# Southern Illinois University Edwardsville

# **SPARK**

**Doctor of Nursing Practice Projects** 

School of Nursing

Spring 5-8-2020

# Improving Emotional Intelligence Skills in Student Registered **Nurse Anesthetists**

Kathryn M. Gratza Southern Illinois University Edwardsville

Follow this and additional works at: https://spark.siue.edu/dnpprojects



Part of the Perioperative, Operating Room and Surgical Nursing Commons

#### **Recommended Citation**

Gratza, Kathryn M., "Improving Emotional Intelligence Skills in Student Registered Nurse Anesthetists" (2020). Doctor of Nursing Practice Projects. 95.

https://spark.siue.edu/dnpprojects/95

This DNP Project is brought to you for free and open access by the School of Nursing at SPARK. It has been accepted for inclusion in Doctor of Nursing Practice Projects by an authorized administrator of SPARK. For more information, please contact magrase@siue.edu.

Improving Emotional Intelligence Skills in Student Registered Nurse Anesthetists

Kathryn Gratza

# **Executive Summary**

### **Introduction of the Problem**

Becoming a certified registered nurse anesthetist (CRNA) involves an intensive graduate program with both didactic and clinical course work. The program is demanding and challenges the student's cognitive, mental, and emotional well-being. Traditionally, students are admitted into nurse anesthesia programs based on standardized cognitive factors, such as their undergraduate grade point average (GPA). While standardized cognitive factors may predict how well students perform in the class and clinical setting, they do not take into consideration the student's emotional intelligence. Preparing students for professional nursing practice depends on the integration of emotions along with cognitive intelligence (Fernandez, Salamonson, & Griffiths, 2012).

Emotional intelligence is a form of intelligence that reflects an individual's aptitude to perceive emotions in themselves and others, regulate their emotions, and to cope appropriately with emotional situations (Por, Barriball, Fitzpatrick, & Roberts, 2011). This type of intelligence is not a fixed measurement but can be developed throughout one's life. Individuals with well-developed emotional intelligence possess many qualities that enhance their emotional and intellectual growth and decision-making. Emotions are a powerful motivator and assist with critical thinking, which is needed by nurse anesthesia students.

#### **Literature Review**

The three primary aims of the literature review included examining the relationships between emotional intelligence, academic success, and clinical performance, along with determining if emotional intelligence improves with training. Databases utilized in this search included CINAHL, PubMed, and Scopus. The databases were searched for literature published within the last 10 years, and the articles ranged in date from 2010 through 2018. Applied keywords for the search were emotional intelligence coupled with students, nurse anesthetists, student success, assessment, clinical performance, and decision making. A review of the current literature found three themes related to emotional intelligence. These themes included emotional intelligence as related to academic achievement, job performance, and the ability to change one's emotional intelligence.

In a study by Snowden et al. (2018), students with higher baseline emotional intelligence scores were more likely to complete their nursing program successfully. Research by both Maguire et al. (2017) and Fernandez, Salamonson, and Griffiths (2012) found positive correlations between emotional intelligence, cognitive engagement, and academic success. Collins (2013) examined nurse anesthesia students in a cross-sectional correlational study and found students who scored higher in facilitation tasks, sensations tasks, and emotional intelligence reasoning were predicted to do better on their National Certification Exam (NCE).

A descriptive correlational study by Beauvais, Brady, O'Shea, and Quinn Griffin (2011) found a significant relationship between total emotional intelligence and nursing performance. Correlational studies by Farshi, Vahidi, and Jabaeili (2015) and Por et al. (2011) explored the relationship between emotional intelligence and clinical competency. Both studies found a positive correlation between high social skills and emotional intelligence with perceived nursing competency. Studies by Hutchinson, Hurley, Kozlowski, and Whitehair (2018) and Winship (2010) examined the relationship between emotional intelligence and job performance in nurses

through the collection of qualitative data. Authors for both studies found positive correlations between emotional intelligence, professionalism and nursing performance.

In a randomized control trial study on emergency medicine residents, Gorgas et al. (2015) implemented emotional intelligence training and re-tested all participants after six months. They found that the intervention group significantly improved their social perspective aspect of emotional intelligence during a six-month follow up, while the control group remained stable. Vishavdeep, Sharma, Das, Malhi, and Ghai (2016) and Codier, Freitas, and Muneno (2013) conducted studies examining the effects of emotional intelligence training on overall emotional intelligence. In the Vishavdeep et al. study (2016), the authors collected emotional intelligence data at baseline and then one month after completing seven training sessions related to emotional intelligence. After the training, the nurses were found to have statistically significant improvements in their emotional intelligence. Participants in the mixed-methods study by Codier, Freitas, and Muneno (2013) were found to have improved emotional intelligence after training when the authors examined the qualitative data.

Benson, Ploeg, and Brown (2010) utilized a cross-sectional survey design on a convenience sample of 100 baccalaureate nursing students. The authors found differences in overall emotional intelligence scores between the first-year and fourth-year nursing students. The fourth-year students were found to have more effective emotional intelligence skills ([p < 0.05]; Benson, Ploeg, & Brown, 2010).

# **Project Methods**

The applicants for the Southern Illinois University Edwardsville (SIUE) nurse anesthesia program who applied and were interviewed in July 2018 were invited to take the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) as part of their interview process. Applicants who

were chosen to begin the program in May 2019 had scores from taking the MSCEIT which served as their baseline emotional intelligence scores.

Project implementation was as follows: the creation of a two-hour educational seminar on emotional intelligence, delivery of the educational seminar to first-year anesthesia students during their fall semester, completion of an anonymous survey by the students upon seminar completion, and finally, the students were invited to re-take the MSCEIT. Please see the full document for a complete timetable for project implementation.

The educational seminar on emotional intelligence was held on the SIUE campus. A PowerPoint presentation was utilized for the seminar. The students were given a printed version of the presentation to follow along and take notes. The first hour of the educational seminar was didactic and provided the students with emotional intelligence background information, the importance of emotional intelligence, and the clinical relevance of emotional intelligence. The Four Branch Model of Emotional Intelligence created by Mayer, Salovey, and Caruso (2004) served as the conceptual framework for this project, and the individual branches were discussed in further detail. During the second hour of the educational seminar students broke out into four small groups, and each group was given a case scenario that specifically focused on one of the four branches of emotional intelligence. The groups were given a set of questions pertaining to their scenario and then presented their findings to their classmates. Please see the full document to review the educational seminar PowerPoint presentation, including the small group case activities.

#### **Evaluation**

Twenty-four first-year nurse anesthesia students were trained during this educational seminar. After the seminar, all 24 students completed an anonymous survey to evaluate the

effectiveness of the seminar. As part of a final evaluation of the educational seminar, the students were also asked to re-take the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).

The survey evaluated whether the seminar improved the students' knowledge of emotional intelligence, how likely the seminar would help them adapt to the nurse anesthesia program, the likeliness of using emotional intelligence in their practice, and if they believed their baseline emotional intelligence scores would improve after emotional intelligence training. Please see the full document for the full survey. Ninety-two percent of the students agreed or strongly agreed that the educational seminar will help them adapt to the high demands of the nurse anesthesia program and 96% of the students responded they were likely or very likely to integrate the newly learned emotional intelligence information into their practice as a student registered nurse anesthetist (SRNA).

Of the 24 students who participated in the educational seminar and were invited to take the MSCEIT, a total of 14 had pre- and post-training data (n = 14). Data from the pre- and post-MSCEIT tests were analyzed using paired samples t-tests. The overall mean score before training was 106.89 and increased to 108 after training. There was not a significant increase in overall emotional intelligence scores after the educational seminar. Data analysis was done to compare the pre-tests of students who only took the pre-test (n = 6) to those who took both the pre and post-test (n = 14). Using an independent means t-test, the overall pre-test scores for students who only took the pre-test had a mean of 95.63, and the pre-test scores for students who took both the pre and post-tests had an overall mean of 106.89. Analysis of the individual branches also showed that students who took both tests scored higher on their pre-tests than students who only took the pre-test.

Despite the lack of a significant increase in emotional intelligence scores, a positive aspect of this project was that all twenty-four first-year anesthesia students received education and training on the importance of emotional intelligence. The survey results reveal that the students were receptive to the training and felt the training was beneficial. Perceived limitations were the small sample size and the fact that taking the MSCEIT after the educational seminar was optional.

# **Impact on Practice**

The goal of this project was to increase the emotional intelligence of first-year students in the nurse anesthesia program at SIUE. Increasing emotional intelligence will help the students to perceive, regulate, and appropriately cope with emotions in themselves and others. By introducing emotional intelligence training early in the nurse anesthesia program, the students can positively develop, or increase previously developed, emotional intelligence.

This project has the potential to have a positive impact on many aspects of the students' current and future practice. Students with higher emotional intelligence will be better able to serve their future patients by demonstrating empathy and compassion in the clinical setting. They will also have improved communication with, and be open to receiving constructive feedback from, preceptors regarding performance as a student registered nurse anesthetist. Successful communication will help to improve the relationships between the students and preceptors, leading to a continued positive relationship between SIUE and the clinical site. Future employers of SIUE graduates may also benefit. Anesthetists with higher emotional intelligence will possess greater adaptability, empathy, and emotional self-control, making them ideal employees and coworkers.

Additional proposed benefits of enhancing the emotional intelligence of nurse anesthesia students are improvements in academic and professional success, interpersonal relationships, clinical decision-making skills, and patient outcomes. When combined, these benefits also have the potential to increase the wellness of the anesthesia provider and help to decrease the risk of burnout.

# **Conclusion**

Emotional intelligence education and training provide many benefits to nurse anesthesia students. This project demonstrated the ease of developing and implementing emotional intelligence training. Early introduction of emotional intelligence curricula in a nurse anesthesia program, students are able to positively develop or improve emotional intelligence to assist them as student nurse anesthetists and future certified registered nurse anesthetists.

# **Author Contact Information**

Kathryn Gratza

kgratza@siue.edu

314-303-5207