

2020

New Graduate Residency Programs

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Walden University

College of Health Sciences

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Shareen Taylor

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Walden University

2020

Abstract

New Graduate Nurse Residency Programs

by

Shareen E. Taylor

MS, University of Phoenix, 2006

BS, Woodbury University, 1992

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

August 2020

Abstract

Nurses are the largest group of healthcare providers in most acute care hospitals, and the demand for registered nurses is expected to grow by 15% by 2026. The new graduate registered nurse (NGRN) is the supply that will fill the shortage; however, NGRNs are reportedly lacking in the ability to connect the lessons learned in the classroom with real patient care, unprepared for necessary skills, emotionally stressed, and have a high first-year turnover rate. Strategies such as nurse residency programs are needed to support NGRNs as these new nurses' transition from academics to clinical practice. The purpose of this project, guided by Duchscher's stages of transition theory and the transition shock model, was to conduct a systematic review of the literature to identify the most current, evidence-based studies that help to answer the question of whether nurse residency programs improve new graduate nurse transition to practice and if they improve retention and satisfaction. A systematic review of 36 studies published between 2010 and 2020 was conducted. The studies were examined using the Joanna Briggs Institute checklist and graded with the hierarchy of evidence pyramid by Glover. The findings revealed the following 3 major themes that aligned with the research question: satisfaction with the program, retention was improved, and NGRN transition to practice. Graduate residency programs were largely reported to be beneficial in helping NGRNs transition from the role of student to professional nursing practice. NGRN residency programs also improved nurse retention and promoted satisfaction. As a result, this project will improve nurse retention, satisfaction, and the quality of patient care resulting in positive social change.

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Dedication

I would like to dedicate this project to the future new graduate nurses that their success is imperative to the livelihood of our nursing profession. I, as a nurse leader, will continue to strive to build a pathway for them to grow in our profession and make positive change happen.

Acknowledgments

I would like to acknowledge and thank my family for their support through this journey. Most importantly, I would like to thank Dr. Long for her support and ability to see things in me that I could not during difficult times. Her encouragement and efforts have moved me to succeed in this process. For that, I am forever grateful for her kind words and help to complete this project.

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Section 1: Nature of the Project

Introduction

Nurses are the largest group of healthcare providers in most acute care hospitals. In 2015, 2.7 million RNs topped the list for the most significant number of providers in the industry (U.S. Department of Labor, 2015). The Bureau of Labor and Statistics reported that RNs' employment is expected to grow by 15% by 2026 (U.S. Department of Labor, 2019). Yet, healthcare settings face a shortage as baby boomers begin to retire and the demand for care rises because the aging population is living longer and living with often multiple chronic health conditions (American Association of Colleges of Nursing, 2019). It is estimated that more than 1 million RNs will retire in the next 10 to 15 years, and the new graduate registered nurse (NGRN) is the supply that will fill the shortage (Ackerson & Stiles, 2018). However, the problem with new graduate nurses is they are not prepared for the professional role; nurse executives estimate only 10% of NGRNs are ready to practice in today's complex healthcare delivery hospital systems (Van Camp & Chappy, 2017). In addition, new NGRNs lack confidence, knowledge, and performance expectations as the professional practicing nurse as well as have been shown to leave jobs in a short amount of time due to dissatisfaction with their work (AL-Dossary, Kitsantas, & Maddox, 2014). The development of nurse residency programs for newly licensed nurses has been identified in previous literature as a solution to address the NGRNs' transition (Goode, Glassman, Ponte, Krugman, & Peterman, 2018). Residency programs have been shown to reduce turnover as well as improve satisfaction and the delivery of quality of care (AL-Dossary et al., 2014). As a result, nurse residency programs may

promote positive social change. Section 1 of this project includes the problem statement, the purpose, the nature of the doctoral project, the significance, and a summary.

Problem Statement

A local hospital has had an ongoing problem of nurse turnover and retention. According to the hospital, in 2017, the first-year nurse turnover was 32.35%, and in 2018, 23.53%. The shortage of experienced nurses is also evident by the number of positions open on an ongoing basis. The relevance of this problem impacts care delivery, the morale of current nurses with staffing, and the costs associated with staffing due to the continuing turnover. The region where the local hospitals are based is also faced with RN programs that will only be producing a small number of new graduates (i.e., 213) for 2020–2021 (Spetz, 2018).

Hospitals have many unfilled positions for RNs regularly. A survey of the industry indicated that 50% of hospitals have between 10 to 74 nurse job openings to fill (Thew, 2019). The need to hire and retain nurses is crucial and necessary for any organization to provide safe, quality care. The cost of turnover for one new nurse can be between \$49,000 to \$92,000 (Trepanier, Early, Ulrich, & Cherry, 2012). Welding (2011) described the known difficulties related to the transition of NGRNs as a lack of ability to connect the classroom with real patients, unpreparedness for necessary skills, emotional stress, and working night shifts, all of which cause a high first-year turnover rate. The successful onboarding and transitioning of NGRNs will address some of the current open positions and bring fresh eyes and energy to local hospitals. The findings of this doctoral

project are significant and could help address the shortage of nurses and improve hospitals' ability to provide quality and safe patient care to the communities they serve.

Systematic reviews can synthesize unbiased evidence for clinical practice, and the research shows they provide the most reliable evidence to guide practice (Clarke, 2011). The local hospitals have initiated residency programs but have no comprehensive compilation of evidence to show what the curriculum is based on and how effective the programs are. Therefore, in this project, I examined the literature systematically to identify published evidence of programs that have been implemented for NGRN preparation to practice and how effective those programs are.

Purpose

The purpose of this project was to conduct a systematic review of the literature to identify the most current, evidence-based studies that help to determine the effect nurse residency programs have in improving new graduate nurse transition to practice and in improving retention. According to local hospitals, the current state of their onboarding programs for new graduate nurses revealed two with no formal program, and one with a program that is not guided by an evidenced-based curriculum. In this project, I addressed the gap in practice by providing the most recent evidence from the literature to the local health systems, so improvements in the onboarding of new graduate nurses may be improved. The practice-focused question for this doctoral project was: Do new graduate nurse residency programs improve retention rates, satisfaction, and the transition of NGRNs?

Nature of the Doctoral Project

This DNP project was a systematic review of the literature to examine the effectiveness of new graduate nurse residency programs in improving nurse retention, satisfaction, and transition to practice. I conducted a literature search of the CINAHL, Medline, EBSCOhost, and OVID Journals databases. I anticipated that the findings could be compiled into a comprehensive list of published evidence demonstrating the effect of NGRN residency programs in increasing the retention, satisfaction, and transition of newly licensed nurses. The compilation of evidence related to new graduate residency programs (NGRPs) will be shared with local organizations. The format and process of the systematic review followed the Walden University Manual for Systematic Review.

Significance

The stakeholders in this project were the NGRNs, clinical educators, preceptors, nurses' coworkers, physicians, nursing department leaders, executive leadership team, and the patients and families whose care is provided by nurses. Each group of stakeholders has an impact on the outcomes of each NGRN experience. One of the contributions this project makes to the field of nursing is building the foundation for health systems to provide evidenced-based residency programs for new graduate nurses to develop strong professionalism and nursing practice within newly licensed RNs in the hospital setting. Statistics show that the nursing shortage places a demand on health systems for new graduate nurses who need to be ready to practice, will be satisfied in their work setting, and are likely to retain their positions where experienced nurses are lacking (Maresca, Eggenberger, Moffa, & Newman, 2015). The complexity of care

needed by nurses is only increasing, and residency programs can help with a successful transition and retention in the first year of practice (Pillai, Manister, Coppolo, Ducey, & McManus-Penzero, 2018). If the transition of newly licensed nurses can be successful and they can begin their career well versed and prepared for the role of the professional nurse in today's healthcare hospital systems, social change and patient outcomes will be positively impacted.

Systematic reviews offer a resource for stakeholders to access a complete list of evidence (Grove, Burns, & Gray, 2013). In a systematic review, healthcare professionals are given recommendations to use the best evidence available for practice. A systematic review is defined as “a specific research question, identifies, selects, evaluates, synthesizes the relevant primary research evidence found and answers the question” (Davis, 2016, p. 61). There are specific steps to the process that guide the researcher. The Walden University (2019) Manual for Systematic Review listed the key strategy elements as having a defined practice question; having a plan to conduct your research with key terms; performing a search of the literature using peer-reviewed, primary sources; evaluating the results from the search; identifying the level of evidence; organizing the findings in a table; ensuring the project question is answered; and formulating recommendations. This project will help stakeholders with retention, improving the transition to practice, and supporting the new graduate nurse to be successful in today's fast-paced healthcare environment.

Summary

In this section, I provided a brief introduction to the problem faced by national and local hospitals as baby boomers retire and new nurses enter the workforce unprepared. The need for newly licensed nurses to be ready as professional nurses as they enter the workforce is critical to the healthcare systems and patient care. The purpose of this DNP project was to conduct a systematic review of the literature on nurse residency programs. In Section 2, I will introduce the background and concepts that informed this DNP project, the methodology used, the relevance of the project to nursing practice, and my role as the DNP student.

Section 2: Background and Content

Introduction

New graduate nurses are needed now more than ever to be ready to effectively fill the professional nurse job vacancies at the local community hospitals in this project. NGRNs are not always prepared for the professional role, with estimates of only 10% of NGRNs are ready to practice in today's complex healthcare delivery hospital systems (Van Camp & Chappy, 2017). NGRNs often lack confidence, knowledge, performance expectations as the professional practicing nurse, and maybe dissatisfied with their work (AL-Dossary et al., 2014). The development of nurse residency programs for newly licensed nurses has been identified in previous literature as a solution to address the NGRNs' transition to practice (Goode et al., 2018). The local hospitals do not all have residency programs for new graduate nurses, and of the ones that do, they do not have any evidence of success or effectiveness. Therefore, the practice-focused question for this doctoral project was: Do new graduate nurse residency programs improve retention rates, satisfaction, and the transition of NGRNs? The purpose of this DNP project was to conduct a systematic review of the literature to examine the effectiveness of new graduate nurse residency programs and to share the findings with local community hospital stakeholders.

In this section, I provide a detailed description of the theory used for the project, the relevance to nursing practice, the local background, and my role as the DNP student.

Concepts, Models, and Theories

I selected Duchscher's stages of transition theory and the transition shock model as the theoretical frameworks for this project. Permission was granted by Dr. Judy Duchsher for the use of the theory for this project. When NGRN nurses enter the workforce, they find that they do not have the clinical expertise or confidence to navigate the highly complex environment of sick patients and nursing workloads (Duchscher, 2008). Once nurses enter the work environment, they present with limited situational awareness and critical thinking for patient care (Gillespie & Paterson, 2009).

Duchscher's (2018) stages of transition theory progresses through three phases: doing, being, and knowing (see Figure 1). The transitional shock model overarches the stages of transition, and the model illuminate NGRN roles, responsibilities, relationships, and knowledge (see Figure 2; Duchscher & Windley, 2018). The stages of transition is a 12-month process that Duchscher described as "becoming" (Hansen, 2018).

The *doing* stage is the initial 3- to 4-months postorientation; it is intense and creates anxiety and stress (Hansen, 2018). The NGRN is overwhelmed with learning the environment and performing the tasks and responsibilities of their new role. The NGRNs' "entry-level skill and knowledge are constantly challenged by their wavering confidence" (Hansen, 2018, p.69). The second stage is called *being*. This is the next 4 to 5 months, and the NGRN is in a constant state of advancement in their thinking (Hansen, 2018). They are becoming increasingly comfortable in their new role and responsibilities but are faced with inconsistency and inadequacies of the healthcare system (Duchscher &

Windley, 2018). The third stage is *knowing*, and in this stage, the NGRN tries to distinguish themselves as practitioners (Hansen, 2018). This final stage can cause a temporary destabilization in identity formation and the desire for work-life balance that started toward the end of the second stage may now inspire a dissatisfaction with shift work, a critique of the conditions of the work environment, and impatience with perceived powerlessness to effect change within their practice environment. (Duchscher & Windley, 2018, p. 231).

Duchscher’s stages of transition theory and the transition shock model can assist the stakeholders in understanding the transition to practice for NGRN.

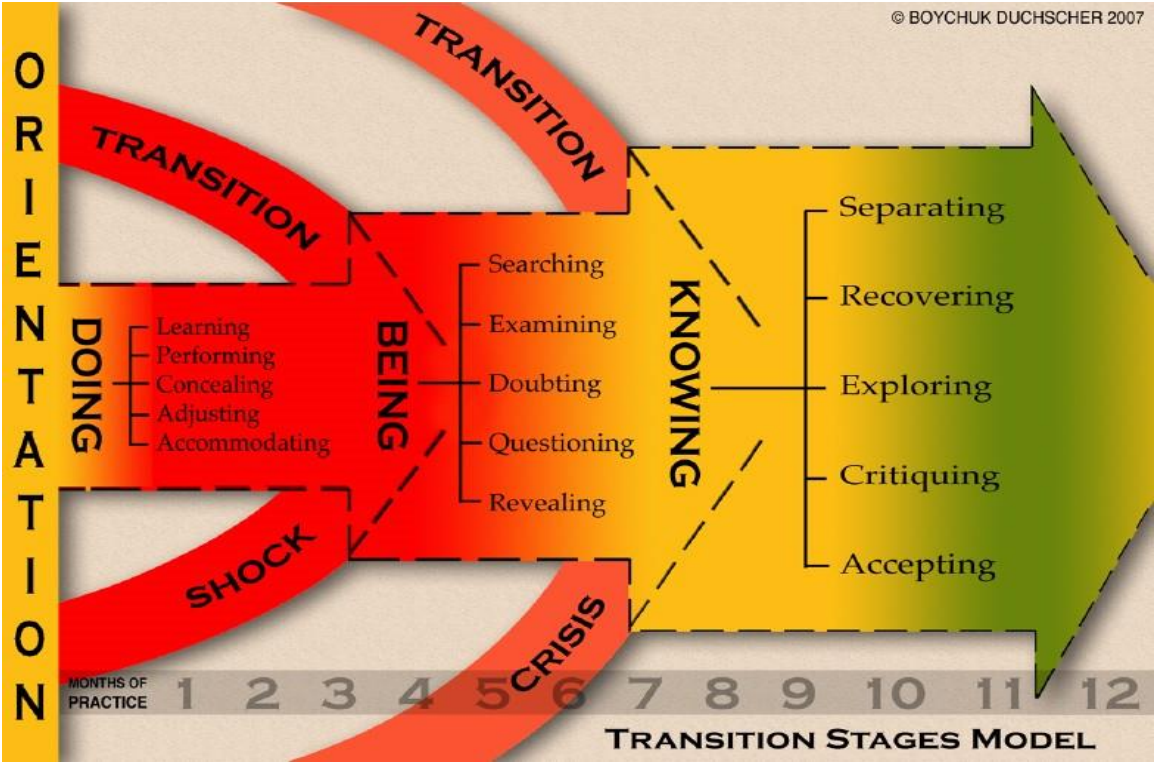


Figure 1. Transition Stages Model From “Hospital Size” [Chart], by T. Gao & B. Gurd, 2019, *BMC Health Services Research*, 19, p. 6. (<https://doi.org/10.1186/s12913-019-3907-6>). Reprinted with permission.

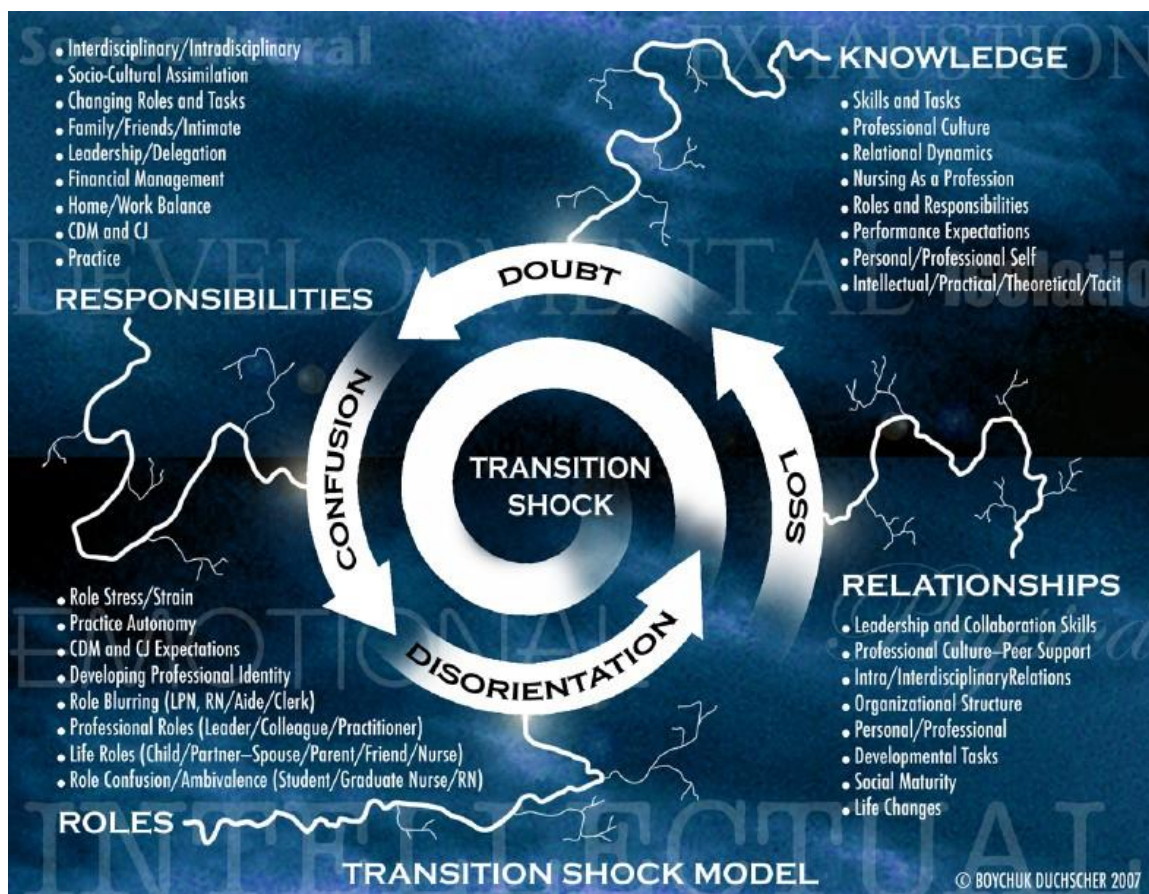


Figure 2. Transition shock model. From “Transition Shock: The Initial Stage of Role Adaptation for Newly Graduated Registered Nurses,” by J. Boychuk Duchscher, 2009, *Journal of Advanced Nursing*, 65, pp. 1103-1113. Copyright 2007 by J. Boychuk Duchscher. Reprinted with permission .

Relevance to Nursing Practice

The need for effective and successful transition programs has been documented in the literature for 80 years (Spector et al., 2015). Hansen (2013) stated that “what seemingly started as grassroots, homegrown initiatives is something much larger, with endorsements, recommendations, and even mandates coming from academia, industry, and other high-level advisory agencies that are heavily invested in nursing” (p. 96). In 2010, the Institute of Medicine recommended that residency programs for nurses were

vital to advancing health (Hansen, 2013). The nursing shortage and aging population are other aspects of the broader problem, and the retention of nurses is critical to maintaining the workforce (Olson-Sitki, Wendler, & Forbes, 2012). New graduate nurse residency programs have been shown to increase job satisfaction, retention, confidence, and improvement in clinical skills application (Olson-Sitki et al., 2012). The successful transition of NGRNs can impact the quality and safety of care delivery. While the literature provides evidence of the benefits, I identified no direct compilation of literature offering a summary specific to the effects of NGRPs on new graduate retention, satisfaction, and successful transitions to practice. In this systematic review, I provide a comprehensive list of studies that can support the value of a residency program in improving retention, satisfaction, and transition to practice.

Local Background and Content

With nurses as the largest provider of direct bedside care, the retention of nurses in the workforce is necessary (Africa, 2017). Two local hospitals have an opportunity to develop a nurse residency program with evidence-based content to help with the nursing shortage and vacancy. One of the hospitals have no residency programs for new graduates, while one hospital has a program that is homegrown without an evidence-based curriculum, and the hospital is not sure if the program should continue. To help the sites determine the benefit of residency programs and to maintain or expand their use, I conducted this systematic review of the literature to offer recent evidence to support the development or improvement of the program based on published evidence.

Role of the DNP Student

My role as a DNP student in this project was to research the literature, collect data, evaluate, and synthesize the evidence of new graduate nurse residency programs, and make recommendations to the local community hospitals. I am a practicing nurse leader and involved with new nurse development and orientation. I want the best possible outcomes for our patients and a successful transition for the NGRNs. My motivation for this systematic review project was to grow as a professional nurse, apply the evidence-based practice, and continue to develop my passion for making a difference for those I care for as well as support other nurses to make a difference on the frontline for the patients and families they work with. I want to improve the quality and safety of the care and services provided to our community. This project touches on DNP Essentials I, II, and III.

Summary

New graduated residency programs are relevant to the nursing profession and fostering the growth and success of nurses to keep the profession strong. Residency programs need to be in place to transition the nurse from student to professional nurse. In this project, I used the stages of transition theory and the transitional shock model to give stakeholders insight into the transition process and experiences of NGRNs. The local background demonstrates the need for a new graduate nurse residency program to help with the retention of nurses and to support their onboarding process. In Section 3 of this project, I will discuss the collection and analysis of evidence.

Section 3: Collection and Analysis of Evidence

Introduction

The purpose of this systematic review project was to identify the effect nurse residency programs have on improving new graduate nurses' transition to practice and in improving retention. The current state of the onboarding program of local hospital programs for new graduate nurses revealed two with no formal program and one with a program that is not guided by an evidence-based curriculum. The local problem involved the low retention rate of nurses and the many vacancies for RNs that were being supported with the high cost of traveler nurses. There was a need to have evidence to support the benefit of implementing a nurse residency program; therefore, I conducted this project to provide the most current published evidence. In this section, I will review the practice-focused question, present the sources of evidence, discuss the analysis and synthesis of the data, and conclude with a summary.

Practiced-Focused Question

The purpose of this project was to identify the effect that nurse residency programs have on improving new graduate nurses' transition to practice and in improving retention by conducting a systematic review of the literature to share with local hospital leaders. The practice-focused question for this doctoral project was: Do new graduate nurse residency programs improve the retention rates, satisfaction, and transition of NGRNs?

Sources of Evidence

I conducted a systematic review of the literature using the databases of CINAHL, Medline, EBSCOhost, and Ovid Journals. The following search terms were used: *new graduate registered nurse residency programs, transition to practice, retention, and satisfaction*. I met with educators from the local community hospitals to gather their current practices and offerings for NGRNs. The evidence suggests that retention can be improved through a residency program for NGRNs, but a comprehensive list of current published evidence is needed (Pillai et al., 2018). The Institute of Medicine's 2010 Future of Nursing report stated that transition to practice programs impact retention and improve outcomes for patients (Pillai et al., 2018). Residency programs are designed to prepare new graduate nurses to transition from being a student to a professional nurse and support their success and increase their retention (Welding, 2011).

Published Outcomes and Research

I performed a general search of the databases listed in the preceding section with no date restriction to generate a basis for subject content in relation to NGRPs. I then formulated a search for studies published between 2010 to 2020 for the most recent studies in the English language only.

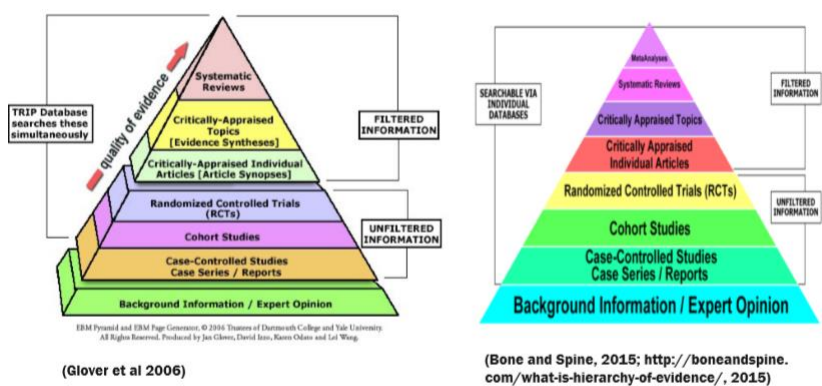
Analysis and Synthesis

I evaluated the literature using the Joanne Briggs Institute (JBI) approach. The JBI (2017) checklist comprises the following 11 questions for the appraisal of the research:

1. Was the study question clearly stated?

2. Were the inclusion criteria appropriate?
3. Were the search strategies appropriate?
4. Were there adequate sources?
5. Were the appraisal criteria appropriate?
6. Did two or more reviewers conduct the critical appraisal?
7. Were methods instilled to reduce or minimize errors in data extraction?
8. Were there methods to combine studies appropriately?
9. Was the publication bias assessed?
10. Was the recommendation for policy or practice supported by the data?
11. Were the specific directives for new research appropriate? (p.66)

I also graded the evidence of articles using the hierarchy or pyramid of research designs by Glover (see Ingham-Broomfield, 2013). Figure 3 shows the nursing research pyramid that was utilized to grade the articles based on seven levels; it includes both quantitative and qualitative paradigms. I also used a literature review matrix (see Appendix) in which each of the final articles reviewed was entered along with their level of evidence.



Comparative Grid of the Seven Levels of Evidence

Level 7 Base	Ideas, Opinions, Editorials, Anecdotes.	Least reliable. Basically anecdotal. Unscientific reports and observations (Usher and Fitzgerald 2008)
Level 6	Case Series and Case Reports	Slightly more reliable but there is a potential for bias in recalling information and the quality may be affected if the information is collected retrospectively (Jirojwong and Pepper 2013).
Level 5	Cohort Studies	Becoming more reliable. Observational studies are good at answering questions about prognosis, diagnosis, frequency and aetiology but not questions regarding the effect of an intervention (Dei Mar et al 2013 p.24).
Level 4 Middle	Random Control Trials	Very Reliable/ Gold Standard. Random Controlled Trials are able to quantify the effects of intervention hence they are higher up the pyramid than Cohort studies (Koch et al 2008)
Level 3	Critically-Appraised Individual Articles (Article Synopses)	Increasing reliability of findings. A synopsis is the evidence of an individual article with an expert telling you its strengths (Wilczynski and McKibbin 2013 p.43). This is less reliable than Critically Appraised Topics as there is less evidence on single articles than in a synthesis of a topic using several papers.
Level 2	Critically Appraised Topics (Evidence Syntheses)	Very high reliability. Synthesising research publications entails the categorising of a series of related studies, analysing and interpreting their findings and then summarising those findings in to unified statements. The potential lack of standardisation can undermine the validity.
Level 1a/1b Apex	Systematic Reviews and Meta-analysis	The most reliable of all. Systematic reviews, and Meta-analyses, of primary research into human health care and health policy are recognised internationally as the highest standard in evidence-based care (Cochrane Community 2015; Jirojwong and Welch 2013 p.284).

Figure 3. Compartaive Grid of the Seven Levels in Evidence. Retrieved from https://www.researchgate.net/publication/301605361_A_nurses'_guide_to_the_hierarchy_of_research_designs_and_evidence/stats. (Ingam-Broomfield, 2016).Reprinted with permission.

I also listed the articles reviewed using a preferred reporting items for systematic reviews and meta-analyses (PRISMA) flow diagram (see Figure 4). The PRISMA flow diagram lays out the flow of information through the stages and steps of the systematic review. The diagram shows the number of articles identified, included, and excluded, and the reasons for exclusions (see Moher, Liberati, Tetzlaff, & Altman, 2009).

Evaluation of the articles reviewed occurred after I received Walden University Institutional Review Board approval. The review took place until no new information emerged, or saturation was reached.



PRISMA 2009 Flow Diagram

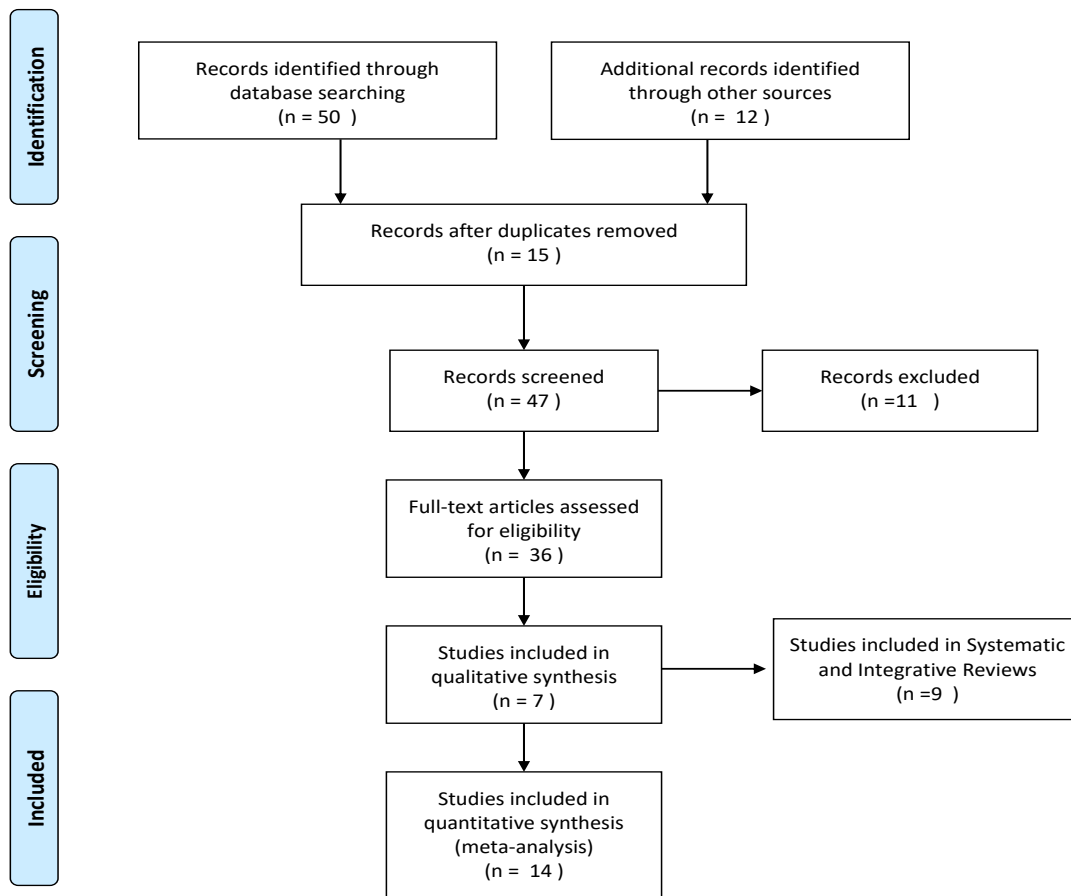


Figure 4. The PRISMA diagram. Adapted from “Preferred Reporting Items for Systematic Reviews and MetaAnalyses: The PRISMA Statement,” by D. Moher, A. Liberati, J. Tetzlaff, D. G. Altman, & The PRISMA Group, 2009, *PLoS Med*, 6, p. e1000097. (doi:10.1371/journal.pmed1000097) Reprinted with permission.

Summary

For this systematic review project, I evaluated the evidence from the literature to determine the value of NGRPs. The successful transition of NGRNs impacts patient safety, satisfaction, and staff retention (Henderson, Ossenberg, & Tyler, 2015). In Section 4, I will present the findings of this DNP project and my recommendations.

Section 4: Findings and Recommendations

Introduction

Nurses are the largest workforce in a hospital setting, and as nurses retire, new graduate nurses will need to replace them. However, the transition from student to professional nurse is not always successful and nurses are not always retained long term. Healthcare is a challenging and dynamic field, and according to the local hospitals, they have a difficult time retaining new graduate nurses after a year. The practice-focused question for this doctoral project was: Do new graduate nurse residency programs improve the retention rates, satisfaction, and transition of NGRNs? The purpose of this DNP project was to systematically review the literature to examine the effectiveness of new graduate nurse residency programs in improving new nurse retention, satisfaction, and transition to practice. The Walden University Institutional Review Board approved this study (Approval No. 03-18-20-0374136) before I began collecting data.

I gathered evidence for this project by collecting articles from EBSCOhost with CINAHL, Medline, and Ovid Journals databases, accessed through the Walden University Library, that met the predetermined inclusion criteria for the study. Each search was conducted with the publication date range of 2010 to 2020 and included only peer-reviewed journals. In Search 1, the Boolean phrase terms *new graduate nurses or new nurses or novice nurses, transition to practice, retention, satisfaction, and residency program* were used. This search generated 14 articles, of which four were excluded due to their focus on incivility, clinical preceptorship, academia, and the public health setting.

In the second search, I used the Boolean phrases *residency program for new graduate nurses, satisfaction, and retention*. It also generated 14 articles, with two being excluded for their focus on the public health setting and nurses' role in retention. In the third and final search, the terms of *new graduate nurse residency programs and retention* were used. It generated 22 articles with four being excluded. These articles were excluded for being specific to the emergency department only, not containing enough information, a focus on a prelicensure residency program, and being specific to a collaborative residency program for academia and hospital prior to nurse program completion. I selected a total of 50 articles after 15 duplications and 11 exclusions were removed. In addition, I included 12 articles from the same authors and others that came recommended during the searches. The final number of articles selected for the systematic review was 36.

Articles were appraised using the JBI checklist and graded for evidence with the hierarchy of evidence pyramid by Glover. After each study was reviewed, I categorized it by a focus on the transition to practice, retention, and/or satisfaction. If the article had additional themes, they were added in the next column of the matrix.

Findings and Implications

I identified three major themes that were consistent with the purpose of this systematic review. The three major themes were transition to practice, retention, and satisfaction. I also grouped other findings together as one additional theme.

Transition to Practice

Of the 36 articles selected for this systematic review, 100% of them demonstrated the impact of residency programs on the transition of a new graduate nurse. The transition from student to professional nurse is a unique period and based on the findings reported in the literature, residency programs improve the transition process. From their own systematic review, Van Camp and Chappy (2017) concluded that nurse residency programs have positive outcomes and the benefits allow for education, support, and guidance. They also found that nurse residency programs build confidence and competency skills that lead to a successful transition process. Walsh (2018) shared that although the transition is overwhelming, the benefits that the nurse residency programs provide are the four foundational skills of communication, critical thinking, organization, and stress management that foster a successful transition. Kramer et al. (2012) showed that NGRPs allow the opportunity to improve patient outcomes by aiding the successful transition of new nurse and stated that “it became evident that not only did nurse residency programs (NRP) positively impact the professional socialization of the NGRNs, they led to transformative changes in the organization and in the practice of other healthcare professionals” (p. 156). AL-Dossary, Kitsantas, and Maddox’s (2016) findings indicated higher clinical decision-making ($t = 23.25$) with a residency program that improved new graduates’ transition.

Retention

The literature review provided strong evidence of increased retention among new graduate nurses who participated in a residency program. Of the articles reviewed, 30

showed improved retention rates among new graduate nurses in a residency program. Van Camp and Chappy (2017) reported 10-year retention rates of 88% to 95% after a 1-year program. Kowalski and Cross (2010) found that after the first year of working, cohort retention rates were 78%, and after the second year, cohort rates were 96%. Rush, Adamack, Gordon, Lilly, and Janke (2013) concluded that formal transition programs improved retention. They found an average retention rate was 90.1% after participating in a program compared to the U.S. national new graduate retention rate averages of 55% to 61%. Dyess and Parker (2012) had 100% retention in a study with 109 subjects who participated in their program since its inception. Ackerson and Stiles (2018) showed a higher retention rate with 1-year programs compared to a shorter program. A residency program retention rate was 94% after 1 year at the University of Kansas Hospital (Setter, Walker, Connelly, & Peterman, 2011). Setter et al. (2011) looked at nurses' reasons for staying and found that culture played a crucial part in retention. Residency programs that have interactive content and support nurses' learning demonstrated a successful transition of new graduates (Henderson, Ossenberg, & Tyler, 2015). Strauss, Ovnat, Gonen, Lev-Ari, and Mizrahi (2016) also found a high correlation of successful transition with residency programs that had a structured program ($t = 4.41$), support ($t = 3.83$), adaptation ($t = 3.83$), and satisfaction ($t = 4.14$). In time-sequence, quantitative, comparative study, Pelletier, Vincent, Woods, Odell, and Stichler (2019) showed retention rates of 88.3% for the first year the residency study was implemented, and 97.1% in Year 2. In AL-Dossary et al.'s study (2014), the implementation of transition residency programs confirmed that turnover was reduced for first-year nurses.

Satisfaction

Satisfaction was demonstrated in 19 articles evaluated, and the authors of these studies concluded that residency programs improve satisfaction among new graduate nurses. In one study, the p value for satisfaction was $p = 0.031$ and rose over time for nurses in an established program compared to those not in a program (Spector et al., 2015). Lin, Kreider Viscardi, and McHugh (2014) conducted a systematic review of job satisfaction and nurses participating in a residency program and determined an overall positive relationship between job satisfaction and support during the residency program. Their study revealed extrinsic factors, like work environment, scheduling, communication, and support, influenced job satisfaction (Lin et al., 2014). Another study showed increased satisfaction among new graduate nurses that had a reflective portion in their residency program, which contributed to increased confidence and independence in their practice (Bolden, Cuevas, Raia, Meredith, & Prince, 2011). Satisfaction was found to be correlated to several facets of residency programs, with environment and communication shown to have an impact (Phillips, Kenny, & Esterman, 2017). Having an opportunity to debrief and share experiences was also a valued component of nursing residency programs versus other programs that did not offer this chance (Ackerson & Stiles, 2018). In a study of organizational commitment, Meyer Bratt and Felzer (2012) demonstrated that satisfaction could be increased with a healthy work environment that supports resiliency through a residency program that then, ultimately, will reduce turnover.

Other Findings

Some other key findings concerned the support necessary from preceptors, facilitators, and especially from nursing leadership. A healthy work environment is a need for NGRNs; the nurse leader needs to make sure the unit environment is amenable to a positive transition (Rush et al., 2013). The leadership style of the nurse manager also impacts the transition process and engagement of the new nurse, and transformational leadership was found to be a strong style for engagement and transition (Wolford, Hampton, Tharp-Barrie, & Goss, 2019).

Reflective practice in the NGRP showed improved satisfaction and the building of clinical confidence that correlated with satisfaction and retention (Bolden et al., 2011). Simulation-based learning in a residency program develops the professional roles for new graduate nurses (Rossler & Bennett, 2017). New graduate nurses provided positive feedback on teamwork building, communication skills, and preparedness for real-life scenarios (Rossler & Bennett, 2017).

Pittman, Bass, Herrera, and Thompson (2013) found that 36.9% of the sample hospitals had residency programs, and those also offered other training programs. The authors felt that it might be the nursing leadership and culture of the hospital that could be a valuable component for successful transition of new graduates (Pittman et al., 2013).

Leadership style impacts new graduates experiences. Tyndall, Jones, Scott, and Cook (2019) demonstrated a correlation between leader behavior and work environment impacted retention and that job embeddedness was a better measurement versus satisfaction. A Pennsylvania medical center implemented a residency program and

concluded that the structure of the program was vital to help with a successful transition (Welding, 2011). Meyer Bratt, Baernholdt, and Prusynski (2014) concluded that providing a support system in an NGRP was necessary for nurse resiliency and stress reduction, helping for a successful transition and decreasing turnover.

Parker et al (2014) study discussion concluded that the experience of NGRNs would benefit from genuine support in the workplace and understanding that horizontal violence is present from senior nurses toward new nurses. The study supports “new graduates are less likely to be bullied when they have access to information, resources, support, opportunities to learn and grow, job discretion and strong work alliances” p. 155. Supports system types can be beneficial in NGRPs.

Implications

Evaluating the effectiveness of NGRPs on the transition, retention, and satisfaction of new graduate nurses was the primary focus of this systematic review. Understanding how the residency programs impact the new graduate nurse’s potential when transitioning from student to a professional nurse in a hospital setting is significant for organizational leaders to grasp. New graduate nurses will be the workforce to replace baby boomers exiting nursing. Retention is a critical component that hospital administrators look at regularly (CITE). Research findings showed 30% of new graduates leave within the first year of employment (Hillman & Foster, 2011). The implications of retention for a hospital will be translated into the cost. Hospitals examine the cost of turnover and the cost of the residency program and resources as the impact is substantial. One hospital compared the potential cost savings related to nurse retention preridency

program versus postresidency program and determined it to be 4 million dollars over 4 years (Hillman & Foster, 2011). In a qualitative study, Regan et al. (2017) showed that formal transition to practice programs with positive unit cultures and supportive mentors and leaders made a difference in transition, satisfaction, and retention.

Strengths and Limitations

The strengths of this DNP project were that the literature validated the value of the new graduate nurse residencies programs for successful transition and retention. The cost of the program would outweigh the return in investment related to the positive retention of new nurses to the organization. Satisfaction varied some in the literature concerning how the design and content of the program were delivered. The length of the programs that were the most successful was 1 year, with some varying from 6 to 18 months. The limitations of the study showed that content design and curriculum varied, and more research would be needed to determine what specific content and curriculum is necessary.

Recommendations

New graduate nurse residency programs are a benefit to the hospital and the profession. The implementation of such a program is recommended by both The Joint Commission and the Institute of Medicine (Spector et al., 2015). Residency programs are designed to increase retention, improve competence, and foster a successful transition (Welding, 2011).

After a review of the literature for this systematic review, I recommend that hospital leaders implement a nurse residency program for new graduate nurses. The

potential for social change with the implementation of a new graduate residency would benefit all stakeholders: the nurse, leaders, coworkers, and the patient and families whose care is being provided. New graduate nurses will benefit from a residency program and have a positive transition from student to professional nurse, leading to the delivery of quality care in today's complex world of healthcare.

Summary

In this section, I provided the findings of the systematic review of the literature related to new graduate nursing residency programs and the impact they have on retention, satisfaction, and transition success. The primary findings demonstrated that retention, satisfaction, and transition success are improved when organizations implemented nurse residency programs. My recommendation from this project is for local stakeholders to develop a new graduate nurse residency program as a standard practice for onboarding new graduate nurses. In the next section, I will provide the dissemination plan and an analysis of self.

Section 5: Dissemination Plan

Introduction

I developed this DNP project to systematically examine the literature regarding new graduate nurse residency programs and determine whether nurse residency programs improve the retention rates, satisfaction, and transition of NGRNs. The results from the systematic review demonstrated that transition, retention, and satisfaction are positively impacted by the implementation of new graduate nurse residency programs in hospital settings. I found the use of Duchscher's stages of transition theory and the transition shock model were effective as a foundation for building successful programs.

Dissemination Plan

I plan to share the findings from the systematic review with local nursing leadership. Key components to be included are the length of the program, curriculum to include support systems, and the ongoing role nursing leadership will need to have and continue to develop a healthy work environment (see Edwards, Hawker, Carrier, & Rees, 2015). This dissemination plan is supported by evidence gathered from this project (see Asber, 2019). I will meet with nurse educators at the local community hospitals to determine if any new programs or processes for new graduate nurse residency programs are in place and offer my recommendations if none are established at this time. I will utilize the Duchschers theory that supports the new graduate nurse transition and develop a presentation that shows the stages of transition and the transition shock model along with the results from this systematic review that demonstrate transition success, retention, and satisfaction outcomes from establishing a new graduate nurse residency program. My

goal is that the organization will take the information from my completed systematic review and develop nurse residency programs for the new graduate nurse at the local community hospitals.

Analysis of Self

My DNP project journey has helped me develop as a nurse scholar and fostered my growth as a nurse leader. I have encountered many difficulties along the way and have learned that perseverance will be rewarded and finding strength will lead to accomplishment. I decided to earn my DNP degree first for myself because I love to learn and have been a lifelong learner but more importantly, for those I lead and provide care for. I wanted to understand where healthcare is as a field, how my profession is changing, and where I need to be. I desire to be a better person and a better professional nurse by furthering my education. What has been fascinating about this process is the fact that nursing will always be in a constant change, and what I learned in this program has provided me with additional opportunities to take practice questions and find answers through research for the best evidence possible for translation. I see myself now as someone who can take existing evidence and help translate that knowledge into a practice setting at the bedside, in education programs for new grads, or perhaps in academia. A long-term goal of mine is to be able to work professionally in academia and help others succeed in higher education. I am thankful that so many professionals continue to research and publish studies so they can continue to improve the nursing profession.

Summary

This DNP project demonstrates the value of a NGRP and how they can impact the transition, retention, and satisfaction of new nurse graduates. This project may promote positive social change in the nursing profession through supporting the transition from student to professional nurse and improving the quality, safety, and delivery of care for patients. With the nursing shortage at the forefront of the profession, nurse leaders are needed to build a foundation for success for future colleagues and establish a NGRP for every hospital system.

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Appendix: Literature Review Matrix

Article Number	Author and Date	Research design/method	Retention/Satisfaction/Transition	Additional Themes	Level of Evidence
1	Lin 2014	Systematic Review	Transition/Satisfaction	Facilitators/interpersonal relationship	1
2	Van Camp 2017	Systematic Review	Transition/Satisfaction/Retention	Confidence/competence	1
3	Edwards 2015	Systematic Review	Transition/Retention	Support systems/Structures program	1
4	Rush 2013	Integrative Review	Transition / Retention/Satisfaction	competency	1
5	Phillips 2017	Mixed Method	Transition/Retention/Satisfaction	Support systems	4
6	Parker 2014	Mixed Method	Transition/Retention/Satisfaction	Support Systems/expectations	4
7	Henderson 2015	Mixed-Method	Transition	Support systems/preceptors	4
8	Meyer Bratt 2014	Quantitative	Transition/Retention/Satisfaction	Stress/ organizational commitment/leadership skills	3
9	Nassar-Al-Dossary 2016	Quantitative	Transition	competency	3
10	Meyer Bratt 2012	Quantitative	Transition/Retention/Satisfaction	Stress	5
11	Kramer 2012	Quantitative	Transition/Retention/Satisfaction	Healthy work environment	6
12	Strauss 2016	Quantitative	Transition/Retention/Satisfaction	Type of structure	3
13	Alexander 2015	Quantitative	Transition/Satisfaction	Structure of program/competency	1
14	Dyess 2012	Mixed-Method	Transition/Retention	Leadership development	4
15	Rosler 2017	Qualitative	Transition	Safety/Content/Teamwork	5
16	Regan 2017	Qualitative	Transition/Retention	Leaders/ support/ resources/Positive Work Environment	5
17	Phillips 2014	Qualitative	Transition/Retention/Satisfaction	Structure/Feedback	5
18	Spector 2015	Quantitative	Transition/Retention/Satisfaction	Feedback, Structure	3

19	Hillman 2011	Quantitative	Transition/Retention/Satisfaction	Culture/Structure of the program	4
20	Reem AL-Dossary 2014	Systematic Review	Transition/Retention	Competency	1
21	Ackerson 2018	Systematic Review	Transition/Retention	Length of program/Social aspect of debriefing and sharing	1
22	Rush 2019	Integrative Review	Transition/Retention	Healthy work environment	1
23	Rush 2013	Integrative Review	Transition/Retention	Formal structure/Support program	1
24	Wolford 2019	Quantitative	Transition/Retention	Support Program /Leadership style/Engagement of work environment	3
25	Bolden 2011	Qualitative	Transition/Retention/Satisfaction	Reflective structure	5
26	Pittman 2013	Quantitative	Transition/Retention	Stress reduction	3
27	Asber 2019	Integrative Review	Transition/Retention	Length of program	1
28	Goode 2013	Quantitative	Transition/Retention	Focused curriculum	5
29	Africa 2017	Qualitative	Transition/Retention	Standardized evidenced-based programs	5
30	Welding 2011	Qualitative	Transition/Retention	Structure	4
31	Kramer 2012	Mixed Method	Transition/Retention/Satisfaction	Structure	4
32	Pelletier 2019	Quantitative	Transition/Retention/Satisfaction	Formalized structure of a program/Social support	3
33	Walsh 2018	Qualitative	Transition/Retention/Satisfaction	Unit culture/type of program	5
34	Tyndall 2019	Quantitative	Transition/Retention/Satisfaction	Leaders/Work environment	3
35	Setter 2011	Mixed Method	Transition/Retention/Satisfaction	Work environment/manager relationship	4
36	Kowalski 2010	Quantitative	Transition/Retention/	Length of program	4