

International Journal of Nursing and Health Care Research

Pallaria TJ, et al. Int J Nurs Health Care Res 7: 090.

DOI: 10.29011/IJNHR-090.100090

Research Article

Effects of a Structured Mentorship Program Handbook on Student Knowledge within a Nurse Anesthesia Program

Thomas J. Pallaria*, Patricia Meringer, Reve Brander, Michael McLaughlin

Nurse Anesthesia Program, Rutgers University, New Brunswick, New Jersey, USA

***Corresponding author:** Thomas J. Pallaria, Program Director and Assistant Professor at Rutgers School of Nursing Anesthesia Program, Newark, New Jersey, USA. Tel: +1-9739722513; Fax: +1-9739728950. Email: pallartj@sn.rutgers.edu/pcm79@sn.rutgers.edu

Citation: Pallaria TJ, Meringer P, Brander R, McLaughlin M (2019) Effects of a Structured Mentorship Program Handbook on Student Knowledge within a Nurse Anesthesia Program. Int J Nurs Health Care Res 7: 090. DOI: 10.29011/IJNHR-090.100090

Received Date: 15 May, 2019; **Accepted Date:** 09 August, 2019; **Published Date:** 15 August, 2019

Abstract

Mentorship within the anesthesia community is an untapped resource that has the potential to enhance not only the wellness of the individuals involved but improve the quality of care provided by anesthesia providers by creating a foundation that molds strong leaders and the clinical educators of tomorrow [1]. The Student Registered Nurse Anesthetist (SRNA) mentorship program at Rutgers University is a student driven system that encourages mentee-mentor relationships to cultivate peer learning, professionalism, and wellness. The purpose of this project was to create a mentorship handbook and evaluate the effectiveness of a mentorship program handbook on student knowledge that can be utilized to implement, maintain, and sustain a successful mentorship program. The study intervention consists of the creation and dissemination of an available handbook and mentorship tool, which outlines the intricate details and execution strategies of the Mentorship Program within the SRNA community at Rutgers University. A total of 63 surveys were collected from both pre and post surveys between the second, third, and fourth Doctorate of Nurse Practice (DNP) cohorts. As a result of the mentorship handbook, knowledge of the mentorship program increased ($r_s=0.999$; $p<0.01$), knowledge of being a mentor/ mentee increased ($r_s=0.999$; $p<0.01$ and $r_s=0.995$; $p<0.01$), and understanding the role and responsibilities of a mentorship coordinator increased ($r_s=0.999$; $p<0.01$).

Keywords: Leadership; Mentee; Mentor; Mentorship; Student registered nurse anesthetist (SRNA)

Introduction

Mentorship within the anesthesia community is an untapped resource that has the potential to enhance not only the wellness of the individuals involved but improve the quality of care provided by creating a foundation that molds strong leaders and clinical educators. Throughout the student nurse anesthetist's educational journey, the role of a clinical guide or mentor is of extreme value [1]. The impact that mentorship plays within the formation of Registered Nurse (RN) to Certified Registered Nurse Anesthetist (CRNA) may not only cultivate academic growth, but also enhances relationships throughout the academic setting and within professional practice. The purpose of this project is to create a mentorship handbook and evaluate the effectiveness

of a mentorship program handbook on student knowledge, with the understanding that such guidebook can be utilized by any individual or institution to implement, maintain, and sustain a successful mentorship program that produces strong leaders who eventually become clinical educators.

The information contained within the mentorship handbook (Figure 1) details the roles, responsibilities, and expectations of the program and its participants. In addition, the handbook details the specific qualities of a strong leader and navigates the user on applicable methods to cultivate those qualities. Information was synthesized from data collected during an in-depth literature review and was collaborated with research obtained from the previous Doctor of Nursing Practice (DNP-1) Mentorship Coordinator Chairs at Rutgers University [1]. The handbook was uploaded to the Rutgers Nurse Anesthesia online portal and disseminated to the SRNAs currently enrolled in the Rutgers Nurse Anesthesia

Program (RNAP). This provides mentorship participants with the ability to successfully transition from mentee to mentor, followed by the transition of a student mentor in academia to a CRNA clinical educator in the clinical practice setting.

A survey was administered before and after public announcement of the handbook to evaluate the impact on student knowledge and mentorship practice within the community, as well as the impact of leadership on active users as participant's transition from students to clinical educators. The objective and aims of this project was to create a mentorship handbook that details mentorship,

the benefits of mentorship, and the framework of the mentor-mentee relationship. Having clearly defined mentorship roles should improve outcomes, enhance peer learning, and cultivate leadership potential. A secondary aim of this project includes defining the role and responsibilities of mentorship coordinators of matching dyads, instituting mentee and mentor training, setting expectations, and providing a framework for evaluation and feedback. Finally, the last objective includes creating a platform for dissemination so other CRNA programs nationwide could utilize and initiate the Rutgers Mentorship Program into their own curriculum. Analysis, evaluation, and discussion of such impact are detailed below.



Rutgers School of Nursing
Stanley S. Bergen Building
Rutgers, The State University of New Jersey
65 Bergen Street
Newark, NJ 07101-1709

Module 1
Mentorship Handbook: Module 1
What is Mentorship

Purpose

This Handbook will support and guide the Mentor and Mentee as they develop and move through the mentorship relationship provided by the mentorship program at Rutgers University

What is Mentorship

Mentorship within the Student registered nurse anesthesia community is an untapped resource when successfully implemented, that has the potential to enhance not only the wellness of the individuals involved but improve the quality of care provided by anesthesia providers by creating a foundation that molds strong leaders and the clinical educators of tomorrow. As it applies for the SRNA community, mentorship is best described as a peer based, one-to-one, reciprocal relationship between a more experienced mentor and less experienced mentee. This relationship should be characterized by consistent interaction within a given period of time, in which the mentor utilizes the STAR MAP to successfully facilitate the development of both the mentor and mentee. This method applies a non-hierarchical form of mentoring, which helps builds trust and sense of community within the mentee-mentor relationship.

What is Mentoring

Mentoring is a reciprocal learning relationship in which a mentor and mentee agree to a partnership where they will work collaboratively towards achievement of mutually defined goals that develop a mentee's skill, abilities, knowledge, and thinking process. This form of mentoring encourages open communication, better outcomes, and bonds users through a similar paradigm, especially as it relates to daily challenges and workload stress. The reciprocal dyad of the mentor and mentee connection is beneficial because both parties are at similar stages in their careers and or education. Thus, successful mentorship leads to positive functional outcomes, which include reduced stress, orientation to the educator role, leadership development, personal growth, integration into the academic community, and builds strong leaders as students transition from an academic environment into clinical and professional practice.

Mentorship benefits

- Empathy
- Encouragement
- Information sharing
- Healthy lifestyles
- Belonging
- Acknowledgment
- Validation
- Communication
- Increased retention rates
- Reduced stress

What is Required:

- ~~Committing~~ time
- Building relationships
- Being available by phone, text, or email
- Maintaining open communication
- Actively listening
- Giving feedback without judgment
- Evaluating the process

What is Gained

- New relationships
- Pride in being part of someone else's growth and development
- Improvements in listening, feedback, problem solving, leadership, and educational skills
- the opportunity to inspire others
- Personal growth and professional development

Module 2 *Understanding Roles*

2a. Understanding Roles: Mentorship coordinator

An effective Mentorship Coordinator is nominated by the nurse anesthesia faculty and requires leadership capabilities to autonomously manage and maintain a mentorship program. The Mentorship Coordinators' primary role will focus on creating optimal matched dyads, which sets the foundation for the mentorship experience. Leadership qualities must be utilized by the Mentorship Coordinator during this process since this position will initiate, conduct, evaluate, and decide mentor-mentee pairings. Secondary goals should focus on mentorship program maintenance, which includes setting goals, monthly emails, student engagement, and remediation.

The Mentorship Coordinator: Responsibilities

- Act as a role model and mentor to all
- Demonstrate and maintain leadership qualities
- Pair dyads
- Plan mentorship events
- Send out monthly emails
- Assess, evaluate, and provide feedback
 - Mentors
 - Mentees
 - Mentorship program
- Encouragement participation
- Community outreach
- Stay committed and involved

The Mentorship Coordinator: Matching dyads

The best practice to achieve appropriately matched dyads is to obtain input in the matching process from both the mentee and mentor if possible. Rutgers Mentorship program utilized a mentee driven process by encouraged input from the protege. Application of this method prior to pairings strengthened commitment to the relationship, improved mentorship quality, and provided a greater understanding of the mentorship program to both parties. Dyad pairing can be achieved via a student mixer, meet and greet, and or during mentee orientation. The event must allow time for all potential mentors and mentees to converse. This should be an informal process to encourage openness and reduce anxiety. Mentees should be directed to write down the names of three mentors that they felt would be an ideal candidate and give this information to the mentorship coordinator. At the conclusion of the event, the mentorship coordinator should attempt to pair mentees with their desired potential mentors. Three variables that should be considered is the location of each individual, gender, and prior relationships. If possible, it is also better to pair dyads that live closer to one another with the hopes of increasing the opportunity for face to face meetings. Matching mentees with mentors of the same gender decreased stress and anxiety prior to their first meet. Lastly, mentees and mentors that already have an established relationship prior to the program should be paired together since a bond already exist. Once the pairing process has been completed, best practice dictates that the

mentor, mentee, and mentorship coordinator should establish guidelines consisting of the purpose, role, and goals of the mentoring relationship

The Mentorship Coordinator: Pairing Guidelines

Mentorship pairing will be conducted by the senior student mentorship coordinators. This will occur via a student run mixer. Based off this interaction, mentees are recommended write down the names of three seniors that they would like to have as mentors and submit them to the mentorship coordinators before leaving the mixer. This is highly recommended since evidence shows that mentee driven relationships have the best outcomes.

- **Mentee Driven**
 - Give mentees opportunity to meet senior mentors
 - Utilize mixer between D4 and D3
- **Other considerations**
 - Location
 - Gender
 - Work experience
 - Previous relationship
- **Once pairing is complete**
 - Mentorship coordinators must email final mentee-mentor matches along with contact info
- **Mentees are required to initiate the first conversation and should meet prior to the start of their first semester**

2b. Understanding Roles: The Mentor

A mentor is a trusted guide, role model, counselor, supporter, confidante, advocate, or advisor. An effective mentor, should be more experienced at a certain task and provide individualized support to mentees, based on assessment of the mentee's needs. The mentorship realm is centered on the needs of the mentee, not community or program needs, which sets the foundation for an individualized relationship tailored to benefit the mentee. A mentor is someone who is able to be a good listener, willing to be open and share experiences and views, willing to commit time and effort, provides an "open door" to questions and problems, points out both strengths and opportunities for improvement in the student partner and in the mentor/student relationship, encourages the student objectively, allows the student freedom in the relationship, leads by example, demonstrates a strong commitment to ethics, and is able to learn from experiences and mistakes.

The Mentor: Responsibilities

- **commit to establishing a partnership based on open communications, productive and proactive interaction and a mutual respect and trust.**
- **Be available, as schedules permit, to work with the student. (one per month as a minimum)**
- **Regular face-to-face meetings are vital to building a strong and effective relationship.**
- **Consistent communication via phone or e-mail is also an important element of mentoring.**

- For distance mentoring relationships to succeed, you must be willing to meet face-to-face for two initial meetings with your student partner and to meet in person at least two times a semester.
- Establish a regular meeting time early on.
 - Remember, the student's schedule changes each semester, so you'll have to address meeting times at least 2 times each year.
- Actively listen and provide guidance.
- Work with your mentee to achieve goals.
- Attend an initial orientation session.
- Encourage attendance to optional program events and conferences
 - Enhances the mentor/mentee relationship as well as the professional relationship with other members of career
- Provide feedback using the program's evaluation surveys.

The Mentor: Goals

- Build confidence
- Role model
- Coach by offering constructive feedback
- Share experiences as learning tools
- Encourage professionalism
- Proactively maintain contact and encourage open communication
- Help problem solve
- Help the student externalize classroom education
- Encourage introspection
- Facilitate goal-setting and being goal-oriented
- Maintain privacy/confidentiality
- Advise in a nonjudgmental and ethical manner

The Mentor: Benefits

- Become a positive role model
- Self-reflection and personal fulfillment through contribution to community and individual
- Satisfaction in helping someone mature, progress, and achieve goals
- Meeting and sharing experiences with your mentee and other mentors
- Professional growth, leadership, and educational skill development

The Mentor: Tips for Success

Be a good listener. Listening is an art—and you need to do more than just hear the mentee. You need to listen and be an active participant in the conversation.

- Listening involve active and nonverbal communication, including body language.
- Provide guidance and constructive feedback.
 - Guide them through a problem-solving process, don't solve the problem for them. Offer feedback that is constructive, developmental, and adjusted to match the personality style of your mentee.
- Take a personal interest in the relationship.

- A good mentor is committed to helping their mentees find success and gratification in their chosen profession. Take the time to invest in the success of your mentee. Value ongoing learning.
- Be a positive role model who shares wisdom and draws out the possibilities of those he/she mentors.
 - Mentees are more likely to be engaged if there is a point of encouragement and inspiration trickled down from the mentor.

First Meet: The Mentor

To prepare for your first meeting, you might want to:

- Summarize your goals and expectations for the mentoring partnership
- Carefully determine the time that you have available for the meetings
 - “How should we work together? Will we stay in touch between meetings, and how?”
- Engage in active listening
- Allow the first meeting to be mentee-driven
- Offer support and guidance as it fits with the mentee’s need.

2c. Understanding Roles: The Mentee

A mentee is a student, advises, novice or beginner. They are the beneficiaries of special relationships who are protected and supported by their mentors. An effective mentee, should strive for open communication, and maintain openness, honesty, and willingness to continuously learn. Once assigned to a mentor by the mentorship coordinator, mentees must take the initiative for cultivating the relationship with their new mentors, which accentuates the mentee’s commitment and willingness to learn. Mentees should strive to absorb knowledge and advice from their experienced mentor to help facilitate their transition from proficient ICU nurse to novice anesthesia provider. The mentee must learn to synthesize advice, knowledge, and practice provided to them, so that they may apply such points into their own clinical expertise. To accomplish this, the mentee must remain flexible, respect the mentor’s time, and display gratitude. As an integral member of a dyad, with focus on the mentee’s success as the main promoter of forward movement within the relationship, these qualities outline the minimal effort needed to establish an effective relationship.

The Mentee: Responsibilities

- Identifying established roles
 - Have a clear understanding of why you want to be mentored
- Communicate expectations
 - Have a clear understanding of your expectations
 - communicate such expectations
 - Stay flexible and learn to adapt (expectations and plans can change)
- Create goals with milestones and deliverables
 - Inform your mentor about your preferred learning style
 - Be realistic
 - Work together as a team
- Listen and contribute to the conversation

- Understand that your mentor will not have all the answers
- Accept constructive feedback
- Set time aside for self-reflection including evaluating progress
- Celebrate success
- Be consistent and reliable
- Provide your mentor with updates
- Provide an evaluation of the experience
- Show gratitude (Say thank you)

The Mentee: Goals

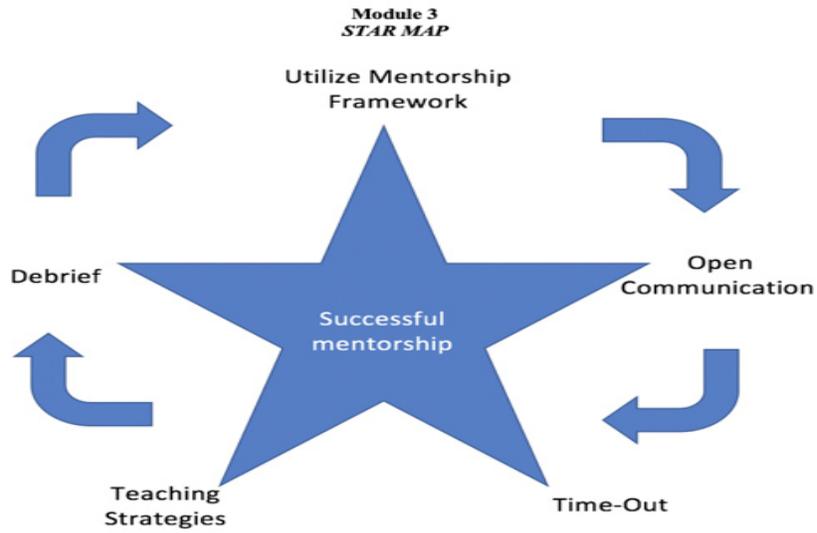
- Will be individualized and specific

The Mentee: Benefits

- Idea sharing, problem solving, advice, and increased self-confidence
- Support, empathy, encouragement, counseling, friendship
- Monthly mentorship email updates and reminders
- Quarterly morale boosting gatherings
- Assistance with teaching strategies and subject knowledge
- Gain personal guidance, positive reinforcement, and feedback
- Vent to someone who has “been there”

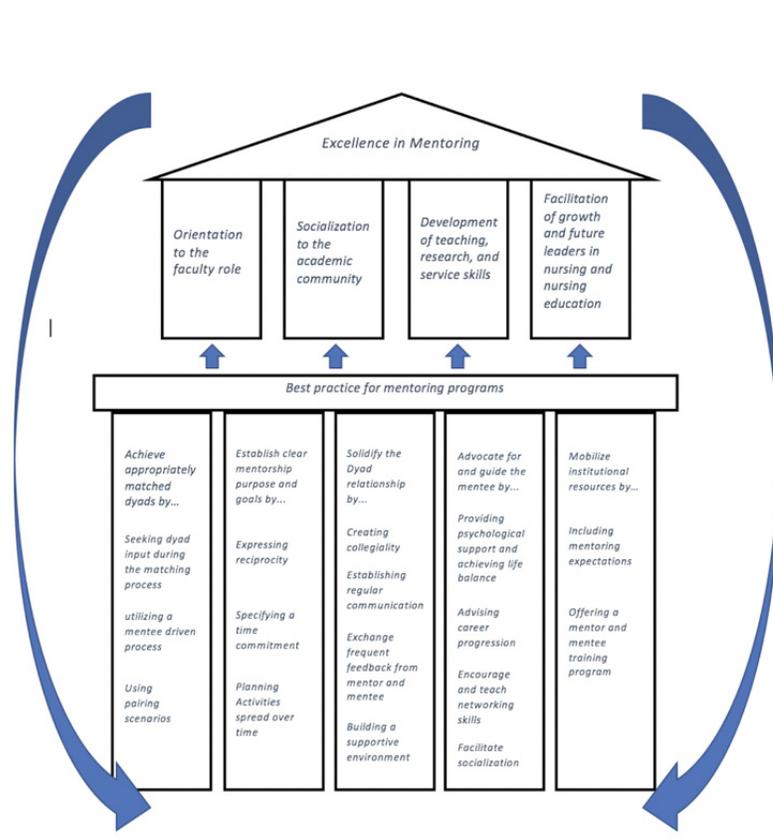
The Mentee: Tips for Success

- Don't be afraid to ask!
 - Your mentor wants to help you and yes, while he or she is taking valuable time and essentially donating it to you, this is something he/she feels strongly about and wants to do. But they don't always know what you want, need or seek, if you don't come right out and say it!
- Keep in touch.
 - Let your mentor know what you have been up to, even if you haven't spoken or gotten together in a while. Send him/her anything that's good and exciting for you so your mentor can be in the loop and as proud of your accomplishments as you are. Make time and find opportunities to make time for your mentor.
- Stay focused.
 - While your mentor's purpose is to contribute to your success as a student, he/she also has a full school load and personal life beyond you. Focus on what's most important, and leave everything else behind, so that you both can make the most of your time together
- Utilize Technology.
 - Email, email, email. It allows your mentor to mentor you on their own schedule and in their free time (texting works too... but give your mentor time to respond)
- Know your Mentor.
 - Get to know them personally. Find out what they like to listen to, what books they like to read, movies they enjoy, family details etc. (but only if they're willing to divulge. This helps you respond to them and also thank them in ways that are important to them)



3a. Framework Utilization

Mentorship Framework: adopted version of “Best Practices in Academic Mentoring: A Model of Excellence



3b. Open Communication

Effective and open communication is an essential aspect of leadership. As with all medical roles, communication aids in smooth transitions as well as transformational leaders. Opening pathways of such communication between the mentor and mentee guides knowledge exchange and offers routes of emotional support. Open communication is highlighted within first meeting and is stemmed from mutual respect. Through the role of the mentor, competent and effective leaders are more likely to be respected by their followers as they practice open 2-way communication, share critical information, and freely disclose their perceptions and feelings with the people they work with. Since the mentorship is generated from the motivation of the mentee, the ability to practice open communication is integral in forward progression.

3c. Time-Out:

GAS: Gauge, Aim, and Succeed

Utilizing the time-out concept at the beginning of any mentorship interactions occurring between the mentor and mentee will increase the ability of the mentor to effectively transfer his or her knowledge successfully. This concept can be best understood by the acronym GAS, which stands for gauge, aim, and succeed. Mentors can successfully implement GAS by taking about 5 minutes at the start of the mentor-mentee conversation. During the first phase, the mentor should gauge where the mentee is in terms of current classes, clinical rotation, and experience. During the second phase, mentor should guide the mentee towards a specific aim or goal. In the final phase, the mentor will offer support and or suggest strategies to succeed

3d. Teaching Strategies

Modeling

- The mentor demonstrates his/her didactic and or clinical knowledge as the mentee listens or observes

Coaching

- The mentor offers step by step instructions to the mentee to improve upon clinical techniques and or study habits

Guiding

- The mentor indirectly suggest alternate strategies, thoughts, or pathways to guide the mentee in particular direction that will lead the mentee to an appropriate end goal of intervention

Open-ended questioning

- The mentor initiates a conversation that is rooted in open ended questions to obtain a better understanding of the mentees knowledge, stimulate critical thinking, encourage independent problem solving abilities.

3e. Debrief

DeGAS: De-stress, Gather, Analyze, and Summarize

Implementing a debrief should occur at the end of any mentoring interaction occurring between the mentor and mentee to evaluate the interaction, goals, achievements, and or struggles. Mentors can successfully utilize this evaluation tool by implementing the acronym DeGAS, which stands for de-stress, gather, analyze, and summarize for 5 minutes at the conclusion of mentor-mentee interactions. During the first phase, both the mentor and mentee

should take a moment to destress and refocus their attitude to be objective instead of emotional and subjective. During the second phase, the mentor should gather information by listening to the mentees to understand how he or she feels about their experience. The following phase, mentor should encourage the mentee to reflect on and analyze their thoughts, actions, and decision making process. During the final phase, the mentor and mentee summarize lessons learned from the shared experience and identify future improvement.

Module 4 Surveys & Evaluations

4a. Mentorship Agreement:

Instructions

Use this partnership agreement at your first meeting to agree on goals and objectives for the mentorship relationship, set ground rules for your meetings, to decide on how to communicate or meet, and to discuss confidentiality.

1. We have utilized the GAS time out agreed on the following goals and objectives as the focus of this mentoring relationship.

Goal/Objectives:

- 1.
- 2.
- 3.

2. We have agreed to build this relationship using open communication and have discussed how we will work together to ensure that our relationship is a mutually rewarding and a satisfying experience for both of us.

Our communication method of choice is to meet:

1. ___ face to face, ___ by phone, ___ by email

2. Our schedule for meetings will be _____

3. Look for multiple opportunities and experiences to enhance the mentee's learning. We have identified, and will commit to, the following specific opportunities and venues for learning: _____

3. We have agreed to maintain confidentiality within this relationship. Any personal information shared between mentor and mentee is to be confidential unless both mentor and mentee agree that the information can be shared and with whom it can be shared. Any conversations about the mentor/mentee relationship that are held with others should not disclose any confidential information. Specifically, no information from confidential conversations between mentor and mentee are to be shared with supervisory personnel.

Yes _____ No _____

4. We will utilize the ~~DeGAS~~ debriefing tool to provide regular feedback to each other and evaluate progress

Yes _____ No _____

Mentor's Signature _____ Mentee's

Signature _____

Print name _____ Print name _____

Date _____ ~~Date~~ _____

4b. Mentorship Evaluation Form

Instruction:

Thank you very much for taking a few minutes to provide this information. It will help us strengthen our program and provide data to demonstrate the effects of mentoring on mentors and mentees. All the individual data from this survey will be kept anonymous.

Evaluation Form

EVALUATION PRE-TEST FORM

Thank you very much for taking a few minutes to provide this information. It will help us strengthen our program and provide data to demonstrate the effects of mentoring on mentors and mentees. All the individual data from this survey will be kept anonymous.

Date:

Cohort:

	Strongly Disagree		Neither		Strongly Agree	
How would you rate your knowledge and understanding of Mentorship?	1	2	3	4	5	6
Do you understand the role and responsibilities of being a mentor?	1	2	3	4	5	6
Do you understand the role and responsibilities of being a mentee?	1	2	3	4	5	6
Do you understand the role and responsibilities of being a mentorship coordinator?	1	2	3	4	5	6
Are you interested in becoming a mentorship coordinator?	1	2	3	4	5	6
How satisfied were you with your mentor match?	1	2	3	4	5	6

Evaluation Form

EVALUATION POST-TEST FORM

Thank you very much for taking a few minutes to provide this information. It will help us strengthen our program and provide data to demonstrate the effects of mentoring on mentors and mentees. All the individual data from this survey will be kept anonymous.

Date:

Cohort:

	Strongly Disagree		Neither		Strongly Agree	
How would you rate your knowledge and understanding of Mentorship?	1	2	3	4	5	6
Do you understand the role and responsibilities of being a mentor?	1	2	3	4	5	6
Do you understand the role and responsibilities of being a mentee?	1	2	3	4	5	6
Do you understand the role and responsibilities of being a mentorship coordinator?	1	2	3	4	5	6
Are you interested in becoming a mentorship coordinator?	1	2	3	4	5	6
How accessible was the Mentorship Handbook?	1	2	3	4	5	6
Are your current mentorship coordinators meeting their role expectations	1	2	3	4	5	6

Figure 1: Mentorship Handbook.

Review of Literature

The impact that mentorship plays within the formation of RN to CRNA augments professional growth within the academic and clinical environment. This is evidenced by superior retention rates, enhanced career development, and improved leadership skills [2]. Mentorship, especially as it applies to SRNAs, possesses a vast amount of benefits, which include promoting professional development, career satisfaction, and success [3,4]. In addition

to these stated benefits, mentorship is crucial within the SRNA community because it can reduce burnout, increase socialization amongst members, reduce stress, and further the development of core professional competencies [4-6].

Mentorship in The Student Nurse Anesthesia Community

Mentorship is best described as a student driven, social, and confidential relationship between two individuals, in which, one individual functions as a mentor while another individual function

as the mentee [7]. Previous doctoral projects in the nurse anesthesia community have exemplified the importance of mentorship [1]. Karcich and DeLeonardis [1] highlight the stress endured by SRNAs and the impact that mentorship has to decrease such stress [1,8]. Further investigation of mentorship acknowledges the impact that peer mentorship has on relationships. As a peer mentor, the relationship is focused on “Seeking shared insights, experiences, ideas, guidance, problem-solving and support” [4]. The word “Mentor”, which is derived from Greek mythology, is a means to serve or guide as a teacher [2]. This concept has since evolved into a conceptual framework that is best described as a, “A multidimensional interactive process that can be formal or informal and evolves over time according to the needs and desires of the mentor and protégé” [2]. When it is applied to academia for SRNAs, it is better understood as, “A one-to-one reciprocal relationship between a more experienced mentor and less experienced protégé that is characterized by consistent interaction within a given period of time to facilitate mentee development” [2]. Within these peer-based relationships, the reciprocal dyad of the mentor and mentee connection is beneficial because both parties are at similar stages in their careers and or education [5]. Utilizing a non-hierarchical form of mentoring helps builds trust and sense of community within the mentee-mentor relationship. This form of mentoring encourages open communication [1], better outcomes, and bonds users through a similar paradigm, especially as it relates to daily challenges and workload stress.

Mentorship Roles

As two equal participants in a relationship, the role of the mentor differs from the mentee. Overall, the relationship between the dyad should be based on honesty, trust, respect, open communication and confidentiality [9]. Identification of a mentor early in one’s academic and professional career is proportional to the success of the mentee [9]. As two active participants in the relationship, clearly defined roles are the primary step in solidifying an effective mentorship [9].

Role of the Mentee

As a mentee, the responsibility includes maintaining clear communication, openness, honesty, and the willingness to learn [10]. Mentees are one half of the equation. They are meant to absorb knowledge and advice from the experienced mentor, but they are also challenged with synthesizing advice, knowledge, and practice provided to them, and applying such points into their own work. As an integral member of a dyad, with focus on the mentee’s success as the main promoter of forward movement within the relationship, these qualities outline the minimal effort needed to establish an effective relationship.

Role of the Mentor

To identify one as a mentor, several characteristics must be present. First, a mentor should be more experienced [11] at a certain task. Next, mentors must provide individualized support to mentees based on assessment of the mentee’s needs. Finally, mentoring surrounds an interpersonal relationship that is flooded with benefit, engagement, and commitment between roles [11]. As two parties within one relationship, the mentorship realm is centered on the needs of the mentee¹¹, not the community or program needs. This provides an individualized relationship tailored to customize benefit for each mentee [11].

Role of the Mentorship Coordinator

An effective mentorship coordinator requires leadership capabilities to autonomously manage and maintain a mentorship program. Although the role of mentorship coordinator is not explicitly investigated in the literature review, there is extensive research regarding the qualities and characteristics of leaders. Careful examination of leadership qualities is explored to identify current knowledge regarding qualities that accentuate an effective leader. A previous cohort study performed by Hendricks, et al. [12], described leadership as a function of knowing one’s self, effectively communicating, building trust within the mentee-mentor relationship, and nurturing one’s own leadership potential [12]. Possessing these leadership qualities is not always an innate trait [12], but it is a skill that can be obtained through practice and guidance.

Role of the Mentorship Coordinator: Matching Dyads

In order to optimize the mentor-mentee pairing process, successful dyads will most often occur when input is received from both the mentor and the mentee, and is highlighted when Nick et al. [2] states, “Regardless of the strategy employed, the recommended best practice to achieve appropriately matched dyads is to obtain input in the matching process” [2]. Leadership qualities are utilized by the mentorship coordinators since this position will initiate, conduct, evaluate, and decide mentor-mentee pairings. According to evidence gathered, mentor and mentee input prior to pairings strengthened commitment to the relationship, improved mentorship quality, and provided a greater understanding of the mentorship program to both parties [2]. Once the pairing process has been completed, best practice dictates that the mentor, mentee, and mentorship coordinator should establish guidelines consisting of the purpose, role, and goals of the mentoring relationship [2].

Efficacy of Roles

Mentoring cannot just occur without training, as the characteristics of an effective mentor and mentee are developed

over time [1,4]. The mentorship handbook identifies these qualities and provides a framework for application. Mentorship coordinators can utilize the “Mentorship Program Framework for Success” (Figure 2) [2] to create an optimal environment conducive for implementing and maintaining a mentorship program. This practice framework is based off of a design [2], which utilizes evidence-based practice themes to facilitate the best practice for creating a program geared towards academic mentorship quality and excellence [2]. The practice themes represent the roles and responsibilities of the previously unidentified mentorship coordinator, which include, “Achieving appropriately matched dyads, establishing clear mentorship purpose and goals, solidify dyad relationships, advocating the protégé, and mobilizing institutional resources” [2]. This training program is a way to streamline mentor and mentee qualities to ensure that an effective relationship can be cultivated [1,2].

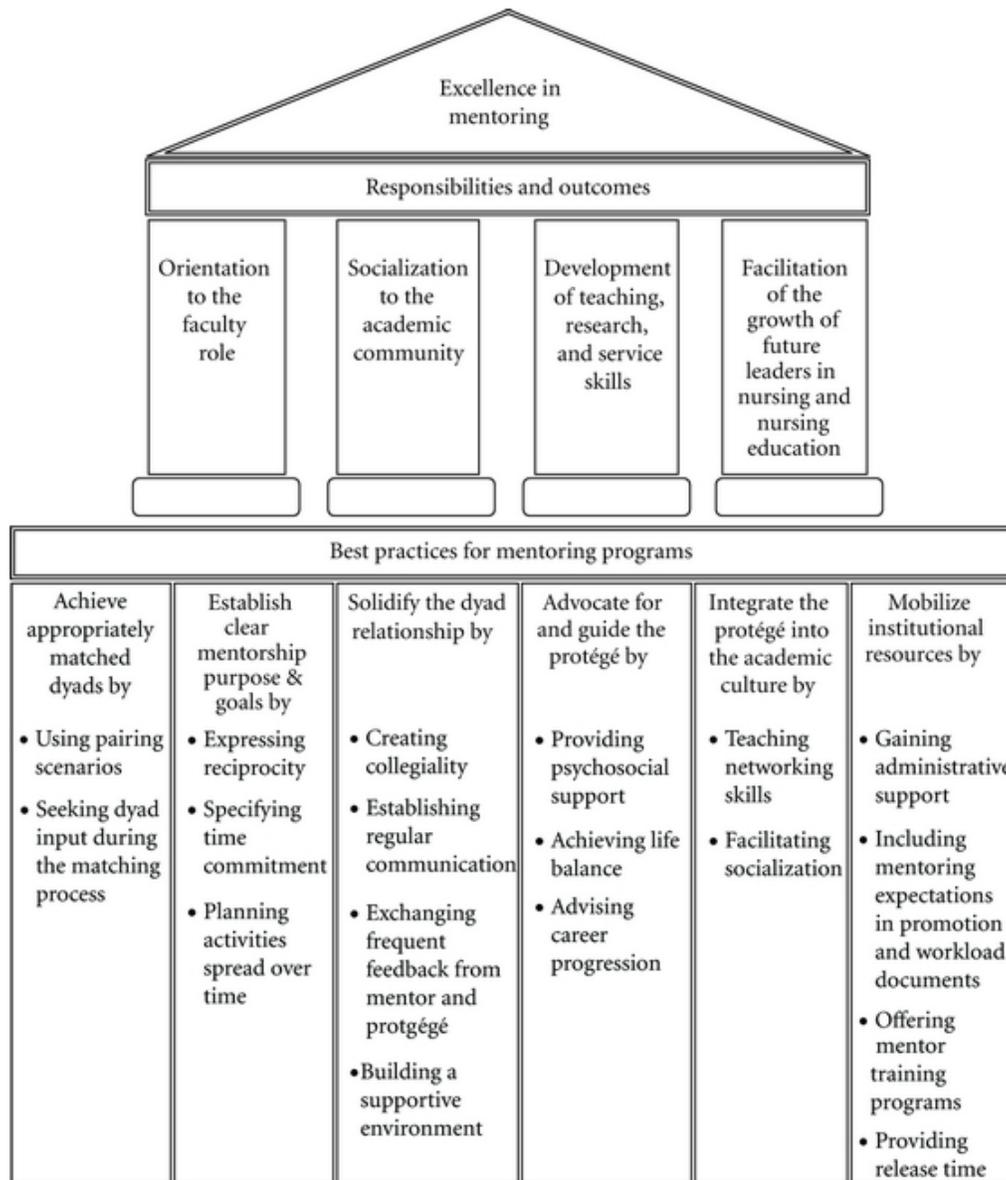


Figure 2: Nick et al. [2], The model: Best Practices in Academic Mentoring: A Model for Excellence.

Benefits of Mentorship

Mentorship leads to positive functional outcomes, which include reduced stress, orientation to the educator role, leadership development, and integration into the academic community [1,2]. One specific benefit observed from peer-mentoring relationships is the possibility to recognize warning signs of emotional stress or substance abuse faster than faculty mentors [1,4]. SRNAs are characterized as a high-risk population for substance abuse and emotional stress due to the extremely high levels of experienced stress for extended periods of time [1]. Being able to recognize the warning signs associated with these experiences provides a foundation for treatment and prevention. Having this lifeline would create a more supportive environment aimed at improving SRNA wellness to counteract the negative outcomes associated with stress [1].

Benefits of Mentorship: Future Educators

The role of mentorship as it applies to SRNAs highlights the importance on student wellness and the impact on professional growth. To understand this influence, careful examination of the impact of educators and mentors on SRNAs is crucial. The clinical portion of nurse anesthesia programs is a key component to their educational foundation and has a direct impact on the physical, emotional, and mental wellbeing of the SRNA [1,13]. The significant impact clinical educators have on the development of self-awareness, critical thinking, psychomotor proficiency, and professional practice has been previously reported [13]. Therefore, the clinical educator is one of the main determinants of the student nurse anesthetists' wellbeing, knowledge attainment, and clinical skill set. The implementation of a mentorship program is one of the potential solutions to this problem because taking on the mentor role will indirectly prepare SRNAs to be effective clinical educators.

Unfortunately, data shows that the majority of clinical educators are failing to meet the standards required to produce quality CRNAs without inflicting negative consequences such as condescending comments, a lack of positive feedback, and or lack of instruction [13]. Effective utilization of a mentorship program helps prevent and counter the negative experience perceived by SRNAs. Prevention will occur because succeeding as a mentor directly applies to the success of a clinical educator. Both roles carry similar responsibilities and leadership demands.

Benefits of Mentorship: Personal Growth

Not only are there documented benefits within career and personal success, there are distinguished benefits for individual mentors and mentees. Those who fulfill the role of mentor have an increase in confidence, a sense of pride in developing the next generation, and an improved career satisfaction [4]. Synthesis of all of these benefits leads mentors in attaining professional growth and

responsibility within their career [3]. On the other hand, those who are labeled as the mentee are better socialized into the profession, involved in academic activities, and have an improvement in collaborative relationships [4]. Simply stated, mentees benefit from their mentors' wealth of experience and mentors practice developing professional boundaries within collegial relationships [5]. Acknowledgement of individual benefits as well as the impact within the program itself is a driving force in the initiating of such plan.

Leadership: Qualities and Characteristics

“Leadership; in its essence, is the capability to explicitly articulate a roadmap and to motivate others to focus their efforts on achieving the desired goals” [14]. In order to inspire others to achieve certain goals, there must be various components to those who are identified as leaders. Leadership provides an outflow between personal connections, social status, and enhances trust between personnel. Previous authors emphasize the importance of magnanimity as an essential characteristic for leaders [12]. In addition, effective and open communication is an essential aspect of leadership. As with all medical roles, communication aids in smooth transitions as well as transformational leaders. Finally, an effective leader exhibits personality attributes in addition to cognitive, social and problem-solving skills [14]. Throughout the analysis of effective qualities of a leader, emotional intelligence continues to play a valuable role [12]. Emotional intelligence is essential in professional practice as it relates to interactions, decision-making, and response to stress. Since a leader must function at an elite level, this form of maturity is certainly evaluated and emphasized. All of these attributes should be recognized and praised when formatting guidelines for coordinators within a mentorship program.

Leadership: Challenges

Positive qualities of effective leaders should be stressed, but negative aspects of the role should be identified. A leadership role has many challenges and can be lonely [12]. This is due to the autonomy within the role, which certainly may deter persons from accepting any leadership position, both formal and informal. Highlighting a leadership role within a community of identified leaders, such as mentors and mentees in the SRNA community, poses many challenge. Developing leadership qualities are critical to the CRNA profession, however, these skills do not develop spontaneously [3]. Standard leadership skills are difficult to develop using conventional teaching strategies such as courses or lectures, and innate personality traits, such as those mentioned before, may carry heavier weight in determining those who are qualified for an elite leadership position [14].

Leadership: Definitive Guidelines

Synthesis of evidence regarding the qualities that make an

effective leader is crucial in constructing formal guidelines for the role of mentorship coordinators. CRNAs are continually expected to practice as leaders by demonstrating teamwork, offer problem-solving tactics, collaborate within the care team, and communicate with other members [3]. All of these traits fall under the umbrella of an elite leader. Therefore, careful attention to previously stated attributes may be integral in defining and solidifying the mentorship coordinator role.

Materials and Methods

The project design encompassed a defined handbook detailing the Mentorship Program at RNAP (Figure 1). This handbook contained information from previous doctoral projects, which included a mentorship training program and standards for both the mentor and mentee [1,3]. In addition, the handbook contained guidelines regarding the roles and responsibilities of each player, including the mentor, mentee, and mentorship coordinators. Specifically, the guidelines were organized into four different modules. The first module explained the purpose of mentorship and the benefits to each player in the relationship. The second module addressed each role within the mentorship program and verifies responsibilities, goals, tips for success, benefits, and highlights the actions necessary when formulating a mentorship program. These aspects were highlighted for the mentor, mentee, and mentorship coordinator. Module 3 explicitly outlined an author-constructed infographic STAR MAP (Figure 3), named for the construction of five important points to guide the mentor and mentee throughout the relationship to augment a successful mentorship bond.

This STAR MAP, constructed by the Principal Investigator (PI) and Co-Investigator (CI), was a formulated method to conduct, evaluate, and address the partnership with the mentee and mentor. This specific trajectory has not been defined in previous literature and should be highlighted throughout this project. Module 3 concluded with methods to address open communication, teaching strategies, and transfer of knowledge. Specifically, the primary authors utilized a “GAS” System, which stands for “Gauge, Aim, and Succeed”, as a form of a time-out strategy to brief between a mentor and mentee [15]. After transfer of knowledge, there was a debriefing formulate known as “DeGAS”, which stands for “De-Stress, Gather, Analyze, and Summarize”, which offered methods of reflection and evaluation [15]. Finally, Module 4 included a mentorship agreement, which verified stated goals between the mentor and mentee and established methods to achieve such goals. In addition, this contract explicitly states confidentiality and pathways of feedback between the mentor and mentee to ensure continuous evaluation and growth of such relationship.

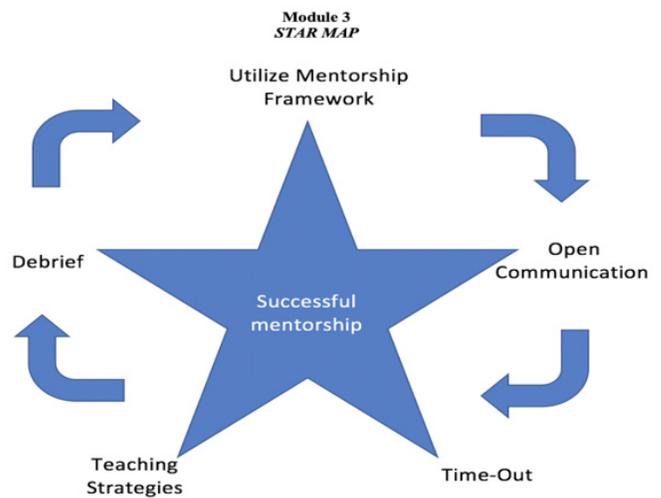


Figure 3: STAR MAP Tool.

Study participants included all current SRNAs enrolled in the RNAP. The current program is comprised of three cohorts, all matriculated on a doctoral curriculum. This means that all admitted students to the RNAP are obtaining a DNP specializing in anesthesia. Admission is offered once a year and the entirety of the program is three years. Therefore, at any given time there are three cohorts admitted into the RNAP. This study enrolled the complete student body of the RNAP. The total students surveyed included 21 third-year SRNAs, 23 second-year SRNAs, and 19 first-year SRNAs. Eligibility criteria included current status as full-time matriculated DNP-SRNA at Rutgers University.

The study intervention consisted of the creation and dissemination of an available handbook, which outlined the intricate details of the Mentorship Program within the SRNA community at Rutgers University. This handbook was formulated by the third year mentorship coordinators and subsequently reviewed by program and project chairs for brevity, information offered, and aesthetics. Announcement and recruitment of subjects was done through e-mail within the secured Rutgers Email Server, which is required of each student in the RNAP. In the email, a flyer made by the PI and CI was attached along with information regarding the seminar. This delivered an overview of information provided within the seminar along with a specified date, time, and location, which encouraged participation.

The study intervention took place immediately after a formal Nurse Anesthesia Program meeting on October 8th, 2018 at

65 Bergen Street in Newark, New Jersey. At the beginning of the program meeting, informed consent was obtained. The PI and CI then distributed pre-intervention surveys. In regards to the surveys, the PI and CI created both pre- and post-test surveys. Students were asked to respond to a question using a six point-likert scale, ranging from strongly disagree to strongly agree. Evaluation and outcomes measured were related to the acquired knowledge of the SRNA after information provided on the mentorship handbook, detailed in the seminar, thereby meeting the objectives of the DNP project. The PI and CI evaluated five identical questions on the pre- and post-test, which included student knowledge of mentorship, knowledge of mentor, knowledge of mentee, knowledge of mentorship coordinator, and interest in becoming a mentorship coordinator. The PI and CI evaluated three “Stand Alone” questions on the pre- and post-test, which included student current satisfaction with mentor-mentee match, student access to mentorship handbook, and if students felt that their current mentorship coordinators were meeting their role expectations.

Therefore, after consent had been obtained, an anonymous, pre-test survey conducted by the third-year mentorship coordinators was distributed in-person to the third-year, second-year, and first-year cohorts to evaluate their inherent knowledge pertaining to the role and responsibilities of the mentorship coordinator, mentorship program, role, guidelines, and requirements for such program. This inherent knowledge would be indicative of the assumed knowledge of the program, since there had been no prior formal educational session to the mentorship program. The pre-test information provided the PI and CI with information regarding current student knowledge of the program, prior to explicit education of a definitive mentorship handbook that outlines the mentorship program. After the pre-test was complete, the PI and CI presented a twenty-minute IRB-approved PowerPoint outlining all of the information that is located within the handbook, including outlining roles and responsibilities of each participant in the mentorship process, the goals of the mentorship program, ways to strengthen the mentor-mentee process, and confirming how students can access the handbook as a resource through the Rutgers Nurse Anesthesia Portal on Rutgers Canvas website.

The presentation given explained the detailed information that was provided in the handbook to give students a familiarity with content and reiterate a structured mentorship program, which was not done in previous cohorts. Having the information gathered and disseminated regarding the structure, goal, and purpose of the program should help streamline the program and definitively support students throughout their time in the program. After presentation of the PowerPoint, all participants were encouraged to complete an in-person post-test survey to evaluate if the information presented in the educational session enhanced their knowledge regarding the roles of each player in the mentorship program and their

current satisfaction with the mentorship program. The PI and CI also evaluated if knowledge alone of a leadership position, such as a mentorship coordinator, was enough for students to express interest in the position. In other words, the PI and CI wanted to evaluate if students would be interested in a leadership position if confronted with the knowledge of the roles and responsibilities of the mentorship coordinator.

In addition, inquiring about satisfaction of the program provided the PI and CI with information on how to improve the program for students in future projects. The Investigators utilized five minutes for each survey (pre and post) and a twenty-minute presentation with time for any questions or clarifications, which took up a total of thirty minutes of the student’s time. The PI and CI collected each survey at the conclusion of the seminar. The data collected from these two surveys was evaluated and compared to determine if the implementation of information that was detailed in a mentorship handbook provided significant improvements in perception and understanding of a mentorship program. Outcome measures were centered on student knowledge regarding the rules, regulations, and expectations regarding the mentorship program, in addition to the identified roles. Measuring student knowledge prior to the educational session that defined the handbook information and after such session identified the information within the handbook as a direct measure of influence on student knowledge.

As a result of having access to definitive information via the Rutgers Nurse Anesthesia mentorship handbook, regarding the roles, responsibilities, expectations, and formalized protocols to match effective dyads, there were improvements in all aspects of mentorship relationships and student satisfaction with the mentorship process. Specifically, the goal was to achieve improvements in knowledge pertaining to mentor, mentee, and mentorship coordinator effectiveness, to enhance overall student experience and eventually lead to sustainability of the mentorship program, which can translate into leadership potential in the clinical setting. The knowledge and skill obtained from mentorship translates into the community setting as mentors and subsequent mentees graduate and enter the professional setting. This generates more clinical leaders and skilled educators, which enhances community mentorship that may be evaluated through previous cohorts who participated in the mentorship program and have entered into clinical practice.

Results

A total of 63 surveys were collected from both pre and post surveys. There were 19 surveys collected from the third-year cohort, 23 from the second-year cohort, and 21 from the first-year cohort. The surveys collected from the third-year cohort did not have the PI and CI included within the final count, hence 19 surveys collected whilst there were 21 students in the cohort. Evaluation of

each pre and post-test was conducted between cohorts and amongst the program as a whole and findings are detailed below (Table 1).

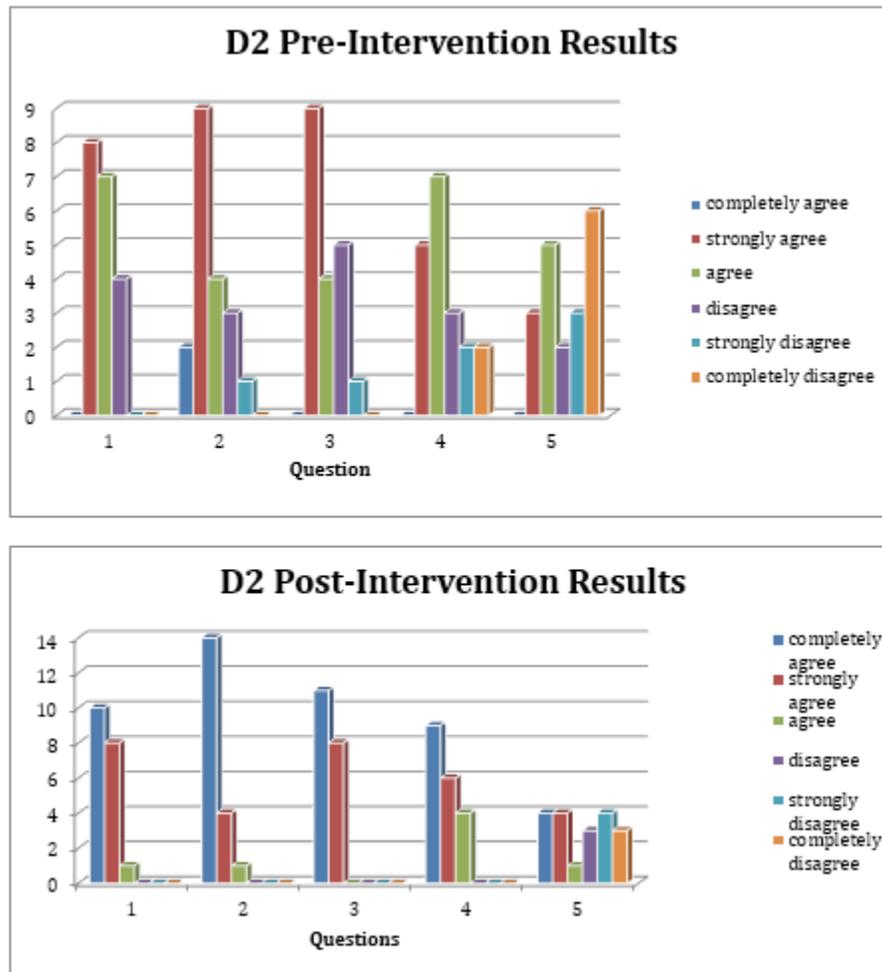


Table 1: D2 Pre-Intervention and Post-Intervention Results.

The first question on both the pre and post-test highlighted the student’s knowledge of mentorship. The pre-test response from the student emphasized student inherent knowledge of mentorship, then the educational session solidified and distributed the information that is standard for the program, and then students were asked if they felt their knowledge had increased related to the impact of the educational session in the post-survey questionnaire. In the third-year cohort, also known as DNP-2, the attendance at an educational session regarding mentorship increased from “Somewhat Agree” with regards to the concept of mentorship to “Strongly Agree” (n=18; rs=0.989; p<0.01). The understanding of roles and responsibilities as it applies to a mentor also exponentially increased as a result of the educational session averaging from

somewhat agree to strongly agree (n=14; rs=0.985; p<0.01). Knowledge as it applies to the roles and responsibilities as a mentee also significantly increased as a result of an information session (rs=0.979, p<0.01). When asked regarding the understanding of the role and responsibilities of a mentorship coordinator, there was no strong association between knowledge and agreement. However, after initiation of a mentorship educational session, the majority of students strongly agreed with their current understanding of the mentorship coordinator requirements (n=9; rs=0.981; p<0.01). Interesting enough, when knowledge was presented, students had a significant increase in interest in becoming a mentorship coordinator (n=4; rs=0.973; p<0.01). These results are depicted in (Table 2).

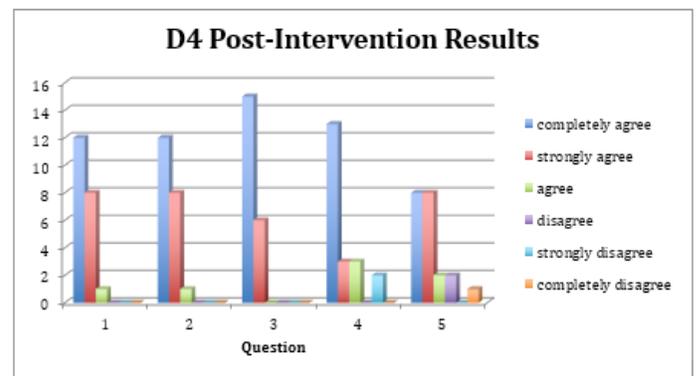
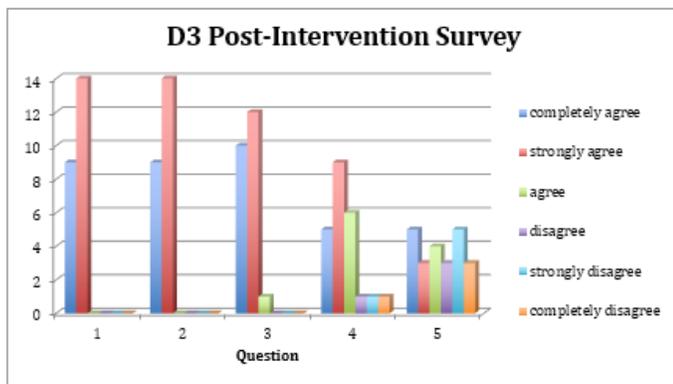
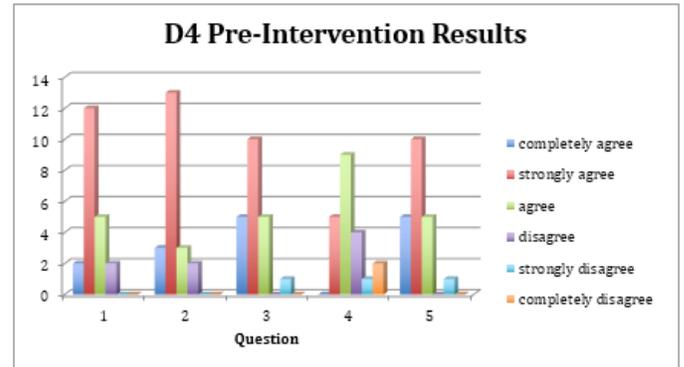
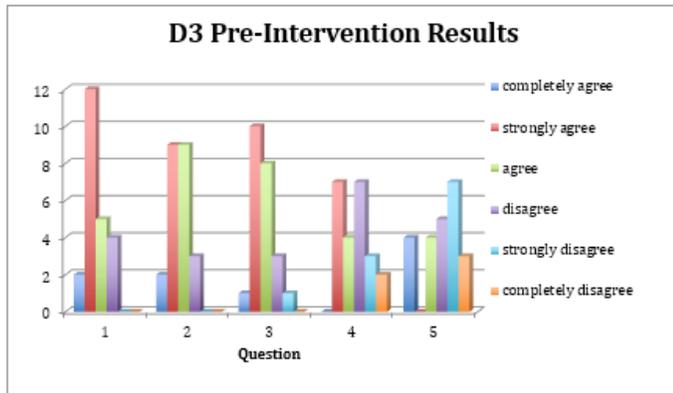


Table 2: D3 Pre-Intervention and Post-Intervention Results.

When evaluating the findings as it pertains to the second-year cohort, also known as DNP-3, there were several key distinctions. In the second-year cohort, the attendance at an educational session enhanced knowledge of mentorship with students responding that they strongly understand the concept of mentorship (n=14; $rs=0.993$; $p<0.01$). The understanding of roles and responsibilities as it applies to a mentor and as a mentee also exponentially increased as a result of the educational session averaging from somewhat agree to strongly agree for mentor (n=14; $rs=0.996$; $p<0.01$) and mentee (n=12; $rs=0.996$; $p<0.01$). When asked regarding the roles and responsibilities of a mentorship coordinator, like the third-year cohort, there was no strong association between knowledge and agreement prior to an educational session. However, after initiation of a mentorship educational session, there was a strong correlation between the educational session and student knowledge regarding the role of the mentorship coordinator ($rs=0.993$; $p<0.01$). Similar to the findings of the third-year cohort, there was a strong correlation between the educational session and knowledge of the mentorship coordinator, but this still did not depict interest in participation of the role as many students felt blasé about the role (n=7; $rs=0.994$; $p<0.01$). These results are depicted in (Table 3).

Table 3: D4 Pre-Intervention and Post-Intervention Results.

When evaluating the findings as it pertains to the first-year cohort, also known as DNP-4, there were several key distinctions. The attendance at an educational session increased knowledge regarding mentorship from “Somewhat Agree” (n=12) to “Strongly Agree” (n=12) with a strong significant positive correlation ($rs=0.995$; $p<0.01$). The understanding of roles and responsibilities as it applies to a mentor and as a mentee also significantly correlated as a result of the educational session. Students experienced a positive correlation of growth in knowledge regarding the role of the mentor (n=12; $rs=0.997$; $p<0.01$) and mentee (n=10; $rs=0.997$; $p<0.01$). When asked regarding the roles and responsibilities of a mentorship coordinator, like the third-year and second-year cohorts, there was strong correlation between the educational session and knowledge, but these students were unaware of the role of the mentorship coordinator, which was improved with utilization of the defined information ($rs=0.979$; $p<0.01$). However, different from the previous cohort, there was recognition that when knowledge was provided regarding the roles of the mentorship coordinators, there was a significant correlation between knowledge and an interest (n=8) or a very strong interest (n=8) in becoming a mentorship coordinator ($rs=0.993$; $P<0.01$). These results are depicted in (Table 4).

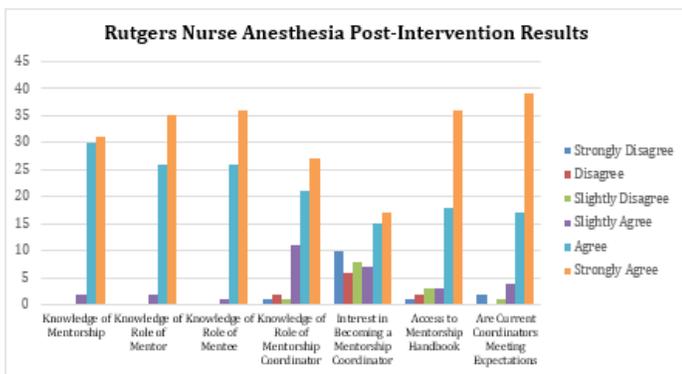
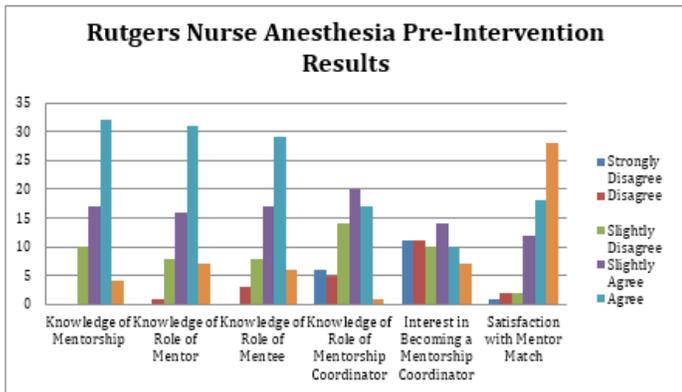


Table 4: Rutgers Nurse Anesthesia Program Pre-Intervention and Post-Intervention Results.

After strict evaluation of each cohort, the PI and CI compiled a synthesis of results (Table 1). As a program, the knowledge of the mentorship program exponentially increased just with the introduction of an educational session with a significantly positive correlation between information offered and understanding of mentorship ($rs=0.999$; $p<0.01$). The knowledge of being a mentor increased from “agree” ($n=31$) to strongly agree ($n=35$) with a significant correlation ($rs=0.999$; $p<0.01$) and knowledge of a mentee increased from agree ($n=29$) to strongly agree ($n=36$), which was also a significant correlation ($rs=0.995$; $p<0.01$). Understanding the roles and responsibilities of being a mentorship coordinator increased overall from somewhat neutral to don’t understand ($n=34$) to completely understand ($n=27$) with a significant correlation between the educational session and knowledge ($rs=0.999$; $p<0.01$). Overall, the interest in becoming a mentorship coordinator somewhat varied with mild movement from apathetic ($n=14$) to somewhat interested ($n=17$), but as previously discovered, this could be due to the overwhelming interest from the first-year cohort. Students experienced a significant positive correlation in knowledge pertaining to the role of a mentorship coordinator, but this does not determine interest in fulfilling the role.

On the pretest, prior to the initiation of the educational session, all students were questioned on their satisfaction regarding the mentorship match (Mentor-Mentee Pairing). For the third-year cohort, previous mentorship coordinators paired dyads on the basis of gender and location. It should be noted that there was no input from the students themselves within the pairing process. In regards to pre-intervention evaluations of satisfaction with the mentor match, there was varying response from students. Overall, students were just generically satisfied with their match, neither impressed or disapproving of it with a mean of 4.89/6. These results are depicted in (Table 5).

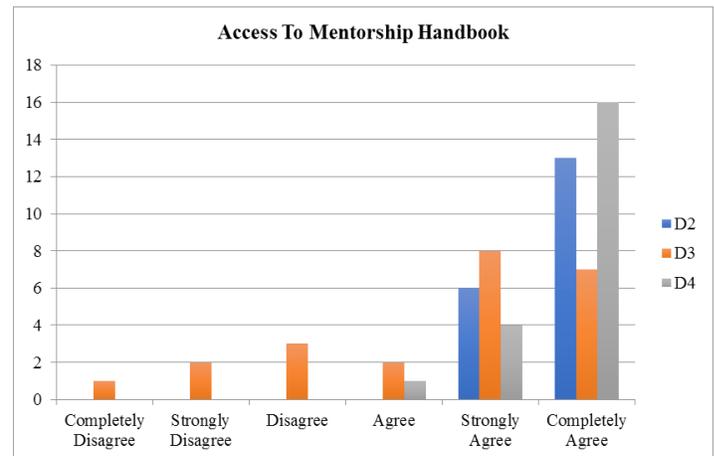


Table 5: Access to Mentorship Handbook.

When evaluating the response of satisfaction within the mentor-mentee pairing for the second-year cohort, in addition to matching students on the basis of gender and location, student input was valued, specifically mentee input. This was accomplished by asking junior students for feedback after an informal gathering, specifically aimed at identifying senior students that they felt most comfortable engaging with. In regard to satisfaction of their match, the second-year cohort was “Satisfied” with their mentor match ($n=8$), which is an improvement from previous cohorts who were more apathetic about pairings. These results are depicted in (Table 5). Upon evaluation of the first-year cohort, in regard to the student satisfaction on the mentorship match (mentor-mentee pairing), students were matched based on previous variables (gender, location, previous relationship), however, heavy emphasis was placed on mentee-directed matching. This means that the mentee’s input was at the forefront of the decision of dyad pairing. In regard to satisfaction of their match, the first-year cohort was “Strongly Satisfied” with their mentor match ($n=16$), which is an improvement from previous cohorts. This is an important finding in the overall mentorship process. These results are depicted in (Table 5).

On the post-intervention survey, students were asked if their current defined mentorship coordinators were meeting their roles expectations, which were delineated in the educational session. Students in the third-year cohort responded that they strongly agree (n=14) with this statement in regards to their mentorship coordinators. Students in the second-year cohort responded that they agree (n=9) with this statement in regard to their mentorship coordinators meeting their role expectations. Students in first-year cohort responded that they strongly agree (n=16) with this statement in regard to their mentorship coordinators meeting role expectations. However, it should be noted that these students are referring to the mentorship coordinators of second-year cohort since mentorship coordinators of first-year cohort had not been chosen at the time of implementation. The visualization of these results is synthesized in (Table 6).

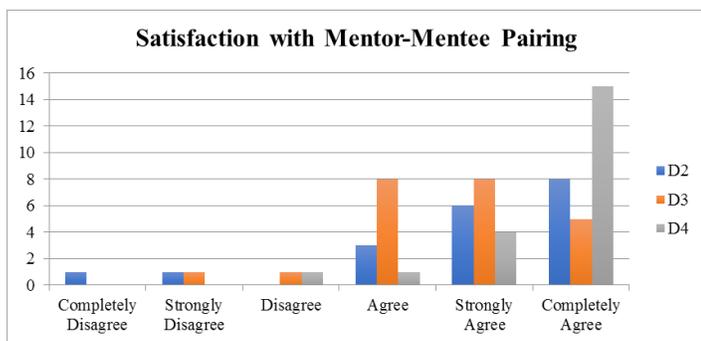


Table 6: Satisfaction with Mentor-Mentee Pairing.

Discussion

As significantly identified through data analysis, the presence of a mentorship handbook and educational session detailing its content, is necessary to implement, maintain, and sustain a mentorship program. Although an introduction to the mentorship program is offered at the new student orientation, this occurs prior to beginning the program, and the PI's believed, based upon their research that the mentorship handbook and educational session should be implemented within the first few months of enrollment for new students while inviting the rest of the program to attend. This will solidify sustainability since knowledge is significantly correlated with outcomes, as evidenced by this project. In addition, the mentorship handbook educational session outlined the roles and responsibilities of the mentor, mentee, and newly defined mentorship coordinator, which had not been done before in any other program.

Verification and education regarding these roles help define the program and strengthen the support system necessary to sustain it. Furthermore, education regarding the roles holds each student accountable to abide by such standards and encourages solidification of the process. Further studies should investigate

the role of the mentorship coordinator as a leader within the student community and identify how that translates into leadership within the CRNA community. Since this program and the role of the mentorship coordinator are fairly new, it is difficult to obtain information of students as they evolve into practitioners since that has not occurred in substantial numbers, but over the next few projects, this could be a source of data.

The PI and CI of this project specifically inquired about student's interest regarding becoming a mentorship coordinator. The PI and CI addressed this aspect due to a current lack of student-expressed interest in the role, and evaluated if knowledge was the main reason why students were apathetic about commitment to the role of the mentorship coordinator. However, this was not the case. Although there was a significant improvement in the understanding of the role of the mentorship coordinator, most students continued to display disinterest in fulfilling such a role (Table 7). Further studies should be aimed at attraction and retention of the mentorship coordinator, since this is an integral role to the sustainability of the program and translation of leaders into the community, as well as clinical practice.

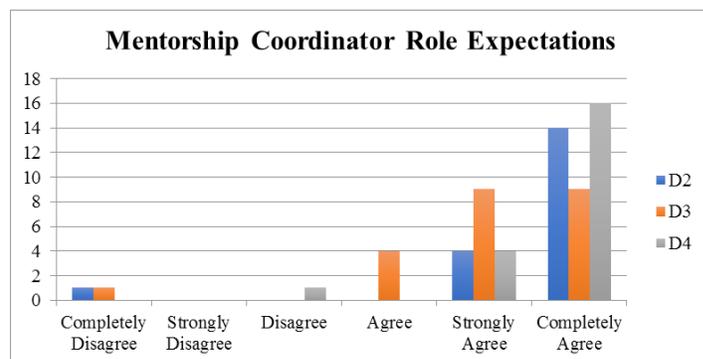


Table 7: Mentorship Coordinator Role Expectations.

Among the vast information obtained from this project, some of the most significant pieces of information generated is related to the mentor-mentee pairings. Evaluation of the different approaches to pairing and the associated satisfaction across cohorts verifies that a mentee-driven process is crucial in the success of the mentorship process, which translates into support within the practice as students transform from students to practitioners. Identification of various variables, such as gender, location, and previous relationships with matriculated students should be taken into consideration in conjunction with mentee-preferences to augment the matching process. Further studies should identify other variables, such as previous work experience, interests in self-care activities, or alike support systems to identify if such characteristics can even further augment a mentor-mentee match to approach nearly complete satisfaction with the pairing process.

This project utilized this population to evaluate the role of the mentorship coordinator. This project was the first project to create and define the role and responsibilities of the student-leaders. Therefore, this study sample was asked regarding if expectations were being met, once the sample understood the role and responsibilities of the mentorship coordinator. This study found that once the study population truly understood the expectations of the mentorship coordinator role, then evaluation of current students in that role depicted that they were meeting expectations. However, it should be noted there was not an overwhelming agreement on such statement. Therefore, further projects should be aimed at either solidifying the role, holding these leaders accountable in some way, or better educating the population on what the mentorship coordinator role encompasses with strict outline of goals for the personnel and the mentorship program.

Implementation of a mentorship program offers many economic benefits to academic institutions, the student population involved, and hospitals as well [8]. For the academic setting, a mentorship program utilizes willing participants in a given community at a cost-effective, convenient sampling. Introduction and education regarding the roles of mentor, mentee, and mentorship coordinator is a simple, cost-effective approach to benefiting the SRNA community since implementation of such program would incur no financial burden to the academic institution or students involved. Secondary economic benefits that the academic setting would gain include improved retention rates, a more desirable program, which would encourage a larger applicant pool, the potential to obtain future donations from satisfied alumni that would be more inclined to give back. Economic benefits that directly affect the student population consist of a way to connect students on an emotional level, which promotes student wellness and helps alleviate some of the stressors incurred as the rigors of the program become more demanding. This is a cost-effective way to cultivate a safe and supportive environment for SRNAs, which are a vulnerable population due to the continuous levels of extreme stress. Hospitals are another benefactor of economic prosperity achieved via mentorship. These institutions would benefit economically by not having to allocate monetary funds towards clinical preceptor training since CRNA's who graduated from programs that utilized mentorship would already have the skills required to achieve success as a clinical educator.

Conclusion

Defining a mentorship program, including the role and responsibilities of the mentor, mentee, and mentorship coordinator, has the ability to strengthen and solidify a mentorship program in the nurse anesthesia community. Effectively instituting an educational session to promote the transfer of knowledge to current matriculated students in the RNAP significantly improved education, knowledge and outcomes of the program.

According to current literature, utilization of a student driven peer mentorship program leads to positive functional outcomes, which includes reduced stress [1], orientation to the educator role, leadership development [4], and integration into the academic community [2]. However, there is minimal literature describing the role and responsibilities of the mentorship coordinator and a lack of guidance pertaining to the best practice for implementation of a mentorship program. As described in the literature above, the mentorship coordinator plays a pivotal role in the mentorship program by having to effectively match, maintain, and evaluate dyads, which sets the foundation for the entire peer relationship [2].

This is the first project to identify and outline the student-leadership role of the mentorship coordinator. The responsibility of such a pivotal role helps to augment and progress a beneficial program like the mentorship program. One of the most significant findings is related to the importance of the dyad pairing which is strictly the job of the mentorship coordinator. Utilization of the findings of this project to selectively and appropriately match mentors with mentees helps to cement strong relationships and support systems within the SRNA community that translates into a more cohesive CRNA community in years to come. This gained aptitude for leadership translates from academia to the professional arena by preparing CRNA's to be better clinical educators, improved clinical preceptors, and better prepared for leadership roles in management.

Therefore, utilization and implementation of a mentorship handbook with the transfer of knowledge regarding the handbook in an educational session not only streamlines the entire mentorship process, but it also significantly improves program outcomes. As a result, the creation of a Rutgers University mentorship handbook effectively allows any individual or institution to successfully utilize, implement, and sustain a mentorship program.

References

1. DeLeonardis A, Karcich C (2018) Rutgers University Student-Driven Mentorship Training Program for Student Registered Nurse Anesthetists. Retrieved from: Rutgers University School of Nursing. Newark, NJ.
2. Nick JM, Delahoyde TM, Prato DD, Mitchell C, Ortiz J, et al. (2012) Best Practices in Academic Mentoring: A Model for Excellence. *Nursing Research and Practice*: 1-9.
3. Pollock GS (1996) We are all leaders. *AANA J* 64: 225-228.
4. Ramani S, Gruppen L, Kachur EK, (2006) Twelve tips for developing effective mentors. *Medical Teacher* 28: 404-408.
5. Petrick H, Nowell L, Paolucci EO, Lorenzetti L, Jacobsen M, et al. (2017) Psychosocial and career outcomes of peer mentorship in medical resident education: a systematic review protocol. *Systematic Reviews* 6: 178.

6. Talley HC (2008) Mentoring: The courage to cultivate new leaders. *AANA Journal* 76: 331-334.
7. Faut-Callahan M (2001) Mentoring: A call to professional responsibility. *AANA Journal* 69: 248-251.
8. 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.
9. Sambunjak D, Straus SE, Marusic A (2010) A systematic review of qualitative research on the meaning and characteristics of mentoring in academic medicine. *Journal of General Internal Medicine* 25: 72-78.
10. Straus SE, Johnson MO, Marquez C, Feldman MD (2013) Characteristics of successful and failed mentoring relationships: a qualitative study across two academic health centers. *Academic Medicine* 88: 82-91.
11. Abdullah G, Rossy D, Ploeg J, Davies B, Higuchi K, et al. (2014) Measuring the effectiveness of mentoring as a knowledge translation intervention for implementing empirical evidence: a systematic review. *Worldviews Evidenced Based Nursing* 11: 284-300.
12. Hendricks JM, Cope VC, Harris M (2010) A leadership program in an undergraduate nursing course in Western Australia: building leaders in our midst. *Nurse Education Today* 30: 252-257.
13. Meno KM, Keaveny BM, O'Donnell JM (2003) Mentoring in the operating room: A student perspective. *AANA Journal* 71: 337-341.
14. Khoshhal K, Guraya S (2016) Leaders produce leaders and managers produce followers. A systematic review of the desired competencies and standard settings for physicians' leadership. *Saudi Medical Journal* 37: 1061-1067.
15. Easton A, O'Donnell J, Morrison S, Lutz C (2017) Development of an Online, Evidence-Based CRNA Preceptor Training Tutorial (CPiTT): A Quality Improvement Project. *AANA Journal* 85: 331-339.