a DNP degree and have at least one year of intensive care experience. The survey was provided only in English due to all students being English-speaking. No other demographics were collected.

Presentation of Findings

Thirty-nine students were eligible to be included in this questionnaire. The project implementer was excluded from completing the questionnaire. Of the 39 eligible, 34 students responded for an 87.2% response rate. The mentors and mentees had different questionnaires tailored to their appropriate group. For both groups, the questionnaire included a Likert scale that was analyzed individually based on the student



responses (1 "Strongly Disagree", 2 "Disagree", 3 "Neither agree nor disagree", 4 "Agree", or 5 "Strongly Agree") and total score statistics were analyzed.

Mentee Questionnaire Statistics

The first group of questions focused on assessing quality/satisfaction of the peer mentor program. The initial statement that the mentees were asked to rank stated, "My peer mentor and I are enjoying a high-quality relationship." Nineteen students ranked this statement. Over 20% of the students reported they "Strongly Agree" by selecting a "5" on the Likert scale, compared to 36.8% who selected "4" signifying they "Agree." Over 30% of the respondents selected "3" and did not agree nor disagree. Only 5.3% of the respondents marked "2" stating they "Disagree" and another 5.3% responded with a "1" stating they "Strongly Disagree."

Table 1

Mentee Results for My Peer Mentor and I are Enjoying a High-Quality Relationship

Score	Frequency	Percent
1	1	5.26%
2	1	5.26%
3	6	31.58%
4	7	36.84%
5	4	21.05%
Total	19	100%

The next statement that the mentees were asked to rank stated, "I am effectively utilizing my peer mentor." Nineteen students ranked this statement. A little over 20% of the students reported they "Strongly Agree" by selecting a "5" on the Likert scale, compared to 36.8% who selected "4" signifying they "Agree." Around 26% of the



respondents selected "3" and did not agree nor disagree. Only 15.8% of the respondents marked "2" stating they "Disagree" and no student strongly disagreed.

Table 2

Mentee Results for I Am Effectively Utilizing My Peer Mentor

Score	Frequency	Percent
1	0	0%
2	3	15.79%
3	5	26.32%
4	7	36.84%
5	4	21.05%
Total	19	100%

Mentees then ranked, "I am benefiting from the mentoring relationship."

Nineteen students ranked this statement. A little over 20% of the students reported they "Strongly Agree," compared to 47.4% who selected that they "Agree." Only 15.8% of the respondents selected they "Neither agree nor disagree." Also, 15.8% of the respondents marked "2" stating they "Disagree." None of the students stated they strongly disagreed.

Table 3

Mentee Results for I am Benefiting from the Mentoring Relationship

Score	Frequency	Percent	
1	0	0%	
2	3	15.79%	
3	3	15.79%	
4	9	47.37%	
5	4	21.05%	
Total	19	100%	



Mentees then ranked, "The peer mentoring program runs smoothly." Nineteen students ranked this statement. Around 26% of the students reported they "Strongly Agree," compared to 52.6% who selected that they "Agree." Only 15.8% of the respondents selected they "Neither agree nor disagree." Also, about 5% of the respondents marked "2" stating they "Disagree." None of the students stated they strongly disagreed.

Table 4

Mentee Results for the Peer Mentoring Program Runs Smoothly

Score	Frequency	Percent
1	0	0%
2	3	5.26%
3	3	15.79%
4	9	52.63%
5	5	26.3%
Total	19	100%

The next statement ranked was "I would recommend the peer mentoring program to others." Nineteen students ranked this statement. Results showed 26.3% of the students reported they "Strongly Agree," while 42.1% selected that they "Agree." A little over 31% of the respondents selected they "Neither agree nor disagree." None of the students stated they disagreed or strongly disagreed.

Table 5

Mentee Results for I Would Recommend the Peer Mentoring Program to Others

Score	Frequency	Percent
1	0	0%
2	0	0%
3	6	31.58%



Table 5 (continued).

Score	Frequency	Percent
4	8	42.11%
5	5	26.30%
Total	19	100%

Next, the mentees ranked "I would want to be a peer mentor to someone in the future." Nineteen students ranked this statement. Around 37% of students reported they "Strongly Agree," and a majority, 57.9% of the respondents, stated they "Agree." Only 5.26% of the respondents selected they "Neither agree nor disagree." None of the students stated they disagreed or strongly disagreed.

Table 6

Mentee Results for I Would Want to be a Peer Mentor to Someone in the Future

Score	Frequency	Percent
1	0	0%
2	0	0%
3	1	5.26%
4	11	57.89%
5	7	36.84%
Total	19	100%

The next section of the questionnaire focused on assessing learning. This section had the mentees rank statements on how they would complete the sentence that starts with "From working with my peer mentor..." The first statement was "I am gaining a better sense of how to be successful and involved at USM." Sixteen students ranked this statement. Around 18% of the students reported they "Strongly Agree" and 18.8% also reported they "Agree." "Neither agree nor disagree" was reported by 50% of respondents and both "Disagree" and "Strongly Disagree" were reported by 6.3% of respondents.



Table 7

Mentee Results for I am Gaining a Better Sense of How to be Successful and Involved at

USM

Score	Frequency	Percent
1	1	6.25%
2	1	6.25%
3	8	50.00%
4	3	18.75%
5	3	18.75%
Total	16	100%

The next statement was "I am gaining new clinical skills." Eighteen students ranked this statement. Around 11% of the students reported they "Strongly Agree." Around one-third of respondents reported they "Agree" and another one third reported they "Neither agree nor disagree." "Disagree" was reported by 16.7% of respondents, and only 5.6% of students responded with "Strongly disagree."

Table 8

Mentee Results for I am Gaining New Clinical Skills

Score	Frequency	Percent
1	1	5.56%
2	3	16.67%
3	6	33.33%
4	6	33.33%
5	2	11.11%
Total	18	100%

"I am becoming more open-minded and able to consider others' feelings and attitudes" is the next statement on the questionnaire. Eighteen students ranked this statement. Around 22% of the students reported they "Strongly Agree" and 22.2% of



respondents also reported they "Agree." Additionally, around 44% of the respondents selected they "Neither agree nor disagree." "Disagree" was reported by 11.1% of respondents and "Strongly Disagree" was not reported.

Table 9

Mentee Results for I am Becoming More Open Minded and Able to Consider Others'

Feelings and Attitudes

Score	Frequency	Percent	
1	0	0%	
2	2	11.11%	
3	8	44.44%	
4	4	22.22%	
5	4	22.22%	
Total	18	100%	

Mentees then ranked "I am improving my ability to communicate effectively with others" next. Eighteen students ranked this statement. Of the 18 respondents, 22.2% reported they "Strongly Agree" and another 22.2% stated they "Agree." "Neither agree nor disagree" was the majority result with 44.4%. Around 11% of respondents "Disagree" and no student reported, "Strongly Disagree."

Table 10

Mentee Results for I am Improving My Ability to Communicate Effectively With Others

Score	Frequency	Percent	
1	0	0%	
2	2	11.11%	
3	8	44.44%	
4	4	22.22%	
5	4	22.22%	
Total	18	100%	



The next group of questions were centered around assessing relationships/communication. The first question in this section asked the mentees to rank "My peer mentor is easy to talk to." Eighteen students responded. The majority, 44.4% of respondents, reported they "Strongly Agree." Around 33.3% of the students stated they "Agree" and 16.7% reported, "Neither agree nor disagree." None of the students stated they disagreed; however, 5.6% of respondents reported they "Strongly disagree."

Table 11

Mentee Results for My Peer Mentor is Easy to Talk to

Score	Frequency	Percent
1	1	5.56%
2	0	0%
3	3	16.67%
4	6	33.33%
5	8	44.44%
Total	18	100%

The next statement assessing relationships/communication included "My peer mentor is well qualified to be a mentor." Eighteen students responded. "Strongly Agree" was reported by 38.9% of respondents, and 44.4% of the students stated they "Agree." Of the 18 students, 16.7% reported "Neither agree nor disagree," and none of the students stated they disagreed or strongly disagreed.

Table 12

Mentee Results for My Peer Mentor is Well Qualified to be a Mentor

Score	Frequency	Percent
1	0	0%
2	0	0%
3	3	16.67%



Table 12 (continued).

Score	Frequency	Percent
4	8	44.44%
5	7	38.89%
Total	18	100%

Finally, two qualitative questions were added to use for improvement of the program. The first question asked was "What would you keep in the peer mentor program?" Only six students responded, and suggestions included: "sharing contact information," "everything," "pairing second-year students with first-year students," "matching with upper level students," and "N/A." The last qualitative question included, "Are there any suggestions or changes you would like to see for the program?" Six students responded with answers including "Group dinner or a second meeting to be able to see each other more than just once, if possible," "No," "N/A," "None," "It doesn't seem like a program. Beyond pairing up students, no involvement has taken place," and "More organized interactions. I haven't spoken to my mentor."

Mentor Questionnaire Statistics

Mentors were given a similar questionnaire, but questions were altered to make it appropriate for their group. Like the mentee questionnaire, the first section focused on assessing the quality/satisfaction of the peer mentor program. The initial statement that the mentors were asked to rank stated, "My mentee and I are enjoying a high-quality relationship." Fifteen students ranked this statement. Around 7% of the students reported they "Strongly Agree" by selecting a "5" on the Likert scale, compared to 60% who selected "4" signifying they "Agree." Around 20% of the respondents selected "3"



and did not agree nor disagree. Only 6.7% of the respondents marked "2" stating they "Disagree" and another 6.7% responded that they "Strongly Disagree."

Table 13

Mentor Results for My Mentee and I are Enjoying a High-Quality Relationship

Score	Frequency	Percent
1	1	6.67%
2	1	6.67%
3	3	20.00%
4	9	60.00%
5	1	6.67%
Total	15	100%

The next statement that the mentors were asked to rank stated, "My mentee is effectively utilizing me as a peer mentor." Fifteen students ranked this statement. Only 6.7% of students reported they "Strongly Agree" by selecting a "5" on the Likert scale, compared to one-third of the respondents who selected "4" signifying they "Agree." Another one-third of the students selected "3" and did not agree nor disagree. Only 20% of the respondents marked "2" stating they "Disagree" and 6.7% of the students strongly disagreed.

Table 14

Mentor Results for My Mentee is Effectively Utilizing Me as a Peer Mentor

Score	Frequency	Percent	
1	1	6.67%	
2	3	20.00%	
3	5	33.33%	
4	5	33.33%	
5	1	6.67%	
Total	15	100%	

Mentors then ranked, "Both my mentee and I are benefiting from the mentoring relationship." Fifteen students ranked this statement. Around 6.7% of the students reported they "Strongly Agree," compared to one-third of the respondents who selected that they "Agree." Additionally, around 46.7% of the respondents selected they "Neither agree nor disagree." Also, 6.7% of the respondents marked "2" stating they "Disagree" and 6.7% that selected they "Strongly disagree."

Table 15

Mentor Results for Both My Mentee and I are Benefiting From the Mentoring

Relationship

Score	Frequency	Percent
1	1	6.67%
2	1	6.67%
3	7	46.67%
4	5	33.33%
5	1	6.67%
Total	15	100%

Mentees then ranked, "The peer mentoring program runs smoothly." Fifteen students ranked this statement. Only 6.7% of students reported they "Strongly Agree," compared to 60% who selected that they "Agree." Around 13.3% of the respondents that selected they "Neither agree nor disagree." Also, 13.3% of the respondents marked "2" stating they "Disagree." One of the students, which is 6.7% of the students, responded that they strongly disagreed.



Table 16

Mentor Results for the Peer Mentoring Program Runs Smoothly

Score	Frequency	Percent
1	1	6.67%
2	2	13.33%
3	2	13.33%
4	9	60%
5	1	6.67%
Total	15	100%

The next statement ranked was "I would recommend the peer mentoring program to others." Fifteen mentors ranked this statement. Results revealed that 20% of students reported they "Strongly Agree," while 60% selected that they "Agree." Approximately 13% of respondents selected they "Neither agree nor disagree." None of the students stated they disagreed and one student strongly disagreed.

Table 17

Mentor Results for I Would Recommend the Peer Mentoring Program to Others

Score	Frequency	Percent
1	1	6.67%
2	0	0%
3	2	13.33%
4	9	60%
5	3	20%
Total	15	100%

Next, the mentors ranked "I wish I had this at the start of my clinical experience." Fifteen students responded to this statement. Four students, which is 26.7% of the students, reported they "Strongly Agree," and a majority, 46.7% of the respondents, stated they "Agree." Around 13.3% of the respondents selected they "Neither agree nor



disagree." One of the students stated they disagreed and one student felt they strongly disagreed.

Table 18

Mentor Results for I Wish I Had this at the Start of my Clinical Experience

Score	Frequency	Percent
1	1	6.67%
2	1	6.67%
3	2	13.33%
4	7	46.67%
5	4	26.67%
Total	15	100%

The next section of the questionnaire focused on assessing learning. This section had the mentors rank statements on how they would complete the sentence that starts with "From working with my peer mentee..." The first statement was "I am gaining a better sense of how to be successful and involved at USM." Fifteen students ranked this statement. Approximately 6.7% of students reported they "Strongly Agree." The majority of the respondents, 46.7% of students, reported they "Agree." "Neither agree nor disagree" was reported by 26.7% of respondents and 6.7% of students ranked that they "Disagree." Two students, which is 13.3% of the reports, felt they strongly disagreed with the statement.



Table 19

Mentor Results for I am Gaining a Better Sense of How to be Successful and Involved at

USM

Score	Frequency	Percent	
1	2	13.33%	
2	1	6.67%	
3	4	26.67%	
4	7	46.67%	
5	1	6.67%	
Total	15	100%	

The next statement ranked asked if the mentor was "gaining new clinical skills." Fifteen students ranked this statement. Approximately 13.3% of the students reported they "Strongly Agree." Around 33% of respondents reported they "Agree" and 26.7% reported they "Neither agree nor disagree." "Disagree" was reported by 20% of respondents, and only 6.7% of students responded with "Strongly disagree."

Table 20

Mentor Results for I am Gaining New Clinical Skills

Score	Frequency	Percent
1	1	6.67%
2	3	20%
3	4	26.67%
4	5	33.33%
5	2	13.33%
Total	15	100%

"I am becoming more open-minded and able to consider others' feelings and attitudes" was the next statement ranked by the mentors on the questionnaire. Fifteen mentors ranked this statement. Around 13.3% of the students reported they "Strongly



Agree," while the majority 46.7% of respondents reported they "Agree." Approximately 26.7% of the respondents selected they "Neither agree nor disagree." Both "Disagree" and "Strongly Disagree" was reported by one student.

Table 21

Mentor Results for I am Becoming More Open Minded and Able to Consider Others'

Feelings and Attitudes

Score	Frequency	Percent	
1	1	6.67%	
2	1	6.67%	
3	4	26.67%	
4	7	46.67%	
5	2	13.33%	
Total	15	100%	

Mentors were then asked to rank "I am improving my ability to communicate effectively with others." Fifteen students ranked this statement. Of the 15 respondents, 13.3% reported they "Strongly Agree" and 46.7% stated they "Agree." "Neither agree nor disagree" was the majority result with 33.3% of reports. No students reported they "Disagree" and one student reported they "Strongly Disagree."



Table 22

Mentor Results for I am Improving My Ability to Communicate Effectively With Others

Score	Frequency	Percent
1	1	6.67%
2	0	0%
3	5	33.33%
4	7	46.67%
5	2	13.33%
Total	15	100%

The next set of questions in the questionnaire assessed relationships/
communication. The first question in this section asked the mentors to rank "It is easy to
talk to my mentee." Fifteen students responded. Three students, which is 20% of
respondents, reported they "Strongly Agree." The majority of respondents, at 53.3%,
ranked they "Agree" with the statement. Around 20% reported, "Neither agree nor
disagree." None of the students stated they disagreed; however, 6.7% of respondents
reported they "Strongly disagree."

Table 23

Mentor Results for It is Easy to Talk to My Mentee

Score	Frequency	Percent
1	1	6.67%
2	0	0%
3	3	20%
4	8	53.33%
5	3	20%
Total	15	100%

The next statement assessing relationships/communication included "I feel wellprepared to be a mentor." Fifteen students responded. "Strongly Agree" was reported by



6.7% of respondents, while 73.3% of the students stated they "Agree." Of the 15 students, 13.3% reported they "Neither agree nor disagree," and none of the students stated they disagreed. One student, which was 6.7%, reported that they strongly disagreed.

Table 24

Mentor Results for I Feel Well-Prepared to be a mentor

Score	Frequency	Percent
1	1	6.67%
2	0	0%
3	2	13.33%
4	11	73.33%
5	1	6.67%
Total	15	100%

Finally, two qualitative questions were added to use for improvement of the program. The first question asked, "What would you keep in the peer mentor program?" Only ten students responded with suggestions like "Mentor-Mentee pairing," "Matching," "Everything," "No complaints," "No suggestions," "I think the peer mentor program is a good idea," and "N/A." The final qualitative question included, "Are there any suggestions or changes you would like to see for the program?" Ten students responded with answers including: "Begin the mentor program before the mentee starts clinicals," "A way to encourage communication between the mentee and mentor," "Receive a mentor earlier in the program," and "I believe that the institution of this program will greatly benefit students as they enter into this program and hope to see it evolve into a successful program." Some students reported "Nope," "No," and "None." Similar suggestions were reported like, "As long as the peer mentoring program is



initiated at the onset of acceptance into the program I feel it will provide a valuable resource for new students as well as upperclassmen," "I think the peer mentor program is a great idea and I could see it working, but I think it should begin with the first semester. A first-semester student should be paired with a junior student in which they can utilize that same person throughout the length of the program," and "I would try to match people up based on their similarities, but I think it is also valuable to look at which students are at clinical together. It might be more beneficial if the mentor and mentee saw each other at clinical. I think that mentees are less likely to utilize the mentor when they never see them and don't want to bother them with texts, etc."

Proposal of Peer Mentor Policy to Nurse Anesthesia Program

Three months after implementation of the peer mentor program and after receiving data from evaluations, a peer mentoring policy was proposed to the nurse anesthesia program faculty at The University of Southern Mississippi (USM). See Appendix H for full peer mentor program policy. With the help of the positive evaluations from the questionnaires, the anesthesia program faculty accepted and adopted the peer mentor program policy into effect. The evaluations help to assure the sustainability of the program and help to revise the policy as needed in the future.

Summary

The peer mentor program evaluations were used to measure the program's impact, process, and usefulness. The results also assess if SRNAs are actively participating in the peer mentor program. These results were strategically analyzed and compared to current evidence. The evaluations were then used to help revise the proposed policy. From this



point, it is hopeful that the evaluations will be sent out yearly and will be used to help revise the peer mentoring program and policy in the future.



CHAPTER IV - DISCUSSION

Significance of Findings

In summary, the majority of the mentors and mentees reported positive findings to most questionnaire sections. Most of the mentees stated the peer mentor program allowed them to have a high-quality relationship, helped them gain new clinical skills, and improved their communication skills. The commonality between mentees is that they reported their mentor was very easy to talk to and they were benefitting from the mentoring relationship. Mentees largely reported that the program ran smoothly and would recommend the peer mentor program to others. Also, most mentees stated they would want to be a mentor to someone in the future.

The mentors had similar findings. Most mentors gained a high-quality relationship, a better sense of how to be successful and involved at USM, and new clinical skills from participating in the peer mentor program. They mainly reported that they have become more open-minded and able to consider others' feelings and attitudes and are improving their communication with others. Many of the mentors believe their mentees are easy to talk to and they feel prepared to be a mentor. The majority also reported that the program runs smoothly, they would recommend the peer mentoring program to others and wished they had this at the start of their clinical experience. Most mentors believe their mentee was effectively utilizing them as a mentor; however, most mentors thought that neither of the participants were benefiting from the mentor relationship.

The suggestions for program improvement from both mentors and mentees stressed a need for earlier implementation of the program. They also wanted



enhancements in the matching process and more ways to encourage communication and interactions between the groups. Also, many comments stated to not change anything about the program.

These results confirm the main goal of this project. The SRNAs—both mentors and mentees—who participated in a peer mentor program, evaluated the program positively. Also, a nurse anesthesia program in the southeast United States adopted a policy for a peer mentor program within three months of the project completion.

Barriers

Many threats occurred with the implementation of this DNP project. For example, the nurse anesthesia program might not implement a policy and fail continuation of the program or the nurse anesthesia department may not support the program. Also, many of the barriers could impact the project's findings including, low participation by the SRNAs, limited amount of contact between participants, and program evaluations may not be returned by the SRNAs. The sample was a small group which could have an impact on the validity of the findings.

Recommendations for Future Programs

With this project supporting the clinical question that peer mentor programs provide positive evaluations from SRNAs, it is imperative that other anesthesia programs around the nation consider the implementation of this project. It is important for this project to be implemented in SRNAs due to a possible improvement in the overall wellness of students. King's theory of goal attainment also provides support for the importance of understanding a nurse-client relationship and provides evidence for how to further develop successful peer mentor programs. The framework should be utilized by



future program initiators and can also be used to assess if mentor-mentee relationships are successful in those programs.

This project helped reveal answers to the posing clinical questions. The SRNAs who participated in a peer mentor program evaluated the program positively. Also, the mentors evaluated the program positively after three months of implementation.

Additionally, a nurse anesthesia program in the southeast United States adopted a policy for a peer mentor program within three months of the project's completion. With these positive results, it is hopeful that this DNP project will be a catalyst for other CRNA programs for the continuation and/or implementation of peer mentor programs.

Conclusion

An essential for practice as an advanced practice registered nurse (APRN) is the implementation of evidence-based research into the clinical environment (Zaccagnini & White, 2017). Evidence has shown that SRNA stress is debilitating and perceived as above average (Chipas et al., 2012). Studies also indicated SRNAs have low self-efficacy during clinical (Imus et al., 2017). The use of peer mentoring programs, as described in this project, has shown to effectively alleviate stress, improve self-efficacy, and advance overall performance during the initiation of clinical (Barker et al., 2012; Giordana & Wedin, 2010). On the basis of the evidence found in this project, a peer mentor program was designed, implemented, and evaluated. Additionally, the evidence may be applied in the development of a peer mentor program policy for programs without a current policy in place. These findings can also be disseminated to SRNAs to educate them about the positive effects of peer mentoring. Future research by APRNs and



implementation by other anesthesia programs may help to improve SRNA health and knowledge and may indirectly improve patient safety nationwide.



APPENDIX A – Logic Model

Table A1. Logic Model

Inputs	Activities	Outputs
 SRNA volunteers who agree to participate in a peer mentor program DNP project committee members Literature databases (PubMed, CINAHL with full text, EBSCOhost) Evidence of positive effects from peer mentor program implementation Approval for implementation from director of the nurse anesthesia program 	 Conduct a comprehensive integrated review of evidence Narrow down eligible articles (peer mentoring, patient safety) Development of a program evaluation or obtain permission from an author who has already created one Development of a program evaluation or obtain permission from an author who has already created one Development of a program policy 	 Peer mentor program evaluations to measure the program's impact, process, and usefulness Peer mentor program policy adoption SRNAs actively participating in the peer mentor program Produce evidence-based SRNA practice update suited to SRNAs that demonstrate advantages and disadvantages of peer mentoring Delivery of the EBP update Patient safety outcomes
Initial	<u>Outcomes</u> Intermediate	Long-term
 Implementation of a policy to maintain a peer mentor program Increased knowledge and awareness of peer mentor programs Introduction of open communication between different SRNA cohorts Positive program evaluations and improvement 	 SRNA continued participation in the program Adoption of program policy by anesthesia program Potential for enhanced patient safety 	 Acknowledgment of the benefits of a peer mentor program Improved SRNA health outcomes Nurse anesthesia program compliance and sustainability of the peer mentor program Council on Accreditation for CRNA schools will support peer mentor programs in all anesthesia schools



APPENDIX B – DNP Essentials Table

Table A2. DNP Essentials Table

DNP Essentials	Clinical Implications
Essential I: Nursing Science and Theory: Scientific Underpinnings for Practice	A peer mentor program is an intervention, based on theories, that has shown to improve clinical performance in students and enhance patient care (Sprengel & Job, 2004). It is documented that peer mentoring increases self-efficacy in students, decreases stress, and improves learning (Giordana & Wedin, 2010; Barker et al., 2012; Becker & Neuwirth, 2002).
Essential II: Organizational and Systems Leadership for Quality Improvement and Systems Thinking	This essential is demonstrated in this project by the DNP student's ability to develop and evaluate a new mentoring program with hope of improvement in the quality of the SRNA's experience and overall patient outcomes. The completion of this project results in a fully sustainable peer mentor policy and program that will be at an organizational level. It ensures accountability for the SRNA to participate in high-quality health care while also protecting patient safety.
Essential III: Clinical Leadership and Analytical Methods for Evidence-Based Practice	This essential is fulfilled in this project by the use of analytical methods to appraise current evidence-based practice in existing evidence on the topic of peer mentoring and its effect on SRNAs and patients. The results of this project were compared to current evidence to determine variances and trends. The findings of this project were applied in the development of a peer mentor program policy, which was designed and implemented to improve SRNA wellness and promote safe, effective, and efficient patient-centered care. An extensive review of the evidence was performed and resulted in many articles that support this topic. These findings were disseminated to SRNAs to improve clinical practice.



	1
Essential IV: Information	The fourth essential was applied in this
Systems/Technology and Patient Care	project by utilizing technology to design a
Technology for the Improvement and	program evaluation, recruit participants of
Transformation of Health Care	the program, and connect SRNAs with
	their mentors/mentees. The technology
	was used to analyze data that is gathered
	from the evaluations to better understand
	the results. The use of these strategies
	helped to improve the overall knowledge
	of technology's impact on health care.
Essential V: Health Care Policy for	Essential five was a major influence in the
Advocacy in Health Care	implementation of this project. The data
,	conducted from the implementation of the
	peer mentor program lead to approval of a
	new health policy from the perspective of
	SRNAs. With the successful results from
	the program evaluations, this project can
	be used as a guide to propose a new policy
	within all CRNA schools leading to the
	widespread implementation of peer
	mentor programs to improve the outcome
	of clinical performance in SRNAs around
	the country. The DNP student educated
	others at all levels of the CRNA program,
	including the organization's
	policymakers. Also, this project provided
	the DNP student with leadership for
	healthcare policy by influencing the
	SRNA's healthcare delivery and
Essential VI. International	improvement of patient safety.
Essential VI: Interprofessional	Essential six was evident in this project
Collaboration for Improving Patient and	within the interaction between the two
Population Health Outcomes	levels of SRNA students. The peer
	mentor program introduced
	intraprofessional communication and
	collaborative skills (Seenan et al., 2016).
	Also, the program evaluations allowed for
	peer review and critique. This project
	required the DNP student to employ
	interprofessional collaboration with the
	nurse anesthesia program administration
	in the approval to implement a mentoring
	program and adoption of a mentoring
	policy.



Essential VII: Clinical Prevention and
Population Health for Improving the
Nation's Health

This essential promotes patient health and prevents illness or disease (Zaccagnini & White, 2017). Prevention of clinical errors due to SRNAs was a secondary outcome in this DNP project. These errors were induced by low self-efficacy, stress, or other debilitating causes that could have been prevented by peer mentoring. Low self-efficacy in the SRNA may lead to the student's inability to think clearly or appropriately act in clinical (Imus et al., 2017). Stress during clinical can cause "biological, emotional, mental, social, and spiritual consequences" and can "affect the perceptive and possibilities for problemsolving" (Papathanasiou et al., 2015, p. 47). This project met essential seven because peer mentoring has been documented to improve self-efficacy, prevent high amounts of stress in students, and provide many other positive qualities to the SRNA (Giordana & Wedin, 2010; Barker et al., 2012; Li et al., 2010). The peer mentor program was developed, implemented, and evaluated to address health promotion and disease prevention in SRNAs while also secondarily addressing improvement to clinical performance with patients.

Essential VIII: Advanced Nursing Practice

Essential eight was incorporated in this project when the DNP student conducted a comprehensive and systematic evaluation of peer mentoring's effect on SRNAs and its possible impact on clinical performance and patient outcomes. The program was created, implemented, and evaluated based on nursing science and psychological theories. The project had the possibility to develop therapeutic relationships and partnerships with other professionals to improve patient outcomes. Also, the program guided, mentored, and supported SRNAs to achieve excellence in nursing practice.

This project aided in educating SRNAs
about peer mentoring effects during their
transition into a CRNA.

APPENDIX C – Literature Matrix

Table A3. Literature Matrix

	T		O.1 D	
	G 10 F 60	a.	Other Peer	Success in
Article	Self-Efficacy	Stress	Mentoring	Other
			Positive Effects	Medical
				Disciplines
Bandura, A.	The self-efficacy			
(1977)	theory of a			
	person's belief in			
	his or her ability			
	to achieve goals			
	was originally			
	established by			
	Bandura and now			
	has been			
	established as a			
	strong predictor			
	of motivation,			
	learning, and			
	academic			
	performance.			
Barker, T. A.,	performance.		Mentors benefit	Highlights
			from the	0 0
Ngwenya, N.,				importance of
Morley, D.,			experience by	student
Jones, E.,			improving their	mentors in the
Thomas, C.			communication	success of
P., &			s skills and	hospital
Coleman, J. J.			developing an	orientation in
(2012)			increased	first-year
			interest in	medical
			teaching.	students.
				Student
				mentors were
				ideal for first
				years to gain
				the most from
				this day.
Becker, M.,		The teaching		
& Neuwirth,		assistants		
J. M. (2002)		helped clinical		
		students;		
		Evaluation of		
		this program		



		showed a significant decrease in nursing student anxiety and, as a result, 87% of the students reported improved clinical	
Bruster, B. E., & Coccoma, P. (2013)	Self-efficacy is defined as "one's sense of competence and confidence in performing certain actions to achieve desired outcomes" p.388	performance.	
Chipas, A., Cordrey, D., Floyd, D., Grubbs, L., Miller, S., & Tyre, B. (2012)	outcomes." p.388	Investigates the stressors of the typical SRNA with the objective of identifying trends in the perceptions, manifestations, and coping mechanisms of stress; Analysis revealed statistically significant relationships between self-reported stress and negative outcomes (increased sick days, decreased health and wellness, and depression);	



r	I	
		shows SRNAs
		perceive their
		stress as above
		average;
		SRNAs have a
		substantially
		higher level of
		stress than do
		practitioners;
		SRNAs
		suggested to
		provide peer
		support in the
		AANA
		wellness
		initiative.
Chipas, A., &		Symptoms of
McKenna, D.		acute stress and
(2011)		chronic stress;
(2011)		discuss stress
		in CRNAs and
		SRNAs; Stress
		management
		education
		should begin
		ideally in
		anesthesia
		school; too
		much stress
		leads to
		information
		overload and
		causes
		decreased
		retention;
		reveals sources
		of stress in
		SRNAs
Conner, M.	High levels of	"If stress
(2015)	self-efficacy have	exceeds a
	been shown to be	manageable
	predictive of	level, negative
	increased	consequences
	academic	can arise, affect
	performance and	the health of



	1		I	1
	improved student	the SRNA, and		
	retention.	possibly impair		
	Self-efficacy can	patient safety."		
	be increased by	p.135		
	social	In 1999, most		
	persuasion/suppor	SRNAs (77%)		
	t which is helpful	reported that		
	for those facing	their school did		
	stressful	not have a		
	situations.	stress		
		management		
		program.		
		"Students		
		depend and		
		trust other		
		SRNAs to help		
		them cope by		
		sharing their		
		frustrations and		
		concerns."		
		p.135		
Ciondono C	Door montoring	p.133		
Giordana, S.,	Peer mentoring			
& Wedin, B.	has shown to			
(2010)	improve self-			
	efficacy.			
	"Mentor			
	programs have			
	enabled mentees			
	to become more			
	comfortable with			
	their own skills,			
	and therefore, are			
	improving the			
	care that is			
	delivered to			
	patients." p.395			
Glass, N., &	panento. p.575		"Outcomes of	Peer
Walter, R.			the experience	mentoring
(2000)			include shared	process in
(2000)			learning,	nursing
				education
			caring,	
			friendship, and	provides a
			a commitment	nurturing
			to each other's	climate for
			growth." p.156	both personal



		 	and
			professional
			growth.
Imus, F. S.,	Research with		
Burns, S., &	SRNAs suggests		
Weglarz, D.	that self-efficacy		
M. (2017)	is a significant		
	predictor of a		
	student's clinical		
	performance.		
	Studies have		
	indicated that		
	SRNAs in their		
	clinical years		
	have lower self-		
	efficacy		
	compared with		
	students in their		
	didactic year.		
	Also, some		
	CRNA program		
	faculty have		
	hypothesized that		
	self-efficacy		
	remains a		
	significant factor		
	that influences		
	how SRNAs		
	approach		
	academic and		
	clinical		
	education.		
	Low self-efficacy		
	may lead to the		
	student's inability		
	to think clearly		
	and respond to		
	preceptors'		
	questions.		
	The article		
	stresses the		
	importance of		
	integration of		
	interventions to		
	improve self-		



	efficacy into	
	SRNA	
	curriculum.	
Kendrick, P.		"It has been
(2000)		estimated that
		stress-related
		outcomes cost
		organizations
		\$50 billion to
		\$75 billion per
		year." p.117
		"These costs
		are from
		decreased
		productivity,
		increased
		absenteeism,
		and increased
		job turnover."
		p.117
		Findings
		showed
		practicing
		nurse
		anesthetists
		have more
		resources than
		SRNAs.
		High incidence of distress in
		the educational
		years may lead
		to impairment
		in the
		practicing years of the
		professional;
		included
		maladaptive
		behaviors to
		stress; students
		as a group reported less
		coping
	1	CODIIIE



		resources than		
		the CRNAs.		
		the CKNAS.		
Li, H. C.,	Mentees		Provides	
Wang, L. S.,	expressed they		positive mentor	
Lin, Y. H., &	felt supported and		evaluations of	
Lee, I. (2010)	had an increased		peer mentoring.	
	sense of security		A clinical	
	when working		teacher said, "I	
	with a mentor.		could feel that	
			students	
			worked harder	
			on assignments	
			because of a	
			desire to	
			perform better	
			than the others"	
			p. 205; "Peer	
			mentoring	
			might promote	
			the student's	
			thinking	
			process as	
			more	
			thoughtful and	
			increasing	
			academic	
			knowledge" p.	
			205	
Locken, T., &		Peer mentoring	Peer mentoring	Successful
Heather, N.		reduces	improves	peer
(2005)		anxiety.	learning ability.	mentoring in
		-		nursing
				students.
Lopez, N.,			Reported that a	Respondents
Johnson, S.,			peer mentor	said they
& Black, N.			program is a	wanted a
(2010)			cost-effective	mentor during
,			way of aiding	their first year
			in students	to help them
			dealing with	transition to
			stress in their	dental school.
			curriculum and	"Seventy
			these	percent of
			requirements	respondents
			could be	from all

	<u> </u>		madwaad bee	alaggag a series d
			reduced by	classes agreed
			annually	that having a
			electing a student to plan	mentor during their first year
			mentor/mentee	helped them
			events.	transition to
			events.	dental school,
				and 58%
				agreed that
				the
				mentor/mente
				e relationship
				was helpful
				beyond the
				freshman
				year." p.1201
Ljungberg, I.,	Mentors help			
Kroll, T.,	build confidence			
Libin, A., &	in their mentees			
Gordon, S.	which allows the			
(2011)	mentees to			
	effectively self-			
	manage their life			
	and improve self-			
3.6	efficacy.	A .1		
Moscaritolo,		As the		
L. M. (2009)		advances in		
		health care and		
		technology continue to		
		grow, the clinical setting		
		will become		
		progressively		
		more stressful.		
		High stress and		
		anxiety impede		
		concentration,		
		memory, and		
		problem-		
		solving ability,		
		which in turn,		
		adversely		
		affect academic		



		T	T	T
Papathanasiou , I. V., Tsaras, K., Neroliatsiou, A., & Roupa,		performance and learning. The state of anxiety can negatively affect task performance. Stress is a process that is experienced by everyone.		
A. (2015) Seenan, C., Shanmugam, S., & Stewart, J. (2016)	Students reported increased confidence in skills, especially in communication and teamwork.		Faculty felt that the group peer teaching was beneficial for students, and an effective learning and teaching strategy.	PT students reported satisfaction with the experience of the group peer; "Peer teaching appears to be an effective method in aiding the development of important skills within the first year of a PT education program." p.45
Sprengel, A., & Job, L. (2004)		Results from this study showed an overwhelmingl y positive response from freshman students in terms of decreasing anxiety levels during their		



	first clinical
	experience.
Tunnish C	"Overwhelmin
Tunajek, S.	
(2006)	g amount of
	stress in
	SRNAs can
	lead to feelings
	of failure, low
	self-esteem,
	helplessness,
	and puts the
	student at risk
	for physical
	and mental
	issues." p.20
	"Reports
	emphasize the
	importance and
	need for
	proactive,
	supportive,
	structured
	process
	designed to
	help nurse
	anesthesia
	students
	manage
	stressors due to
	their
	education."
	p.21
	r

APPENDIX D – Mentor-Mentee Matching Questionnaire

- 1. What do you hope to gain from this mentoring relationship?
- 2. What do you bring to this mentoring relationship?
- 3. What non-nursing interests or hobbies do you have?
- 4. In what professional nursing organizations do you actively participate?
- 5. Which days, times, and how long would you like to meet with your mentor/mentee?
- 6. Would you like to meet face-to-face, by telephone, email or another method of communication?



APPENDIX E – Peer Mentoring Evaluations

Peer Mentoring Evaluation (for mentees)

Are you 18 years or older? Yes □ No □	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Quality/Satisfaction					
1. My peer mentor and I are enjoying a high quality relationship.	1	2	3	4	5
2. I am effectively utilizing my peer mentor.	1	2	3	4	5
3. I am benefiting from the mentoring relationship.	1	2	3	4	5
4. The peer mentoring program runs smoothly.	1	2	3	4	5
5. I would recommend the peer mentoring program to others.	1	2	3	4	5
6. I would want to be a peer mentor to someone in the future	1	2	3	4	5
Learning					
From working with my peer mentor					
I am gaining a better sense of how to be successful and involved at USM.	1	2	3	4	5
8. I am gaining new clinical skills.	1	2	3	4	5
I am becoming more open minded and able to consider others' feelings and attitudes.	1	2	3	4	5
 I am improving my ability to communicate effectively with others. 	1	2	3	4	5
Relationship, Respect, and Communication					
11. My peer mentor is easy to talk to.	1	2	3	4	5
12. My peer mentor is well-qualified to be a mentor.	1	2	3	4	5



13. What would y	ou keep in the peer men	or program?		
14. Are there any	suggestions or changes	you would like to see fo	or the program?	
•				

Peer Mentoring Evaluation (for peer mentors)

	Are you 18 years or older? Yes □ No □	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
	Quality/Satisfaction					
	1. My mentee and I are enjoying a high quality relationship.	1	2	3	4	5
	2. My mentee is effectively utilizing me as a peer mentor.	1	2	3	4	5
	3. Both my mentee and I are benefiting from the mentoring relationship.	1	2	3	4	5
	4. The peer mentoring program runs smoothly.	1	2	3	4	5
	5. I would recommend the peer mentoring program to others.	1	2	3	4	5
	6. I wish I had this at the start of my clinical experience	1	2	3	4	5
73	Learning					
	From becoming a peer mentor					
	I am gaining a better sense of how to be successful and involved at USM.	1	2	3	4	5
	8. I am gaining new skills.	1	2	3	4	5
	I am becoming more open minded and able to consider others' feelings and attitudes.	1	2	3	4	5
	10. I am improving my ability to communicate effectively with others.	1	2	3	4	5
	Relationship, Respect, and Communication					
	11. It is easy to talk to my mentee.	1	2	3	4	5
	12. I feel well-prepared to be a mentor.	1	2	3	4	5

13.	What would you keep in the peer mentor program?
14.	Are there any suggestions or changes you would like to see for the program?

74

APPENDIX F – Evaluation Tool Approval

From: fsye [fsye@niu.edu]

Sent: Wednesday, September 20, 2017, 10:31 AM

To: Kristin Cox < @usm.edu> **Subject:** Re: Peer Mentor Program Evaluation

Thank you so much for reaching out. Feel free to use any resources listed on our website to help foster your mentoring program. We know how hard it can be to get a program up and running so use the resources as needed. If you have any questions or need any assistance, please feel free to reach out.

Thanks, FSYE



APPENDIX G – Handouts

Information for Mentors

Congratulations on joining the peer mentoring program! Your participation will help increase opportunities for professional development, improve student communication, and aid in sharing of knowledge, experience, and support.

Program Overview:

The main objective of this program is to help transition new students of the Nurse Anesthesia Program into prepared and competent students. The peer mentoring program is an opportunity for the upper classmen to provide lower classmen with advice from learned experiences, answer questions pertaining to courses, and elevate stressful situations. This program could help you develop teaching skills, build confidence, and improve intraprofessional communication and collaborative skills.

Effective Mentor

CharacteristicsAdvocateAttentive

• Enthusiastic

• Empathetic

weaknesses

• Patient

• Problem solver

nonthreatening

Nonjudgmental and

• Cognizant of personal

Expectations for Mentors

- Be available via email/text/call with a reasonable response window.
- Maintain support and open communication. Contact your mentee as soon as you receive his/her name. Discuss the best ways of communicating with each other.
- Be willing to commit time and energy to providing positive support for your mentee
- Adapt your support to the needs of your mentee, which may depend on academic, social, national and other backgrounds.
- Be a good listener and give constructive feedback.
- Maintain confidentiality.
- Promote your mentee's creativity and skill development. Encourage independence; not dependence.
- Help the mentee develop goals, access resources, and build a professional network.
- Follow-up on your mentee's academic/clinical progress/goals.
- Share your experience about the program, course concepts, and activities. (what to expect in the semesters/years ahead, clinical situations, coursework load)
- Be aware of cultural and social diversity. Get to know your mentee as an individual.
- If academic help or counseling is needed, provide appropriate resources.
- Protect and guard academic integrity within the context of your peer mentoring relationship and encourage the same in your peers.

Things to avoid:

Don't allow your mentee to become dependent on you.

Don't do your mentee's work for them.

Don't be their academic tutor or give specific answers to coursework.

Please agree to take on these responsibilities to the best of your ability and make the peer mentoring relationship mutually beneficial.

Pairing with mentees will be random. Please fill out the attached survey to help in the matching process. If any problems arise, time commitment is unmanageable, or your mentee is in need of additional resources for support, please contact the Nurse Anesthesia Program Director or the project leader.



Information for Mentees

Congratulations on joining the peer mentoring program! Your participation will help increase opportunities for professional development, improve student communication, and aid in sharing/gaining of knowledge, experience, and support.

Program Overview:

The main objective of this program is to help transition new students of the Nurse Anesthesia Program into prepared and competent students. The peer mentoring program is an opportunity for the upper classmen to provide lower classmen with advice from learned experiences, answer questions pertaining to courses, and elevate stressful situations. This program could help you further develop collaborative skills, build confidence, and improve intraprofessional communication.

You will find that having a supportive mentoring relationship will benefit you as you learn the ins and outs of being a new SRNA. Your mentor is a support, but <u>not</u> your tutor. Please be receptive to what the mentor has to say and be clear in asking for assistance when you need it.

Expectations for Mentees

- Respond to your mentor's emails promptly.
- Seek out advice and support about the program, course concepts, and activities. (what to expect in the semesters/years ahead, clinical situations, coursework load)
- Share your own knowledge and experience with your mentor.
- Work with your mentor to develop goals, access resources, and build a professional network.
- Be aware of cultural and social diversity. Get to know your mentor as an individual.
- Assume personal responsibility for your academic growth.
- Listen and consider alternatives.
- Maintain confidentiality.
- Accept constructive feedback willingly and maintain a positive attitude.
- Demonstrate initiative.
- Respect your mentor's time when notifying them of your problems, concerns, or questions.
- If in need of academic tutoring or counseling, contact the appropriate resources.
- Protect and guard academic integrity within the context of your peer mentoring relationship and encourage the same in your peers.

Things to avoid:

Don't rely on your mentor as your only source of information.

Don't expect your mentor to give you all of the answers and do all of your work.

Don't become dependent on your mentor.

Please agree to take on these responsibilities to the best of your ability and make the peer mentoring relationship mutually beneficial.

Pairing with mentors will be random. Please fill out the attached survey to help in the matching process. If any problems arise, time commitment is unmanageable, or your mentee is in need of additional resources for support, please contact the Nurse Anesthesia Program Director or the project leader.



APPENDIX H – Policy for Peer Mentor Program

SUBJECT: Peer Mentor Program

PURPOSE

As new students to the anesthesia program, the first-year cohort and the second-year cohort are always anxious and anticipating what to expect. The peer mentor program will be an opportunity for the experienced third-year cohort to help both second-year and first-year students with any advice they need entering the program or beginning clinical.

OBJECTIVE AND BENEFICIARIES

The underlying mission of the peer mentor project is promoting stronger, more successful nurse anesthesia students and prospective Certified Registered Nurse Anesthetists (CRNAs) through peer mentoring. The primary goal is for the first-year and second-year cohort of the NAP to manage challenges of being a student more effectively and gain interpersonal and leadership skills which they can then use and build upon as a new CRNA. Also, the second-year cohort will act as mentors to the first-year cohorts. The third-year cohort and second-year cohort mentors will develop teaching skills, improve time management, and become more self-confident. This program will also help the student government be more active participants in a stronger student community.

PROCEDURES

The program will be led by a student representative in the student government. Each year in January, an information packet will be emailed to the first-year cohort, second-year cohort, and third-year cohort explaining the program overview, expectations, and what to avoid as a mentor/mentee. Additionally, the emails to both the mentor and mentee groups will include a mentor-mentee matching questionnaire that will aid in matching the mentors to their mentees. Matching will be done based upon analogous interests and communication styles. Third-year students will be paired as a mentor to a second-year student and the second-year student will be paired as a mentor to a first-year student. Once students are matched, a day will be arranged between first-year and second-year cohorts for the reveal of the mentor and mentee matches (third-year and second-year students will have already been paired from the prior year). From this point in the program, the participation and communication between the three groups will be strictly voluntary. Periodic email reminders to the mentors will be emailed from the student representative to reinforce communication. At the end of each year, a satisfaction survey will be sent out to evaluate the program and assess suggestions to further enhance the program.

Responsibilities of Student Council Representative:

Provide formal guidance and information for both mentors and mentees (initial email)



- Arrange mentor-mentee pairings between cohorts
- Schedule initial match day
- Facilitate communication between mentor-mentees
- Help facilitate mentor-mentee relationships
- Follow up with issues and send yearly satisfaction survey
- Refers to the NAP director and/or faculty when needed



APPENDIX I – IRB Approval Letter



INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

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

- The risks to subjects are minimized.
- · The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
 Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 17111401

PROJECT TITLE: Implementation of a Sustainable Peer Mentor Program in Student Registered

Nurse Anesthetists (SRNAs) PROJECT TYPE: New Project RESEARCHER(S): Kristin Cox

COLLEGE/DIVISION: College of Nursing

DEPARTMENT: Leadership and Advanced Nursing Practice

FUNDING AGENCY/SPONSOR: N/A

IRB COMMITTEE ACTION: Expedited Review Approval PERIOD OF APPROVAL: 12/07/2017 to 12/06/2018

Lawrence A. Hosman, Ph.D. Institutional Review Board



REFERENCES

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change.

 Psychological Review, 84, 191-215. https://doi.org/10.1016/0146-6402(78)90002-4
- Barker, T. A., Ngwenya, N., Morley, D., Jones, E., Thomas, C. P., & Coleman, J. J. (2012). Hidden benefits of a peer-mentored 'Hospital Orientation Day': First-year medical students' perspectives. *Medical Teacher*, *34*, e229-e235. http://dx.doi.org/10.3109/0142159X.2012.642833
- Becker, M., & Neuwirth, J. M. (2002). Teaching strategy to maximize clinical experience with beginning nursing students. *Journal of Nursing Education*, *41*, 89-91.

 Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/11852991
- Block, M., & Florczak, K. L. (2017). Mentoring: An evolving relationship. *Nursing Sciences Quarterly*, 30, 100-104. http://dx.doi.org/10.1177/0894318417693312
- Bruster, B. E., & Coccoma, P. (2013). Mentoring for educational success: Advancing foster care youth incorporating the core competencies. *Journal of Human Behavior in the Social Environment*, 23, 388-399. http://dx.doi.org/10.1080/10911359.2013.764218
- Burruss, N., Billings, D., Brownrigg, V., Skiba, D., & Connors, H. (2009). Class size as related to the use of technology, educational practices, and outcomes in webbased nursing courses. *Journal of Professional Nursing*, 25, 33-41. https://doi.org/10.1016/j.profnurs.2008.06.002
- Butts, J. B., & Rich, K. L. (2018). *Philosophies and theories for advanced nursing* practice (3rd ed.). Burlington, MA: Jones & Bartlett Learning.



- Chipas, A., Cordrey, D., Floyd, D., Grubbs, L., Miller, S., & Tyre, B. (2012, August).

 Stress: perceptions, manifestations, and coping mechanisms of student registered nurse anesthetists. *AANA Journal*, *80*, 49-55. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/23248831
- Chipas, A., & McKenna, D. (2011). Stress and burnout in nurse anesthesia. *AANA Journal*, 79, 122-128. Retrieved from https://www.aana.com/docs/default-source/wellness-aana.com-web-documents-
 - $(all)/chipas_mckenna_stress_burnout_na_aanaj2011.pdf?sfvrsn=802c4bb1_4$
- Conner, M. (2015). Self-Efficacy, Stress, and Social Support in Retention of Student Registered Nurse Anesthetists. *AANA Journal*, *83*, 133-138. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/26016172
- Council on Accreditation of Nurse Anesthesia Educational Programs (COA). (2016).

 CRNA school search: Accredited programs. Retrieved from http://home.coa.us.com/accredited-programs/pages/crna-school-search.aspx
- Giordana, S., & Wedin, B. (2010). Peer mentoring for multiple levels of nursing students.

 *Nursing Education Perspectives, 31, 394-396. Retrieved from http://journals.lww.com/neponline/Citation/2010/11000/Peer_Mentoring_for_Multiple_Levels_of_Nursing.15.aspx
- Glass, N., & Walter, R. (2000). An experience of peer mentoring with student nurses:

 Enhancement of personal and professional growth. *Journal of Nursing Education*,

 39, 155-160. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/10782759
- Imus, F. S., Burns, S., & Weglarz, D. M. (2017). Self-efficacy and graduate education in a nurse anesthesia program: A pilot study. *AANA Journal*, 85, 206-216. Retrieved



- from https://www.aana.com/docs/default-source/aana-journal-web-documents-1/self-efficacy-0617-pp205-216.pdf?sfvrsn=22cd48b1_4
- Institute of Medicine (IOM). (1999). *To err is human: Building a safer health system*.

 National Academies of Engineering, Science, and Medicine. Retrieved from http://www.nap.edu/books/0309068371/html
- Jordan, L. M., Quraishi, J. A., Boust, R., Clayton, B. A., Crawforth, K., Everson, M., ...
 Zambricki, C. (2015). The AANA Foundation malpractice closed claim study: A
 descriptive analysis. AANA Journal, 83, 318-323. Retrieved from
 https://www.ncbi.nlm.nih.gov/pubmed/26638452
- Kendrick, P. (2000). Comparing the effects of stress and relationship style on student and practicing nurse anesthetists. *AANA Journal*, 68, 115-122. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/10876458
- King, I. M. (1981). A theory for nursing: Systems, concepts, process. New York, NY: Wiley.
- Li, H. C., Wang, L. S., Lin, Y. H., & Lee, I. (2010). The effect of a peer-mentoring strategy on student nurse stress reduction in clinical practice. *International Nursing Review*, 203-209. http://dx.doi.org/10.1111/j.1466-7657.2010.00839.x
- Ljungberg, I., Kroll, T., Libin, A., & Gordon, S. (2011). Using peer mentoring for people with spinal cord injury to enhance self-efficacy beliefs and prevent medical complications. *Journal of Clinical Nursing*, 20, 351-358. http://dx.doi.org/10.1111/j.1365-2702.2010.03432.x
- Locken, T., & Heather, N. (2005). Reduced anxiety improves learning ability of nursing students through utilization of mentoring triads. Retrieved from



- $https://pdfs.semanticscholar.org/0140/1bd30d31262cecaa2d7d7974bfe14eb585ae. \\pdf$
- Lopez, N., Johnson, S., & Black, N. (2010). Does peer mentoring work? Dental students assess its benefits as an adaptive coping strategy. *Journal of Dental Education*, 74, 1197-1205. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/21045224
- McQueen, L., Cockroft, M., & Mullins, N. (2017). Imogene King's theory of goal attainment and the millennial nurse: An important mentoring tool for nurse educators. *Teaching and Learning in Nursing*, *12*, 223-225. https://doi.org/10.1016/j.teln.2017.03.003
- Memorial Hospital. (n.d.). Mentor and mentee "Get Acquainted" questionnaire. Retrieved from

 http://c.ymcdn.com/sites/anpd.siteym.com/resource/resmgr/2013_Convention/S40

 2_Sehr_Handout_4.pdf
- Moscaritolo, L. M. (2009). Interventional strategies to decrease nursing student anxiety in the clinical learning environment. *Journal of Nursing Education*, 48, 17-23.

 Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/19227751
- Northern Illinois University. (n.d.). Peer Mentor Evaluation. Retrieved from http://english.org/mentor/resources/peer-mentoring-survey-tool.docx
- Papathanasiou, I. V., Tsaras, K., Neroliatsiou, A., & Roupa, A. (2015). Stress: Concepts, theoretical models and nursing interventions. *American Journal of Nursing Science*, *4*, 45-50. Retrieved from http://article.sciencepublishinggroup.com/pdf/10.11648.j.ajns.s.2015040201.19.p



- Rittler, K. W. (2008). The benefits of a peer-based mentor/tutor program for undergraduate students in a four-year traditional baccalaureate nursing program.

 ProQuest Dissertations Publishing, 1-57. Retrieved from

 https://search.proquest.com/openview/eedd72b2d82ab881a41fb1be1dca0365/1?p

 q-origsite=gscholar&cbl=18750&diss=y
- Seenan, C., Shanmugam, S., & Stewart, J. (2016). Group peer teaching: A strategy for building confidence in communication and teamwork skills in physical therapy students. *Journal of Physical Therapy Education*, *30*, 40-49. https://doi.org/10.1016/j.physio.2016.10.282
- Sprengel, A., & Job, L. (2004). Reducing student anxiety by using clinical peer mentoring with beginning nursing students. *Nurse Educator*, 29, 246-250. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/15586121
- Tunajek, S. (2006). Student stress: A question of balance. *AANA News Bulletin*, 20-21.

 Retrieved from https://www.aana.com/docs/default-source/wellness-aana.com-web-documents-(all)/student-stress-a-question-of-balance.pdf?sfvrsn=b3264bb1_2
- W. K. Kellogg Foundation. (2004). Logic model development guide. Retrieved from https://www.wkkf.org/resource-directory/resource/2006/02/wk-kelloggfoundation-logic-model-development-guide
- Wong, E., & Li, Q. (2011). Faculty discernment of SRNA's personality characteristics that contribute to safe and unsafe nurse anesthesia practice: Metrics of excellence.

 AANA Journal, 79, 227-234. Retrieved from

 https://www.ncbi.nlm.nih.gov/pubmed/21751691



Zaccagnini, M. E., & White, K. W. (2017). *The Doctor of Nursing Practice essentials* (3rd ed.). Burlington, MA: Jones & Bartlet Learning.

