Enhancing Self-Efficacy Of Novice And Emerging Nurse Leaders Through A Virtual Emotional Intelligence Education Program

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ENHANCING SELF-EFFICACY OF NOVICE AND EMERGING NURSE LEADERS THROUGH A VIRTUAL EMOTIONAL INTELLIGENCE EDUCATION PROGRAM

Submitted to the Faculty
Yale University School of Nursing

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Nursing Practice

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This DNP Project is accepted in partial fulfillment of the requirements for the degree Doctor of Nursing Practice.

Mary Ann Camilleri, JD, RN, FACHE, Project Advisor

Date: May 16, 2023
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Signed:

May 16, 2023
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Abstract

Enhancing Self-efficacy of Novice and Emerging Nurse Leaders through a Virtual Emotional Intelligence Education Program

Nursing leaders are not equipped to meet the current challenges in healthcare landscapes (Sihvola et al., 2022). Significantly, 51.4% of novice nurse managers have the intent to leave within the next two years (Warden et al., 2021). Lack of traditional leadership development programs focused on emotional intelligence competency building, is one of the contributing factors (Spano-Szekely et al., 2016). Evidence shows that Emotional Intelligence (EI) associated with transformational leadership styles can influence job satisfaction and retention of NM & clinical staff (Frias et al., 2021).

This DNP project developed and implemented an Emotional Intelligence (EI) Leadership Development Program, adapted from Goleman’s model (Goleman et al., 2017). The program curriculum is composed of the four EI Building blocks with case scenarios, in sequential 10-minute virtual modules accessed through a web-based platform. Participants’ Knowledge Acquisition (Z = -3.10, p = 0.002) and EI self-efficacy mean scores (Z= -5.33, p < 0.001) were analyzed using Wilcoxon Signed Rank test. Both scores for all the survey questions were significantly higher after implementing the education program compared to pre-intervention scores. Participants reported that this course improved their four pillars of emotional intelligence: Team Management (45%), Social Awareness (30%), Self Awareness (15%) and Self management (10%). This quality improvement project served to enhance the EI self-efficacy and knowledge of novice and emerging nurse leaders in a large urban healthcare system and state-wide professional organization. The long term goal was to first increase novice and emerging nurse leaders’, and subsequently clinical staff’s job satisfaction and intent to stay.
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Part 1

Enhancing Self-efficacy of Novice and Emerging Nurse Leaders through a Virtual Emotional Intelligence Education Program

Introduction

In healthcare organizations, effective nursing leadership is critical in achieving successful institutional outcomes and employee job satisfaction (Coladonato & Manning, 2017; Frias et al., 2021). Nurse leaders are one of the driving forces to create changes in healthcare delivery (Prufeta, 2017). Nurse managers (NMs) are expected to drive positive patient experience, influence RN job satisfaction, foster a healthy work environment, and empower staff to the highest quality outcomes most especially during a global pandemic surge (Phillips & Harris, 2017). Clinical nurses who feel that their nurse leaders demonstrates high emotional intelligence report significantly greater job satisfaction (Spano-Szekely et al., 2016). When nurses experience high levels of job satisfaction, they have increased morale and organizational and professional commitment (Warshawsky et al., 2016). Nursing job satisfaction has also been linked to positive patient outcomes and quality care (Coladonato & Manning, 2017).

However, nursing leaders are often not equipped to meet the increasing demands and challenges of current leadership roles that are essential to a fundamentally changing healthcare system in the 21st century (Magbity et al., 2020). One of this challenges is the staffing shortage that American Nurses Association declares as national crisis (Chan et al., 2021). Furthermore, it has been reported that an estimated 5 million US workers quit their jobs for the last two years in the ongoing economic trend called “Great Resignation” of which 30% is comprised the nursing workforce (Linzer et al., 2022). This reinforced the major concern of nurse manager (NM) and clinical staff retention in healthcare today. Common reasons for NM turnover and intent to leave include lack of work-life balance, negative organizational culture, competing
priorities, and staffing challenges (Frias et al., 2021). Multiple organizational outcomes are impacted by high NM turnover, including departmental culture, RN intent to stay, use of evidence-based practices, delivery of quality and safe care, and staff members' job satisfaction (Frias et al., 2021). As nursing leadership challenges continue to increase, efforts to improve NM retention are essential to attain the high-quality outcomes and nursing culture desired by internal and external stakeholders (Frias et al., 2021). Evidence shows that Emotional Intelligence (EI) associated with transformational leadership styles, which directly impact leader effectiveness is a strong predictor of healthcare leaders' success which can influence job satisfaction and retention of both NM and clinical staff (Frias et al., 2021).

**Problem Statement**

Healthcare organizations rely on transformational leaders to promote teamwork, empower staff to perform at a high level, and foster involvement and accountability to improve patient satisfaction and clinical outcomes (Tyczkowski et al., 2015). However, nursing leaders are often not prepared to meet the current volatile, unpredictable, complex, and ambiguous healthcare environment due to traditional lack of nursing leadership development programs focused on competency building, especially demonstrating emotional intelligence (Spano-Szekely et al., 2016). Majority of NMs development is from on-the-job experiences, coaching and training. Most leadership training has curriculum that focus on clinical skills and processes that devoid of strategies essentials for leadership development. Without educational support, nursing leaders are not empowered to meet the demands of leadership roles essential to a fundamental changing healthcare landscape (Spano-Szekely et al., 2016).

Studies have found that transformational leadership style is strongly associated with high emotional intelligence. Mayer, Salovey, and Caruso, were the first to define EI as “the ability to perceive and express emotion, assimilate emotion in thought, understand, and reason
with emotion, and regulate emotions in self and others” (Mayer et al., 2016). EI is an important competency in the hands of nurse-leaders who must be equipped with management skills, such as negotiating resources, building trust relationships, encouraging partnership development, and making evidence-based decisions to successfully meet the growing demands of the modern health care system (Prezerakos, 2018). According to Goleman (Goleman, 1998), EI is not static and can be taught and enhanced. The literature supports the premise that EI competencies can be improved, which sparks interest in EI development through leadership training (Coladonato & Manning, 2017).

Healthcare systems must provide the resources necessary to cultivate emotional intelligence and transformational leadership qualities and skills to develop effective nurse leaders (McCay et al., 2018; Spano-Szekely et al., 2016). Development and coaching of transformational leadership and EI among nurse managers are valuable strategies to achieve organizational goals and increase employee job satisfaction (Frias et al., 2021; Wang et al., 2018). This DNP project developed and implemented a virtual EI Leadership Development Program for novice and emerging nurse leaders in a large, urban healthcare system and in a state-wide professional nursing organization. The overall goal is to enhance the nurse managers’ and assistant nurse managers’ self-efficacy and self-confidence in emotional intelligence which leads to their increased job satisfaction and intent to stay and eventually will influence clinical staff’s job satisfaction and intent to stay.

Significance

The profound impact of staffing shortage and the Great Resignation on the healthcare workforce with an outstanding number of NM vacancies requires a call to action (Linzer et al., 2022). It was reported by Nursing Solutions Incorporated (2022) that the NM turnover rate for the last two years is 11.8%. In a study done by Warden et al. (2021), 51.4% of managers who
have been in their current position for the last 2-5 years have an intent to leave within the next two years. Meanwhile, the current nurse turnover rate is 19.05% in the US (Frias et al., 2021). The high nurse turnover rate results in a vicious cycle of vacancies, overtime, backfilling with agency staff at higher pay rates, vacation denial or deferral and burnout as nurse managers struggle to staff their organizations. For these reasons, a high nurse turnover rate is a key factor further contributing to the “Big Quit” and further perpetuating the ongoing nurse shortage (Linzer et al., 2022).

A partial solution to the nurse shortage would be to retain the nurses who are already in the workforce. Evidence shows that Emotional Intelligence (EI) associated with transformational leadership styles, which directly impact leader effectiveness is a strong predictor of healthcare leaders’ success which can influence job satisfaction and retention of both NM and clinical staff (Frias et al., 2021). EI has been found to have a significant mediating effect on both transformational leadership style and nurse’s intent to stay (Wang et al., 2018). High levels of EI and transformational leadership styles are associated with employee empowerment, well-being at work, and job satisfaction (Başoğlu & Özgür, 2016; Bennett & Sawatzky, 2013; Prezerakos, 2018; Spano-Szekely et al., 2016). Participation in an EI training program will assist nurse managers in being successful and competent in their positions by giving them tools to navigate the complexities and challenges of the healthcare environment (Frias et al., 2021). Long-term outcomes of EI training programs include increased job satisfaction, high-quality patient outcomes, enhanced workload management abilities, and reduced attrition rate among nurse managers and frontline staff members.
Background

Review of Literature

Search Strategy

The search strategy included electronic databases, white papers, and government websites. Search engines included the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Medline, Medline in Process (Ovid SP), Cochrane Database of Systematic Reviews, PubMed, Web of Knowledge, and Scopus. Google Scholar was used as secondary resource. Search terms included emotional intelligence, emotional quotients, transformational leaderships, seven terms related to nursing leaders (Chief Nursing Officer, Nurse Leader, Nurse Executive, Nurse Manager, Middle Managers, Novice Nurse Managers, Nurse Administrator); and six terms related to leadership development (Coaching, Mentor, Mentorship, Sponsorship, Leadership development programs, and Networking). All searches were in the English language.

Inclusion and Exclusion Criteria

Inclusion criteria included relevant articles from 2013 to 2022 and English language articles. The initial search yielded 100 articles following duplicate removal. The title and abstract review yielded 50 articles of which 28 articles not related to healthcare were eliminated. A full-text review of 22 articles for relevance resulted in 10 articles eliminated due to lack of significance. The final 12 articles are used in this review and are further described in the Evidence table, Appendix B. A Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA, 2009) flow diagram has been created to illustrate the review process (Appendix A).
Synthesis of Literature

The purpose of this literature review was to identify the effect of an emotional intelligence leadership development program on novice nurse managers’ job performance in navigating the challenges of a healthcare leader in the 21st century. The review also identified structures and strategies on how to develop and implement an emotional intelligence leadership development program. The literature highlighted five themes relating to emotional intelligence training: the strong correlation between emotional intelligence and transformational leadership; increased job satisfaction for nurse managers and staff following such training; post-training increased intent to stay for nurse managers and staff; a healthier work environment as a result of training; and the importance of the development of emotional intelligence leadership development programs for novice nurse managers.

Emotional Intelligence and Transformational Leadership

According to Frias et al. (2021), constructs of EI have a direct positive correlation with specific transformational leadership traits, indicating that a leader with higher EI is more effective in influencing direct reports and motivating them. Transformational leadership according to Burns (1978), is a process in which “leaders and followers raise one another to higher levels of motivation and morality”. It is a foundational element for nurturing a culture of innovation and change, leading employees to be more committed to working toward the organization’s best interests (Frias et al., 2021). Studies have revealed a significant positive relationship between EI levels and transformational leadership (Spano-Szekely et al., 2016; Tyczkowski et al., 2015). High levels of EI and transformational leadership styles are associated with employee empowerment, well-being at work, and job satisfaction (Coladonato & Manning, 2017; McCay et al., 2018; Phillips & Harris, 2017). Transformational leadership provides intellectual stimulation that encourages the staff nurse to be more creative; creates a positive
organizational climate that has an impact on the development of staff nurse’s empowerment, increasing self-efficacy and engagement in their work. Supporting creativity and innovation with intellectual stimulation transmits the message that the leader believes in the nurse’s integrity and ability, which motivates the nurse to be cooperative, loyal, and committed. When nurse leaders provide individualized consideration, it increases the RN’s feeling of self-worth (Wang et al., 2018). Transformational leadership style and EI in NMs impact health care systems, since EI and leadership style are known to influence not only individual NM success but also the overall nursing unit or environment.

**Job satisfaction for nurse managers and staff**

Understanding nurse job satisfaction as a phenomenon is paramount to nurse leaders due to the strong link between management and the satisfaction of nurses. According to Phillips & Harris (2017), job satisfaction or quality of work-life in the health care environment has been attributed to characteristics such as leadership style and EI. Job satisfaction is critical to retention and is a measure of how happy an individual is with their work environment (Coladonato & Manning, 2017; Phillips & Harris, 2017). Consequently, the nurse manager’s role is to create a positive work environment that encourages engaged professional nurses to work toward desired outcomes (Spano-Szekely et al., 2016). In the nurse manager’s role, EI is a useful tool for managing the emotionally dynamic environment of patient care (Coladonato & Manning, 2017). When nurse managers do not possess EI acumen, the nursing environment can become negative, and employees resist change (Phillips & Harris, 2017). Research indicates that when nurse managers possess higher levels of EI, nurse job satisfaction can be positively affected (Phillips & Harris, 2017). Having leaders with transformational leadership styles brings value to the organization about both manager satisfaction and organizational outcomes. Evidence shows that EI is a strong predictor of leader success, particularly within
healthcare (Frias et al., 2021). EI, as an individual's capacity to recognize and effectively address emotions within themselves and others, facilitate relationships, and resolve issues increases the nurse manager's job satisfaction (Frias et al., 2021).

**Increased Intent to stay for nurse managers and staff**

The World Health Organization announced recommendations for effective solutions to the international nursing shortage, requiring action at multiple levels, from global health policy to individual nursing unit manager action (Wang et al., 2018). The nursing shortage is associated with a substantial reduction in health care quality, as nurses deliver the majority of patient care across settings (Wang et al., 2018). A high nurse turnover rate is one important factor contributing to this ongoing nurse shortage. A partial solution to the nurse shortage would be to retain the nurses who are already in the workforce. To achieve this, a better understanding of what might influence nurse turnover is necessary (Wang et al., 2018). Transformational leadership has been consistently correlated with significantly lower nurse turnover rates. EI has been found to have a significant mediating effect on both transformational leadership style and employee workplace behaviors (Wang et al., 2018). The findings of the study of Wang et al. (2018), contributed to a better understanding of the mediating role of emotional intelligence in the relationship between nurse manager's transformational leadership and nurse's intent to stay. The results will be valuable for policymakers, nursing administrators, and nursing educators to formulate nursing retention strategies (Wang et al., 2018). Furthermore, participation in an EI training program will assist nurse managers in being successful and competent in their positions by giving them tools to navigate the complexities and challenges of the healthcare environment thereby motivating nurse manager's retention (Coladonato & Manning, 2017; Frias et al., 2021; Prufeta, 2017).
Healthy Work Environment

Nurse leaders play a critical role in creating and maintaining a positive work environment, within this ever-changing milieu (Frias et al., 2021). Evidence suggests that positive work environments and hospital cultures do not naturally occur; they are created by strong leaders, particularly frontline nurse managers (Bennett & Sawatzky, 2013). Unfortunately, many nurses' workplaces are toxic environments. Unhealthy workplaces contribute to medical errors, ineffective patient care, conflict among staff, increased stress on health care providers, and decreased job satisfaction (Bennett & Sawatzky, 2013). Nurse managers are in positions of power to recognize and address negative workplace behaviors, such as bullying. However, emerging leaders, in particular, may not be equipped with the tools to deal with bullying and consequently may choose to overlook it (Bennett & Sawatzky, 2013). Substantive evidence from other disciplines supports the contention that individuals with greater emotional intelligence are better equipped to recognize early signs of negative behavior, such as bullying (Bennett & Sawatzky, 2013). Therefore, fostering emotional intelligence in emerging nurse leaders may lead to less bullying and more positive workplace environments for nurses in the future (Bennett & Sawatzky, 2013).

Today's competition in the work environment and individual differences steadily increase conflict among employees (Başoğlu & Özug, 2016). Conflict is defined as an interactive process manifested in incompatibility, disagreement, or dissonance within or between social entities i.e, individuals, groups, organization (Barber, 2012). The conflict between nurses is considered a very important issue in the healthcare environment all over the world (Başoğlu & Özug, 2016) The most important causes of conflict among nurses are differences in management strategies, the perceptions of employees, staff shortages, differences in
objectives, and competition between working groups (Başoğlu & Ö zgür, 2016). Some of the most important sources of conflict in nursing settings are limited staff resources in the unit, resulting in higher levels of stress, differences in goals among workgroups, and disagreement between the leaders' or head nurses' demands and the subordinates' or staff nurses' orientation and staff perspectives (Başoğlu & Ö zgür, 2016). In healthcare organizations, ineffective conflict management causes unhealthy working conditions, power games, patient dissatisfaction, a reduction in the quality of care, and an increase in healthcare costs (Başoğlu & Ö zgür, 2016). All conflicts, whether they are functional or not, are essentially emotional because conflicts arise from individuals' or groups' perception of threats to their agendas. Emotional intelligence is an important concept for nurses in healthcare to understand the views and demands of patients and for nurse managers to develop relations that promote successful management and reduce conflict (Başoğlu & Ö zgür, 2016).

**Emotional Intelligence Leadership development program for novice nurse leaders.**

EI is considered to be an important facet of effective leadership (SixSeconds, 2020). Nurse leaders are faced with the daunting challenge of not only managing clinical unit and administrative activities, but also playing a significant role in translating and achieving organizational goals within their defined areas of responsibility (Weiszbrod, 2020). Nurse leaders with high EI tend to develop positive relationships with clinical nurses and are better able to manage emotions in the workplace (Phillips & Harris, 2017). Clinical nurses who feel that their nurse leader demonstrates high EI report significantly greater job satisfaction (Phillips & Harris, 2017). The literature supports the importance of nurse leader EI skills to create a supportive environment and facilitate staff empowerment, leading to staff job satisfaction (Coladonato & Manning, 2017; Phillips & Harris, 2017). There is emerging agreement that EI competencies can be improved, which sparks interest in EI development through leadership
training (Coladonato & Manning, 2017). The results of the study done by Coladonato & Manning (2017) are important to health care systems as they experience an increased need to educate, recruit, and retain top-performing nursing leadership and managers. As a related factor to resiliency, EI is not static and can be taught and enhanced. Emotional intelligence and predominant leadership style assessment could be considered by health systems in pre-employment screening as a way to recruit the strongest applicants to nurse management and administration (Spano-Szekely et al., 2016). These assessments could also be included in performance reviews for existing NM employees or in succession planning to groom future NMs. The ideal candidate for leadership development programs are nurses who are in the early stages of their career, who hold a BSN or higher (Prufeta, 2017). The Robert Wood Johnson Foundation created a how-to-guide for health systems to create NMs who will lead innovation and improvement (Tyczkowski et al., 2015). This guide includes a 4-pronged approach to improve NMs' ability to support transformational change that includes talent management, formalized nursing leadership development programs, development of leaders' EI, and effective succession planning (Tyczkowski et al., 2015). The concepts and results found in this study support such efforts for the development of strong and resilient nurse leaders in tomorrow's health care systems.

**Project Management Framework**

The PDSA change management model by Deming was utilized for this project. The PDSA Cycle (Plan-Do-Study-Act) is a scientific and systematic process for gaining valuable knowledge for the continual improvement of a process, product, or service. Also known as the Deming Wheel, or Deming Cycle, this integrated learning - improvement model was first introduced to Dr. Deming by his mentor, Walter Shewhart of the famous Bell Laboratories in New York (Deming.org, 2022). The cycle begins with the Plan step. This involves identifying a
goal or purpose and putting a plan into action. These activities are followed by the Do step, in which the components of the plan are implemented. Next comes the Study step, where outcomes are monitored to test the validity of the plan for signs of progress and success, or problems and areas for improvement. The Act step closes the cycle, integrating the learning generated by the entire process, which can be used to adjust the goal, change methods, or broaden the learning – improvement cycle from a small-scale experiment to a larger implementation Plan. These four steps can be repeated over and over as part of a never-ending cycle of continual learning and improvement (Deming.org, 2022).

The utilization of the PDSA change management model supports this project during the pilot study. In the “Plan” stage, the four EI education modules adapted from Goleman’s theory along with the case studies were created in an external web-based platform. The creation of self-efficacy and knowledge acquisition questionnaires and the course survey was also completed. In the “Do” phase, the implementation of the pilot program in an external web-based platform was completed. The “Study” phase allowed for the analysis of the data and summarization of lessons learned. The final stage “Act” included the evaluation of the entire cycle with the identification of potential areas for improvement or expansion of the project. Figure 1 provides a visual of this project articulated through the PDSA cycle (IHI, 2022).
Supporting Theoretical Framework

The supporting framework that guided this project is based on Bandura’s Social cognitive theory and self-efficacy. This model encompasses a group of theories about learning grounded in the belief that human behavior is bound by a three-way relationship between cognitive and environmental factors and behavioral influences. Knowledge, attitudes, and expectations comprise the cognitive factors. While social norms influence environmental factors, skills, practice, and self-efficacy relate to behavioral factors (Greenhalgh, 2018). This theory posits that those seeking to change the behavior of a group of individuals should follow five principles. First, provide role models and provide an abundance of exposure to these role models. Second, provide group hands-on training to gain knowledge and skills and the confidence to sustain the behavior despite no supervision. Third, make sure that individuals will know the positive things that will happen if they change their behavior. Fourth, acknowledge that
there is a reciprocal interaction between the person and the environment. Fifth, allocate incentives and rewards, including self-reward to reinforce the desired behavior (Bandura, 1991). The construct of self-efficacy, which is also a part of social cognitive theory, is defined as an individual’s belief in his or her own ability to succeed or accomplish a task in specific situations (Greenhalgh, 2018).

The use of social cognitive and self-efficacy theory supported this project because of the association of all the three factors: cognitive, environmental, and behavior factors and self-efficacy and how all these factors influenced an individual’s self-growth necessary for the leadership development program. Mentoring, role modeling, and training which is the main precept of this program are fully supported by this framework. Leadership self-efficacy is critical to the leadership development process because it impacts the goals a leader selects, leader motivation, development of functional leadership strategies, and the skillful execution of those strategies (Bandura, 1991).

Applying social cognitive theory and the self-efficacy construct to the leadership process has theoretical and practical implications. First, managerial leaders who are confident of their leadership capabilities will select higher goals and deploy their skills and efforts more effectively than those plagued by self-doubt. Second, for someone to be successful in a leadership role, he or she must have a healthy sense of personal effectiveness as a leader. This implies that enhancing leadership self-efficacy should be an important objective for those responsible for improving the quality of leadership in organizations. Third, leadership training creators can use social cognitive theory to guide the design of interventions to improve the leadership capabilities of their trainees. This theory posits that efficacy perceptions are derived from four kinds of experiences. These are repeated personal performance accomplishments, observational learning, social persuasion, and physiological or emotional states. Training programs structured
to include mastery experiences, role plays, and positive persuasory messages do enhance trainees’ task-specific efficacy perceptions (Bandura, 1991), which was applied in this pilot program.

Figure 2
Adapted from (Bandura, 1991). Social Cognitive and Self-Efficacy Theory Related to Emotional Intelligence Leadership Development Training Program

System Description and Assessment

Description of the System

This project was implemented in a large, urban healthcare system and in a state-wide professional nursing organization. This healthcare system is a premier academic medical center and the primary teaching hospital for the college of Medicine. It is an integrated health system with a quadruple mission of: to heal, to teach, to discover and to advance the health of the communities they serve. It is nationally recognized for clinical excellence, research, training the next generation of healthcare leaders, and delivering science-driven, patient centered care.

This healthcare system is nationally ranked in 6 adult specialties and 3 pediatric specialties and rated high performing in 4 adult specialties and 12 procedures and conditions. In 2022, it was regionally ranked No.7 in New York city metropolitan area hospitals and 35 in the country by US News and World Report (US News and World Report, 2022).
This Health System serves primarily the 1.3 million residents of the Bronx, New York, one of the most economically distressed communities in the nation but the institution was able to provide coordinated, compassionate, and leading-edge care designed to reach people when and where they need it most. Through highly integrated teams of physicians, nurses, social workers, mental health professionals and other caregivers, they have created an innovative, seamless system of care focused on the patient. Due to skillful coordination of healthcare leaders across the multiple settings, they have earned federal recognition from the Centers for Medicare and Medicaid Services as a Pioneer Accountable Care Organization.

With a workforce of 23,000 employees of which 3,300 are registered nurses/licensed practical nurses, and over 900 in the nursing leadership position, nurses at this institution are known as champion for innovation, while providing excellent and exceptional patient care. The key tenet of the Department of Nursing is integrating evidence-based patient care validated by inquiry and research through collaboration with physician colleagues. Nursing leaders are dedicated to supporting and empowering bedside nurses at every stage of their professional growth through transformational leadership, exciting educational and professional advancement opportunities while creating an atmosphere of just culture and cultivating a healthy workplace environment.

The state-wide professional nursing organization caters primarily to critical care nurses. Comprised of 300 members from different institutions within the New York city area, its mission is grounded in excellence and the ability of nurses to fulfill their promise to patients and families to advance, promote and distribute information through education, research and science. It is committed to helping nurses improve the health of their work environment, providing the standards for and recognizing excellence in acute and critical care nursing, and certifying nurses to ensure their practice is consistent with established standards of excellence.
SWOT Analysis

A SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was conducted for this project. See the description below.

Strengths

One of the organizational strengths of this health system, and specifically its nursing enterprise, is the Vice President of Nursing and Senior Nurse Executive leaders who are transformational leaders with a growth mindset. They prioritize staff support and empowerment through research education, leadership development, and evidence-based practice, all of which supported this project. Interdisciplinary collaboration is also one of the strengths of this Medical Center, as well as collaborative relationships between nursing leaders, physicians, and union labor officials. The components of this Emotional Intelligence curriculum will teach the skills needed to navigate relationships and support the interdisciplinary collaboration that is required to achieve positive organizational outcomes.

Weaknesses

This institution is serving one of the most economically distressed communities in the nation. The current pandemic and national staffing crisis have brought a high turnover rate of nursing leaders. For the past two years, 40% of nurse leaders from this Medical Center have transitioned to another institution. This led to increasing numbers of novice and emerging nurse leaders, about 60% of the nursing workforce, who need support and mentorship to learn to navigate the complexities of the healthcare landscape. Novice nurse leaders are those nurse managers and assistant nurse managers who have been in the management role for the last 4 years or less. Emerging nurse leaders are patient care coordinators and charge nurses who will be the future nurse managers that will drive clinical outcomes, staff satisfaction, and job retention.
Opportunities

One of the strategic goals of the VP of Nursing is to work on achieving Magnet status. As the institution embarks on this journey, robust leadership training programs, mentorship opportunities, nurse leaders’ competency development, and standardization of professional practice models across campuses are key areas for development and enhancement. The proposed emotional intelligence leadership development program is the underpinning for the success of many of these initiatives. Another area of opportunity is the succession planning of the assistant nurse managers and charge nurses. Attending this course will prepare ANMs for greater roles as they develop self-awareness and the ability to be emotionally agile when faced with a variety of healthcare challenges. Embarking on this Magnet journey and leadership development and preparation of NMs and ANMs may provide a competitive advantage in a highly constrained nurse market to attract more NMs and ANMs to join this team, and improve the satisfaction of nurses for retention.

Threat

The current pandemic landscapes that resulted in the Great Resignation and national staffing crisis motivate every institution to create strategies to recruit and retain nurse leaders by providing programs to develop and support their novice and emerging nurse leaders. There are two other institutions within geographic locations near this Medical Center that compete for qualified, nursing managers and staff. This threat suggests that this project initiative is imperative to keep this institution competitive in the recruitment and retention of nurses. There is a risk that competitors, all of whom are focused on the nursing shortages, provide retention strategies sooner or better thereby diluting the effect of this program for competitive positioning.
Part 2

Methods

Project Goal and Aims

The goal of this DNP project was to develop and implement an EI Leadership Development Program for novice and emerging nurse leaders in a large, urban healthcare system and in a state-wide professional nursing organization. The overarching goal was to enhance the nurse managers’ and assistant nurse managers’ self-efficacy and self-confidence in EI. The long term goal is to increase NM job satisfaction and intent to stay and eventually will influence clinical staff’s job satisfaction and intent to stay.

The project had the following aims:
1. Develop a virtual Emotional Intelligence Education Program for novice and emerging nurse leaders.
2. Implement and evaluate the virtual emotional intelligence education program.
3. Make recommendations for scaling and sustainability of the program throughout the healthcare system and beyond.

Methods

Aim 1: Develop a virtual Emotional Intelligence Education Program for novice and emerging nurse leaders.

To achieve this aim, the following process steps were taken:

- Leadership buy-in was established at the pilot institution by presenting it to the AVP of Nursing Practice, Executive Nurse Leaders, and Nurse Leader Practice Council. For the professional nursing organization, executive summary was presented to the Board of Education Director for approval to recruit participants.
• An external web-based program that served as the platform for curriculum accessibility was developed by the Program Leader and a web developer. A dedicated email address specific to the project was also created for timely response and participant privacy.

• An evidence-based Emotional Intelligence curriculum from Daniel Goleman’s Building Blocks of Emotional Intelligence: 12 Leadership Competency Primers (2017), was modified by the author of this project who is also the Program Leader. Components of the program included the Four EI building blocks.

  1. Self-Awareness
  2. Self-Management
  3. Social Awareness
  4. Relationship Management

• The curriculum consisted of four modules. Teaching modules in each course were presented by video, PowerPoint slides, and case studies.

  • A video called “Developing Emotional Intelligence” from www.mindtools.com was incorporated with permission and proper citation.

  • Powerpoint presentations were developed and concepts from Building Blocks of Emotional Intelligence: 12 Leadership Competency Primers (Goleman et al., 2017) were adapted to address the needs and challenges of nurse managers.

  • Application of the four EI building blocks was accomplished through the case study. Case studies that depicted challenging situations that novice and emerging nurse leaders frequently encounter in their daily work in the healthcare environment were created by applying the principles of Goleman’s Building
Blocks of Emotional Intelligence: 12 Leadership Competency Primers (Goleman et al., 2017).

- Participants accessed the four short modules through the external web platform. Each module is devoted to one of the four EI components and has an estimated time for completion of four to ten minutes per module. The modules were built in sequential format and did not allow advancement until the previous module has been completed.
- The website also provided a Resource section where the contact information of the Program Leader was listed and enabled participants to access for any technological difficulties and program inquiries. This section also included the references of materials used in the creation of the website modules. This section was managed and monitored by the Project Leader several times a day.

**Aim 2. To implement and evaluate the virtual emotional intelligence education program.**

**Project Timeline**

This project had a 3-month timeline from October to December 2022 with key deliverables and milestones such as approval to implement, securing external experts and approval to recruit participants, curriculum development and website creation, participants recruitment, project implementation, and evaluation. A Gantt chart was created for this project to manage key deliverables and milestones (Appendix B).

Implementation proceeded as follows:

- Permission to recruit participants from the pilot institution and the professional nursing organization members was secured by the Project Leader before the implementation phase.
Recruitment:

• Program enrollment and implementation commenced mid-November of 2022 and concluded by the end of December, 2022.

• In the middle of November, the rolling enrollment of the prospective participants consisted of novice and emerging nurse leaders was initiated.
  
  o Novice nurse leaders included nurse managers and assistant nurse managers with less than 5 years of experience in this role and emerging nurse leaders are Patient Care Coordinators or Charge Nurses who oversee clinical staff.
  
  o Nurse managers who have more than 5 years of experience and are in senior leadership positions were excluded from this program.

• An informational flyer Invite with a QR code link for Registration was sent out initially by the Office of the Director of Professional Practice to all the nurse leaders and emerging nurse leaders at the pilot institution. The Registration form is a google document survey that collects all the demographic data needed for the pilot study. After the prospective participant completed the registration form, an automatic e-mail notification was sent to the Project leader. To maintain confidentiality, the completed registration survey form was accessed by the Project leader only. A weekly e-mail reminder was sent out by the Project Leader until the deadline date.

• For the professional nursing organization site, an informational flyer Invite with a QR code link for Registration was initially sent by the chapter’s Director of Education to the professional organization’s listserv. The 150 e-mails from the listserv were deemed active by the chapter’s Director of membership. The informational flyer was also posted by the Project Leader on the chapter’s website until the deadline date. A weekly e-mail reminder was sent to all members until the deadline date. Enrollment of participants
continued until 35 participants were identified from both the pilot institution and nursing professional organization. The estimated recruitment time was four to six weeks.

• Upon participants’ registration, an automatic email notification was sent out to the Program Leader which prompted her to send an email with a website link to all prospective participants. Participants were required to create a login ID and password to access the educational web-based program. At the external web-based platform, an overview of the project, privacy and confidentiality statement, and the requirements for receiving a certificate of completion were explained. Completion of the following within the four to six-week timeframe was required for the award of a Certificate of Completion:
  o Four EI modules
  o Bandura Self-Efficacy pre-and post-test (Appendix C)
  o Knowledge Acquisition pre and post-test (Appendix D)
  o Program Evaluation Survey (Appendix E)

• Each participant was able to access the website using their e-mail address. Participation activities were also tracked by the Project Leader. The course modules were built sequentially in a way that the participant cannot proceed to the next course without completing the outstanding modules. The Project Leader tested the website functionality before it was accessed by all participants.

• The participants started the program by completing the Knowledge Acquisition pre-test and Bandura’s Self-Efficacy pre-test then they proceeded to access the modules. Once all the courseworks were completed, the participants were prompted to access a QR code and/or Google docs link to access the Knowledge Acquisition post-test, Bandura’s Self-Efficacy post-test, and the Program Evaluation Survey. There was a weekly
reminder notification statement that tests and surveys must be completed to receive a Certificate of Completion.

- The Program leader facilitated, monitored, and maintained the program.

**Evaluation**

- Bandura’s Self-Efficacy Scale (Appendix C) was given as a pre-and post-test for program effectiveness. The Self-Efficacy Scale (Bandura, 2006) was chosen to identify patterns of strengths and limitations in the perceived capability of emotional intelligence.

- Bandura’s Self-Efficacy Scale (Bandura, 2006) is a self-report inventory scale that covers the sampling domain of four EI building blocks.
  - The scale has a total of 8 questions in which the participants rated their degree of confidence from 0-100 with 10 points intervals.
  - The pre-and post-tests were matched using the participants’ e-mails that they entered through a Google docs link and/or QR code on the website learning platform. A comparison of the pre-and post-tests was used for further statistical analysis.
    - The pre-test was given upon the participant's enrollment into the program.
    - Post-test was given at the end of the course and was accessible through a QR code and/or Google docs link on the website learning platform.
  - Knowledge Acquisition pre-and post-test (Appendix D) is a multiple-choice quiz with five questions given before and after course implementation through a Google docs link and/or QR code to evaluate participants’ knowledge baseline and knowledge acquisition of the course.
  - The Emotional Intelligence Course Evaluation Survey (Appendix E) is a four-question survey that consisted of two five-point Likert scale questions and two open-ended
questions that provided information for potential improvement or modification of the program.

**Evaluation**

- The evaluation consisted of descriptive and bivariate statistics for the Knowledge Acquisition and Bandura’s Self-efficacy survey. Qualitative analysis was used for Course Evaluation Survey. Statistics were used to analyze data.
- Demographic data was collected from the registration form (Appendix L). Demographic data included: age, race, highest education completed, current role, years of experience, and current job satisfaction status.
- Nurse Leaders’ EI Self-efficacy in pre-and post-program was measured using bivariate statistics to determine whether there is a significant difference in participants’ EI self-efficacy before and after completion of the program.
  - Knowledge acquisition pre-and post-program was analyzed using bivariate statistics to determine whether there is a significant acquisition of new EI knowledge after completion of the program.

**Aim 3: To make recommendations for the scaling and sustainability of the program throughout the healthcare system and beyond.**

**Sustainability**

Results of the program and curriculum proposals will be presented during the pilot institution’s Executive Board meetings with the leadership team such as the AVP, the Senior Executive Nurse Leadership, and the professional nursing organization’s Board of Directors. Ongoing sustainability of the program, if approved, would be at a nominal cost through the organization’s web platform with oversight of the Education Department.
Scaling

Based on the findings, this program will be recommended to the pilot institution’s enterprise-wide Nursing Executive Board as an inclusion in the system-wide NM orientation program and will be presented at the Annual Nursing Research. At the nursing professional organization site, the potential for annual offerings of the program statewide and nationally will be recommended.

Dissemination

The results of the project will be disseminated for podium or poster presentation to professional nursing leadership organization conferences such as the American Organization for Nursing Leadership (AONL), and the New York Organization of Nurse Executives (NYONEL), and American Association of Critical Care (AACN). Abstract submission to a peer-reviewed professional journal such as the Journal of Nursing Administration (JONA), and Nursing Management (NM) is also planned.

Protection of Human Subjects

It was determined by Yale IRB that this DNP project was deemed a Quality Improvement project and did not involve human and ethical considerations. The pilot institution’s Research department also deemed that this is a Quality Improvement project and did not require IRB approval taking into consideration the Yale IRB determination. This was also a voluntary sampling study wherein the privacy and confidentiality of the participants were protected. The project leader did not claim any conflict of interest.

Part 3

Systems, Policy, and Business Implications

Systems Overview: Leadership, Business, Policy
The pilot institutions’ campus mission of “to heal, to teach and to discover and to advance the health of the communities we serve” is in alignment with the author’s proposed leadership training program. As an integrated academic institution embarking on a Magnet journey, education and training of novice and emerging nurse leaders is one of the strategic goals of the executive leadership to build a robust nurse leaders group that is prepared to handle the crisis and challenges of the current healthcare landscapes such as high turnover rate of bedside nurses and novice nurse leaders, staffing shortage and the current global pandemic.

Preparation of future leaders as part of succession planning and to be able to embrace the volatile, uncertain, complex, and ambiguous healthcare landscapes are one of the goals of the proposed leadership development program.

The Business Case and Leadership Engagement

I. Leadership and Stakeholder Engagement

The external subject matter experts at the pilot institution who authorized to approve the project are the Assistant VP of Nursing, and the Director of Professional Practice and Learning Network. As the project lead for this quality improvement initiative, I assumed the primary decision-making role which included content development, design, production, budget, coordination, execution, and dissemination. Participants are key component and essential stakeholder within this project. At the nursing professional organization site, the external subject matter expert and approver was the Board of Director for Education and the President of the chapter. The member participants are key component and essential stakeholder within this project.

The Executive summary was a necessary document that was presented to the major stakeholders of the organization for executive sponsor approval and funding request.
It summarized key information about the project such as goals and objectives, statement of need, proposed solutions, implementation plan and evaluation, cost, benefit and return on investment analysis.

II. Business/Financial Considerations

Project Budget

The cost of this project was a total of 250 dollars for the website developer and materials.

Cost/Benefit Analysis (Return on Investment)

Conservatively estimating a resulting decrease in nurse manager turnover by one nurse manager and RN turnover by 1 RN per year presented the opportunity for significant turnover cost avoidance. The cost-saving benefit of replacing a NM is estimated at 75% to 125% of their annual salary which is a potential savings of 105, 500 to 176,000, an average of 141, 000 savings benefit (Titzer et al., 2013). Furthermore, EI training will offer a return on investment for organizations by increasing NM and her/his team's performance by outperforming the yearly earning goals by 20% (Goleman, 1998). Meanwhile, the average cost of turnover for a bedside RN is 40, 038 and ranges from $28,400 to 51, 700. With an RN vacancy rate in the US of 9.9%, the average hospital loses between $3.6m – $6.5m/yr (NSI Nursing Solutions, 2022). A lower vacancy rate of RNs provides the opportunity to reduce costs associated with agency nurses to backfill vacancies. For every 20 Travel RNs eliminated, a hospital can save on average, $3,084,000. Assuming that due to nurse manager skill development, 1 RN turnover will be reduced each year in the next four years, a potential savings of 160, 000 savings over the next four years exists. The intangible, or indirect, benefits of this program include an increase in nurse leaders’ EI self-efficacy and self-confidence, increased staff satisfaction, increased intent to stay, and eventually improved patient outcomes and improved clinical quality of care. The
cost of the program was minimal and greatly outweighed by the potential direct and indirect benefits to the nursing enterprise and the system.

III. Risk Assessment and Risk Mitigation Plan

Risk Identification and Mitigation Plan that can arise in project completion and some mitigation plan are:

- Lack of stakeholder or leadership support: Obtained leadership buy-in and involved the major stakeholders early on and established continuous communication with the team.

- Poor communication: This was mitigated through transparent communication throughout the program. In the Resource section of the website, contact information was provided for any questions or challenges in accessing the web-based program. When a participant sends an email to the contact person, which is the Project leader, the website’s built-in functionality automatically sends an email notification to the Project Leader for a timely response. The Project Leader monitored the project email several times a day.

- Poor quality of the EI program: The Project Leader tested the modules and website’s functionality before launching it to all participants.

- Attrition of participants: Participants were motivated to complete the course through the following actions:
  - The course was short and relevant (approximately 1 hour to complete the program).
  - Mobile-friendly accessibility of the program.
  - Pop-up reminders, weekly emails, and text messaging were provided to all participants to alert them of their progress or need to complete the sections.
The value of the Certificate of Completion was emphasized as a professional development continuing education.

Part 4

Results

This quality improvement project was implemented at a large, urban healthcare system and in a state-wide professional nursing organization from November 9th to December 31st, 2022. A total of 38 registrants consisted of novice and emerging nurse leaders; 36 participants met the criteria for enrollment. Two participants were excluded due to working in a senior leadership position for more than 10 years. Demographic data are presented in Figure 3 to Figure 6. See Appendices. There were 28% (n=10) participants from a large urban healthcare system and 72% (n=26) from the state-wide professional nursing organization. Participants ranged from 24 to 68 years of age. The average age was 45.9, and the median age 48.5 years. Racial composition of the group included Asian 33.3% (n=12) Black or African American 27.8% (n=10) and White 27.8% (n=10) Hispanic or Latino, 5.6% (n=2), mixed origin 2.8% (n=1). See Figure 3. One participant chose not to answer. The majority of the participants were female at 77.8% (n=28) in comparison with male respondents at 22.2% (n=8).

The highest degree attained by 47.2% (n=17) of participants was a Master of Science in Nursing (MSN). 44.4.7% (n=16) had a Bachelor of Science in Nursing, 5.6% (n=2) had Master in Business Administration and 2.9% (n=1) had MSN in Nursing Education. See Figure 4.

Out of the 36 participants, 52.8% (n=19) were Novice Nurse Leaders and 47.2% (n=17) were Emerging Nurse Leaders. Those who were considered Novice Nurse Leaders have current roles of Nurse Managers (NM) 19.4% (n=7), Assistant NMs 8.3% (n=3), Nurse Education Managers 8.3% (n=3), Interim NMs 5.6% (n=2), Nurse Administrator 2.8% (n=1), Nurse Practitioner 2.8% (n=1), Nurse Practitioner Manager 2.8% (n=1), and Clinical Faculty...
2.8% (n=1). All Emerging Nurse Leaders had the role of Charge RN, 47.2% (n=17). See Figure 5. The number of years in their current leadership role of respondents ranged from 1 month to 5 years for Novice Nurse Leaders and 2 to 32 years for Emerging Nurse Leaders.

All respondents were surveyed on their degree of satisfaction in their current role, 63.9%(n=23) reported that they are satisfied, 22.2%(n=8) were very satisfied and 13.9% (n=5) were not satisfied. This unsatisfied group comprised of 4 emerging NL and 1 Novice NL. See Figure 6.

Survey Findings

The Wilcoxon Signed ranks test was used to test knowledge acquisition as well as to compare Bandura’s self efficacy pre and post intervention. Statistical significance was assumed at an alpha value of 0.05 and all analyses were performed using SPSS Version 29 (IBM, 2022). Descriptive analysis was used for the program evaluation.

Results for Knowledge Acquisition Survey

A statistically significant increase in overall knowledge scores was detected across time, Z = -3.10, p = 0.002 after implementing the education program compared to pre-intervention scores. The descriptive statistics of the Wilcoxon tests of the Knowledge Acquisition survey are presented in Table 1 and the Median Interquartile Range in Figure 7.

Results for Bandura’s EI Self Efficacy Survey

Statistically significant increases were also found across time for all 8 of the Bandura’s EI Self-Efficacy survey items, Z=-5.33 , p < 0.001. Self-efficacy mean scores were significantly higher after implementing the education program compared to pre-intervention scores (Figure 8). The descriptive statistics of the Wilcoxon tests of the Bandura’s EI Self-Efficacy survey are presented in Table 1.
Program Evaluation Results

The course program evaluation was evaluated descriptively. All (n=36) of respondents reported that the course content was based on relevant evidence and opportunities were provided for critical reflection. When participants were surveyed on how they intend to use the content in their daily management, a pattern of themes surfaced (Figure 9). As expected, the four building blocks of emotional intelligence were the themes that were reported. Almost half of the participants responded that they would use what they learned for Team Management 45% (n=16). The most common feedback from participants was related to the content on improving teamwork, developing team communication skills and increasing job satisfaction amongst the team members. Thirty percent (n=11) reported that they were more aware of how to assess and build relationships with their team utilizing the Team Norms that were discussed in the program. This finding coincides with Social Awareness, one of the building blocks of emotional intelligence. 15% (n=5) developed Self Awareness, stating they will use these skills to manage their emotions, and improve communications and interactions with their team. 10% (n=4) were focused on self management and stated that they will utilize the content of this program to practice mindfulness through meditation when dealing with the daily stresses as a new nurse manager.

Part 5

Discussion and Conclusion

Discussion of Findings

A total of 36 participants were enrolled in this quality improvement project during the two-month implementation period. The overarching goal of this project was to enhance novice and emerging nurse leaders’ EI self-efficacy and knowledge. The long-term goal was to first increase novice and emerging nurse leaders, and subsequently clinical staff’s, job satisfaction
and intent to stay. All self-efficacy items were significantly improved after the virtual EI education program implementation. Evidence demonstrated that increased EI self-efficacy correlates with increased self-confidence which influenced job satisfaction and intent to stay.

The Knowledge Acquisition pre-test and post-test demonstrated participants’ knowledge baseline and knowledge acquisition of the course. All the Knowledge Acquisition quiz items had showed improvement of 20% after the virtual EI education program. Despite the minimal increase in the Knowledge Acquisition scores there was a significant increase in EI self-efficacy post-implementation. The discrepancy suggests that introducing EI concepts to novice leaders in itself served to increase their self confidence, while reinforcement of EI theory to bolster application in their management practice may be beneficial. It also raises question as to whether the pre-test and post-test were adequately aligned to the content which should be revisited. An additional consideration is whether there were other external factors that impacted at the time of the knowledge acquisition testing.

Limitations

One external factor that did not impact completion of the modules, but may have impacted the learning in the medical center participants was a difficult Collective Bargaining Agreement negotiation in the Fall 2022 which required preparations and regulatory requirments to manage an impending nurse’s collective bargaining unit strike. This event likely required a significant increase in workload and adaptation for novice nurse leaders during the implementation timeframe which may have impacted the knowledge acquisition assessment.

The virtual platform implementation process may have also impacted the course assimilation of knowledge and self- efficacy experiences of the participants. Since the nature of the course centered on team building and human connections, it can benefit the face to face
teaching platform. This can be eliminated if the program will be offered in a hybrid platform. Participants can access the modules with on-demand accessibility but with quarterly work group in-person meeting with a certified coach to validate and reinforced what they have learned.

**Sustainability**

This education program can be incorporated into a novice and emerging nurse leader orientation program with minimal cost. The program can also be annually offered to a state-wide professional nursing organization. For the program to be relevant, the iterative process of the PDSA cycle needs to be done after each program offers. Changing the timing of self-efficacy post-implementation evaluation to 3 to 6 months will be a meaningful period to determine if there will be an increase in self-efficacy. Within this time frame, participants are predicted to have enough time to translate what they have learned from the educational material into practice.

**Scalability**

Results of this pilot study and curriculum proposals will be presented to the AVP of Professional Development at this large urban medical center for the possibility of inclusion of the educational materials in the e-learning modules of onboarding Nurse Managers/Assistant Nurse Managers and Charge Nurses classes. With the modifications discussed, this education program can be incorporated into a novice and emerging nurse leader orientation program. The program can also be annually offered to a state-wide professional nursing organization with the opportunity to reach novice emerging leaders more broadly and for some, more comfortably outside their workspace.
Dissemination

This project will be presented at the pilot institution’s Annual Nursing Research Day. An abstract will be submitted to the American Association of Critical Care Nursing (AACN) for next year’s Annual Conference.

Broader Healthcare Systems Implications

The Covid-19 pandemic has disrupted the landscape of nursing leadership. Nurse leaders were expected to provide organizational stability while ensuring high-quality care and supporting their team in exhausting situations (Sihvola et al., 2022). During event such as this, nurse leaders needed to use an enhanced skill-set to prioritize activities and promote positive cognitive, behavioral, and emotional responses among staff (Fowler & Robbins, 2022). The literature supports the importance of nurse leader’s emotional Intelligence skills together with transformational leadership style to empower nurses and move an organization forward towards commitment to quality and safety during challenging times (Fowler & Robbins, 2022).

Post-Covid and in anticipation of future crises and stresses including workforce shortages, health systems need to prepare by providing novice nurse leaders with the tools they need to manage theses crises. Incorporating Emotional Intelligence education programs for the novice and emerging nurse leaders as part of the leadership training program to assist with their professional growth and development can have significant impact for the nurse leaders and the systems. Ideally, a bolstering human resource for nurse education department with an Emotional Intelligence certified coaches would bring the training system-wide and allow for program facilitation and mentoring. These concepts and results support efforts for the development of strong and resilient nurse leaders in today and tomorrow’s health care systems.
Conclusion

This quality improvement project focused on the development and implementation of an emotional intelligence education program for novice and emerging nurse leaders to empower, educate, and increase their EI knowledge and self-efficacy. The development of a virtual emotional intelligence education program through an external web-based platform provided novice and emerging nurse leaders with an evidence-based, reliable, and accessible tool to be able to navigate the complexities and challenges of the healthcare environment. The evidence from the project coincides with the literature review that the self-efficacy of novice and emerging nurse leaders will be enhanced through an emotional intelligence education program. Participants reported that this course improved their knowledge and self-efficacy pertaining to the four building blocks of emotional intelligence: Self-awareness, Self-management, Social awareness, and Team or Relationship Management. This pilot underscores the need for health systems to incorporate emotional intelligence education programs for the development of novice and emerging nurse leaders. Acquiring EI knowledge and a sense of self-efficacy will benefit each novice and emerging nurse leader and increase their intent to stay thereby providing significant benefit to the health system, its employees and patients.

https://doi.org/10.1016/j.anr.2016.07.002

https://doi.org/10.1097/NAQ.0b013e318286de5f

https://doi.org/0.3912/OJIN.Vol26No02Man02

https://doi.org/10.1097/01.NUMA.0000522174.00393.f2

https://doi.org/10.1111/wvn.12597


SixSeconds. (2020). What if a billion people were practicing emotional intelligence? https://www.6seconds.org/about/


Appendix A

Adapted PRISMA Flow Diagram for DNP Project ROL

Records identified through OVID database searching (n = 100)

Additional records identified through other sources (PubMed, Scopus, CINAHL, Web of knowledge (n = 100)

Records after duplicates removed (n = 100)

Records screened (n = 50)

Records excluded (n = 28) Not related to healthcare

Full-text articles assessed for relevance (n = 22)

Records excluded (n = 10) Lack of significance to leadership development

Studies included in ROL (n = 12)

Studies included in matrix (n = 12)

YSN 2019


For more information, visit www.prisma-statement.org.
## Appendix B

### DNP Project Timeline (Gantt Chart)

<table>
<thead>
<tr>
<th>Milestone Description</th>
<th>Lead</th>
<th>Start Date</th>
<th>End Date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1: To develop and modify a virtual EI program</strong></td>
<td>JGD</td>
<td>9/1/22</td>
<td>9/30/22</td>
<td>Not started</td>
</tr>
<tr>
<td>Presentation and final approval of proposal</td>
<td>JGD</td>
<td>5/2/22</td>
<td>9/29/22</td>
<td>Not started</td>
</tr>
<tr>
<td>Establish leadership buy-in</td>
<td>JGD</td>
<td>7/21/22</td>
<td>9/1/22</td>
<td>In progress</td>
</tr>
<tr>
<td>Modify an evidence-based EI curriculum</td>
<td>JGD</td>
<td>6/15/22</td>
<td>9/30/22</td>
<td>Not started</td>
</tr>
<tr>
<td>Create a website learning platform</td>
<td>JGD</td>
<td>9/1/22</td>
<td>9/30/22</td>
<td>Not started</td>
</tr>
<tr>
<td><strong>Objective 2: To implement and evaluate the virtual educational program</strong></td>
<td>JGD</td>
<td>9/15/22</td>
<td>11/10/22</td>
<td>Not started</td>
</tr>
<tr>
<td>Recruit 35 or more participants by sending flyers through emails and websites</td>
<td>JGD</td>
<td>9/15/22</td>
<td>10/7/22</td>
<td>Not started</td>
</tr>
<tr>
<td>Send QR code/Qualtrix link for program registration and Bandura's Self-Efficacy and Knowledge acquisition pre-test</td>
<td>JGD</td>
<td>9/30/22</td>
<td>10/15/22</td>
<td>Not started</td>
</tr>
<tr>
<td>Send the website link for Course Program Implementation</td>
<td>JGD</td>
<td>10/15/22</td>
<td>10/15/22</td>
<td>Not started</td>
</tr>
<tr>
<td>Administer the Bandura's Self-Efficacy Scale Post-test Knowledge Acquisition Post-test and evaluation survey at the website through QR code/Qualtrix link</td>
<td>JGD</td>
<td>11/15/22</td>
<td>11/30/22</td>
<td>Not started</td>
</tr>
<tr>
<td>Send reminder to all participants to complete the course</td>
<td>JGD</td>
<td>11/15/22</td>
<td>11/30/22</td>
<td>Not started</td>
</tr>
<tr>
<td>Send course completion certificate</td>
<td>JGD</td>
<td>11/30/22</td>
<td>11/30/22</td>
<td>Not started</td>
</tr>
<tr>
<td>Program implementation completed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Objective 3: To make recommendations for the scaling and sustainability</strong></td>
<td>JGD</td>
<td>4/10/23</td>
<td>5/1/23</td>
<td>Goal</td>
</tr>
<tr>
<td>Presentation of program results and curriculum proposals to major stakeholders</td>
<td>JGD</td>
<td>4/10/23</td>
<td>4/31/23</td>
<td>Goal</td>
</tr>
<tr>
<td>Inclusion of the program at the NM orientation program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Objective 4: Program Completion</strong></td>
<td>JGD</td>
<td>2/28/23</td>
<td>2/29/23</td>
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<tr>
<td>Project completed</td>
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<td>3/31/23</td>
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<td>Written Project Summary</td>
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<td>Oral Presentation</td>
<td>JGD</td>
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<td>Goal</td>
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<tr>
<td>Final Immersion Hours Completed</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Appendix C

Emotional Intelligence Self-Efficacy Scale

This questionnaire is designed to help us gain a better understanding of nurse managers level of emotional intelligence.

Please rate how certain you are that you can do the things discussed below by writing the appropriate number. Your answers will be kept strictly confidential.

Rate your degree of confidence by recording a number from 0 to 100 using the scale given below:

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot do at all</td>
<td>Moderately can do</td>
<td>Highly certain can do</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SELF-AWARENESS EFFICACY**

I can identify an emotion from the moment it starts to develop in me __________

Overall, I can cope with change effectively __________

**SELF-MANAGEMENT EFFICACY**

I find it easy to regulate my emotions __________

Overall, I’m able to deal with stress __________

**SOCIAL AWARENESS EFFICACY**

I’m normally able to “get into someone’s shoes” and experience their emotions __________

When I take a decision, I’m always sure it is the right one __________

**RELATIONSHIP MANAGEMENT EFFICACY**

Even when I’m arguing with someone, I’m usually able to take their perspective __________

I can take control of challenging situations at work __________

---

Appendix D

Knowledge Acquisition Quiz

Emotional Intelligence Knowledge acquisition Quiz

1. _________________________ is the ability to understand your own emotions and their effects on your performance.

2. _________________________ is the ability to keep your disruptive emotions and impulses in check, to maintain your effectiveness under stressful or even hostile conditions.

3. _________________________ means having the ability to sense other's feelings and how they see things.

4. _________________________ is the ability to work with others toward a shared goal, participating actively, sharing responsibility and rewards, and contributing to the capability of the team.

5. _________________________ it's how you manage yourself and your relationships.

Appendix E

Course Evaluation Survey

Emotional Intelligence Course Evaluation Survey

1. Course content was based on relevant evidence
   - Not applicable
   - Strongly agree
   - Agree
   - Neutral
   - Strongly disagree
   - Disagree

2. Opportunities were provided for critical reflection
   - Not applicable
   - Strongly agree
   - Agree
   - Neutral
   - Strongly disagree
   - Disagree

3. After completing this course, how do you intend to use the content in your daily management? Explain.

4. Do you have any suggestions/comments that will help us make the program better?
Table 1

Statistics

<table>
<thead>
<tr>
<th>Variable/Question</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
<th>Z-score</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>40.0 (40.0 – 60.0)</td>
<td>60.0 (60.0 – 80.0)</td>
<td>-3.099</td>
<td>0.002</td>
</tr>
<tr>
<td>I can identify an emotion from the moment it starts to develop in me.</td>
<td>70.0 (60.0 – 80.0)</td>
<td>80.0 (80.0 – 90.0)</td>
<td>-5.333</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Overall, I can cope with change effectively.</td>
<td>70.0 (60.0 – 80.0)</td>
<td>80.0 (75.0 – 90.0)</td>
<td>-4.862</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>I find it easy to regulate my emotions.</td>
<td>70.0 (60.0 – 70.0)</td>
<td>80.0 (80.0 – 80.0)</td>
<td>-5.119</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Overall, I’m able to deal with stress.</td>
<td>70.0 (68.0 – 80.0)</td>
<td>80.0 (80.0 – 90.0)</td>
<td>-5.009</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>I’m normally able to “get into someone’s shoes” and experience their emotions.</td>
<td>70.0 (60.0 – 80.0)</td>
<td>80 (80.0 – 90.0)</td>
<td>-5.062</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>When I take a decision, I’m always sure it is the right one.</td>
<td>70.0 (60.0 – 80.0)</td>
<td>80.0 (70.0 – 90.0)</td>
<td>-5.287</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Even when I’m arguing with someone, I’m usually able to take their perspective.</td>
<td>70.0 (60.0 – 80.0)</td>
<td>80.0 (70.0 – 90.0)</td>
<td>-4.29</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>I can take control of challenging situations at work.</td>
<td>80.0 (70.0 – 80.0)</td>
<td>90.0 (80.0 – 90.0)</td>
<td>-5.295</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>

Note: All values are median (interquartile range)
Figure 2

Theoretical Model

Figure 3  
Demographics  

Race  
- Mixed: 2.8%
- I choose not to answer: 2.8%
- White or Caucasian: 27.8%
- Hispanic or Latino or...: 5.0%
- Black or African Amer.: 27.6%
- Asian: 33.3%  

Figure 4  
Degree Completed  

Highest Degree Completed  
- MSN ED: 2.8%
- MBA: 5.6%
- MSN: 47.2%
- BSN: 44.4%
Figure 5

Participant’s Role

Novice and Emerging Nurse Leaders

- Emerging NL: 47.2%
- Novice NL: 52.8%

Current Role of Participants

- Assistant NM
- Charge RN
- NM
- Interim NM
- Clinical Faculty
- Nursing
- Nurse Education
- Nurse Practitioner
- NP Clinical Program

Number of Participants
Figure 6  
*Degree of Satisfaction*

Degree of satisfaction with current role:

- Very Satisfied: 22.2%
- Satisfied: 63.9%
- Not Satisfied: 13.9%

Figure 7  
*Knowledge Acquisition Survey Results*

Pre- and Post-Knowledge Survey Results
Figure 8

Bandura’s Self Efficacy Pre- and Post-tests Results

Questions with Correlating Four Building Blocks of Emotional Intelligence

Figure 9

Program Evaluation Survey Results

1. Opportunities were provided for critical reflection
   - 83% Strongly Agree
   - 17% Agree

2. Course content was based on relevant evidence
   - 100% Strongly Agree

3. How do you intend to use the content in your daily management?

   - Relationship Management: 16 (45%)
   - Social Awareness: 11 (30%)
   - Self-Management: 4 (10%)
   - Self-Awareness: 5 (15%)

4. Do you have any suggestions/comments that will help make the program better?

   - Great program, very informative, applicable for everyday use: 50%
   - More graphics and interactive: 10%
   - Nothing at this time: 40%