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Establishing a New Graduate Nurse Peer Mentoring Program

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Abstract

Problem Statement: New Graduate Nurses (NGN) report increased stress, likely due to decreased confidence and social support (Frogeli et al., 2019). The most current NGNs are disadvantaged as much of their undergraduate clinical experience has been affected by the COVID-19 pandemic (Smith et al., 2021). At the end of their residency, information gathered from former NGNs suggested they feel they need "more support" during the residency.

Purpose: The purpose of this quality improvement project was to determine if the addition of a peer mentor to the already existing nurse residency program would improve nurse confidence, job satisfaction, and intent to stay among newly graduated nurses at a 557-bed acute care facility in central South Carolina. This project aimed to develop supportive and nurturing relationships between new graduate nurses hired into a nurse residency program and nurses with one to two years of nursing experience and recent graduates of the same nurse residency program. Quantitative and qualitative research has demonstrated the connection made with a slightly more experienced nurse who shares similar new nurse experiences can help ease the transition to practice for an NGN (Johnson, J. et al., 2019; Van Patten, R.R. et al., 2019). In addition, these peer mentors help to guide NGNs in their professional, personal, and interpersonal growth. As NGNs become more confident, their competency in nursing skills and critical thinking will improve (Ulriich et al., 2010).

Methods: A modified version of the Academy of Medical-Surgical Nurses (AMSN) Mentoring Program was incorporated into the already existing nurse residency program. Three measures from the AMSN toolkit were used to evaluate the effectiveness of the program: (a) the Intent-to-Stay survey, (b) the Job Satisfaction Scale, and (c) the New Nurse Confidence Scale AMSN, 2012)

Mentees were recruited from NGNs in the Winter 2022 nurse residency program. The project was implemented over twelve weeks at a 557-bed acute care facility in central South Carolina. Participation was open to any NGN within the Winter 2022 cohort of the residency program who wished to be paired with a mentor. An appropriate mentor was a previous graduate of the nurse residency with one to two years of experience who could relate to starting their career in the current healthcare climate. The nurse residency coordinator identified mentors based on willingness/interest, interpersonal skills, availability, and compatibility. Both NGN and peer mentor understood participation in the program was strictly voluntary.

Analysis: Data analysis and descriptive statistics included comparing results of the Intent-to-Stay survey, the Job Satisfaction Scale, and the New Nurse Confidence Scale from participants in this project (AMSN Mentoring Program) to the same surveys given NGNs who participated in the traditional nurse residency program.

Results The initial Confidence Scale for New Nurses scores were higher in the comparison group without a mentor and the post-program scores were higher in the group with a peer mentor. The group with peer mentors also saw a significant increase in confidence scores over the twelve weeks from a mean of 2.44 to 3.43. The comparison group showed a decrease in overall confidence scores from a mean of 3.26 to 2.97 for twelve weeks. The overall mean scores for the Job Satisfaction Scale and the Intent to Stay Survey were slightly higher in the NGNs paired with a peer mentor group.

Implication for Practice: Developing supportive relationships in a formal mentorship program early in a nurse's career can affect their intent to stay, stress level, and ultimately patient care.

Establishing a New Graduate Nurse Peer Mentor Program

The transition period from student to New Graduate Nurse (NGN) is a very exciting time. NGNs often experience role performance stress, moral distress, discouragement, and disillusionment during the initial months of professional nursing in acute care (Wakefield, 2018). However, it can also be stressful as it requires adjusting to new routines and surroundings (Labrague & McEnroe-Petite, 2018). Given the current COVID pandemic and the additional changes to healthcare, more recent graduates have an additional lack of confidence in their skills and clinical judgment in the contemporary workplace environment (Smith et al., 2021).

Background

A poor experience during the transition to practice period can delay an NGN from reaching their full potential (Edwards et al., 2015). Frogeli et al. (2019) found that role clarity, task mastery, and social acceptance are correlated with stress for the NGN. When an NGN is unsure of expectations, responsibilities, and mandates for their professional role, their stress increases. Kovner et al. (2014) estimated the 1-year turnover rate to be around 17.5 % among NGNs. The turnover rate for NGNs is costly to both the healthcare organization and society. As for the healthcare organization, it is estimated that on-boarding for an NGN cost approximately $70,000 per nurse, which is ultimately an empty investment when the nurse leaves the healthcare organization (Silvestre et al., 2017). Cho et al. (2012) found that 46.3% of NGNs leave a job within three years, often leaving the nursing profession altogether.

Hospitals rely on competent nurses as a component of error prevention. Ulrich et al. (2010) say the application of competence requires self-confidence. As NGNs become more confident, their competency in nursing skills and critical thinking will improve (Ulriich et al.,

2010). Satisfied and supported NGNs are an asset to an organization and contribute to positive patient outcomes (Kramer et al., 2011).

Setting

The current nurse residency program at a 557-bed acute care facility in central South Carolina (SC) is responsible for NGNs' transition to practice and orientation. While not accredited, this 12-week program is closely aligned with the American Nurses Credentialing Center's (ANCC) "Practice Transition Accreditation Program" and includes lectures and hands-on training on effective communication, skills practice, critical thinking, patient- and family-centered care, conflict resolution, prioritization, time management, and delegation. The residency program has two clinical tracks: Medical-Surgical and Critical-Care. Approximately 100 applicants apply for 35 spaces; individual residencies start in January, June, and August, depending on date of hire.

After being hired to the facility, NGNs begin with a one-week hospital and clinical orientation and orientation to the nurse residency. NGNs then complete two six-week rotations on either a medical-surgical unit or a critical-care unit, depending on whether they are in the Medical-Surgical Residency Program or the Critical-Care Residency Program. During the Medical- Surgical Residency, NGNs spend six weeks on a general medical unit and six weeks on a general surgical unit. During the Critical Care Residency, NGNs spend six weeks on one critical care unit, including the Emergency Department, Medical or Surgical Intensive Care Units, or Cardiovascular Surgery Stepdown Unit, and spend six weeks on a different critical care unit. NGNs are each assigned a unit-based preceptor to work with on each unit during the residency. Preceptors are nurses with at least two to three years of nursing experience who have attended the Nurse Preceptorship class offered by the facility. Preceptors and nurse managers

evaluate the NGN at the end of each rotation using an evaluation primarily focused on competencies within the NGN's skillset developed by the facility. NGNs attend a day-long lecture series towards the end of the twelve weeks. After completing the 12-week residency program, NGNs again speak with the nurse managers on the units to which they rotated. If the nurse manager and the NGN feel the unit will be a good fit, the nurse manager extends an offer, and the NGN accepts a permanent job assignment. For the next nine months, NGNs attend quarterly lectures provided by the nurse residency coordinators. The nurse residency coordinators are both Masters-prepared nurses with extensive clinical education experience. After 12 months, the nurse residents will graduate from the nurse residency. At this time, they will be full-time employees of their unit, off orientation, and practicing independently.

Problem Statement

While an assigned nurse preceptor is integral for acclimation to the nursing unit, NGNs currently do not have another outlet for social or emotional support within the new hospital setting. NGNs report increased stress, likely due to decreased confidence and social support (Johnson, J. et al., 2019; Van Patten, R.R. et al., 2019). The most recent NGNs are at a particular disadvantage as much of their undergraduate clinical experience has been affected by the COVID-19 pandemic. In 2020, clinical placement sites could not accommodate students because of personal protective equipment conservation, group size limitations, and COVID-19 mitigation. This led to a loss of face-to-face experiences during clinical hours (Smith et al., 2021). For recent NGNs at the local facility, information collected on post-residency surveys suggests they need "more support" during their residency. Nurse residents have also reported this directly to the nurse residency coordinators. NGNs often look to other nurses, mentors, and preceptors for support (Price & Reichert, 2017).

Nurse retention in the first three years following the residency was investigated by reviewing data from the past five years and current employment data from Human Resources and the Nurse Residency coordinators to evaluate trends in retention among NGNs at the facility. Implementation of this project received stakeholder support from the nursing administration at the facility, the Chief Nursing Officer, nursing directors, nurse managers, and preceptors on the inpatient nursing units where the NGNs were practicing. This quality improvement project was implemented in early Spring 2022.

Given the findings in the literature and the unique opportunity for project implementation at the facility, the PICOT question for this project was: Among new graduate nurses participating in a nurse residency program (P), what is the impact of adding a peer mentor (I) to the current program (C) on job satisfaction scores, intent-to-stay scores, and new nurse confidence scale scores (O) over three months (T)?

Review of the Literature

To identify evidence-based approaches to address this problem, a literature search was conducted using PubMed-Medline, CINAHL, JBI EBP Databases, and Sigma Theta Tau Repository. The databases were searched using the following terms and phrases: “novice nurse”, “new graduate nurse”, “nurse residency”, “mentor*”, “nurse mentor*”, “new nurse mentor”, “transition to practice”, “nurse transition”, “nurse retention”, “attrition”. The phrases “clinical relationships” and “interpersonal relationships” were added to expand the search. Boolean operators “AND” and “OR” were also used. Duplicate articles and articles not related to the topic were excluded. The search was restricted to the English language, free, full-text articles dated 2016-2021. Ancestry searches of references of two exceptional articles were used to hand-find pertinent articles. The advanced search function “Similar Articles” was also utilized in PubMed.

A total of 242 articles were populated, matching search criteria after exclusion filters were enabled. Of these, 29 articles were chosen for review. Three distinct searches were completed in JBP EBP using various search terms. Six articles were populated, and two were selected for consideration. Four distinct searches were conducted in CINAHL, yielding 98 articles matching the search criteria. Nine were saved for consideration. Five distinct searches were completed in PubMed-Medline using various search terms. These searches yielded a total of 73 articles. Fifteen were selected for consideration. Three distinct searches were conducted in the Sigma Theta Tau Repository. These searches yielded 65 articles or presentations. Three articles were chosen for review.

Of the 29 articles chosen for review, seventeen were selected for an Evidence Table upon further review as they discussed the best practices for nurse mentoring within a transition to practice program.

Synthesis of the Evidence

The transition from student to new nurse can be exciting and stressful. A peer mentor can help a new nurse to feel welcomed at the facility and provide emotional and social support and a feeling of camaraderie during this unique time in the RN's career. This can improve the transition to practice which may, in turn, enhance patient care and patient satisfaction (Edward, K. et al., 2017; Szalmasagi, J. et al., 2018). Although a unit-based preceptor can help with skill development and a transition to the unit, the addition of a nurse mentor to a nurse residency program has been shown by researchers to decrease stress and improve clinical confidence for the new nurse (Johnson, J. et al., 2019; Van Patten, R.R. et al., 2019).

Kramer (2011), the foremost expert on new nurse "reality shock", believes the single most significant variable of the new graduate transition to practice is the healthy work

environment. The idea of a healthy work or positive work environment is well documented in the literature (Johnson, J. et al., 2019; Mikkomen, K. et al., 2020; Van Patten, R.R. et al., 2019). Zhang et al. (2019) states that the mentor/mentee relationship enhances solidarity among colleagues and creates a positive work environment where the new nurse feels supported, valued, and heard. This can help improve the new nurse's commitment to the profession and their organization (Johnson, J. et al., 2019; Mikkomen, K. et al., 2020, Zhang, Y. et al., 2019). The addition of a mentor to a nurse residency program has also been shown to increase retention among new nurses (Brook, J. et al., 2019; Johnson, J. et al., 2019; Szalmasagi, J. et al., 2018; Zhang, Y. et al., 2019). When implementing a nurse mentoring program, the mentor/mentee relationship is central to the success of the intervention and mentors (Brook, J. et al., 2019). Mentors should be chosen through a rigorous process and need sufficient training (Devey Burry, R. et al., 2020; Zhang, Y. et al., 2016). Mentor and mentee should be matched based on similar personality characteristics (Brook, J. et al., 2019; Devey Burry, R. et al., 2020). Mentors with high levels of empathy, flexibility, tolerance, and patience tend to foster a mentor's motivation leading to better mentoring practices (Mikkomen, K. et al., 2020). Mentors must understand that new nurses often have role ambiguity and seek guidance and a "safe haven" from their mentor (Lalonde, M. et al., 2016; Szalmasagi, J. et al., 2018). Discussing topics such as balancing work and personal life, adjusting to night shift, how to communicate with colleagues, and how to advocate for themselves can help the new nurse to feel supported in their new environment and increase their confidence (Lavoie-Tremblay, M. et al., 2020; Verret, G. et al., 2016).

The length of a new nurse mentoring program was discussed in the literature. Some sources recommended a 12-to-24-month nurse mentor program (Verret, G. et al., 2016; Zhang, Y. et al., 2016). A program should also be considered for two to three months after the formal

orientation or a nurse residency program in order to decrease the stress associated with being separated from the familiarity of the residency (Glassman, E., 2020; Van Patten, R. R.. et al., 2019)

Barriers to implementing a nurse mentoring program have also been discussed in the literature. Facilitators must be transparent with mentors and mentees and understand that time, space, and scheduling constraints frequently become obstacles to proper program implementation (Devey Burry, R. et al., 2020; Zhang, Y. et al., 2016). The facilitator must remember these things while planning a successful mentoring program.

A common theme in the evidence was the need for a formal, structured mentorship program. The Academy of Medical-Surgical Nurses (AMSN) developed a comprehensive mentoring program in 2012. This program, available at no cost, is designed to help nurses, especially new nurses, develop strong relationships, meet challenges, and provide better patient care (AMSN, 2012). Program guides for site coordinators, mentors, and mentees suggest activities for mentor-mentee groups and evaluation tools. This program can be adjusted to meet the organization's needs and the project's goals. (Academy of Medical-Surgical Nurses (AMSN), 2012). Szalmasagi (2018) and Kroft & Stuart (2021) saw an increase in intent-to-stay and job satisfaction in new graduates paired with a mentor during their nurse residency compared to those not paired with a mentor. The participants in Szalmasagi's (2018) study also reported an ease in their transition to practice due to their relationship with a mentor. AMSN encourages the use and modification of the mentoring program and tools. The AMSN grants permission for use on their website (AMSN, 2012).

Theoretical Framework

The theoretical framework guiding this QI Project was Duchscher's Theory, developed by Judy Duchscher to prove the transition to professional nursing can take a significant emotional toll on the new graduate nurse (Wakefield, 2018). "Transition Shock" represents the initial reaction NGNs have to the experience of moving from the sheltered and controlled environment of their undergraduate education to the unfamiliar context of professional practice (Duchscher, 2009). The foundation of Duchscher's Theory is the contrast between relationships, roles, responsibilities, knowledge, and performance expectations required within the academic environment with those required within the professional environment (Duchscher & Windey, 2018). This theory helps bridge the gap between student and professional nurses by adjusting and accommodating to the healthcare environment, often with the help of a mentor (Duchscher, 2009). The NGN will progress, over a 12-month span, through Stage 1 (Doing), Stage 2 (Being), and Stage 3 (Knowing) (Duchscher & Windey, 2018).

Acute care nursing is intense, highly dynamic, and laden with stress and excessive workload demands (Duchscher, 2009). The recommendations outlined in Duchscher's Theory can help prepare NGNs for a successful and healthy transition to practice. Duchscher's theory considers the emotions and relationships of the NGN during the transition period. This theory also suggests the importance of a structured transitioning and mentoring program for NGNs. Such a plan would foster healthy partnerships between NGNs and seasoned nurses (Duchscher, 2009).

Project Purpose, Objectives, and Expected Outcomes

The purpose of this project was to determine if the addition of a peer mentor to the already existing nurse residency program would improve job satisfaction scores, intent to stay

scores, and confidence levels of newly graduated nurses at a 557-bed acute care facility in central SC. This project aimed to develop supportive and nurturing relationships between NGNs and more experienced nurses and guide new nurses in their professional, personal, and interpersonal growth. This project aimed to improve new nurses' intent-to-stay scores, confidence levels, and job satisfaction scores, ultimately leading to improved patient outcomes for the facility.

Project Design

Project Site

The setting for this project was a hospital system in central SC, with a 557-bed acute care facility, 70 physician practices, five community medical centers, and an extended-care facility. The health system employs approximately1800 RNs.

Population

The project participants included NGNs, defined as nurses who recently graduated from an accredited Associate Degree in Nursing (ADN) or Bachelor of Science in Nursing (BSN) program, generally within the past six months, and were hired into the nurse residency program at the facility. The NGN could not have practiced as a nurse previously at another facility. Previous NGN cohorts at this facility were generally under age 25, predominately female, with one to two males per residency cohort. Of the 88 NGNs accepted into the residency for 2021, 46 held a BSN, and 42 had an ADN. Of the NGNs hired into the residency in 2021, 82% were still employed at this facility (A.Rhoden, personal communication, September 22, 2021), higher than the national average of 72.7% (Nursing Solutions, Inc., 2021). For the Winter 2022 cohort of NGNs, 11 held a BSN, and 14 had an ADN.

For 2019, the facility reported a 92% participation rate for the National Database for Nursing Quality Indicators (NDNQI) RN Satisfaction Survey. For job satisfaction, the facility

scored 4.36 (1 to 6 scale, 6 being the highest), and NDNQI Benchmark was 4.1. RNs with less than five years of practice only made up 20% of survey respondents, and RNs with greater than ten years of practice made up 59% of respondents. Currently, there are no metrics used to evaluate job satisfaction and intent to stay among newly graduated and less experienced nurses at the facility.

Project Type

The Project Coordinator implemented a Quality Improvement Project within the current transition to practice program at the 557-bed acute care facility.

Implementation Plan/Procedures

Project Method/Model

This project utilized the Model for Improvement (MFI) developed by the Associates in Process Improvement. MFI uses a cycle called Plan Do Study Act (PDSA) to test the effects of small changes, make the changes, and ultimately spread the effective changes through the practice or organization (Institute for Healthcare Improvement [IHI], 2021). The model has two parts: 1) Three questions ("What are we trying to accomplish?", "How will we know that a change is an improvement?", and "What change can we make that will result in improvement?") and 2) The PDSA cycle tests the change to determine if the change has made an improvement. The PDSA cycle adapts the scientific method for action-oriented learning by planning the change, trying it, observing the results, and acting on what is learned (IHI, 2021).

Implementation Steps

This project was designed and implemented based on best practices from the literature on nurse mentorship and used elements of the AMSN Mentoring Program. Following Institutional Review Board (IRB) exemption at the facility, the project coordinator worked with the nurse

residency coordinators to identify and recruit peer mentors. Eligibility criteria for a mentor were recent completion of the nurse residency program (2019, 2020, or 2021), a positive recommendation from the nurse residency coordinators, and an active RN license. Ideal mentors were caring, compassionate, genuine, and willing to disclose information about themselves and what they knew (AMSN, 2012). Mentors understood their role in the project was voluntary. Six peer mentors were oriented to the program using educational materials from the AMSN mentoring toolkit (AMSN, 2012). Participation was open to any NGN within the Winter 2022 cohort of the residency program who wished to be paired with a mentor. Six NGNs agreed to participate. Both mentor and mentee were given literature on the definition, purpose, and goal of mentorship and agendas and topics to discuss at their meetings from the AMSN Mentoring Program before their first meeting. All participants also received copies of the instruments that would be used to evaluate this project.

Participants were scheduled to meet every two to three weeks, a modification of the AMSN program due to the time constraints of this project, for one hour via face-to-face meeting, phone call, or online video conferencing platform. During their meetings, participants were encouraged to follow prompts provided within the AMSN Mentoring Toolkit. During the initial meeting, peer mentor and NGN discussed their background information, short-term and long-term goals, and their experiences during their first few weeks of work as a nurse. Subsequent meetings were guided by peer mentors and focused on further developing the mentor-mentee relationship. Prompts included “Tell me about the current demands of your work,” “Have you received any feedback from others on your unit?” “Has anything gone wrong recently? What has gone well?” (AMSN, 2012).

Measures, Tools, and Data Plan

The peer mentor program used tools and surveys from the AMSN Mentor Program (AMSN, 2012).

- "Confidence Scale for New Nurses (CSNN)" AMSN Mentee Tool 4 (Appendix B)
- "Intent-to-Stay Survey" AMSN Mentee Tool 11 (Appendix C)
- "Job Satisfaction Scale" AMSN Mentee Tool 10 (Appendix D)

The Project Coordinator collected responses from the group of NGNs with a mentor and a comparison group (NGNs without a mentor). The comparison group consisted of NGNs from the Winter 2021 who chose not to work with a mentor. Seven NGNs agreed to participate in the comparison group. They were asked to complete the "Confidence Scale for New Nurses, the “Intent to Stay Survey," and the "Job Satisfaction Scale” at the same time points as the intervention group. These responses were compared to the responses of the group with a peer mentor to the same tools (Confidence Scale for New Nurses, Intent to Stay Survey, and Job Satisfaction Survey). Both groups completed a pre-program “Confidence Scale for New Nurses” in March. The "Confidence Scale for New Nurses" is a 26-item self-examination tool measuring confidence in performing everyday nursing activities. A 5- point Likert scale used scores of 1 (not at all confident) to 5 (very confident) (AMSN, 2012). The "Intent-to-Stay Survey" (Mentee Tool 11) uses 15 questions on a 7-point Likert scale (1, strongly disagree, to 7, strongly agree). This Survey measured employees' personal feelings toward their current job and whether the employee plans to stay or leave their current organization. (Cronbach’s alpha = .94) (Grindel & Hagerstrom, 2009). The "Job Satisfaction Scale" (Mentee Tool 10) uses 26 items measuring the degree of employee satisfaction on a 5-point Likert scale (1, insignificant/low, to 5, significant/high) based on Maslow's Hierarchy of Needs (AMSN, 2012). [Cronbach’s alpha =

0.83 (Grindel & Hagerstrom, 2009)] Demographic data and all survey responses were collected electronically utilizing Research Electronic Data Capture (REDCap), a secure web platform for building online surveys and databases through the University of South Carolina (Health Sciences South Carolina, n.d.). Data was exported from REDCap into Excel.

The Project Coordinator analyzed survey responses for mean Likert scales for each question. Paired T-tests compared the difference in the mean of the responses in the two groups. A p-value <0.05 was considered statistically significant. Demographic data was compiled to show any correlation between NGN characteristics (including highest nursing degree obtained, gender, previous nursing career experience) and confidence scores, intent to stay scores, and job satisfaction scores. Descriptive statistics were used to analyze demographic data in both groups to summarize and compare similarities and differences. Intellectus Statistics was used for all statistical analysis. Any qualitative data, including comments, suggestions, or feedback, was reviewed for themes.

Protection of Human Subjects

The Project Coordinator presented this quality improvement project to the Institutional Review Board (IRB) at Lexington Medical Center on December 1, 2021. As this project posed little to no risk to human subjects, it was deemed exempt from further IRB review. Informed consent was not required. NGNs and mentors understood participation would not affect their employment. Benefits to participation were discussed with participants. Participation was confidential, and study participants' personal information was deidentified. The measurement tools were built into REDCap and were accessible to the participants via secure electronic invitation (Health Sciences South Carolina, n. d.). All electronic data was kept in a password-protected online Dropbox account.

Resource Requirements

Participation in this project was strictly voluntary for the mentors and the NGNs. The AMSN Mentoring Toolkit was available without cost from the AMSN website. Administrative costs of this project included approximately $200 for the mentor and NGN manuals assembly. This figure covered the cost of purchasing binders and copies of all materials. No other expenses were incurred.

Results

Project Evolution

Twenty-one NGNs were admitted to the Medical-Surgical and Critical Care Residency Programs at the facility for Winter 2021; participant demographics were similar to previous years. Six NGNs agreed to participate in the intervention group and were paired with a mentor. Seven NGNs responded to the email request to complete surveys and became the comparison group. Demographics of both groups are described in Table 1 and Table 2.

Table 1

Demographic Data for group of NGNs with a peer mentor

Variable	*n*	*%*
Sex		
Female	6	100.00
Male	0	0.00
RN education		
Associate Degree in Nursing	6	100.00
Baccalaureate Degree in Nursing	0	0.00
Is nursing your first career?		
No	4	66.67
Yes	2	33.33
Residency program		
Critical-Care Residency	3	50.00
Medical-Surgical Residency	3	50.00
Age: Mean: 41.33 years		

Table 2
Demographic Data for Comparison Group (NGN without peer mentor)

Variable	*n*	*%*
Sex		
Female	6	75.00
Male	2	25.00
RN education		
Baccalaureate Degree in Nursing	4	50.00
Associate Degree in Nursing	4	50.00
Is nursing your first career?		
Yes	5	62.50
No	3	37.50
Residency Program		
Medical-Surgical Residency	7	87.50
Critical-Care Residency	1	12.50

Age: Mean: 30.62 years
Min: 22 years, Max: 52 years

Peer mentors and NGN mentees received their AMSN Mentoring Toolkit manuals in early March and were oriented to the program by the Project Coordinator. They were given each other's contact information, including name, nursing unit, shift, cell phone, and e-mail address. Peer mentors initiated the first contact between pairs. Before their first meeting, NGN mentees completed the Pre-Program Confidence Scale for New Nurses (CSNN). The comparison group also completed this Survey. For the next 12 weeks, the peer mentor and NGN mentee pairs were to "meet." Most pairs met approximately four times during the program, face-to-face, via FaceTime, or text message. One pair reported communicating only twice through e-mail. Two pairs regularly texted each other and formed close relationships. The Project Coordinator conducted "check-ins" approximately every three weeks via e-mail. Peer mentors or NGN mentees voiced no concerns. The Project Coordinator led one face-to-face check-in with the NGN mentees during the Winter 2021 Nurse Resident Lecture Day on April 15, 2022. The

program ended in early June 2022. NGN mentees and the comparison group completed the Post-Program Confidence Scale for New Nurses, the Job Satisfaction Scale, and the Intent to Stay in the Job Survey.

Key Findings

The purpose of this project was to determine if the addition of a peer mentor to the existing nurse residency program would improve job satisfaction scores, intent to stay scores, and confidence levels of newly graduated nurses at a 557-bed acute care facility in central SC. Table 3 displays the mean scores on the Job Satisfaction Survey, The Intent to Stay in the Job Survey, the Pre-Program Confidence Scale for New Nurses, and the Post-Program Confidence Scale for New Nurses for the group of NGNs with a peer mentor and the comparison group (NGNs without a peer mentor).

Table 3

Mean Scores on Pre/Post Nurse Confidence (CSNN), Job Satisfaction, and Intent to Stay

Variable	*M*	*SD*	*N*	SE_M	Min	Max
Comparison Group Pre CSNN	3.26	0.51	26	0.10	2.00	4.00
Comparison Group Post CSNN	2.97 ↓	0.47	26	0.09	1.83	4.17
NGNs with a Peer Mentor Pre CSNN	2.44	0.48	26	0.09	1.50	3.50
NGNs with a Peer Mentor Post CSNN	3.43 ↑	0.57	26	0.11	2.00	4.40
Comparison Group Job Satisfaction	4.12	0.44	24	0.09	3.14	4.71
NGNs with a Peer Mentor Job Satisfaction	4.27	0.39	24	0.08	3.50	4.80
Comparison Group Intent to Stay	5.56	0.89	15	0.23	3.50	6.67
NGNs with a Peer Mentor Intent to Stay	5.88	1.02	15	0.26	3.00	7.00

While the initial Confidence Scale for New Nurses scores were higher in the comparison group without a mentor, the post-program scores were higher in the group of NGNs with a peer

mentor. This group also saw a significant increase in confidence scores over the twelve weeks from a mean of 2.44 to 3.43. The comparison group showed a decrease in overall confidence scores from a mean of 3.26 to 2.97 for twelve weeks.

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between the comparison group and the NGN group with a peer mentor on the Pre-Program CSNN. The results of this test were significant based on an alpha value of .05, $V = 323.00$, $z = -4.33$, $p < .001$. This indicates that the differences between the comparison group and the group of NGNs with a peer mentor are not likely due to random variation. The median of the comparison pre-program CSNN (*Mdn* = 3.33) was significantly larger than the median of group of NGNs with a peer mentor pre-program CSNN (*Mdn* = 2.50).

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between the comparison group post-program CSNN and the group of NGNs with a peer mentor post-program CSNN. The results of this test were significant based on an alpha value of .05, $V = 36.00$, $z = -3.41$, $p < .001$. The median of the comparison group's post-program CSNN (*Mdn* = 2.83) was significantly lower than the median of the group of NGNs with a peer mentor's post-program CSNN (*Mdn* = 3.60). This indicates that the differences between the comparison group and group of NGNs with a peer mentor are not likely due to random variation.

Two-tailed paired samples *t*-tests were conducted to examine whether the mean difference between Pre-Program Confidence Scale for New Nurses scores and Post-Program Confidence Scale for New Nurses Scores were significantly different from zero. Pre-Program and Post-Program scores in the comparison group were not significantly different for each of the 26 items in the instrument. For the group of NGNs with a peer mentor, statistically significant differences were noted in eight of the 26 items. Of these eight items, three themes emerged. In

the group of NGNs with a peer mentor, confidence levels rose in the areas of patient care, critical thinking, and patient teaching/advocacy.

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between Job Satisfaction Scale scores for the comparison group and Job Satisfaction Scale scores for the group of NGNs with a peer mentor. The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 62.00$, $z = -2.52$, $p = .012$. This indicates that the differences between the comparison group and the group of NGNs with a peer mentor are not likely due to random variation. The median of the comparison group ($Mdn = 4.14$) was significantly lower than the median of the group of NGNs with a peer mentor ($Mdn = 4.25$).

The results of the two-tailed Wilcoxon signed rank test to determine whether there was a significant difference between the comparison group and the group of NGNs with a peer mentor for the Intent to Stay Survey scores were not significant based on an alpha value of .05, $V = 28.00$, $z = -1.82$, $p = .068$. This indicates that the differences between the comparison group ($Mdn = 5.83$) and the group of NGNs with a peer mentor ($Mdn = 6.00$) are explainable by random variation (Intellectus Statistics, 2022).

Several themes emerged from the responses to these surveys. On the Job Satisfaction Survey, the group of NGNs with a peer mentor reported higher responses in the areas of "interest level", “responsibility”, “ability to be creative”, and “decision-making power”. The comparison group reported higher responses in the “on-the-job stress category”. On the Intent to Stay in the Job Survey, the group of NGNs with a peer mentor reported higher responses in the “work is very meaningful to me” category. The comparison group scored higher in the “generally satisfied with work” category but also in the “I think of leaving this job regularly” category.

Qualitative Findings

During the face-to-face check-in between the group of NGNs with a peer mentor and the Project Coordinator, positive feedback was received from each NGN mentee. This included "Thank you so much for doing this program. I feel very supported by my mentor.", "I'm glad I came to a hospital with resources like this program available to new nurses.", "I enjoy talking to my mentor because I can ask her things, I don't feel comfortable asking my preceptor- just things about being a new employee and a new nurse.", "I enjoy my mentor so much; he is so nice! We have really gotten into a groove now that we are on the same schedule", and "I feel this program is very beneficial. I would like to be a mentor to a new grad one day".

Strengths and Limitations

This project had several strengths. Through their communication, the peer mentors could assist the NGNs with their transition to professional nursing by discussing their experiences, learning opportunities, and ideas to improve performance. Peer mentors reported enjoying the program and "getting to know someone in a different stage of life, but new to nursing and so excited about the profession." The program was well-received by facility stakeholders and championed by leadership within the clinical education department at the facility. The prompts and meeting guides within the AMSN toolkit are easy to follow.

Several limitations were identified for the project. The sample size was small, as six of 21 nurse residents agreed to participate in the group of NGNs with a peer mentor. Due to concerns over the COVID Omicron variant at the beginning of the program, all contact was encouraged to take place virtually instead of face-to-face. Cost constraints required all participants to be strictly voluntary. The timeline recommended in the AMSN mentoring toolkit occurs over 12 months. Due to time constraints, this project was completed in three months. Members of the comparison group could have formed an informal mentor relationship on their unit, thus allowing them to benefit from a mentorship experience. Finally, if the peer mentor and NGN mentee were scheduled on opposite shifts, they may have struggled to arrange a time to communicate.

Unintended Consequences

Despite a robust amount of interest from experienced nurses interested in being peer mentors, more response was expected from the Winter 2021 NGNs. In their response to the requirement email, peer mentors often voiced their excitement for the chance to be a part of the program and their wish for a similar program when they were new nurses in the residency program. The Project Coordinator was contacted approximately six weeks into the program by a nurse resident who had initially decided not to participate but was now wanting to participate. Her colleague was a participant and was having a positive experience. While she was not enrolled in the program, she was put in contact with a nurse to whom she could connect.

The Project Coordinator did not anticipate confidence scores to decrease for the comparison group over the 12 weeks. Initial scores were higher in the group of NGNs with a peer mentor than in the comparison group (3.26 vs. 2.44). The comparison group was generally comprised of younger nurses than the group of NGNs with a peer mentor.

One NGN mentee did not complete the post-program instruments despite participating in the program. Multiple attempts to reach them were made via automated e-mail from Redcap, personal e-mails from the Project Coordinator, an e-mail from the nurse residency program coordinator, and several text messages. The participant is still employed with the facility; however, no explanation was given for not completing the surveys.

Discussion

Future Direction for Evidence-Based Practice

New nurse confidence scores of the comparison group and the group of NGNs with a peer mentor are expected to increase over the first year of practice as a nurse (Grindel & Hagerstrom, 2009). Longitudinal observation of the NGN mentees with repeated instruments at

six and twelve months could be beneficial. A future site coordinator could also consider implementing this program at the end of the nurse residency program, the 12-month mark, as this is when the NGN is no longer under the guidance of the residency program.

Comparison of Results with Other Publications

While the purpose of Szalmasagi et al. (2018) was slightly different from this project (to determine if participating in the AMSN mentoring program impacted retention rates in a small community hospital), the qualitative data of the study showed the NGNs who were paired with a mentor reported feeling welcomed and appreciated at the facility. Similar responses were collected from participants in this project. The participants in the Szalmasgi study also stated their participation in the mentor program strengthened their intent to remain employed at the hospital. Overall, providing a mentor to the NGN was seen as a positive addition to the transition into practice.

Kroft and Stuart (2021) implemented the AMSN mentoring program for new nurses at their facility at the start of the COVID-19 pandemic. They implemented the evidence-based mentorship program over 12 weeks. They found job satisfaction scores to be slightly higher than the scores of nurses without a mentor from the previous new-hire group. Intent to stay initially was slightly lower however the authors were encouraged by these results considering the influence of the pandemic on frontline nurses.

Impact of the Project

As NGNs become more confident, their competency in nursing skills and critical thinking will improve (Ulriich et al., 2010). Adding a peer mentor to the current nurse residency program can improve new nurses' confidence and positively affect job satisfaction and intent to stay in the job. The peer mentor program can provide NGNs with social support and a role model to help

improve their confidence. Improved confidence could result in improved patient care and patient satisfaction (Szalmasagi et al, 2018).

Conclusions

Sustainability

"I enjoyed the freedom to make it how we needed, to follow the prompts (in the AMSN toolkit), but still be relaxed enough just to talk through our experiences" (peer mentor, 2022). As the AMSN Mentoring Toolkit is comprehensive and user-friendly, this project is sustainable for the facility. The facility will need a dedicated site coordinator. This position could easily be assumed by one of the nurse residency coordinators. A team of committed peer mentors can be assembled. As NGN mentees "graduate" from the program, they will consider acting as a peer mentor to future NGNs. As a component of the formal nurse residency program, scheduled meetings can be arranged to easily facilitate communication between peer mentors and NGN mentees. The nurse residency coordinators at the facility were informed throughout the program as feedback was received by participants.

Usefulness of the Work

This project informed Nurse Residency Coordinators, Nursing Leadership, and other stakeholders of the need for a formal mentorship program in the current nurse residency. If the facility considers the ANCC Magnet Recognition Program application, a fully developed mentorship program is essential to each of the five Magnet model components (Jakubik, L. et al., 2011). The AMSN mentoring toolkit can be easily modified to fit the needs of any nursing department in the facility (AMSN, 2012).

Next Steps

Results of this project will be presented to the Vice President of Nursing at the facility as well as nursing leadership in clinical education. This manuscript will be prepared for submission for publication as the project can be used to inform hospital nurse educators who are considering implementing a mentor program for new graduate nurses.

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Appendix A: Evidence Table

PICOT: Among new graduate nurses participating in a nurse residency program, does a mentoring program compared to the current process without the mentoring program improve job satisfaction scores over a three-month period. Bowers, Teresa

Brief Reference, Type of study, Quality rating	Methods	Threats to Validity/ Reliability	Study Findings	Conclusions
Article 1: Brook, J., Aitken, L., Webb, R., Maclaren, J. & Salmon, D. (2019), Characteristics of successful interventions to reduce turnover and increase retention of early career nurses. http://doi.org/10.1016/j.nurstu.2018.11.003 **Evidence Level: II** Systematic review **Quality: High** Extensive Literature review, recommendations for further research, and implications for practice stated definitive conclusions	**Design:** Systematic Review Electronic databases were searched, including JBI, Academic Search Complete, Medline, Health Policy Reference Center, EMBASE, Psychinfo, and CINAHL. 53 papers were included for review **Sample:** sample sizes ranged from 3 to 6000 with a median of 90. **Setting:** Hospital sizes ranged from 12 to 1800 beds **Framework:** none mentioned **Measures:** Time series designs, pretest-postest quasi-experimental, nonequivalent control group, and RCT multi-site	**Conclusion Validity:** Limitations and strengths addressed. Comparisons across studies were at times difficult to make due to variations in outcome measures. **Internal Validity:** Methodological issues impacted the extent to which conclusions could be drawn. Very few papers reported negative findings indicating publication bias. **External Validity**: Large sample size, across multiple sites and facilities **Construct Validity:** Research question addressed **Reliability:** Results are generalizable.	In regards to mentoring: Nine studies included a mentor component. Seven of these provided turnover data, with a 14% average decrease in turnover across the studies, and one was reporting a 2 % increase in turnover. Two studies reported retention data, and retention improved by an average of 17% across the studies. Five studies provided data for mentorship programs and internships, with 43 scorings three or less in the quality assessment. Ten studies looked at turnover with an average of 18% decrease. Six studies examined retention and found a negative impact on the turnover with a mentorship program.	"Mentorship is an established mechanism for support in early career nursing, with the mentor/mentee relationship again central to the success of the intervention." The appropriate fit between mentor and mentee is very important. Personality and characteristics of individuals need to be considered when arranged pairs. Regular meetings between mentor and mentee are necessary.

PICOT: Among new graduate nurses participating in a nurse residency program, does a mentoring program compared to the current process without the mentoring program improve job satisfaction scores over a three-month period. Bowers, Teresa

Brief Reference, Type of study, Quality rating	Methods	Threats to Validity/ Reliability	Study Findings	Conclusions
Article 2: Szalmasagi, J. (2018). Efficacy of a mentoring program on nurse retention and transition into practice. https://doi.org/10.20849/ijsn.v3i2.378 **Evidence Level:** **II** Quasi-Experimental **Quality:** Good Purpose and clinical question clearly stated, recommendations clear, excellent literature review	**Design:** Retrospective descriptive quasi-experimental study **Sample:** 14 new graduate nurses. These were compared to six non-mentored nurses from the previous year. (20 total) **Setting:** Small, community hospital in Indiana **Framework:** Benner's novice to expert theory **Measures:** Qualitative: Mentoring Program Evaluation Questionnaire Quantitative: Employee Retention data from human resources **Analysis Plan:** Chi-Square Test of Independence **Procedure:** All participants completed a six-month mentoring program adapted from the AMSN Mentoring Program. The new nurse was assigned to a mentor who helped the new nurse with aspects of professional nursing, policies and procedures, and reinforcing nursing skills.	**Conclusion Validity:** Reasonable, authors list small sample size and limitations **Internal Validity:** Although a statistical difference was found, the Validity of the findings is questionable as all three assumptions of the Chi-Square test were not met. Feedback from mentors, both positive and negative, was not consistent over the 6-month timeframe. Time constraints prevented the site coordinator from having regular, personal contact with all participants. Only 9 of 14 participants completed the qualitative component. **External Validity:** The study was conducted at a small community hospital; results may not be generalizable to a larger hospital in a larger city. **Construct Validity:** Did measure what they intended to measure **Reliability:** Fair, the author admits a larger sample size may produce a more reliable analysis of a mentoring program **Precision:** p value 0.0003	Of the six nurses (without mentoring) used for comparison, only one was still employed one year after hire. However, of the 14 nurses (with mentoring) sample size, 12 were still employed one year after the hire date. Of the 9 participants who completed the Mentoring Program Evaluation, all nine stated they felt the program was beneficial and helped them transition to the new hospital environment. They also said they felt comfortable going to their mentors for advice and guidance.	Overall, providing a mentor to the new grad nurse was seen as positive and helped the nurse feel welcome and appreciated at the facility. A mentor may also give the new nurse a "safe haven" in which to ask questions and be assured that guidance is available if needed. Improving the transition to practice for new nurses may, in turn, improve patient care and patient satisfaction.

PICOT: Among new graduate nurses participating in a nurse residency program, does a mentoring program compared to the current process without the mentoring program improve job satisfaction scores over a three-month period. Bowers, Teresa

Brief Reference, Type of study, Quality ra	Methods	Threats to Validity/ Reliability	Study Findings	Conclusions
Article 3: Van Patten, R. R. & Bartone, A. (2019). The impact of mentorship, preceptors, and debriefing on the quality of program experiences. https://doi.org/10.1016/j.nepr.2019.01.007 **Evidence Level:** **Level II** Quasi-Experimental Study **Quality:** High Sufficient sample size for the study design, definitive conclusions, comprehensive literature review, research questions clearly stated	**Design:** Cross-sectional survey design using secondary analysis **Sample:** Convenience sample 1078 graduate nurses **Setting:** Versant RN Residency Programs at various hospitals in the United States **Framework:** Benner's Novice to expert, Roy Adaptation Model **Measures:** (1) Demographic Information Survey, (2) Evaluation of the RN Residency Survey **Analysis Plan**: Bivariate Analysis- Pearson r correlation, Multivariate analysis-multiple linear regression **Procedure:** The Demographic Information Survey was completed during the second week of the residency. The Evaluation of RN Residency Survey was given during the last week of the residency.	**Conclusion Validity:** power analysis determined a sample size of 150 would be adequate to detect a medium-size effect with power set at 0.8 and Cronbach's alpha of .05. **Internal Validity:** Limitations**:** Data was collected at only one point in time, difficult to infer casualty. No attrition. The study was restricted to one questionnaire. Future studies should consider a qualitative or mixed-method design to get a better understanding of stress levels and stress management. **External Validity:** Although data was restricted to the curriculum of the Versant Residency, it could still be generalized. **Construct Validity:** Did measure what they intended to measure. **Reliability:** Fair, large sample size and number of sites, could be generalized to other residency programs. **Precision:** overall model stat.significant, $F=56.68$, $p<0.001$	As related to the effect of mentoring, as opposed to preceptorship and debriefings: Reduced stress due to mentorship alone was reported by 54.9% of participants. Multiple Linear regression examining the effect of reduced stress due to mentoring indicated the overall model was statistically significant $F=56.68$, $p<0.001$	As nurses complete a residency with a mentorship, they become more competent and prepared to deal with workplace challenges. Participants found that the addition of a mentor to the residency program decreased stress. Consider continuing a mentorship after a formal orientation of the residency program to decrease the stress associated with being separated from the familiarity of the residency.

PICOT: Among new graduate nurses participating in a nurse residency program, does a mentoring program compared to the current process without the mentoring program improve job satisfaction scores over a three-month period. Bowers, Teresa

Brief Reference, Type of study, Quality rating	Methods	Threats to Validity/ Reliability	Study Findings	Conclusions
Article 4: Zhang, Y., Qian, Y., Wu, J., Wen, F., & Zhang, Y. (2016). The effectiveness and implementation of mentoring program for newly graduated nurses: A systematic review. https://doi.org/10.1016/j.nedt.2015.11.027 **Evidence Level: II** Systematic Review of 8 quasi-experimental studies and 1 RCT. **Quality:** Good, focused specifically on mentoring to fill a gap in knowledge, extensive literature review	**Design:** Systematic Review **Sample:** 16 articles met criteria, obtained from electronic databases (The Cochrane Library, Medline, Ovid, Elsevier, Embase, CINAHL, CBM, CNKI, and WanFang Data) up to 2014. 1491 total participants (1,147 new graduates) **Setting:** 6 acute care facilities in the USA, two acute care facilities in China, one acute care facility in Thailand **Framework:** not addressed **Measures: 15** quasi-experimental studies and 1 RCT	**External Validity:** High external Validity as multiple sites throughout the US, China, and Thailand was reviewed. **Limitations:** A literature search was limited to electronic databases and published articles, some meaningful evidence could have been missed, publication bias may exist as no negative results were found in evidence, studies were only derived from the US.	Common Themes: Mentor Training, Mentor, and Mentee Matching. Mentor and Mentee Relationship, Job Satisfaction, and Cost-effectiveness	A successful mentorship program needs to include a rigorous mentor selection. Mentors need sufficient training. Formal or Informal mentor models can be used. Time constraints, space constraints, and scheduling are common obstacles to proper mentor implementation. For new grad nurses, a mentoring program should last for 12-24 months.

PICOT: Among new graduate nurses participating in a nurse residency program, does a mentoring program compared to the current process without the mentoring program improve job satisfaction scores over a three-month period. Bowers, Teresa

Brief Reference, Type of study, Quality rating	Methods	Threats to Validity/ Reliability	Study Findings	Conclusions
Article 5: Devey Burry, R., Stacey, D., Backman, C., Donia, M. B., & Lalonde, M. (2020). Exploring pairing of new graduate nurses with mentors: An interpretive descriptive study. https://doi.org/10.1111/jocn.15360 **Evidence Level: III** An interpretive descriptive qualitative study **Quality: Good** excellent literature review, clear recommendations, clear implications for practice	**Design:** Interpretive descriptive qualitative study **Sample:** 13 new nursing graduates and 12 mentors. 31 semi-structured interviews. **Setting:** A multicampus academic health science center in Ontario, Canada **Framework:** Duchscher's new graduate transition model **Measures:** In-person and telephone interviews. Interview guide questions developed by the research team **Analysis Plan:** Qualitative analysis of interviews was conducted using Braun and Clarke's approach **Procedures:** Interviews were conducted from July-November 2018. Results reflect a total of 13 new graduate experiences and 50 mentor experiences.	**Conclusion Validity:** reasonable. Barriers and limitations are listed. **Internal Validity:** Comprehensive interview questionnaire **External Validity:** Small sample size, very specific site location in Ontario, results may not be generalizable **Construct Validity:** Interviews measured what was intended to be measured **Precision:** no descriptive statistics discussed	Themes related to the mentor/mentee pairing process: *Lack of awareness of the pairing process, making an initial connection, organizational facilitators, and preferred pairing processes.* Three main discussion points emerged from the interviews: *A lack of awareness and involvement in the pairing process by the participants, lack of preparation for initial contact, and ideal future pairing processes.*	Both mentor and mentee need to be included in the pairing process. Facilitators need to be transparent and available to all participants. Mentor and mentee may do well to be matched from a personality standpoint. Mentor and mentees need to know what to expect prior to their first contact.

PICOT: Among new graduate nurses participating in a nurse residency program, does a mentoring program compared to the current process without the mentoring program improve job satisfaction scores over a three-month period. Bowers, Teresa

Brief Reference, Type of study, Quality rating	Methods	Threats to Validity/ Reliability	Study Findings	Conclusions
Article 6: Lalonde, M., & Hall, L. M. (2016). The socialization of new graduate nurses during a preceptorship programme: strategies for recruitment and support. https://doi.org/10.1111/jocn.13563 **Evidence Level: III** Cross-sectional design with convenience sample **Quality: High** Adequate sample size, clear research questions, excellent literature review	**Design:** cross-sectional design with a convenience sample **Sample:** 45 new graduate nurses participating in the Ontario Ministry of Health New Graduate Nurse Initiative **Setting:** 5 hospitals located in Ontario, Canada **Framework:** Organizational Socialization (Van Maanen and Schein, 1979) **Measures:** Survey consisting of demographic questions, five scales, and two closed-answer questions. Scales consisted of *role ambiguity, role conflict, job satisfaction, intent to turnover, and core self-evaluations* **Analysis Plan:** Descriptive statistics and Pearson's correlation analyses were conducted to explore the relationships. **Procedures:** Survey completed within one month of completing formal preceptorship program.	**Conclusion Validity:**. Authors do admit positive results of study were not necessarily expected. **Internal Validity:** Hiring practices changes during the study period. Hiring did not occur as a large wave over the summer, rather a staggered hiring in several months- this likely affected the number of new graduates to sample from. **External Validity**: Findings may be generalizable to other settings that employ new graduate nurses (NGN) **Reliability:** Results could be replicated with sample. **Precision:** Cronbach's alphas were adequate for all scales used in this study.	The mean length of preceptorship was three months. 52% of the sample reported having one preceptor, 24% had two preceptors, and the remaining had four or more. The NGNs in this sample appeared to have a good understanding of their role as a new nurse (mean =5.75, SD 0.84). They also reported having low role conflict (mean=3.21, SD: 1.17)	For NGNs, being employed in their specialty unit of choice positively affects jo satisfaction. A preceptor must understand NGNs often have role ambiguity and lack a clear understanding of their role as a new nurse. Previous literature supports an NGN having two preceptors, as most of this sample reported, however, one quarter of this sample had a "team of preceptors". This could have a practice implication for a preceptor and mentor program for new grads.

PICOT: Among new graduate nurses participating in a nurse residency program, does a mentoring program compared to the current process without the mentoring program improve job satisfaction scores over a three-month period. Bowers, Teresa

Brief Reference, Type of study, Quality rating	Methods	Threats to Validity/ Reliability	Study Findings	Conclusions
Article 7: Lavoie-Tremblay, M., Sanzone, L., Aubé, T., Bigras, C., Cyr, G., & Primeau, G. (2020). A university/healthcare institution mentorship programme: Improving the transition to practice for students. https://doi.org/10.1111/jonm.12960 **Evidence Level: III** Mixed-methods qualitative study **Quality: Good** Draws definitive conclusions, excellent literature review, gives recommendations and implications for practice	**Design:** Mixed-methods qualitative **Sample:** 62 nursing students initially signed up for the program. Following four sessions, a convenience sample of 9 nursing students (mentees) were interviewed. Fifteen mentees and seven mentors completed the survey portion. **Setting:** Public university in Montreal, Canada. All mentors were working in a hospital setting in Montreal. **Framework:** none **Measures:** The survey completed by mentees and mentors consisted of a demographic questionnaire and eight open-ended questions. The interview contained ten open-ended questions **Analysis Plan:** Data was analyzed by the Miles and Huberman Method, qualitative data was condensed, displayed, elaborated, and verified in a continuous process. **Procedures:** Mentor and Mentee groups (8 students maximum /mentor) met four times over four months, with each meeting lasting 2 hrs.	**Internal Validity:** High level of attrition was observed, with 39 mentees attending the first session and only 12 attending the last. **External Validity:** This may not be generalizable due to the small sample size. **Construct Validity:** Did measure what they set out to measure. **Reliability:** may be repeatable among the same sample. **Precision:** no descriptive statistics	Four themes were developed from the interviews and open-ended questions: *Feeling unsure and looking for answers from clinicians, wanted to learn about practical, real-life situations,* they *became more prepared and capable of addressing practical issues*, and they felt participating in the program *normalized the entry to practice.*	A group mentorship program successfully addressed nursing students' fears and uncertainties about what occurs after graduation. It can help to normalize their experiences and allow them to be more confident for transition to practice. "Discussing the topics of how to cope with shift work, how to advocate for themselves, and how to communicate with colleagues" during the pre-licensure and early career phase for a new RN can help them feel supported and increase their confidence.

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Brief Reference, Type of study, Quality rating	Methods	Threats to Validity/ Reliability	Study Findings	Conclusions
Article 8: Mikkonen, K., Tomietto, M., Cicolini, G., Kaucic, B. M., Filej, B., Rikikiene, O., Juskauskiene, E., Vixcaya-Moreno, F., Perez-Canaveras, R., De Raeve, R., & Kaariainen, M. (2020). Development and testing of an evidence-based model of mentoring nursing students in clinical practice. https://doi.org/10.1016/j.nedt.2019.104272. **Evidence Level:** **III** A cross-sectional, coordinated international survey **Quality: High** Study aimed to develop and test an evidence-based model of mentoring nursing students in clinical practice. Research hypothesis confirmed, excellent literature review, large sample size	**Design:** International cross-sectional survey **Sample:** 1360 mentors (registered nurses) **Setting:** Primary and specialist healthcare organizations in five European nations (Finland, Italy, Lithuania, Slovenia, and Spain) **Framework:** Clinical Learning Environment (CLE)) (European Council, 2013) **Analysis Plan:** Exploratory Factor Analysis, then tested with Confirmatory Factory Analysis **Measures/ Procedures:** Data collected using a survey questionnaire, the Mentor's Competence Instrument (4-point Lkert scale) designed to assess 10 factors (mentoring practices in the workplace, mentor characteristics, mentor's motivation, goal-oriented mentoring, reflection during mentoring, student-centered evaluation, constructive feedback, supporting the student's learning process, identifying the student's need for mentoring, and mentoring practices between student and mentor)	**Internal Validity:** MCI was translated into native languages. Item coherence within each language was also validated. Study was collected over 3 years, mentor's education and competencies could have been affected over this time period. **External Validity**: Model may be generalizable to countries outside of the EU **Construct Validity:** Study aimed to develop and test an evidence-based model of mentoring nursing students in clinical practice. Research hypothesis confirmed **Precision:** Cronbach's alpha for the 7 factors measured ranged between 0.83 and 0.94, well within the ranges of good or excellent. The overall variance in EFA is 68%.	All six hypotheses were confirmed and all parameters in the model were significant ($p<0.01$). High levels of mentor's characteristics (empathy, flexibility, tolerance, patience) foster mentor's motivation (0.71) and this leads to better mentoring practices in the workplace (0.61)	CLE encompasses four attributes that influence student learning experiences: the physical space, the organizational culture, psychosocial interactions, and the teaching-learning process. Mentoring and CLE are major determinants in the degree of a student's anxiety and feelings of vulnerability. This model identifies focal competencies for designing mentors' education to improve clinical learning: reflection to provede constructive feedback, high levels of motivation, and high levels of goal "Mentorship is important for both healthcare organizations and educational systems to enhance students' clinical competencies, professional growth, and commitment to the nursing profession and organizational environments"

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Brief Reference, Type of study, Quality rating	Methods	Threats to Validity/ Reliability	Study Findings	Conclusions
Article 9: Williams, F., Scott, E. Tyndall, D., & Swanson, M. (2018). New nurse graduate residency mentoring: A retrospective cross-sectional research study nurse residency programs. No DOI **Evidence Level: III** Retrospective, Cross-sectional research study **Quality: Good** Clear objectives and purpose, excellent literature review, recommendations, and implications for practice given	**Design:** Retrospective, cross-sectional research study using secondary data analysis **Sample:** 3,484 new graduate nurses who participated in the Versant New Graduate Residency program. **Setting:** 102 acute care facilities throughout the US. **Framework:** none mentioned **Measures: (1)** Versant Evaluation of the RN Residency, (2) Versant Self-Competency Self Confidence Survey, (3) Turnover Intention survey with Likert scale **Analysis Plan:** one-way analysis of variance. SPSS used to analyze descriptive statistics **Procedures:** Participants were asked to complete Versant Evaluation of RN residency and the Versant Self Competency survey at the end of the nurse residency. The Turnover Intention Survey was administered within 2-weeks of completing the residency and again at the one-year anniversary of beginning the residency.	**Conclusion Validity:** Effect sizes calculated for all measures of association. No limitations mentioned **Internal Validity:** not a controlled study, so other variables could affect results. **External Validity:** Large sample size, many sites throughout the US, results generalizable **Construct Validity:** measures what was intended to be measured **Reliability:** Results may be reproducible **Precision:** Statistical significance evaluated using $p<0.05$.	There were significant but weak relationships between the type of mentoring and the perceived value of mentoring. Individuals receiving one-on-one mentoring rated the experience higher in helping the TTP (chi-square 15.68, $p<0.001$), professional development (chi-square 12.71, $p<0.001$), and stress management chi-square 15.58, $p<0.001$) The frequency of contact between mentor and mentees was higher for those receiving group mentoring than those in one-to-one mentoring relationships. 85% of new grads receiving group mentoring reported no obstacle meeting compared to 47% of those receiving one-to-one mentoring.	Increased contact frequency greatly benefited new grads receiving one-to-one mentoring in reducing stress helping the ttp, and guiding professional development. One-to-one mentoring may be more effective than group mentoring but may be cost-prohibitive.

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Article 10: Zhang, Y., Huang, X., Xu, S., Xu, C., Feng, X., & Jin, J. (2019). Can a one-on-one mentorship program reduce the turnover rate one new graduate nurses in China? A longitudinal study. https://doi.org/10.1016/j.nepr.2019.08.010 **Evidence Level:** **III** Longitudinal Study **Quality:** Good Excellent literature review, purpose and questions clearly stated, recommendations clear, limitations discussed by authors	**Design:** three-year longitudinal, non-randomized control study **Sample:** 448 first-year nurses (199 control (hired in 2013), 239 experimental (hired in 2014)) **Setting:** 3200-bed general tertiary hospital in Zhejiang, China. **Framework:** none used **Measures:** Employment data from human resources monitored periodically over three years and calculated in days of employment. Analysis Plan: Propensity-score-matching analysis to adjust for confounders, survival analysis Global chi-square test ($p<0.001$) Cox proportional hazards regression analysis **Procedure:** New nurses in both groups were given an intensive 3-week orientation prior to being assigned to unit. All control group (2013) nurses were assigned to one preceptor for 4-6 months. Role of the preceptor: bedside teaching, supervision or practice, competency assessment. Experimental group nurses selected one mentor, the relationship lasted one year. Roles of mentor guided by "5 functions of mentorship": teach, sponsor, encourage, counsel, and befriend. The roles of preceptor and mentor were clearly delineated.	**Internal Validity:** The two samples were not from the same time period- Control group hired in 2013, experimental group from 2014. "High turnover rate of nurses in 2013 could remind nurse managers to create a more supportive environment in 2014," thus affecting 2014 results **External Validity:** Results may not be generalizable as this was not an RCT. Also, the study was conducted in a single organization. Findings may not be applicable to other organizations. **Construct Validity:** Did measure what they stated **Reliability:** Results could be replicated on the same sample **Precision:** The 1-year turnover rate was statistically significant ($p<0.05$)	The 1-year turnover rate for new graduate nurses in the experimental group was significantly lower than that of the control group ($p<0.05$), while the 2- and 3- year rates were not significantly different between groups ($p>0.05$). On survival curves, the estimated probability that a new graduate nurse in the experimental group would survive (stay on the job) for three years was 0.84, greater than that of the control group. Turnover rates for the experimental group were 3.77%, 3.48%, and 8.11%, compared to 14.07%, 9.36%, and 14.19% for the control group at the end of the first three years, respectively.	"Compared with preceptors, mentors not only provide guidance on professional knowledge and skills but also provide support and encouragement in professional and personal realms" Even with the study's limitations, findings indicate a one-on-one mentorship program is more beneficial for the retention of new graduate nurses during the first year of employment. Hospitals need to develop standards for mentor selection, training, and evaluation to ensure the consistency of mentors.

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Article 11: Cook, M., Price, A., & Gehrich, P. (2021) Enhancing support for new graduate nurses: Implementation of a peer advisor program. https://doi.org/10.1097/NND.0000000000000677 **Evidence Level:** **V** Quality Improvement/ Organization Experience **Quality:** Excellent literature review, thorough description of program and implications for practice	**Design:** Quality Improvement **Sample: n**urse residency graduates **Setting:** Johns Hopkins All Children's Hospital **Framework:** none mentioned **Measures:** Casey-Fink Graduate Nurse Experience Survey **Analysis Plan:** none mentioned, survey results reviewed by staff **Procedures:** Peer advisors attend three classes with their assigned cohort of new graduates. Each cohort completed the Casey-Fink Graduate Nurse Experience Survey one month into the program	**Internal Validity:** Not much description of the tools. **External Validity: the** program is generalizable **Reliability:** The design of the program can be adapted to another facility or unit **Precision:** low, no descriptive statistics	69% of residents chose "peer support" as the most satisfying aspect of the peer advisor program. An internally developed 6-month NRP evaluation tool revealed that 82% of participants agreed that the program provided support and encouragement.	The JHACH Peer Advisor Program has successfully provided peer support to new grad nurses following their residency program. It provides an additional layer of support. This program also engages the new nurse in program development and socializes the new grad to the new workplace environment. The JHACH Peer Advisor program stresses a "Clarity of Expectations" among mentors and mentees. Schedules are communicated in advance. Peer advisors are encouraged to commit to 2 out of 3 planned sessions. This allows peer mentors to opt-out if their schedule does not permit

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Article 12: Edward, K., Ousey, K., Playle, J., & Giandinoto, J. (2017). Are new nurses work-ready- The impact of preceptorship. An integrative review. https://doi.org/10.1016/j.profnurs.2017.03.003 **Evidence Level: V** Integrative review **Quality: Good** Clear aims and objectives, explicit inclusion and exclusion criteria, Gives recommendations and implications for practice	**Design:** Integrative Review (Including qualitative, quantitative, and mixed-methods studies) Primary outcomes of interest: work-readiness and how it related to newly graduated nurses An electronic literature search of Medline, CINAHL, Academic Search Complete, and Cochrane Library. **Sample:** 15 studies were included for review. Total sample size n=2853. One hundred two preregistration nurses, 185 newly registered nurses, 1562 experienced nurses, and 1004 nursing staff not specifically categorized. **Setting:** acute care facilities in Australia, UK, US, Canada, and Finland **Framework:** not addressed **Measures:** focus groups, interviews, content analysis, qualitative surveys, quantitative surveys.	**Conclusion Validity:** reasonable, lists imitations **Internal Validity:** Terms for preceptorship, readiness to work, mentorship, may vary globally. By limiting the search to peer-reviewed articles in English, meaningful data from non-Western countries were excluded. **External Validity:** Large sample size, multiple international and domestic sites, common themes consistent with the literature **Construct Validity:** Measures what the authors set out to measure **Reliability:** results are generalizable and reproducible **Precision:** ok- multiple descriptive studies reviewed	Key findings that influence work readiness: positive relationships with a well-prepared preceptor and adequate clinical exposure and clinical competence. Themes found in the 15 studies: *positive relationships between the preceptors and the new nurse, preparing and supporting the preceptor for the role*, and *using a model to guide students' preceptors.*	Preparing RN preceptors/mentors for their role sufficiently can improve clinical competence and confidence for the new nurse. Positive relationships with mentors, preceptors, and the clinical staff can "facilitate the new nurse's immersion in the learning experience and subsequently promote socialization into the profession."

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Brief Reference, Type of study, Quality rating	Methods	Threats to Validity/ Reliability	Study Findings	Conclusions
Article 13: Glassman, E. (2020). Developing a mentor program to improve support and retention. (DOI) **Evidence Level: V** Organization Experience/ Quality Improvement **Quality: Good** Clear objectives, good literature review, recommendations for practice	**Design:** Quality Improvement **Sample:** sample size not stated. The sample consisted of new nurses interns **Setting:** Medical Intensive Care Unit at University of Vermont Medical Center **Framework:** Benner's novice to expert **Measures:** Mentee survey **Analysis Plan:** Survey results analyzed by the facilitator **Procedures:** The MICU mentor program does not have a defined end date allowing for a natural, long-term relationship.	**Internal Validity:** poor description of tools used for measurement **External Validity:** likely small and niche sample but could be expanded to a different unit or facility **Construct Validity:** Measured what was intended to be measured. **Reliability:** likely reproducible with the same sample **Precision:** no descriptive statistics	Nurse intern evaluation of the mentorship program: Positive =87.5%, Neutral 12.5%, Other=3.3% Since the introduction of the program, 70% of participating nurses have remained on the unit. 50% of new nurses recommended the mentor program provide 2-3 months of support after orientation, 33% recommended up to 6 months of support after orientation, 8recommonended one month following orientation.	Mentorship programs can support the unique emotional and professional health of new nurses. The program at the University of Vermont has helped retain nurses in the MICU. Based on feedback, the mentor program now lasts 2 to 3 months after orientation.

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Article 14: Johnson, J., Kim, K., & Punzalan, P. (2019). Mentoring for success: neurosurgery new hire RN mentorship program. (no DOI) **Evidence Level: V** Organizational Experience /Quality Improvement **Quality:** Good, draws definitive conclusions but low sample size, lacking statistical rigor—very little literature review.	**Design:** QI Study **Sample:** six mentor/mentee pairs **Setting:** New York Presbyterian-Columbia University Hospital 36 bed neurosurgical unit **Framework:** none described **Measures: (1)** Mentee confidence scale survey (2) Career satisfaction survey. The Likert scale used 1 to 5, 1-low, 5-high) **Analysis Plan:** Results of survey answers (Likert scale) were reviewed. **Procedures:** New graduate is matched with a mentor. They meet once a month for 1 to 3 hours to discuss topics they have agreed upon. They also coordinate their schedules to increase the mentor's availability as a resource for the new graduate. Mentees completed a confidence scale survey during orientation, at three months, at the end of the 6-month program. Mentees are asked to complete a career satisfaction survey after six months.	**Conclusion Validity:** poor, no limitations mentioned, small sample size. **Internal Validity:** No attrition **External Validity:** Fair, small sample size and very specific unit used for the site may not be generalizable **Construct Validity:** Answered research question stated. **Reliability:** Results may be reproducible with the same small sample size **Precision:** no descriptive statistics utilized.	Survey results at the beginning, mid-point, and end of the program showed a steady increase in new hire RN's confidence. Survey results showed higher new nurse confidence in being part of a team and welling well with others. Results showed that special attention is needed to increase confidence for dealing with a rapid response event. Mentee confidence rose from a mean score of 48/85 on the initial survey to 72.5/85 on the final survey. Annual turnover rate decreased from 17.8 % in 2016 to 14.5% in 2017 and 3.5% in 2018.	Formal mentoring improved clinical confidence and satisfaction for novice nurses. Mentors feel a sense of accomplishment and solidarity with their colleagues. This promotes a positive work environment where nurses feel supported, valued, and heard.

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Article 15: Kramer, M., Brewer, B., & Maguire, P. (2011). Impact of healthy work environments on new graduate nurses' environmental reality shock. https://doi.org/10.1177/0193945911403939. **Evidence Level: V** Descriptive Study **Quality: High** Clear research questions, excellent literature review, large sample size *This article was published in 2011 and is outside of the five-year timeframe for evidence. It was chosen for inclusion as it was written by Marlene Kramer, the expert on nurse burnout, especially in the new graduate population. The student is interested in the concept of "reality shock" among new graduate nurses*	**Design**: Quantitative, Longitudinal Study **Sample:** These hospitals on-boarded 468 new graduate nurses (NGN) on 191 clinical units. 80% of NGNs BSN prepared.60% of NGNs are employed in academic-teaching hospitals, 38% in community hospitals. **Setting**: 20 Magnet hospitals across the US were selected. Seventeen hospitals participated. **Framework:** Systems research organizing model (SROM) **Measures: (**1) EOMII: This measurement measures the process component of healthy work environments. APPE: Anticipated work environment. PPPE: Perceived work environment ERS 4: Environmental Reality Shock ERS 8: Arithmetic Difference in APPE and PPPE QC 4, Qc 8, Qc 12: Respondents' perceptions Nurse-Assessed Quality of Patient Care on Unit **Analysis Plan:** Multivariate ANOVA used to analyze APPE scores, Repeated measures ANOVA used to analyze all other variables. **Procedures:** EOMII was administered to all mentors. PPPE administered at 4, 8, 12 months post-hire for new graduates. Environmental Reality Shock survey administered at four months and eight months post-hire.	**Conclusion Validity:** While the EOMII had been administered to thousands of nurses in past studies, this was the first study in which the EOMII was administered to new graduate nurses **Internal Validity:** Variability within the VHWE group suggesting some other factor was operating within this group as their standard deviation increased but not to the same degree as the VHWE group. Multiple time points were addressed increasing internal Validity. **External Validity:** High external Validity as multiple sites throughout the US. **Construct Validity:** Did measure what they stated **Reliability:** Results reliable **Precision:** statistically significant result for HWE and reality shock.	For Healthy Work Environment: significant differences between environment reality shock and HWE ($p<0.0001$). There is also significant interaction effect. Environmental Reality Shock is highest at four months and drops significantly at eight months, occasionally increasing at 12 months.	New graduate nurses often leave school with very high expectations of their first nursing job; this can lead to "Reality Shock." The single most significant variable after the new graduate transition to practice is the healthy work environment. New graduate nurses also rate the quality of care on their unit higher if they perceive their work environment as supportive and healthy. A healthy work environment needs to be a top priority for nurse leaders, leading to satisfied, competent, and confident nurses. In addition, a healthy work environment supports education for their staff and productive relationships between disciplines. This leads to optimum patient care.

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Article 16: Verret, G. & Lin, V. (2016). Easing the transition: An innovative generational approach to peer mentoring for new graduate nurses. https://doi.org/10.1016/j.pedn.2016.08.003 **Evidence Level: Level V**, Organization Experience/ Quality Improvement **Quality:** Good The purpose is clearly stated, excellent literature review, consistent results in a single setting	**Design:** QI Study **Sample:** 19 nurses (7 new grad nurses, seven peer mentors, five veteran mentors) **Setting:** 32 bed pediatric surgical unit at Children's Hospital Los Angeles **Framework:** Generational Model **Measures:** (1) Monthly mentorship evaluation program questionnaire, (2) Final Evaluation questionnaire. The Likert scale was used with both tools. **Analysis Plan:** Scores from monthly and final evaluation forms reviewed based on the Likert scale. Averages were reported. **Procedures:** New graduate nurses were each assigned one peer mentor and one veteran nurse mentor—6 a month duration. Mentor and mentee completed monthly mentorship evaluation form and final evaluation form.	**Conclusion Validity:** reasonable, lists limitations and recommendations for future research. Small sample size **Internal Validity:** Several monthly evaluation forms from mentors and mentees were not completed. No attrition. **External Validity:** Conclusions are limited to the single site on which the study was piloted. **Construct Validity:** Addressed research question of the effect of generational mentoring **Reliability:** The sample size is small, but the program could be expanded to additional units at CHLA and other institutions **Precision:** descriptive stats were not addressed	In the monthly evaluation form, each participant is asked to rate "how beneficial the mentorship program is" on a 1 (low) to 5 (high). The average score increased every month starting from month 2. Month 2 had an overall rating of 4. Month 5 had an overall rating of 4.366. The final evaluation had an overall rating of 4.366 for the mentorship program, 4.772 for the mentoring relationship, and 4.634 for the program's overall benefits.	A peer mentor provides new knowledge of current policy and procedure, familiarity with technology, and recent experience transferring knowledge from school and their residency to independent practice. Mentor and Mentor interacted more often than the twice-monthly recommendation. The most frequent method of communication was text messaging. Most common topics of discussion: balancing work and personal life, coping with stress, reviewing difficulty shifts, and adjusting to the night shift. One year post-generational mentoring program, 100% of participants commented that having a peer and veteran mentor was beneficial in transitioning to independent nursing roles.

Appendix B: Confidence Scale For New Nurses

Completed by the Mentee

If this is your first position as a nurse, complete this tool as a self-examination of your confidence in performing the following activities. For each item, circle your degree of confidence according to the scale 1-5.

I am confident of…	Not at all confident	A little confident	Fairly confident	Confident	Very Confident
1.Working with the nurses on the unit.	1	2	3	4	5
2. Functioning independently in providing patient care.	1	2	3	4	5
3. Taking care of a regular assignment of patients.	1	2	3	4	5
4. Performing patient care activities (i.e. bathing, feeding, medication administration, wound care, etc.)	1	2	3	4	5
5. Discussing the patient's condition with the physician	1	2	3	4	5
6. Interpreting lab tests	1	2	3	4	5
7. Making clinical decisions about my patients' care.	1	2	3	4	5
8. Delegating appropriate patient care activities to unlicensed assistants.	1	2	3	4	5
9. My ability to refuse to follow a physician's order if I question its correctness for the patient.	1	2	3	4	5
10. Teaching patients about their diseases.	1	2	3	4	5
11. Teaching patients about their diagnostic procedures.	1	2	3	4	5
12. Teaching patients about their medications.	1	2	3	4	5
13. Assessing changes in the patient's condition.	1	2	3	4	5
14. Responding to a code on the unit	1	2	3	4	5
15. Initiating consults with a physician if your assessment indicates such a need.	1	2	3	4	5
16. Withholding a medication that is contraindicated for a patient despite pressure from nursing peers to carry out order.	1	2	3	4	5
17. Assuming complete responsibility for my own professional actions without expected to be protected by the physician or hospital in the case of malpractice,	1	2	3	4	5
18. Accurately documenting pertinent patient care information.	1	2	3	4	5
19. Reporting incidents of physician harassment or inappropriate nurse behaviors to the unit manager or the administrator.	1	2	3	4	5
20. Carrying out patient care procedures using your professional judgment to meet the individual patient's needs even when this means deviating from the hospital procedure manual.	1	2	3	4	5

21. Declining a temporary assignment to a specialty unit when you lack the education and experience to carry out the demands of the assignment.	1	2	3	4	5
22. Initiating referrals to social services and dietary at the patient's request	1	2	3	4	5
23. Writing nursing orders to increase the frequency of vital signs of a patient whose condition is deteriorating even in the absence of a medical order to do so.	1	2	3	4	5
24. Initiating clinical research to investigate a recurrent clinical nursing problem.	1	2	3	4	5
25. Offering clinical assistance to other nurses when needed.	1	2	3	4	5
26. Developing effective communication channels in my workplace for nurses' input regarding the policies that affect patient care	1	2	3	4	5

Appendix C: Intent to Stay in the Job Survey

Completed by the Mentee

Each of the statements below is something that a person might say about their job. Indicate your own personal feeling about your job by circling your degree of agreement with each statement according to the scale of 1-7.

Statement	Disagree Strongly	Disagree	Disagree Slightly	Neutral	Agree Slightly	Agree	Agree Strongly
1. It's hard for me to care very much about whether or not the work gets done right.	1	2	3	4	5	6	7
2. My opinion of myself goes up when I do this job well.	1	2	3	4	5	6	7
3. Generally speaking, I am very satisfied with this job.	1	2	3	4	5	6	7
4. Most of the things I have to do on this job seem useless or trivial.	1	2	3	4	5	6	7
5. I usually know whether or not my work is satisfactory on this job.	1	2	3	4	5	6	7
6. I feel a great sense of personal satisfaction when I do this job well.	1	2	3	4	5	6	7
7. The work I do on this job is very meaningful to me.	1	2	3	4	5	6	7
8. I feel a very high degree of personal responsibility for the work I do on this job.	1	2	3	4	5	6	7
9. I frequently think about leaving this job.	1	2	3	4	5	6	7
10. I feel bad and unhappy when I discover that I performed poorly on this job.	1	2	3	4	5	6	7
11. I often have trouble figuring out whether I'm doing well or poorly on this job.	1	2	3	4	5	6	7
12. I feel I should personally take credit or blame for the results of me work on this job.	1	2	3	4	5	6	7
13. I am generally satisfied with the kind of work I do on this job.	1	2	3	4	5	6	7
14. My own feelings generally are not affected much one way of the other by how well I do on this job.	1	2	3	4	5	6	7
15. Whether this job gets done right is clearly my responsibility	1	2	3	4	5	6	7

Appendix D: Job Satisfaction Scale

Completed by the Mentee

The following 26 items indicate dimensions of satisfaction with your job. For each item, circle your degree of satisfaction with your work experience according to the scale of 1-5.

Item	Degree of Satisfaction		
1. Importance of work	Insignificant	1 2 3 4 5	Significant
2. Responsibility	Little	1 2 3 4 5	Much
3. Opportunity to use skills and abilities	Low	1 2 3 4 5	High
4. Ability to be creative	Low	1 2 3 4 5	High
5. Decision-making power	Low	1 2 3 4 5	High
6. Autonomy	Low	1 2 3 4 5	High
7. Variety of work	Monotonous	1 2 3 4 5	Varied
8. Interest level	Boring	1 2 3 4 5	Interesting
9. Complexity	Simple	1 2 3 4 5	Complex
10. Workload	Light	1 2 3 4 5	Heavy
11. Staffing	Inadequate	1 2 3 4 5	Good
12. Working Conditions	Poor	1 2 3 4 5	Good
13. Tension/pressure	Low	1 2 3 4 5	High
14. On-job stress	Relaxed	1 2 3 4 5	Great
15. Recognition of work done	Nonexistent	1 2 3 4 5	Given
16. Opportunity for professional development	Low	1 2 3 4 5	High
17. Opportunity for advancement	Poor	1 2 3 4 5	Good
18. Relationship with colleagues	Competitive	1 2 3 4 5	Helpful
19. Relationship with immediate supervisor	Non-supportive	1 2 3 4 5	Supportive
20. Relationship with unit manager	Autocratic	1 2 3 4 5	Fair Treatment
21. Relationship with VP/Director of Nursing	Autocratic	1 2 3 4 5	Fair Treatment
22. Satisfaction with patient care given	Low	1 2 3 4 5	High
23. Enjoyment of work	Low	1 2 3 4 5	High
24. Status	Not Respected	1 2 3 4 5	Respected
25. Morale	Poor	1 2 3 4 5	Good
26. Motivation to work	Low	1 2 3 4 5	High