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Student Registered Nurse Anesthetist Perspective on the Impact of a Clinical
Mentoring Program

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Submitted in Partial Fulfillment of the Requirements for the Doctor of Nursing Practice Degree

Arkansas State University

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Abstract

There is a competitive push for recruiting and retaining the Student Registered Nurse Anesthetist (SRNA) graduate. Retention efforts begin with their first clinical experience. Mentoring in the clinical setting is a critical factor in influencing the student nurse anesthetist's retention to practice. The purpose of this project was to assess whether mentoring in the local setting noted similar findings. The method involved a survey of student nurse anesthetists queried about perspectives on a clinical-based mentorship program. Certified Registered Nurse Anesthetist (CRNA) faculty members vetted the survey instrument before implementation. The project focused on students presently enrolled in their first-year clinical anesthesia rotation. Students were allowed to evaluate their experiences. The survey consisted of questions about demographics, mentoring relationships, mentoring characteristics, skill development, role satisfaction, and retention. Survey results noted similar practice experiences. There was a 100% participant response in the pilot study indicating that a clinical mentoring program would make the student more likely to stay in a clinical environment that empowers professional development. The project results showed that a mentoring program was well-received in one local anesthetic setting with first-year clinical SRNAs. This result is consistent with the literature on mentoring.

Keywords: mentoring, nurse anesthesia, skill development, role satisfaction, retention

Introduction

With an overall national nursing shortage, healthcare facilities face challenges in recruiting and retaining staff. Retiring nursing staff and the decrease in maintaining graduate nurses all contribute to the reduction of the workforce. Hospitals report turnover rates ranging from 35% to 65% during the first year of employment (Grossman, 2013). Taking advantage of an experienced advanced practice anesthesia nurse's ability to impact the novice anesthesia nurse's professional development will enable them to reach their professional goal. Mentoring promotes cultures that influence the progression of nursing careers. Mentoring relationships between a nurse leader and mentee provides success for both parties as well as the organization of employment and the profession of nursing as a whole (Grossman, 2013).

Problem

In the clinical setting, students often appear to be disorganized and experience high-stress levels that can impact their clinical performances. Understanding that stress can be expected in this setting, identifying ways to combat this issue sparked an eagerness to explore this area. Due to local organizational management changes, the challenges of recruiting new graduate nurse anesthetist students have increased. Recruitment measures for recent student graduates involve huge recruitment bonuses. This activity is a massive advantage for the recent graduate, but it would also be increasingly beneficial to provide a framework that promotes retention based on the organizational practice structure. Providing a mentored and supportive atmosphere has benefits for all involved and offers future practitioners' development (Casey & Clark, 2011). The purpose of this Doctor of Nursing Practice (DNP) project will be to attempt to address the issues of role satisfaction, skill development, and retention of Student Registered Nurse Anesthetists (SRNA) as they transition into the local clinical setting.

PICO

In the Student Registered Nurse Anesthetist (SRNA) clinical learning environment, is it perceived that a clinical mentoring program will positively impact mentored SRNA's skill development, role satisfaction, and retention?

Objective

The project aims to evaluate implementing a clinical mentoring program and the potential impact on SRNA role satisfaction, skill development, and retention. When provided clear supportive boundaries, students are empowered and confident in their knowledge development, and practice is improved (Casey & Clark, 2011). Exploring mentees' and mentors' opinions on clinical placement settings will improve student retention and student satisfaction in the clinical setting (Bjørk, Berntsen, Brynildsen, & Hestetun, 2014).

Background

Nurse anesthesia students enter training from different levels of clinical backgrounds. Transitioning into a diverse environment and requiring a different set of clinical skills can be stressful. Clinical training is a crucial time for developing the necessary foundations for applying academic training. Nursing school clinical training, in general, can be a stressful and intimidating environment that impacts students' learning process, clinical performance, and overall academic success (Kim et al., 2013).

The nurse anesthesia student begins a transition from its previous nursing practice as a registered nurse under a physician's direction to one day practicing and making their own solo decisions regarding patient care (Phillips, 2010). The student nurse anesthetist faces developing their skill of using logical reasoning in making crucial life or death decisions about patient care (Phillips, 2010). This new clinical responsibility level could lead to a decreased interest in role

satisfaction, skill development, and retention. The clinical development of an SRNA begins as they enter their first clinical site. The clinical experiences encountered during nurse anesthesia programs impact students' growth in self-awareness, critical thinking, and professionalism (Elisha & Rutledge, 2011). Mentors can play a significant role in the students' learning as they integrate their newly obtained academic knowledge into clinical practice. Mentoring shifts the focus onto the mentee's need and not that of the program or mentor (Abdullah et al., 2014).

Literature Review

The literature search consisted of information from theoretical and research-based sources. This review consisted of a thorough examination of multiple databases, journals, and books related to the clinical mentoring processes. Literature used was accessed through the Arkansas State University Dean B. Ellis Library. This review's databases included PubMed, ProQuest, and Cumulative Index to Nursing and Allied Health Literature (CINAHL). The search terms used included: student nurse mentorship, student nurses, student nurse anesthetist, role satisfaction, retention, and skill development. The studies chosen for inclusion were evaluated and assigned a level of evidence using the Hierarchy of Evidence defined by Melnyk and Fineout-Overholt (2019). The use of reasonable and appropriate evidence levels helps determine the literature search quality (Moran, Burson, & Conrad, 2017).

The literature focuses mainly on mentoring newly graduated nursing professionals as they enter the workforce. Mentoring benefits the mentor, mentee, and healthcare organization that employs each. The basis for an efficient mentoring relationship is for the mentor to be proficient in their area of practice. Mentoring is a mutual relationship wherein one imparts knowledge, and the other seeks and receives knowledge. Atkins and Williams (1995) defined mentoring as a relationship between an experienced professional, known as a mentor, and a less

experienced, aspiring professional, known as a mentee. Mentoring is also known as giving guidance and knowledge by skillful individuals to assist in the growth and professional career development of an individual's skillset (Flaxman & Gelb, 2011). Mentoring roles are supportive, positive, interpersonal relationships that produce meaningful outcomes for all those involved (Hale, 2018).

Mentoring in collaboration with other related concepts such as coaching, precepting, and role modeling can also help develop critical thinking, decision-making skills, leadership skills, and clinical skills (Hodgsen & Scanlan, 2013). Literature often uses these concepts interchangeably when referring to mentoring, so explaining each helps to identify which fits the organizational needs (Grossman, 2013)

Precepting: Grossman (2013) refers to precepting as a concept seen in healthcare. It is a relationship between a new individual and one that is more experienced. This relationship is a clinically based orientation that only lasts for a set amount of time. Mentoring relationships can be ongoing. Precepting includes formal assessment or evaluation at the end of that period (Hodgsen & Scanlan, 2013).

Coaching: This is similar to mentoring in that the experienced person instructs and provides support and guidance. The focus is more on the behavior and skill development in the current role, whereas mentoring could focus on support throughout career development (Hodgsen & Scanlan, 2013).

Role Modeling: Unlike mentoring, role modeling is the concept in which one internalizes and emulates behavior, values, or appearances of another and does not require a relationship between two individuals (Hodgsen & Scanlan, 2013).

Clinical preceptors and career mentors promote professional development that leads to self-actualization and growth in the nursing profession (Talley, 2008). The inclusion of these concepts provides supportive roles that influence overall mentoring in nursing. Supporting positive outcomes through mentoring also supports success (Grossman, 2013).

Elisha & Rutledge (2011) completed a descriptive cross-sectional survey study to demonstrate the SRNAs' attitudes related to the clinical instructor. The American Association of Nurse Anesthetists (AANA) provided a randomly selected SRNA member sample to the project lead. This study recruited 2,673 students to answer a questionnaire, and a total of 696 participated. Elisha & Rutledge's (2011) selection process displayed a significant strength in that it was random and regionally provided a more generalized finding. Overall, the study showed that the SRNAs found that the Certified Registered Nurse Anesthetist (CRNA) mentor and unique cases, reading assignments, and clinical lecture were helpful to their clinical learning experience. Learning strategies, mentor's characteristics, and behaviors are all linked to positive student outcomes. Continued development of mentoring programs is an essential component of supportive clinical sites.

Skill Development

Abdullah et al. (2014) completed a systematic review that evaluated the effectiveness of mentoring as a knowledge translation (KT) tool to help healthcare providers increase the uptake of evidence into clinical practice. Mentoring was a supportive, mutually engaging, and committed interpersonal relationship based on mentee needs. A data search span between 1988-2012 yielded 10,699 articles, of which 10 were deemed eligible for this study. Out of the 10, one study specifically evaluated the effectiveness of mentoring as a KT intervention with notable improvement outcomes. Mentoring combined with other interventions of knowledge translation

yielded was the focus of the articles that remained. This study helped acknowledge mentoring as a KT intervention to support the uptake of evidence into clinical practice. Successful clinical knowledge translation would be evident in increased confidence in accomplishing skill development. It could not determine the specific effects of a mentoring knowledge intervention tool as beneficial to the uptake of evidence into practice.

In 2009, Komaratat and Oumtanee completed a quasi-experimental research study using a mentorship model that paired trained mentors with 19 newly graduated nurses for competency improvement. This study assessed the competency skills of each new graduate nurse before entering the one-month mentoring relationship. The nursing competency level for each graduate nurse was higher using the mentoring model of trained mentors. Although this study's results proved that the newly graduated nurse's competency level increased after using the mentorship model, it showed that it could also impact the SRNA as they begin clinical practice and transition into completing their clinical rotations. The same concept would apply in this area of nursing specialty.

Retention

Increasing retention creates an environment of stability, fosters teamwork, builds confidence, and increases patient satisfaction. Talley (2008) and Elisha & Rutledge (2011) also show that mentoring provides positive avenues for retention, competence, professional and personal growth, and critical thinking. Schroyer, Zellers, & Abraham (2020) completed a quasi-experimental, descriptive, quantitative research that concentrated on retaining RNs using mentorship programs in a 325-bed community hospital in northern Indiana. The timeline involved a retrospective period of six months before implementation, followed by six months post-implementation. The study hypothesized that implementing a mentoring program that

paired each new nurse with an experienced nurse would increase retention rates. With the confidence interval of 95%, $P = .009$, the results yielded a 91% increase in retention. The non-mentored group showed only 66% proving the alternate hypothesis that a mentoring program increased nurse retention.

Role Satisfaction

In a randomized controlled trial by Kim et al. (2013), mentoring is an essential strategy in reducing students' anxiety, promoting self-efficacy and student role satisfaction, all while facilitating a smooth transition into their new professional roles through the development of supportive and encouraging relationships. Kim et al. (2013) completed a study with undergraduate nursing students that received twenty hours of mentoring from an assigned graduate school nurse. The State-Trait Anxiety Inventory, Baccalaureate Student Self-Efficacy Questionnaire, nursing, and career choice satisfaction were tools used for the study. This study supports clinical mentoring as a form of stress reduction, promotes self-efficacy, and boosts student role satisfaction. Effective mentoring provides a lasting and positive impression that can motivate nurse anesthesia students to progress through their program (Meno, Keaveny, & O'Donnell, 2003).

Theory

The nursing profession constantly changes and continues to exchange knowledge, perception, judgment, and skilled actions among professionals (Schroyer, Zellers, & Abraham, 2020). Schroyer, Zellers, & Abraham (2020) stated that mentoring helps provide the keys and tools needed for practice. This project's conceptual framework used two models: the Benner Novice-To-Expert Model and the ACE Star Model of Knowledge Transformation. The Benner Novice-To-Expert Model provides a core conceptual framework for a Student Registered Nurse

Anesthetist (SRNA) mentoring program. The novice nurse anesthesia student in the operating room setting enters an entirely foreign environment at the head of the table (Meno, Keaveny & O'Donnell, 2003). Benner's model offers a practice-centered path that helps the student nurse anesthetist transition from novice to expert in the clinical setting. Based on Dreyfus and Dreyfus' skill acquisition model and skill development, Benner developed this model's five stages as one of the most practical models in the professional advancement of the nursing field (Butts & Rich, 2018). Benner's model consists of five stages of proficiency from novice to expert: novice, advanced beginner, competent, proficient, and expert (Davis & Maisano, 2016). Davis & Maisano (2016) describe the context of the phases as shown in Appendix A: Figure a. For Benner's Novice to Expert Model Project Application, see Appendix A: Figure b.

The second conceptual model used for this project translation is the ACE Star Model of Knowledge Transformation. Kathleen Stevens' model provides a framework that systemically puts evidence-based practice processes (EBP) into action (Keele, R. (2011). It provides a framework to organize EBP processes and approaches to convert evidence into clinical practice (Stevens, 2004). This 5-point star illustration model focuses on five major stages of knowledge transformation: 1) discovery research, 2) evidence summary, 3) translation to guidelines, 4) practice integration, and 5) process outcome evaluation (Stevens, 2004). See ACE Star model in Appendix A: Figure c.

The ACE Star model will relate to this project in that the first stage of discovery using traditional research methods is to obtain new knowledge of SRNA mentoring, clinical placement, role satisfaction, SRNA retention, and skill development. The second phase of evidence is collected, appraised, and synthesized to develop a meaningful statement of knowledge regarding SRNA clinical mentoring. The third phase consists of research evidence translated to develop

recommendations for a clinical mentoring program at the clinical practice site. The integration phase is applicable to be used for changes of practices and policy. The evaluation stage will explore expected outcomes of SRNA's satisfaction, self-efficacy/skill development, and facility retention.

Needs Assessment

The American Association of Nurse Anesthetists reports that there are over 57,000 practicing nurse anesthesia providers. This number also includes student nurse anesthetists. The US Department of Labor's Bureau of Labor Statistics reported an expected increase of up to 17.5% of CRNAs by the year 2028. There is an estimated 13% rate of new CRNA graduates at risk of leaving their current organization (Cottingham et al., 2011). One of the main factors that may contribute to the inability to recruit and retain SRNA graduates is poor practice environments that do not support student mentoring. White, Brown, & Terhaar (2016) state that work done in clinical microsystems promises to provide leadership and team framework to improve systems and future outcomes. The clinical microsystems at this local hospital are operating room settings used to train and mentor SRNAs.

The projected site for the recommended mentoring program implementation is a 706-bed hospital in Memphis, TN. This clinical site provides opportunities for Student Nurse Anesthetists to work with multiple advanced practitioners. This project provided an opportunity for demonstrating progressive levels of systems thinking and accountability in evaluating evidence-based knowledge needed in designing a curriculum recommendation for the Student Registered Nurse Anesthetist clinical mentoring program.

Presently there is not a mentoring program at this local clinical site. This clinical anesthesia site provides one day of general department overview and orientation of the clinical

site location. The student must take the initiative to contact the clinical instructor. The first encounter with this provider is often the first day on site. Each day the student nurse anesthetist is randomly assigned to an anesthesia provider. This mentor could be a Certified Registered Nurse Anesthetist or Anesthesiologist. Providing an initial one-on-one continuity training opportunity for skill development could decrease anxiety among Student Nurse Anesthetists as they enter the clinical site. The development of a hospital-based mentorship program for Student Registered Nurse Anesthetist (SRNA) transition into their clinical rotation pushes clinical practice environment improvements. A clinical mentoring environment has the potential to foster a culture of safe clinical practice and patient safety. Providing opportunities for open discussions regarding novice errors and concerns without fear of punishment enhances safety measures. Delivering this atmosphere encourages confidence and communication between novice and mentor in training to promote patient safety.

This DNP project has the potential to impact multiple stakeholders as it relates to potential outcomes. Organizational readiness is the executive members' change in commitment and shifts in efficacy to implement organizational change (Weiner, 2009). A high level of enthusiasm from all stakeholders provides an organization that is more willing to initiate change, exert more significant effort, exhibit more remarkable persistence, and display more cooperative behavior, leading to more effective implementation of change (Weiner, 2009). For this project's purpose, the two main stakeholders will be the SRNAs and the clinical CRNA mentors. Other stakeholders involved include the student clinical coordinator, facility site manager, and university program directors.

A mentoring clinical environment has the potential to foster a culture of practice and patient safety. Providing this type of atmosphere encourages confidence and communication

between novice and mentor in training to promote patient safety. Company shortages occur when there is a lack of interest in promoting graduates' confidence in skill levels, job dissatisfaction, and staff looking for better opportunities elsewhere.

Cost-Benefit

The healthcare environment faces both a nursing shortage and financial instability created by continual declines in cost reimbursements (Trepanier, Early, Ulrich, & Cherry, 2012). With a lack of staff and budget cuts, new graduate SRNA orientation suffers from needs to meet budgets, graduate salaries, and decrease non-productive time (Trepanier, Early, Ulrich, & Cherry, 2012). The cost-effectiveness of starting SRNA mentoring relationships during their education decreases or eliminates the expense of paying a new graduate a salary during orientation. According to the US Bureau of Labor Statistics, the Certified Registered Nurse Anesthetist's median nationwide wage is \$87.04. The cost-effectiveness of an on-site SRNA clinical mentoring program that takes the time for skills development, knowledge development, and the professional core values will decrease the time and cost needed for post-graduate orientation (Evans, Kowalchik, Riley, & Adams, 2020).

This facility's post-graduate orientation period is 8-10 days. There are two providers assigned to a case during that orientation period, the orientee and the seasoned provider. Based on the average salary, the company's added average cost for this orientation period would be \$5,570.50- \$6,963.20 for each the orientee and the seasoned provider. Focusing on early mentoring efforts could provide a smoother graduate transition into their post-graduate role as CRNA. Each year provides a new pool of graduates that can contribute to decreasing the nationwide shortages. An effective SRNA clinical mentoring program would provide an economic recruitment tool to increase recent graduates' organization retention. Recruitment

efforts with noted adequate support and mentoring time that began with clinical training and potentially extended beyond the typical post orientation period could increase SRNA facility retention (Cottingham, Dibartolo, Battistoni, & Brown, 2011), therefore, either eliminating or reducing the time and cost needed for orientation. Recruitment efforts with noted adequate support and mentoring time with clinical training and extending beyond the typical post orientation period could increase SRNA facility retention (Cottingham, Dibartolo, Battistoni, & Brown, 2011). A clinical mentoring program during SRNA training may play a key role in reducing the economic burden associated with recruitment and retention cost.

Methodology

This study was reviewed and approved by Arkansas State University Institutional Review Board (IRB) and met the ethical obligations required by federal law and university policies (see Appendix B). The researcher completed the Collaborative Institutional Training Initiative (CITI Program) and ethics modules before pilot study initiation (See Appendix C, Figure a and Figure b). Project completion did not require a specific site. This project did not cause any physical or psychological harm to participants. The researcher took every measure to protect participants' privacy, and the study did not collect personal identifiable information.

The researcher used a qualitative method of data collection. A questionnaire was developed and distributed after project chair collaboration and approval (Appendix D). Every participant received a request to complete the survey via classroom distribution. Each student committed to no more than 15 minutes to complete the questionnaire and returned it via email. The participants consented by completing and returning each questionnaire via email. Recruited 30 students from a convenience sample of SRNAs presently enrolled in Arkansas State University School of Anesthesia program were in their first year of clinical rotations. After two

weeks of data collection, 19 surveys were returned and used for descriptive statistics for data analysis. This project provided a retrospective assessment of SRNAs' clinical mentoring perspective, which can be used locally for future mentoring program planning.

Results

Pilot Project Results

A pilot study preceded project implementation. The pilot study and project implementation questionnaire queried content in three areas: demographics, mentoring relationships, and SRNA perception of clinical mentoring on role satisfaction, skill development, and facility retention. Similar findings noted that a mentoring program would be well received in one local clinical setting with the first-year clinical SRNAs. Demographic results were eight females, and two males with diverse ethnic backgrounds. The average age range for this group was from 26 to 35. Each participant had a minimum of three years in the field of nursing. Study results noted that 80% of the participants stated that they previously have a mentor and said they had no preference for completing mentoring assignments. A reported 100% of participants stated that they would benefit from a clinical mentoring program to transition into the clinical anesthesia setting. Most participants expressed that they were more concerned about the impact on their clinical experience and skill development than to whom they were assigned. Results met the pilot study's expected outcome in that 100% indicated that they thought a mentoring program would positively impact their clinical experience.

Project Results

Demographics: Regarding previous years of practicing as a registered nurse (Table 1), there was a 95% CI within 2.677 standard deviation of mean of 4.65 years reported among all 19 students. There was a lower bound range of 3.36 years and an upper bound of 5.94 years. The

minimum years of practice reported was two years; and there was a maximum of eleven years. Ten out of nineteen (52.6%) respondents ranging in age from 26 to 30 years, with the next age group of five out of nineteen being 31 to 35yrs (26.3%). Out of 19 survey respondents, there was a noted predominantly Caucasian (84.2%) response with African American, Asian, and Hispanic/Latinos showing equal reaction (5.3% each). Regarding gender, the male gender was reported in eleven (57.9%) out of 19 respondents, and there were seven females (38.8%). One participant did not identify their gender. Eighty-four percent of enrolled students had their BSN, and sixteen percent of students reported having their MSN (Table 2).

Table 1. Previous years in nursing before anesthesia school		
		Statistic
Mean		4.65
95% CI	Lower Bound	3.36
	Upper Bound	5.94
Std. Deviation		2.67
Minimum		2.00
Maximum		11.00

Table 2. Demographics (Age, Ethnicity, Gender, Education Level)

	Frequency (n=19)	Percent
Age		
20-25	2	10.5
26-30	10	52.6
31-35	5	26.3
36-40	1	5.3
>40	1	5.3
Ethnicity		
White	16	84.2
Black	1	5.3
Multi	1	5.3
Asian	1	5.3
Gender		
Male	11	57.9
Female	7	36.8
No Response	1	5.3
Education		
BSN	16	84.2
MSN	3	15.8

Mentoring Relationships

Thirty-two percent of respondents said they had past mentoring program experience, whereas sixty-eight percent stated they were not involved in a mentoring program. Regarding the present clinical site mentoring program, only one (5.3%) respondent said they have a program. There was a 94.7% response stating that their current clinical site does not have a clinical mentoring program. This response is more than likely because this local facility provides training to most ASU students. Each respondent showed a vast 100% response indicating that there were perceived benefits to having a clinical mentoring program as they transitioned into their clinical site. There was an overwhelming 100% response stating that they thought a mentoring program would impact their overall clinical experience. Mentoring assignment responses showed that 68.4% had no preference regarding who made the assignment. Only one (5.3%) stated they would prefer the clinical site to make the assignment, and five (26.3%) preferred that the SRNA

chose their mentor. Preferred communication preferences for fifteen responses were texting (42%) and in-person (36.8%). Other communication forms were telephone or email, both with an equal preference of 10.5% (Table 3).

Table 3. Mentoring Relationships		
	Frequency (n=19)	Percent
Past Mentoring		
Yes	6	31.6
No	13	68.4
Present Site Mentoring		
Yes	1	5.3
No	18	94.7
Transition Benefit		
Yes	19	100.0
Mentoring Prog. Impact		
Yes	19	100
Mentoring Assignment		
Site	1	5.3
SRNA	5	26.3
Either	13	68.4
Communication		
Phone	2	10.5
In-Person	7	36.8
Text	8	42.1
Email	2	10.5

Perception of Mentorship

Participants used the 5-point Likert scale to rank each mentoring characteristic and its degree of importance on role satisfaction, clinical skill development, and clinical setting retention. The scale rank was 1=strongly disagree, 2= disagree, 3=neutral, 4=agree, and 5=strongly agree. The characteristics surveyed included the ability to help the student integrate into setting, calmness, non-threatening communication, teaching enthusiasm, encourages clinical independence and decision making, ability to give timely and constructive feedback, respect for student, stimulates effective discussions, offers support, high professional standard, provides

objective evaluations, uses student care plans, individualizes teaching, and provides an open mind.

Summative results showed that 98% of participants felt mentoring characteristics were important concerning student role satisfaction. A total of 75% of those participants stated that they strongly agreed these characteristics would impact their role satisfaction. There was a 99% response that felt that the mentoring characteristics would impact student skill development, with 86% reporting that they strongly agreed. A total of 98.5% participants felt mentoring characteristics were essential to clinical setting retention, with 82% said that they strongly agreed. Sixty eight percent of participants felt that a clinical mentoring program would impact their decision to consider employment at that facility post-program completion.

Discussion

Holly (2014) states that the action research method of scholarship can impact practice directly. The foundation for sustaining this project will be through collaboration, which is the foundation of action research. Action research provides the method to assess, develop, and evaluate the perceived effects of new teaching strategies in the clinical setting. Steven's (2004) ACE Model fourth stage of change involves the steps to change both individual and organizational practices through formal and informal channels while addressing factors that affect the rate of change adoption and integration of the change into a sustainable system.

One lesson learned during this study was that peer-to-peer mentoring is also beneficial. Some programs provide peer-to-peer mentoring opportunities to help guide students through the entire program. Most respondents were more concerned about the clinical mentoring and the impact on their clinical experience, skill development, and providing help with job searches. This fact supports the fact that mentoring relationships are ongoing. Respondents did not show a

preference regarding mentor-mentee assignments. Sixty-eight percent of participants stated that either site or student mentoring assignment process was acceptable.

Intervention

The dissemination plan includes a summative presentation to the facility student clinical coordinator and clinical site coordinators. Using a poster, I will show current project results, literature review support, and proposed benefits to the organization with program implementation. I will focus on the organizational impact on developing, recruiting, and retention of graduating SRNAs. With the levels of expected nationwide nursing shortages rising, nurse mentorship will impact all healthcare organizations. Poster presentation to a broader audience will be accomplished by applying as a presenter for poster and lecture sessions locally and statewide.

Recommendation

Future research in the area of evidence-based clinical mentoring and educational opportunities for providers helps expand assessment of the perceptions of practicing CRNAs and Anesthesiologists. Compiled with this project findings, mentor assessment will provide a broader aspect of anesthesia practitioners' input for mentoring in the clinical setting. The DNP-prepared Nurse Anesthetist is part of the healthcare team responsible for training future Nurse Anesthetists. Nurse leaders in the clinical setting provide evidence-based research that attests to mentoring benefits. This facility has an impact on students from three area anesthesia programs. This evidence fosters program implementation measures that promote a mentoring environment conducive to recruiting and retaining confident, skilled practitioners. Project data results support mentoring in the clinical setting and warrants a recommendation to the clinical facility committee to consider a future formal mentoring program. Continued collaboration with

Arkansas State faculty, student clinical coordinator, and future cooperation with clinical site coordinators will be essential for project sustainability.

Mentoring directly influences the SRNA's decision toward longevity in the healthcare organization, thereby strengthening the workforce (Frederick, 2014). Frederick (2014), and states that magnet-designated hospitals support the importance of mentor-mentee relationships for positive retention and positive recruitment outcomes. The SRNA transitions through Patricia Benner's 5 Stages of Clinical Competence--novice, advanced beginner, competent, proficient, and expert--begin with the clinical mentorship, and continue throughout their career (Evans, Kowalchik, Riley, & Adams, 2020). The benefits of mentoring the novice throughout these stages of clinical and educational development are that the mentor increases in his/her competence regarding knowledge of mentoring practices in the workplace, evaluating the novice, identifying needs, supporting the learning processes and goal orientation in mentoring, and providing constructive feedbacks to SRNAs (Evans, Kowalchik, Riley, & Adams, 2020). Future implementation of policy changes for a formal clinical mentoring program is less expensive than the cost of lucrative recruiting. An environment that focuses on improving future providers' proficiency, increasing confidence in practice, introducing SRNAs to new experiences and professional growth can prove beneficial in safe and effective care that enhances public trust and improves economic gains (Saletnik, 2018). This project data provides the knowledge needed to promote clinical mentors that are motivated to mentor and encourage mentors to provide opportunities for open discussions with SRNAs without fear of punishment.

Limitations

Further study with a larger, more diverse sample size is needed. The sample size (N=30) was predominantly composed of Caucasian (84.2%) male (57.9%) respondents. Time restraints

were a factor in accessing a larger participant pool and their responses. Providing an online survey tool and larger sample size provides more valid study results to show the benefits of mentoring and its impact on skill development, role satisfaction, and retention.

Conclusion

This study results are consistent with the literature. One of the anticipated lessons learned from this study was that the clinical setting atmosphere impacts SRNA professional development. The empowerment of the SRNA professional development is supported in the clinical mentoring environment. A program implementation provides an atmosphere that encourages confidence and communication that leads to patient safety. Mentoring provides the novice with expert guidance and practical knowledge from experienced CRNAs. Mentoring is also a two-way relationship where the novice can voice their concerns regarding current academic knowledge, ideas, and input regardless of position. Holly (2014) states that clinical wisdom is about knowledge, experiences, empathy, integrity, resourcefulness, and inspiration. These are all attributes needed for a successful educational system and training of SRNAs.

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Appendices

Appendix A

Figure a. Benner's Novice to Expert Concept.



<https://xbrlsite.azurewebsites.net/2019/Library/NoviceToExpert.jpg>

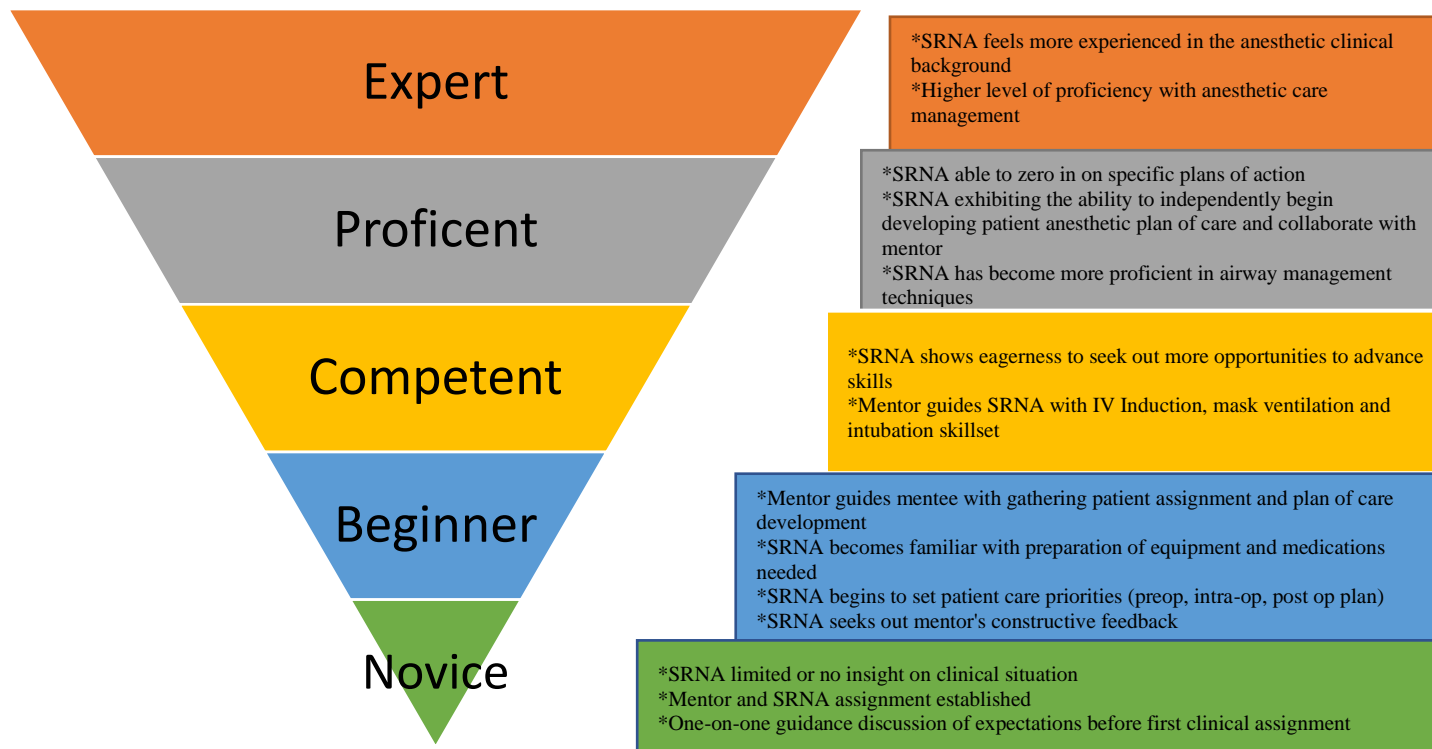


Figure b. Benner's Novice to Expert Model Project Application



Figure c. Copyright [Stevens 2004](#)

Appendix B



RESEARCH AND TECHNOLOGY TRANSFER

P.O. Box 2760, State University, AR 72467 | o: 870-972-2694 | f: 870-972-2336

October 28, 2020

Principal Investigator: Sheila McCarley

Board: Institutional Review Board (IRB)

Study: FY20-21-54 Designing a Student Nurse Anesthesia Clinical Mentoring Program

Submission Type: Initial

Board Decision: No Engagement in Research

Approval Date: October 28, 2020

Thank you for your submission of New Project materials for this research study. The Arkansas State University Institutional Review Board has determined the proposed activity does not meet the definition of "research" involving "human subjects" as defined by the U.S. Department of Health and Human Services Office for Human Research Protections regulations, codified at 45 CFR 46.102. Review and approval by the A-State IRB is not required. This determination applies only to the activities described in the submission noted above and does not apply to any changes to this project. You may proceed with your project. Please submit a new request to the IRB for a determination if any changes are made which lead to any questions about whether the activities are research involving human subjects.

Please retain a copy of this correspondence for your records. If you have any questions, please contact the Director of Research Compliance at (870) 972-2694 or IRB@astate.edu. Please include your study title and study label.

Sincerely,

Amy R. Pearce, Ph.D.

Chair, Institutional Review Board

Appendix C

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS*

* NOTE: Scores on this [Requirements Report](#) reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Sheila McCarley (ID: 8998599)
- **Institution Affiliation:** Arkansas State University (ID: 950)
- **Institution Email:** sheila.mccarley@small.astate.edu
- **Institution Unit:** NURSING
- **Phone:** 901-826-8845

- **Curriculum Group:** Social and Behavioral Responsible Conduct of Research
- **Course Learner Group:** Same as Curriculum Group
- **Stage:** Stage 1 - RCR
- **Description:** This course is for investigators, staff and students with an interest or focus in **Social and Behavioral** research. This course contains text, embedded case studies AND quizzes.

- **Record ID:** 35849577
- **Completion Date:** 10-Mar-2020
- **Expiration Date:** 10-Mar-2023
- **Minimum Passing:** 80
- **Reported Score*:** 83

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
Introduction to RCR (RCR-Basic) (ID: 17009)	09-Mar-2020	3/3 (100%)
Authorship (RCR-Basic) (ID: 16597)	09-Mar-2020	5/5 (100%)
Collaborative Research (RCR-Basic) (ID: 16598)	10-Mar-2020	5/5 (100%)
Conflicts of Interest (RCR-Basic) (ID: 16599)	10-Mar-2020	4/5 (80%)
Data Management (RCR-Basic) (ID: 16600)	10-Mar-2020	4/5 (80%)
Mentoring (RCR-Basic) (ID: 16602)	10-Mar-2020	5/5 (100%)
Peer Review (RCR-Basic) (ID: 16603)	10-Mar-2020	3/5 (60%)
Research Misconduct (RCR-Basic) (ID: 16604)	10-Mar-2020	4/5 (80%)
Plagiarism (RCR-Basic) (ID: 15156)	10-Mar-2020	2/5 (40%)
Research Involving Human Subjects (RCR-Basic) (ID: 13566)	10-Mar-2020	5/5 (100%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?k185c12cc-d2c0-460e-a445-5fbd31056ef4-35849577

Collaborative Institutional Training Initiative (CITI Program)

Email: support@citiprogram.org

Phone: 888-529-5929

Web: <https://www.citiprogram.org>

Figure a. Collaborative Institutional Training Initiative (CITI Program) Part 1

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

COMPLETION REPORT - PART 1 OF 2 COURSEWORK REQUIREMENTS*

* NOTE: Scores on this [Requirements Report](#) reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Sheila McCarley (ID: 8998599)
- **Institution Affiliation:** Arkansas State University (ID: 950)
- **Institution Email:** sheila.mccarley@smail.astate.edu
- **Institution Unit:** NURSING
- **Phone:** 901-826-8845

- **Curriculum Group:** Human Research
- **Social Learner Group:** Social/Behavioral Research Course
- **Stage:** Stage 1 - Basic Course

- **Record ID:** 35849576
- **Completion Date:** 11-Mar-2020
- **Expiration Date:** 11-Mar-2023
- **Minimum Passing:** 85
- **Reported Score*:** 96

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
Belmont Report and Its Principles (ID: 1127)	10-Mar-2020	3/3 (100%)
History and Ethical Principles - SBE (ID: 490)	10-Mar-2020	5/5 (100%)
Defining Research with Human Subjects - SBE (ID: 491)	10-Mar-2020	4/5 (80%)
The Federal Regulations - SBE (ID: 502)	10-Mar-2020	4/5 (80%)
Assessing Risk - SBE (ID: 503)	10-Mar-2020	5/5 (100%)
Informed Consent - SBE (ID: 504)	10-Mar-2020	5/5 (100%)
Privacy and Confidentiality - SBE (ID: 505)	11-Mar-2020	5/5 (100%)
Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928)	11-Mar-2020	5/5 (100%)
Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)	11-Mar-2020	5/5 (100%)
Conflicts of Interest in Human Subjects Research (ID: 17464)	11-Mar-2020	5/5 (100%)
Arkansas State University (ID: 1792)	11-Mar-2020	No Quiz

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?kb54b17f2-9674-4598-a4c3-b414cb3d8d9a-35849576

Collaborative Institutional Training Initiative (CITI Program)

Email: support@citiprogram.org

Phone: 888-529-5929

Web: <https://www.citiprogram.org>

Figure b. Collaborative Institutional Training Initiative (CITI Program) Part 2

Perception of Mentorship

Using the Likert scale, rank the following items on the degree of importance as follows:

1=strongly disagree, 2= disagree, 3=neutral, 4=agree, 5=strongly agree

7. Based on the following mentoring characteristics, what is your perception of importance as it relates to the influence on student role satisfaction?

1. Helps student integrate academic knowledge into clinical practice

1 2 3 4 5

2. Calmness during stressful situations and events

1 2 3 4 5

3. Offers nonthreatening communication

1 2 3 4 5

4. Enthusiasm/Enjoys teaching

1 2 3 4 5

5. Communicates clearly

1 2 3 4 5

6. Encourages clinical independence and independent decision-making

1 2 3 4 5

7. Provides constructive and timely feedback

1 2 3 4 5

8. Shows respect for student

1 2 3 4 5

9. Stimulates effective discussions/reflections

1 2 3 4 5

10. Offers support/motivation and is accessible

1 2 3 4 5

11. Has high professional standards/clinical judgment and competence

1 2 3 4 5

12. Provides objective evaluations

1 2 3 4 5

13. Uses student care plans

1 2 3 4 5

14. Individualizes teaching

1 2 3 4 5

15. Open-Minded

1 2 3 4 5

8. Based on the following mentoring characteristics, what is your perception of importance related to its impact on student skill development?

1. Helps student integrate academic knowledge into clinical practice

1 2 3 4 5

2. Calmness during stressful situations and events

1 2 3 4 5

3. Offers nonthreatening communication

1 2 3 4 5

4. Enthusiasm/Enjoys teaching

1 2 3 4 5

5. Communicates clearly

1 2 3 4 5

6. Encourages clinical independence and independent decision-making

1 2 3 4 5

7. Provides constructive and timely feedback

1 2 3 4 5

8. Shows respect for student

1 2 3 4 5

9. Stimulates effective discussions/reflections

1 2 3 4 5

10. Offers support/motivation and is accessible

1 2 3 4 5

11. Has high professional standards/clinical judgement and competence

1 2 3 4 5

12. Provides objective evaluations

1 2 3 4 5

13. Uses student care plans

1 2 3 4 5

14. Individualizes teaching

1 2 3 4 5

15. Open-Minded

1 2 3 4 5

9. Based on the following mentoring characteristics, what is your perception of importance related to clinical setting retention?

1. Helps student integrate academic knowledge into clinical practice

1 2 3 4 5

2. Calmness during stressful situations and events

1 2 3 4 5

3. Offers nonthreatening communication

1 2 3 4 5

4. Enthusiasm/Enjoys teaching

1 2 3 4 5

5. Communicates clearly

1 2 3 4 5

6. Encourages clinical independence and independent decision-making

1 2 3 4 5

7. Provides constructive and timely feedback

1 2 3 4 5

8. Shows respect for student

1 2 3 4 5

9. Stimulates effective discussions/reflections

1 2 3 4 5

10. Offers support/motivation and is accessible

1 2 3 4 5

11. Has high professional standards/clinical judgment and competence

1 2 3 4 5

12. Provides objective evaluations

1 2 3 4 5

13. Uses student care plans

1 2 3 4 5

14. Individualizes teaching

1 2 3 4 5

15. Open-Minded

1 2 3 4 5

10. Would a clinical mentoring program have an impact on your decision to stay at that facility post-program completion?

1 2 3 4 5

Questionnaire developed with a combination of questions from studies done by Elisha & Rutledge, 2011, Meno, Keaveny & O'Donnell (2003), and Cook, (2005)

Provide any additional comments below that may benefit the facilitation of program development:

