The Implementation of Nurse Practitioner Residency Programs to Increase the

Employment Retention of New Graduates

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The primary duties of a registered nurse include assessment of the patient, identifying the client's critical needs, and implementing a medical care plan. As the registered nurse advances their training to nurse practitioner (NP) their role continues to work closely with the patient to monitor health and provide care. In addition to those duties, the nurse practitioner is now a provider responsible for prescribing treatments, determining the course of care, ordering diagnostic tests, and diagnosing patients. This abrupt and dramatic shift in a role as a healthcare provider has the tendency to cause role strain for the novel nurse practitioner, eventually leading to burnout. By definition, burnout is a condition experienced by professionals who develop adverse feelings and depression-like symptoms, and mental or emotional exhaustion as a result of stress related to their workplace role (Abraham et. al, 2021). According to a recent analysis of a cross-sectional survey of nearly four hundred nurse practitioners, over one-fourth of these advanced practicing providers reported burnout (Abraham et. al, 2021).

Problem Statement

The creation and utilization of the nurse practitioner as a provider was intended to alleviate the shortage of primary care providers, but with the current climate of nurse practitioners experiencing burnout with the intention to resign from their positions, it is imperative for the welfare of the healthcare organizations to identify the factors related to retention of NPs (Hagan & Curtis, 2018). The current standard of practice does not currently require nurse practitioners to attend a formal residency program. Unlike the NP's physician counterpart, most physicians attend a residency program. Residencies allow a stage of additional

clinical education where the new graduate providers care under the supervision of either a physician or another nurse practitioner while being compensated with a salary.

By reducing the role strain of the novel nurse practitioner, residency programs can provide transitional support and increase the NP's job satisfaction. The aim of this quality improvement is to show evidence that NP participation in residency improves employment satisfaction and increases employment retention.

PICO

Of the new graduate nurse practitioners, does the implementation of a residency program increase job satisfaction and increase NP employment retention?

Background and Significance

The evidence within the research findings suggest that a significant number of new graduate nurse practitioners feel that they are practicing outside of their competency level during their first year of employment (Meissen, 2019). Considering the proliferation of nurse practitioner programs (in-person, hybrid, or exclusively online) combined with the employment of the NP to fulfill the provider shortage, the onboarding process for these new graduates calls for standardization. A 2012 National Sample Survey of Nurse Practitioners found that approximately 22,000 licensed nurse practitioners were not actively working in the NP role, some (1.07%, n=138) stated that "lack of experience" was the main culprit behind their decision to recant from their provider role (Meissen, 2019). The Misener Nurse Practitioner Job Satisfaction Survey defines retention as the number of years within the NP position with the intention to leave within five years (Hagan & Curtis, 2018). But to increase NP retention, one

must understand the commonly reported reasons that influence a nurse practitioner to resign. Those reasons include unclear role visibility in relation to provider colleagues (Poghosyan, 2019), lower perception of the quality of healthcare (Hagan & Curtis, 2018), fewer years of experience as an NP (Meissen, 2019), burnout from role expectations (Abraham et. al, 2021), lack of support from organizations endorsing NP practice, and unfavorable relations with physicians and administration (Poghosyan et. al, 2017).

The current climate involves ever-changing laws regarding the scope of practice of the NP, utilizing residency programs for graduate nurse practitioners not only negates the common reasons for NP resignation and gives the graduate thorough preparedness for the workforce, but residency programs also have the ability to strengthen and embolden the credibility of the advanced practicing nurse practitioner.

Evidentiary Support of the Intervention and Outcome

Dr. Margaret Flinter, the director of the Nurse Practitioner Residency, designed a 1-year training program that included a robust residency structure to transition new graduates into practice successfully. Following the creation of this program, a 2-year joint initiative between the Robert Wood Johnson Foundation and the Institute of Medicine, based on their findings the initiative published a nursing report outlining the need to develop a practice transition program for nurse practitioners (Meissen, 2019). An exploratory study utilizing a quantitative design by the American Association of Nurse Practitioners showed that more than 90% of nurse practitioner program directors indicated that NP recruitment and retention were beneficial to organizations implementing the NP residency or fellowship program (Kesten & El-Banna, 2020).

A study conducted by the Journal American Associations of Nurse Practitioners involved analyzing 8,400 primary care nurse practitioners (PCNPs) explored the effects of completing postgraduate residency or fellowship programs (Park et. al, 2021). The study examined the survey responses (Park et. al, 2021). Around 10% of PCNPs had undergone this training, and those who did were more likely to be from minority backgrounds and serve underserved populations. PCNPs with this postgraduate training reported increased confidence, greater autonomy, improved collaboration, higher job satisfaction, and lower intent to leave compared to those without such training (Park et. al, 2021). These findings suggest that postgraduate programs have a positive impact on NP role perception and satisfaction, supporting the need for expanding such initiatives in primary care nursing.

The study highlights the advantages of postgraduate residency or fellowship programs for both NPs and healthcare organizations. It emphasizes improved patient care through enhanced NP confidence and autonomy. To facilitate wider access to these programs in primary care graduate nursing, the study recommends increased public funding, ultimately aiming for better outcomes for NPs, healthcare systems, and patients.

Barriers to Implementing the Intervention

Some of the barriers and limitations to this study include not being able to survey those residency programs that were not discoverable and therefore not included in the database of the study. The descriptive statistics do not enable the conclusions of the study to be generalized throughout all nurse practitioner residency programs (Kesten & El-Banna, 2020). As well for the survey analysis studies, because of the limited number of post-graduate residency programs that exist for nurse practitioners, there are only a handful of studies that exist to support the need for

their implementation. Another possible barrier to the implementation not mentioned in the literature includes a lack of robust data demonstrating those nurse practitioners who have stayed in primary care for more than 5 years, and whether those nurse practitioners decided to do so with an introductory residency program as causation for their retention.

A substantial amount of evidence exists that contains sound information about the benefits of a residency program for novice nurse practitioners. As well, there is measurable evidence that outlines cause for distaste for the nurse practitioner role. The problem is recognizing the deficiency of the onboarding and transitional stage for the new graduate NP without addressing the need for guidance and support as the provider navigates their new role. Creating enough residency programs to match the amount of increasing NP graduates is a viable project and worthwhile investment (Kesten & El-Banna, 2020). With NP graduate residency programs already in existence, their popularity, utilization, and significance are grossly underrated (Meissen, 2019). In order to influence nurse practitioners to partake in such residency programs it is imperative to apply the systematic approach of behaviorism. Behavioral psychology can provide theoretical solutions to improving nurse practitioner retention. Without enough NPs actively practicing, healthcare organizations and policymakers will not have the ability to address the need for primary care providers.

Introduction of Theory

The role of the nurse practitioner was created out of the need to increase patients' access to healthcare providers. In order to become a nurse practitioner, one must be a registered nurse, hold a bachelor's degree in nursing, complete an NP-focused graduate master or doctoral program, and successfully pass board certification. Despite the lengthy process of obtaining NP

certification, nurse practitioners continue to report job dissatisfaction with some prematurely resigning from their positions. Applying the theory of planned behavior to this quandary, the theory may provide an explanation for what circumstances or challenges exist around the nurse practitioner and how this environment discourages the NP from their role.

Theory of Planned Behavior

The theory of planned behavior (TPB) provides an explanation for how a population's perceived control and power over a situation can influence their behavioral response. Essentially, this theory explains why a population will act in a certain way.

The theory of planned behavior explains and predicts how these behaviors are formed. Three constructs assist in building this theory. The first construct identifies the population's attitude toward the act. Next, the subjective norm is identified, this outlines the typical environment that the population exists in. And lastly, the third construct of this theory is perceived behavioral control (LaMorte, 2019). Perceived behavioral control identifies the amount of autonomy and influence a person believes they possess in a situation and leads to their decision to act on the behavior.

This theory can be used to predict the attitude toward the behavior, the environment that influences the behavior, and the perceived amount of individual control and intention to act on the behavior (LaMorte, 2019). The summation of the attitudes, environment, intention, and ease of ability to control the situation ultimately drive the behavior (Rimer & Glanz, 2005).

Theory of Planned Behavior Influence on the Advanced Practice of Nursing

The role of the advanced practicing registered nurse (APRN) was created in response to the shortage of primary care providers in patient populations (Pulcini et. al, 2019). The development of this role first identified the needs of patients and built upon the successful foundations of nursing. The healthcare system then incorporated a graduate-level curriculum to further specialize and train experienced registered nurses in providing care to patients. As the pressing need for healthcare reform continues to improve, the basis for refining the Advance Practice of Nursing stems from studying theory in evidence-based practice (Pulcini et. al, 2019).

To evaluate constructs from the theory of planned behavior - attitudes, sense of control, subjective norms, and intentions - were used as predictors of accuracy in blood pressure monitoring (Nelson, 2014). In a study conducted by the Journal of Clinical Nursing, medical staff including medical assistants, LPNs, RNs, and providers completed a survey on their intentions to measure accurate blood pressure and their techniques in doing so. The intentions of the medical staff were in fact to measure blood pressure accurately, but with multiple variations in techniques, the results inevitably yielded inaccurate blood pressures. A majority of the staff had a false sense of control, but the subjective norm was that all medical staff measured blood pressure in a similar manner (Nelson, 2014). The results from this study based on the theory of planned behavior found fault in the standardization of how each medical staff measured the vital sign of blood pressure. Had this variability gone unnoticed, patient treatment could be based on erroneous blood pressure measurements. These findings have important implications for nursing education departments and organizations which traditionally invest significant time and effort in annual competency training focused on knowledge enhancement by staff (Nelson, 2014). Standard techniques yield accurate measurements and ultimately improve patient outcomes.

Another example of how the TPB has improved the field of APRNs is by refining the techniques used in patient education. The healing process of chronic wounds requires collaboration from the managing healthcare provider as well as diligent adherence to the wound care regime by the patient. A continuing education activity was offered to physicians, nurses, PAs, and NPs with an interest in skin and wound care (Callender et. al, 2021). The providers distinguished the use of theoretical frameworks to promote patient adherence to wound healing recommendations. Collaboratively they cultivated commonly reported barriers their patients reported that prevented them from adhering to the treatments. Utilizing the theory of behavior they analyzed individual patient needs, attitudes, and perceived control over the healing process (Pulcini et. al, 2019). The providers were able to use the results of the study to synthesize appropriate techniques, like motivational interviewing, to elicit better methods of communication improving how advanced practitioners educate their patients (Callender et. al, 2021).

Theoretical Framework Analysis

The theory of planned behavior may provide insight as to why some nurse practitioners find the transition from registered nursing to advanced nursing practice more difficult than others. For novice nurse practitioners, adopting the autonomous role as a healthcare provider can cause role strain. Role strain describes the stress that results from the differing demands and expectations associated with a social role (Norful et. al, 2018). The theory of planned behavior is a psychological theory that links belief to behavior, it explains why the studied population will choose to act a certain way. In this capstone project, the theory of planned behavior will identify the three core components of nurse practitioners: the attitude of the NP role, the subjective norms that surround the nurse practitioner, and the NP's perceived behavioral control.

This proposal will review job satisfaction surveys completed by nurse practitioners. The purpose of this step is to assess the attitude of the population. Next, the theory of planned behavior calls to identify the environment of the nurse practitioner. The environment is dependent on the scope of practice which refers to the professional activities that each state authorizes nurse practitioners to perform (Poghosyan et. al, 2017). Lastly, the theory of behavior can establish the NP's perceived control over their transition into the new role. Why or why not did the new nurse practitioner choose to participate in a residency program prior to accepting their first job offer?

The theory of planned behavior can explain why novice nurse practitioners feel inadequate in their new roles. This is where the implementation of residency programs for new graduate nurse practitioners can provide a solution to a problem.

Theoretical Contribution to APRN Profession

The goal of utilizing the role of the nurse practitioner has been to establish a healthcare provider role that alleviates the shortage of physicians in primary care and underserved populations. So, identifying factors that contribute to the success of the NP in clinical practice can increase job satisfaction, boost role confidence, and ultimately increase the retention of nurse practitioners in primary care.

For example, the American Medical Association led a coalition of state and specialty societies that worked to block the scope-of-practice expansion. The perception is that nurse practitioners work ambiguously and have an unrefined scope definition (Kandrak et. al, 2021). The misconception that some physicians have is that nurse practitioners creep into a scope of

practice that traditionally belongs to that of a medical doctor, imposing on jeopardizing the safety of patients.

In the case that a novice nurse practitioner uptake a role in an environment where the collaborating physicians believe NPs pose a threat to patient safety, that environment surrounding the NP could influence the way the NP perceives their new role. The theory of planned behavior can establish this environment in which an NP may not feel welcomed, thus influencing how nurse practitioners act under role strain. The utilization of residency programs that have physicians and nurse practitioners work symbiotically can clearly define the scope of practice. Such residency programs have the potential to eliminate the hesitancy in incorporating the NP as an integral part of the interdisciplinary healthcare team.

Theories Implications to Guide Personal APRN Practice

The theory of planned behavior allows advanced practice registered nurses to be guided by comprehensive critical thinking of the conditions that surround clinical decisions and actions. Critical thinking is defined as understanding the facts, evidence, observations, and arguments to form a judgment. But the theory of planned behavior also takes into consideration how individuals are influenced by attitude, environment, perceived control, and the ability to decide.

In order to ensure patient safety and uphold the standards of practice that are compliant with state authority, it is important that APRNs stay up to date with the policies and regulations that restrict the nurse practitioner's scope of practice. The legality can be determined by the state of practice, the current practice guidelines, or the policies of the institutions of employment. This not only emphasizes how imperative continuing education is to healthcare providers but also implements the best evidence-based practice at all times.

Literature Search

To determine the impact nurse practitioner residency programs have on new graduates, a literature search was conducted. The academic research databases Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane Library, and PubMed were used. Boolean operators "OR" and "AND" have been used, to result in more focused and productive article results. Conducting the search using the following terms: "Nurse Practitioner AND Residency OR Training" yielded 807 results. These terms were combined with the following terms: "Job Satisfaction," "Career Satisfaction," "Retention, "Attrition," or "Fellowship" were added, narrowing down the results to 28 articles. The search was narrowed down to studies that utilized an evaluative screening tool, Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS) on novice nurse practitioners to determine the efficacy of residency programs in being able to instill greater confidence and increase job retention. The Supporting Nursing Advanced Practice Transitions (SNAPT) residency program amongst other similar postgraduate residencies conducted systematic reviews and meta-analyses in their ability to transition the nurse practitioner from didactic to clinical practice.

The literature search only included recent peer-reviewed articles. In order for the publication to be considered recent to the discrete PICO question the publication dates were limited to a five-year time frame of 2018 to 2023. The final search resulted in six applicable and empirical articles (Bryan & Parker, 2020; Hagan & Curtis, 2018; Hart et. al, 2022; Kesten & El-Banna, 2020; Park et. al, 2021; Poghosyan et. al 2019) which includes: three inferential statistics (Bryan & Parker, 2020; Hagan & Curtis, 2018; Poghosyan et. al 2019); two retrospective cohort studies (Hart et. al, 2022; Park et. al, 2021) and one exploratory comprehensive examination (Kesten & El-Banna, 2020).

Definitions

This project will use the following definitions:

1) Fellowship is the period of medical training that a medical provider may undertake after completing a specialty training program (American Medical Association, 2022).

2) Residency is a stage of graduate medical education referring to a time period where a qualified medical provider (MD or NP) holding a medical degree directs or supervises a novel medical clinician registered in that specialty (Painter et al., 2019)

3) Retention of an organization's ability to prevent employee turnover, or the number of people who leave their position in a certain period, either voluntarily or involuntarily (Bryant & Parker, 2020).

4) Nurse Practitioner Primary Care Organizational Climate Questionnaire (*NP-PCOCQ)* is the only NP-specific tool measuring NP work environment and is being used in different U.S. states with variable NP scope of practice regulations and internationally to produce evidence about NP work environments within their organizations. (Poghosyan et. al, 2019).

5) Misener Nurse Practitioner Job Satisfaction Scale (*MNPJSS*) is a tool developed by the Journal of Nursing Measurement as a 44-item questionnaire with a possible maximum score of 264. The tool incorporates a 3-page questionnaire and six subscales for satisfaction: 1) intra practice partnership/collegiality, 2) challenge/autonomy, 3) professional, social, and community interaction, 4) professional growth, 5) time, and 6) benefits (Bryant & Parker, 2020).

Literature Review

Nurse practitioner residency programs have gained attention as a potential solution to the ongoing challenge of retaining new graduate nurse practitioners. These programs aim to provide additional support and training to new graduate nurse practitioners as they transition from the academic setting to professional practice. Numerous studies have examined the impact of nurse practitioner residency programs on the retention of new graduate nurse practitioners. The focus of this literature review is to examine the impact of these residency programs and to explore the studies that highlight their potential to significantly improve outcomes for new graduate nurse practitioners.

Theme 1: Design and Utilization of New Graduate Residency Program Evaluation

Nurse practitioner residency programs are structured postgraduate training programs designed to provide advanced clinical and professional development to nurse practitioners who have recently completed their education and obtained their nurse practitioner certification. The average residency program typically ranges from several months to a year (Hart et. al, 2022). The majority of the residency programs entailed full-time employment with training opportunities for NP residents. The participants are engaged full time during the residency experience and typically scheduled for a minimum of 40-hour work weeks to meet residency requirements.

All the studies, which focused on nurse practitioners who completed a residency or fellowship program, utilized surveys as their primary method of data collection. Hart et al. (2022) surveyed NP alumni completing FQHC residency from 2008 to 2019. Bryant & Parker (2020) surveyed nurse practitioners from both residency and non-residency backgrounds using a DNP discussion board. Hagan and Curtis (2018) surveyed active Texas-licensed APRNs via the

Texas NP Organization. Poghosyan et al. (2019) surveyed 278 primary care NPs in New York and 314 NPs in Massachusetts. Park et al. (2021) surveyed the 2018 National Sample Survey of Registered Nurses.

Two studies used web-based surveys (Kesten & El-Banna, 2020; Poghosyan et. al, 2017). While three studies obtained permission to email NPs through educational institutions or professional associations databases (Hagan & Curtis, 2018; Hart et. al, 2022; Park et. al, 2021). An email survey directly invited individuals via email to participate through a link or attachment, in contrast to a web-based survey that relied on respondents finding and completing questionnaires on a website (Speight et. al, 2019). Those studies that utilized an email-based survey had the following response rates: 15.9% (Hagan & Curtis, 2018), 65% (Hart et. al, 2022), 11.1% (Park et. al, 2018). Those studies that utilized a web-based survey had the following response rates: 50% (Kesten & El-Banna) and 53% (Poghosyan et. al, 2017). Though it should be noted that the Kesten & EL-Banna (2020) study incentivized their respondents with a $50.00 Amazon gift card for completing the survey. Bryant & Parker (2020) which utilized a DNP discussion board had the highest response rate of 100%.

There were some differences in sample sizes among the studies. Park et al. (2021) included a larger sample size of participants by utilizing the National Sample Survey of Registered Nurses database which sampled a total of 75,963 PCNPs nationwide. Eleven percent of that population completed a residency program and provided feedback. Whereas Bryant and Parker (2020) examined cohorts who participated in a program from a single institution yielding a sample size 258 volunteer participants, where 209 participants did not complete an NP fellowship program and 49 respondents did complete an NP residency. This difference in sample size could potentially affect the generalizability of the findings.

The studies reviewed yielded a total of 9,352 NP subjects surveyed (Bryan & Parker, 2020; Hagan & Curtis, 2018; Hart et. al, 2022; Park et. al, 2021; Poghosyan et. al 2019). The number of respondents for each study varied, ranging from 65 to 8,400. 65 (Hart et. al, 2022), 258 (Bryant & Parker, 2020), 314 (Poghosyan et. al, 2019), 315 (Hagan & Curtis, 2018), and the largest size of 8,400 (Park et. al, 2021) from the 2018 National Sample Survey of Registered Nurse database.

The reviewed studies evaluated the perceived value of the residency programs to those NPs who completed residency programs as well as their current level of satisfaction with their careers. Two of the studies utilized the Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS) (Bryant & Parker, 2020; Hagan & Curtis, 2018). One study utilized the Nurse Practitioner Primary Care Organizational Climate Questionnaire (NP-PCOCQ) (Poghosyan et. al, 2019). The remaining surveyed subjects with Likert scale questionnaires containing categories that measure their satisfaction with their NP roles, leadership development, greater practice autonomy, and future intent to leave their practice (Hart et. al, 2022; Park et. al, 2021). This survey-based approach allowed researchers to gather valuable insights into the effectiveness of these programs and their impact on new graduates.

Bryant (2020) found that although NP fellows reported increased preparedness, confidence, and job satisfaction after completing a fellowship program, the study's small sample size limited its ability to detect significant differences in other measures. Conversely, Hart et al. (2022) discovered that completing a residency program increased competence and confidence, but not all programs prioritize continuous performance improvement, suggesting lack of uniformity within the different residency programs. Kesten (2020) conducted an exploratory

examination of postgraduate NP residency/fellowship programs in the US to understand why programs vary in effectiveness.

Enhancing study designs would greatly benefit from a comprehensive national-level database covering all nurse practitioner residency programs. Long-term studies spanning 5 or 10 years post-residency could provide invaluable insights, especially when comparing data between those who completed a residency and those who didn't. Bryant and Parker (2020) exemplified this approach. Additionally, four of the six reviewed studies conducted a power analysis, thereby strengthening the evidence (Bryant & Parker, 2020; Hagan & Curtis, 2018; Park et al., 2021; Poghosyan et al., 2019).

Theme 2: Assessment Tools Used to Measure Nurse Practitioner Satisfaction.

Tools used in these studies to measure nurse practitioner job satisfaction were the Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS) and the Nurse Practitioner Primary Care Organizational Climate Questionnaire (NP-PCOCQ).

The MNPJSS assessed the satisfaction levels comprehensively, examining various facets that contribute to job satisfaction without solely concentrating on organizational aspects (Bryant & Parker, 2020). The MNPJSS scale is an assessment tool with 44-item questionnaire measuring six subscales for satisfaction: 1) intra practice partnership/collegiality, 2) challenge/autonomy, 3) professional, social, and community interaction, 4) professional growth, 5) time, and 6) benefits. The MNPJSS assesses job satisfaction and work environment using a 6-point Likert-type scale, with a maximum score of 264 (Hagan & Curtis, 2018). Studies by Hagan (2022) and Bryant & Parker (2020) utilized this tool. The scale demonstrated high reliability (Cronbach's alpha = .96) (Hagan & Curtis, 2018) and showed a strong positive correlation with a single item ($r = .72$, $p <$

.001) (Bryant & Parker, 2020). Both studies concluded that completing a residency led to NPs reporting increased autonomy, higher annual salary, and decreased intention to leave their position within five years (Bryant & Parker, 2020; Hagan & Curtis, 2018).

The second tool used was the Nurse Practitioner Primary Care Organizational Climate Questionnaire, NP-PCOCQ. This 24-item assessment tool investigates the favorable organizational climate in primary care settings needed in order to expand the nurse practitioner workforce and promote their practice. A solitary study Poghosyan et. al (2019), exclusively employed this evidence-based assessment tool as its intervention strategy. Poghosyan et. al (2019) validated the reliability of the NP-PCOCQ using item response theory (IRT) models and conducted differential item functioning (DIF) amongst NPs practicing in different U.S. states with variable regulations governing NP practice (Poghosyan et. al, 2019). Poghosyan (2017) reported reliability and validity of this 4-factor survey regarding job satisfaction as (beta = .36; p < .001) and intent to leave the job (odds ratio = .28; p = .011) (Poghosyan et. al, 2017). Poghosyan (2019) used the NP-PCOCQ to assess 163 primary care organizations with NPs, finding that for each unit increase in standardized subscale scores was associated with a 20% increase in job satisfaction odds and a 20% decrease in turnover intention (Poghosyan et al., 2017).

The remaining studies lacked the use of evidence-based assessment tools to gauge job satisfaction among NPs. Instead, Park et al. (2021) delved into the effects of completing postgraduate programs on five key domains, including role perception, practice autonomy, team collaboration, job satisfaction, and intent to leave. Furthermore, Hart et al. (2022) conducted a survey focusing on four domains: satisfaction with professional role, leadership development, career growth opportunities, and future intentions in practice. Despite the absence of specific

tools used to assess job satisfaction in these studies, the authors uniformly held favorable views of evidence-based tools for assessing job satisfaction.

The authors unanimously concurred on the reliability of the Meisner Nurse Practitioner Job Satisfaction Scale (MNPJSS) and the Nurse Practitioner Primary Care Organizational Climate Questionnaire (NP-PCOCQ) as assessment tools for measuring nurse practitioner job satisfaction. In an early 2017 study, Poghosyan utilized the assessment tool to validate the NP-PCOCQ's reliability through a 4-factor model. The NP-PCOCQ score effectively forecasted job satisfaction (beta = .36; p < .001) and the intent to leave the job (odds ratio = .28; p = .011) (Poghosyan et. al, 2017).

In my opinion, both assessment tools, the NP-PCOCQ and MNPJSS, effectively measure nurse practitioner job satisfaction. The NP-PCOCQ evaluates organizational climate's impact, while the MNPJSS assesses overall satisfaction and its influencing factors. Both tools offer reliable metrics, providing comprehensive insights into nurse practitioners' job contentment. The greater the fulfillment experienced by a nurse practitioner in their role, the higher the probability of their commitment and longevity in that position.

Theme 3: NP Employment Retention after Residency Participation

Multiple research findings indicate that NPs reporting levels of employment satisfaction typically practiced at their clinical sites for a minimum of 5 years, with the median years of experience being 10 years of practice (Bryant & Parker, 2020; Hagan & Curtis, 2018; Poghosyan et al., 2019). Four out of the six studies discussed statistical significance from the number of respondents as compared to their post-hoc analysis and evaluation of job satisfaction (Bryant & Parker, 2020; Hagan & Curtis, 2018; Park et al., 2021; Poghosyan et al., 2019). Both Bryant &

Parker (2020) and Park et al. (2021) discovered a statistically significant relationship between completing a residency program and increased job satisfaction, longer employment, as evidenced by a *p*-value of ≤ .05 and a confidence interval of 95% or higher. Furthermore, Park et al. (2021) found that individuals with residency experience were 0.65 times less likely to leave their current employer.

All of the studies reported positive findings that NPs who were enrolled in residencies (Bryan & Parker, 2020; Hagan & Curtis, 2018; Hart et. al, 2022; Park et. al, 2021; Poghosyan et. al 2019). Important evidence demonstrates that residency is significantly linked to increased NP employment retention. This is supported by conducting Levene's tests on NP-PCOCQ and MNPJSS assessment tools. Three studies—Bryant & Parker (2020), Hagan & Curtis (2018), and Poghosyan et al. (2019)—utilized post hoc power analyses to validate this observed effect, affirming the direct relationship. NPs with fellowship experience exhibited a heightened "sense of what you do," as measured by the MNPJSS scale (Bryant & Parker, 2020). Furthermore, these NPs received notably higher salary bonuses in relation to their years of experience (*p*-value < .01) (Bryant & Parker, 2020). Hagan & Curtis (2018) conducted a factor analysis and discovered that for each year of employment, novice practitioners experienced a $25,000 salary increase and reduced their intention to leave employment by 33%. Additional statistical analysis which was offered included CI, Cronbach's alpha, bivariate analysis, and reliability testing of survey scale (Park et. al, 2021; Poghosyan et al., 2019). Both Park (2021) and Poghosyan (2019) incorporated these methods to enhance evidentiary support for the outcome: improved NP retention.

Multiple studies (Bryant & Parker, 2020; Hagan & Curtis, 2018; Park et al., 2021; Poghosyan et al., 2019) unanimously concluded that effective mentorship during residency positively impacted new graduates' overall success. Park et al. (2021) highlighted that

completing a residency or fellowship program enhanced competency, confidence, and retention rates in the first year of practice. Notably, a consequential finding in the Park et al. (2021) study discovered that minority NPs serving similar demographics were more likely to continue working long-term, suggesting a need for increased funding in graduate nursing education to encourage primary care NPs to serve underserved minority populations akin to their background. NPs practicing in the primary care domain with favorable practice environments, exhibited higher levels of job satisfaction and lower intent to leave their positions (Poghosyan et al., 2017). The authors of two statistically significant studies, who also utilized the evidence-based MNPJSS tool, agreed that taking part in a fellowship residency program resulted in significantly boosted the practitioners' confidence. This increase in confidence led to improvements in their income and their desire to remain with their current practice (Bryant & Parker, 2020; Hagan & Curtis, 2018).

Although the design of Hart et. al (2022) exclusively surveyed NPs with residency experience and resulted in a majority positive impact on career, as well as strong importance of participation in the residency program; the lack of statistical significance renders the results non-conclusive. Such limitations included failure to reject the null hypothesis, therefore, correlation between NP residency programs on the retention cannot be established in this case. Studies with stronger evidence demonstrated that nurse practitioner residency programs have a positive impact by retaining new graduate NPs in their jobs and aiding them in addressing the shortage of primary care providers (Bryant & Parker, 2020; Hagan & Curtis, 2018; Poghosyan et al., 2019).

Theme 4: Need for Legislative Change and Promotion of NP Residency Participation

One final recurring theme from the reviewed studies was the discussion on the need for legislative change to promote NP residency programs. Kesten & El-Banna (2020) conducted an exploratory examination to gain understanding of the facilitators, barriers, and funding processes in promoting residencies. This national survey of program directors found that few barriers exist; the authors' discussion mentioned initiating legislation to fund fellowship programs needs to be explored (Kesten & El-Banna, 2020). Retention improved with monetary compensation to those NPs with residency experience (Hagan & Curtis, 2018). Employers are supportive of residency programs for new graduate NPs although the literature lacks enough statistical evidence to support the value proposition (Poghosyan et al., 2019). National organizations have recognized a deficit in primary care providers, recommended NPs as a solution, and supported NP residency programs as a means to prepare and recruit qualified practitioners into communities (Institute of Medicine [IOM], 2010). However, the entry into practice for new advanced practice nurses can be highly difficult without tailored clinical guidance and training. Acknowledging this challenge, the IOM advocated for residency programs, urging their widespread adoption to bolster the clinical skills and job retention of novice nurse practitioners.

Not mentioned in the research, is the barrier of the American Association of Nurse Practitioners (AANP) resistance into mandating such residency training programs for new graduates (American Association of Nurse Practitioners, 2019). That same year the AANP released a position statement exclaiming, "NPs are prepared to be fully licensed providers upon graduation from an accredited NP program and national board certification. No added academic curriculum or supervisory hours are necessary for the safe provision of patient care. The AANP opposes mandated postgraduate residency and fellowship programs." Speight (2019) further endorses the AANP position by explaining that mandating residency for NP could cause

potential delays in workforce entry, limitations on professional autonomy, diverse educational backgrounds of nurse practitioners, and the possible financial burdens on both individuals and the healthcare system (Speight et al, 2019). They argue that such requirements could impede access to care, restrict career paths, and overlook the varied experiences of nurse practitioners, ultimately impacting the quality and accessibility of healthcare services (Speight et al, 2019).

Advocates for residency propose that if medical students complete residencies and fellowships before practicing independently, nurse practitioners should also undergo similar extended training (Camal Sanchez, 2018). This additional post-graduate education aims to refine clinical skills, deepen specialization, and ensure a comparable level of expertise to enhance patient care and safety, reflecting the evolving complexity of healthcare (Camal Sanchez, 2018).

In order to bridge this gap, perhaps new nurse practitioner programs seeking accreditation should consider conducting partnerships with established residency programs. By doing so, they can ensure that their current students meet the requirement of clinical hours and the transition into professional practice is congruent with graduate level academic curriculum. Additionally, providing incentives to both educational institutions and governing bodies to encourage graduates to remain in the field of primary care is crucial. This approach could significantly enhance the quality of care provided by nurse practitioners, positively impact patient outcomes, and bolster the overall healthcare system by strengthening the primary care workforce.

Limitations and Strengths

There were several limitations and strengths included in the studies. One limitation was low response rate. Bryant & Parker (2020) reported a response rate of 30%. Consequently, the study suffered from low statistical power due to a restricted sample size of n = 258, ultimately

affecting the robustness and generalizability of the findings. Similarly, the low response rate introduced sample bias in the survey distributed to members of the Texas NP Organization. A second limitation included potential confounding effects of the COVID-19 pandemic during the 2020 survey, which could have influenced healthcare burnout and related responses (Kesten & El-Banna, 2020). Additionally, Hart et al. (2022) suggested the sample demographics were not representative of all residency programs. Furthermore, Kersten and El-Banna (2020) excluded residency programs that were not discoverable in the national database, potentially limiting the comprehensiveness of the findings.

In terms of the strengths of these studies, one notable strength was the inclusion of a diverse sample of participants. Kesten and El-Banna (2020) encompassed new graduate nurse practitioners from various clinical settings, including rural primary care settings, which adds a level of generalizability to the findings. The benefits and impact of nurse practitioner residency programs can be applicable to a wide range of practice settings, ensuring their relevance and effectiveness in different contexts. Additionally, the authors consistently reported positive outcomes for nurse practitioners participating in residency programs (Bryan & Parker, 2020; Hagan & Curtis, 2018; Hart et. al, 2022; Kesten & El-Banna, 2020; Park et. al, 2021; Poghosyan et. al 2019). Residency programs establish perceived competence, confidence, and mastery (Park et. al, 2021). Participants reported they were very well qualified for practice and better prepared than their peers who had not completed a residency program (Hart et. al., 2022).

Despite limitations related to sample sizes, which may stem from the limited availability of residency programs or the relatively small cohorts in existence for nurse practitioners, the positive outcomes, such as increased job satisfaction, enhanced recruitment, and improved retention rates among NPs, underscore the effectiveness and benefits of residency programs in

advancing the careers of nurse practitioners, thereby validating the studies' overall contribution to the field (Bryant & Parker, 2020).

Gaps in Literature

While the literature review has provided valuable insights into the impact of nurse practitioner residency programs on the retention of new graduate nurse practitioners, it is important to address potential gaps in the literature. Specifically, these findings necessitate further comprehensive and objective data that thoroughly outline the multifaceted reasons driving NPs to leave the profession. Key factors such as inadequate pay, a lack of work-life balance, heightened bureaucratic demands, and insufficient acknowledgment and respect for their proficiency as healthcare providers are notably underrepresented and understudied (Poghosyan et. al, 2019).

These critical aspects directly impact job satisfaction and can lead to attrition within the NP profession. The limited attention to these reasons within the literature highlights a significant gap in understanding the challenges that NPs face, hindering the development of targeted strategies and policies to address and mitigate these issues. By investigating the reasons behind the low retention rates of novice nurse practitioners, residency programs can bridge the disconnect between didactic and autonomous clinical practice (Speight et. al, 2019). Further research and a deeper exploration of these factors are essential to comprehensively grasp the dynamics influencing NP retention and inform strategies to improve their work environment and job satisfaction.

Conclusion

Nurse practitioner residency programs have emerged as a promising solution to the persistent challenge of retaining new graduate nurse practitioners. These programs aim to facilitate a smoother transition from academic training to professional practice by providing advanced clinical and professional development. The theory of behavior, specifically in the context of psychology and organizational behavior can help understand and influence nurse practitioners' choices to stay in the field. Understanding these behavioral theories can guide healthcare organizations and policymakers in developing strategies to improve nurse practitioner retention. Organizations can use these theories to create strategies that address motivation, job satisfaction, culture, and support, encouraging nurse practitioners to stay and enhance healthcare outcomes. The literature examined highlights the impact of nurse practitioner residency programs and highlights studies that consistently report positive outcomes for participants in terms of increased competency, confidence, job satisfaction, and intent to remain in the profession. Implementing NP residency programs brings several significant benefits to the healthcare industry by addressing workforce shortages and meeting demand for primary care providers. Residency programs contribute to retaining new graduate NPs in the profession. With a growing demand for healthcare services, especially in primary care, NP residency programs contribute to addressing the healthcare workforce shortage. By preparing NPs efficiently, these programs increase the availability of qualified healthcare providers to meet the demand as well as improve retention of NP in the chosen field or practice.

References

A., Ghaffari, A., Liu, J., & Poghosyan, L. (2021). Primary care nurse practitioner burnout and

perceptions of quality of care. *Nursing Forum*, *56*(3), 550–559.

https://doi.org/10.1111/nuf.12579

American Association of Nurse Practitioners. (2019, June). *AANP Position statement: Mandated*

residency and fellowship training. Retrieved from

https://storage.aanp.org/www/documents/advocacy/position-papers/Mandated-Residency

-and-Fellowship.pdf

Bryant, S., & Parker, K. (2020). Participation in a nurse practitioner fellowship to instill greater

confidence, job satisfaction, and increased job retention. *Journal of the American*

Association of Nurse Practitioners, *32*(10), 645–651.

https://doi.org/10.1097/JXX.0000000000000313

Camal Sanchez C. A. (2018). Current Status of Fellowship Programs for Advanced Practice

Registered Nurses in the Nurse Practitioner Role. *Nurse Educator*, *43*(1), 42–44.

https://doi.org/10.1097/NNE.0000000000000392

Callender, L. F., Johnson, A. L., & Pignataro, R. M. (2021). Patient-centered education in

wound management: Improving outcomes and adherence. *Advances in Skin &Wound*

Care, *34*(8), 403–410. https://doi.org/10.1097/01.ASW.0000753256.29578.6c

Hagan, J., & Curtis, L., (2018). Predictors of nurse practitioner retention. *Journal of the*

American Association of Nurse Practitioners, *30*(5), 280–284.

https://doi.org/10.1097/JXX.0000000000000049

Kandrack, R., Barnes, H., & Martsolf, G. R. (2021). Nurse practitioner scope of practice regulations and nurse practitioner supply. *Medical Care Research and Review: MCRR*, *78*(3), 208–217. https://doi.org/10.1177/1077558719888424

Kesten, S., & El-Banna, M. (2020). Facilitators, barriers, benefits, and funding to implement postgraduate nurse practitioner residency/fellowship programs. *Journal of the American Association of Nurse Practitioners*, *33*(8), 611–617.

LaMorte, W. W. (2019). *The theory of planned behavior.* Boston University School of Public Health.https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/BehavioralChangeTheories3.html

Meissen H. (2019). Nurse practitioner residency and fellowship programs: The controversy still exists. *Journal of the American Association of Nurse Practitioners*, *31*(7), 381–383. https://doi.org/10.1097/JXX.0000000000000255

Nelson, J. M., Cook, P. F., & Ingram, J. C. (2014). Utility of the theory of planned behavior to predict nursing staff blood pressure monitoring behaviors. *Journal of Clinical Nursing*, *23*(3-4), 461–470. https://doi.org/10.1111/jocn.12183

Norful, A. A., de Jacq, K., Carlino, R., & Poghosyan, L. (2018). Nurse practitioner-physician co management: A theoretical model to alleviate primary care strain. *Annals of Family Medicine*, *16*(3), 250–256. https://doi.org/10.1370/afm.2230

Poghosyan, L., Ghaffari, A., Liu, J., & McHugh, D. (2020). Organizational support for nurse practitioners in primary care and workforce outcomes. *Nursing Research*, *69*(4), 280–288. https://doi.org/10.1097/NNR.0000000000000425

Poghosyan, L., Liu, J., Shang, J., & D'Aunno, T. (2019). Practice environments and job satisfaction and turnover intentions of nurse practitioners: Implications for primary care workforce capacity. *Health Care Management Review*, *42*(2), 162–171. https://doi.org/10.1097/HMR.0000000000000094

Pulcini, J., Hanson, C., & Johnson, J. (2019). National organization of nurse practitioner faculties: A 40-year history of preparing nurse practitioners for practice. *Journal of the American Association of Nurse Practitioners*, *31*(11), 633–639.

Rimer, B. K. & Glanz, K. (2005). The theory at a glance: A guide for health promotion practice. Bethesda, MD: *US Department of Health and Human Services, National Institutes of Health, National Cancer Institute.*

Speight, C., Firnhaber, G., Scott, S., & Wei, H. (2019). Strategies to promote the professional transition of new graduate nurse practitioners: A systematic review. *Nursing Forum*, *54*(4), 557–564. https://doi.org/10.1111/nuf.12370