

Exploring the Factors That Influence Nurse Practitioner Role Transition

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ABSTRACT

The transition from registered nurse (RN) to nurse practitioner (NP) is often a stressful career change. Data are lacking on the factors affecting NP role transition. This study examined the relationships between NP role transition, prior RN experience, and a formal orientation. From a sample of 352 NPs, only a formal orientation contributed significantly to the regression model, indicating a positive relationship with NP role transition ($\beta = 6.24, P < .001$). Knowledge of the factors that explain NP role transition is important to inform the discipline how best to support NPs during entry into practice.

Keywords: nurse practitioner, Meleis, role transition, Transitions Theory, workforce

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The transition from registered nurse (RN) to nurse practitioner (NP) is a significant career role transition. It is often difficult and can be stressful across various settings.¹ During this time, there is a shift from an experienced, often expert status in the RN role to an inexperienced, novice status in the NP role.² This can result in an alteration in professional identity, loss of confidence, and impaired NP role development. Employment continuity and the decision to remain in the profession can be affected when role development is undermined.³ Successful role transition is important in order for NPs to become efficient and effective providers as quickly and positively as possible.³

BACKGROUND

Nationally, NPs have received increased attention in recent years. Through the Patient Protection and Affordable Care Act,⁴ the United States government has directly called for an increase in the number of health care providers to care for the expected millions of Americans who will become eligible for health insurance. Currently, there is a shortage of physicians in the US, which is expected to increase.⁵ NPs are being viewed as key providers in the collaborative efforts to address these workforce needs.⁶

However, employment turnover rates for NPs are twice those of physicians.⁷ Seminal research on NP role transition^{3,8-10} has identified many difficulties that NPs can experience during this time, and provider

outcomes, such as lower job satisfaction and feelings of discontentment, have been associated with increased intent to leave and high turnover.^{11,12} These findings suggest that poor transition experiences result in NPs leaving positions.

During NP role transition, there are different personal and environmental factors that are thought to promote the transition, and 2 of these factors include experience and receiving a formal orientation.² No studies were identified that directly examined NP role transition in relationship to experience, specifically prior RN experience, or receiving a formal orientation. The purpose of this study was to explore NP role transition in relationship to prior RN experience and receiving a formal orientation in the first NP position.

Experience is believed to be important for skill acquisition and developing competency in nursing practice.¹³ However, the available literature does not explicitly define experience in relationship to NP role transition as prior RN experience or experience in a similar role. Prior RN experience is reported to provide a foundation and help facilitate the transition to the NP role,^{1,9,14} and NPs with less RN experience are thought to require more time to transition into the new role.³ One study found no significant correlation between years of prior RN experience and NP clinical skills after graduation.¹⁵

Within nursing, formal orientations are recommended as beneficial to role transition for RNs,^{16,17}

clinical nurse specialists,¹⁸ and NPs.^{12,19,20} Orientations have been found to relieve stress and help promote a sense of confidence, competence, and satisfaction.^{12,16} Although extensive training and orientation time are provided to new RNs, similar measures are lacking for NPs, and a lack of structured support has been found to affect NP role transition negatively during the first year of practice.³

THEORETICAL FRAMEWORK

Meleis's Transitions Theory²¹ was used to guide this research. This framework defines personal- and community-level transition conditions that are predicted to either promote or inhibit the transition, and NPs can experience a successful or an unsuccessful transition. A successful transition is characterized by a subjective sense of well-being, increased confidence and competence, mastery of skills, and autonomous practice.² An unsuccessful transition is characterized by negative emotions, a lack of confidence, turnover, and limited support.^{2,22} In this study, prior RN experience was examined as a personal-level transition condition, and receiving a formal orientation was examined as a community- or environmental-level transition condition. These variables were examined as possible promoters or inhibitors of NP role transition.

METHODS

This study used a descriptive, cross-sectional survey of practicing NPs. Data were collected via a paper-and-pencil questionnaire from a convenience sample of 352 participants at a national NP conference. Based on a prior power analysis using a level of significance of $P < .05$, a power of .8, and a medium effect size of .13, the projected minimum sample size for this study was 88. A medium effect size of .13 is suggested for multiple regression analysis,²³ which was included in the data analysis. Participants were recruited through flyers and posters that directed them to the data collection site. They were given a questionnaire along with a letter explaining the study and their rights as research participants. Completed surveys were returned anonymously in a secured box. Inclusion criteria included NPs who are currently practicing in direct patient care within the US, hold a graduate degree to practice as an NP, are able to

speak and read English, and have been working as an NP for at least 6 months because role transition after graduation and into the first position can, at a minimum, last this long.⁹ Finally, participants were required to have started practicing as an NP after 1990; this is when NP preparation shifted from being primarily certificate based to requiring a graduate degree.²⁴ Institutional review board approval was obtained before data collection.

Measures

In this study, NP role transition was the dependent variable. The 16-item, 5-point Likert Scale Nurse Practitioner Role Transition Scale (NPRTS) was used to measure participants' perceptions of their own NP role transition experience.²² Participants were asked to rate their agreement (1 = "strongly disagree" to 5 = "strongly agree") with statements regarding concepts such as feelings of support versus isolation; understanding of their role by patients, physicians, and other staff; and feeling prepared to manage patients and time. A higher total score indicated the perception of an easier role transition experience.²² The possible range of scores was 16 to 80. Permission was obtained from the instrument's first author to use the NPRTS for this study.

Content validity and reliability of the NPRTS were previously established in a sample of 182 practicing NPs across a variety of settings.²² Through exploratory factor analysis, the authors found 3 dimensions that explained NP role transition: developing comfort and building competence in the role, understanding of the role by others, and collegial support. Internal consistency reliabilities for the 3 subscales were high at .88, .83, and .79, respectively; no reliability coefficient was provided for the total 16-item instrument.²² In the present sample ($N = 352$), reliabilities for the instrument's subscales were similar at .85 for developing comfort and building competence in the role, .78 for understanding of the role by others, and .73 for collegial support. Internal consistency reliability for the total 16-item NPRTS was .87. Further development of the instrument and evaluation of its psychometric properties continue providing encouragement for future use.²²

The independent variables of prior RN experience and receiving a formal orientation in the first NP position were measured using single-item questions. The item on RN experience asked, "How long did you work as an RN prior to working as an NP?" The item on formal orientation asked, "Did you receive a formal orientation in your **FIRST** NP position?" Given that there are a limited number of orientation programs for new NPs and the body of research describing and evaluating these programs is small and varies across health care settings,^{19,20,25} a common definition of what constitutes a formal orientation is lacking. The question asking about receiving a formal orientation aimed to assess whether the participants felt they were provided with the necessary structure and support during entry into practice.

Data Analysis

Data were double entered to reduce the chance of errors and assure data quality. Descriptive statistics were used to describe participants' characteristics and study variables. Pearson correlations between the variables were evaluated, and an independent *t* test was used to compare the mean scores on the NPRTS between those participants who reported receiving a formal orientation and those who did not. A multiple regression analysis was used to test if prior RN experience and a formal orientation explained NP role transition. Finally, using Cook's distance and Mahalanobis distances, no outliers or influential cases were identified, and all assumptions of multiple regression analysis were analyzed and met.²⁶ Data were analyzed using IBM SPSS Statistics 20 (SPSS Inc, Chicago, IL).

RESULTS

Description of Participants

A summary of the demographic data and characteristics of participants' first NP position are presented in [Table 1](#). The present sample was primarily female (88.6%), white (81.8%), and had a mean age of 47 years. A majority (86.6%) held a master of science in nursing as their highest nursing degree. Years of NP experience ranged from 6 months to 23 years, with a mean of 7.7 years. The most frequently cited population focus was family (47.9%), and almost 60%

Table 1. Demographic Data and Characteristics of the First Nurse Practitioner Position (N = 352)

| Demographic | Statistic |
|--|-------------|
| Age (n = 350) | |
| Mean (SD) | 47.3 (10.1) |
| Range | 25-70 |
| Sex (n = 352) | |
| Female (%) | 88.6 |
| Race (n = 351) | |
| White (%) | 81.8 |
| Black/African American (%) | 9.4 |
| Highest nursing degree (n = 352) | |
| Master of science in nursing (%) | 86.6 |
| Doctor of nursing practice (%) | 10.2 |
| Years of NP experience (n = 352) | |
| Mean (SD) | 7.7 (5.9) |
| Range | 0.5-23 |
| Characteristics of the first NP position | |
| Population focus (n = 338) | |
| Family (%) | 47.9 |
| Adult-Gero primary care (%) | 19.2 |
| Adult-Gero acute care (%) | 12.7 |
| Pediatrics/neonatal (%) | 2.4 |
| Women's health (%) | 1.8 |
| Psychiatric/mental health (%) | 1.2 |
| Practice setting (n = 343) | |
| Outpatient/private practice office (%) | 57.1 |
| Inpatient/hospital/ICU/neonatal ICU (%) | 15.2 |
| Emergency/urgent care/retail clinic (%) | 9.9 |
| Nursing home/LTC/rehabilitation (%) | 5.2 |

Note: Some categories are not included in the table.

ICU = intensive care unit; LTC = long-term care; NP = nurse practitioner; SD = standard deviation.

of the sample reported practicing in an outpatient/private practice office setting.

Study Variables

A summary of the descriptive statistics for the study's variables can be seen in [Table 2](#). Prior RN experience ranged from 0 to 38 years with a mean of 13.8 years. This variable was positively skewed;

Table 2. Descriptive Statistics for Study Variables

| Variable | N = 352 |
|---|-------------|
| Years of prior RN Experience | |
| Mean (SD) | 13.8 (8.5) |
| Range | 0-38 |
| Formal orientation | |
| Yes (%) | 116 (33.0) |
| No (%) | 236 (67.0) |
| NP role transition (total NPRTS scores) | |
| Mean (SD) | 48.9 (10.3) |
| Range | 23-77 |

NP = nurse practitioner; NPRTS = Nurse Practitioner Role Transition Scale; RN = registered nurse; SD = standard deviation.

however, as previously discussed, no outliers or influential cases impacted the analysis. Of note, these descriptive statistics for prior RN experience should not be confused with years of NP experience. Data on NP experience were collected using a separate questionnaire item and were used to establish study eligibility and describe the sample. Prior RN experience had a nonsignificant relationship with NP role transition ($r = -.08, P = .12$). Additional analyses using various cut points within the RN experience variable revealed no significant relationships with NP role transition.

In the first NP position, 33% of participants received a formal orientation (Table 2). Receiving a formal orientation was positively correlated with NP role transition ($r = .29, P < .001$). An independent samples t test revealed that, on average, participants who received a formal orientation had higher scores on the NPRTS ($M = 53.1, SD = 9.4$ vs $M = 46.9, SD = 10.0$). This difference was significant ($t_{350} = -5.62, P < .001$). Overall, the participants reported a moderate transition experience based on a mean NPRTS score of 48.9 ($SD = 10.3$).

Multiple Regression Analysis

Multiple regression analysis was used to test if prior RN experience and receiving a formal orientation explained NP role transition. The results of the regression indicated the 2 variables explained 9% of the variance ($R^2 = .09, F[2, 349] = 17.05, P < .001$).

However, as seen in Table 3, only a formal orientation was significantly associated with NP role transition.

DISCUSSION AND RECOMMENDATIONS

The aim of this study was to examine NP role transition in relationship to prior RN experience and receiving a formal orientation. Because this is the first study that directly explored these relationships, it provides the preliminary work for future research on the concept of NP role transition. As predicted by the Transitions Theory,²¹ receiving a formal orientation was a promoter of NP role transition. Those NPs who received a formal orientation reported better transition experiences. Both the Institute of Medicine²⁷ and provisions in the Affordable Care Act⁴ recommend establishing programs for advanced practice nurses during entry into practice. Additionally, nurse researchers argue that NPs who receive structured orientations have easier and quicker transitions and are more satisfied with the role.^{12,19} This result aligns with the increased interest in structured orientations and support for new NPs across health care settings^{12,19,20,25} and may help to support efforts to develop orientation programs for NPs.

In contrast, prior RN experience was neither a promoter nor inhibitor of NP role transition. Of note, caution is needed when making conclusions about this finding because there is conflicting results in the literature on the influence of prior RN experience. For example, previous NP-focused research highlights the importance of RN experience and suggests that it is beneficial to NP role transition.^{1,3,28} However, studies have reported that new NPs found NP clinical experience to be beneficial during role transition.^{8,9} This finding adds to the body of NP role transition research and may be of use

Table 3. Regression of NP Role Transition on Prior RN Experience and a Formal Orientation (N = 352)

| Variable | Standard | | β | t Statistic | P Value |
|------------------------------|----------|-------|---------|---------------|-----------|
| | β | Error | | | |
| Formal orientation (yes = 1) | 6.24 | 1.11 | .29 | 5.61 | .000 |
| Prior RN Experience | -.01 | .01 | -.08 | -1.56 | .12 |

NP = nurse practitioner; RN = registered nurse.

in informing and helping to frame the discussion on providing the appropriate experiences to NPs.

Alternatively, the relationship between prior RN experience and NP role transition may not be solely explained by the amount of RN experience but also the type of RN experience gained. NP role transition may be influenced by similarities or differences between the practice settings of an individual's RN role and subsequent NP role, such as transitioning from an inpatient RN role to an outpatient versus an inpatient NP role. Perhaps exploring these specific relationships would reveal different results in future research.

The multiple regression model did not explain much of the variance in the dependent variable (9%), and only a formal orientation contributed significantly (Table 3). Therefore, the possibility that 91% of NP role transition is explained by other unidentified factors must be considered. The available literature recounts similar NP role transition experiences,^{8-10,28} and these experiences are reported during transitions to outpatient¹ and inpatient^{3,14} settings. However, in the present sample, family NPs were primarily represented, and the majority of participants practiced in the outpatient setting (Table 1). Exploring the transition experiences across the different population foci and practice settings in which NPs are trained and employed may help to identify additional factors that promote NP role transition. These factors could include the number of precepted clinical hours, curricular content, the amount of mentorship provided, orientation length, the availability of resources, and collegial support.

IMPLICATIONS

The results of this study could have implications for NP practice, education, and administration. The "Consensus Model for APRN Regulation: Licensure, Accreditation, Certification, and Education"²⁹ addresses the growing number of practicing NPs and their value in the health care system through efforts to align NP education, accreditation, and licensure. With the knowledge of what affects role transition for individuals with varying amounts of experience, NP educators could tailor clinical requirements and placements in preparing NPs for practice. This is particularly timely because schools of nursing currently admit students into master of science in

nursing³⁰ and doctor of nursing practice³¹ programs with no prior practice requirements.

Additionally, knowledge about the positive relationship between a formal orientation and NP role transition may encourage administrators to explore hiring and orientation policies and could provide the necessary support for wider development of these programs. The implementation of orientation programs could lead to the establishment of environments that are best suited to support NPs during role transition and may drive highly qualified candidates to specific institutions and positions.²⁰ Whether these environments include hospitals, private practices, or community-based health clinics, helping NPs transition into practice more smoothly and effectively could improve NP satisfaction with the role as well as increase the retention of highly qualified NPs.¹²

LIMITATIONS

This study used cross-sectional, self-report data; thus, causal relationships among the variables cannot be established. Also, NP role transition was measured at 1 time point, and measuring samples of NPs at various times during the transition may reveal different results. Participants in this study had varying years of NP experience. With increasing years since the transition, some participants may not accurately remember their NP role transition experiences and may have forgotten the positive or negative aspects of the transition.²⁸ Finally, the sample did not include all practicing NPs. Only NPs who were in attendance at the conference and were motivated to complete the questionnaire were included for participation.

CONCLUSIONS

This is the first study to provide empirical data on NP role transition in relationship to prior RN experience and receiving a formal orientation in the first NP position; it provides a foundation for future research on this topic. The results are unexpected and interesting because NP role transition had a nonsignificant relationship with prior RN experience, and the 2 independent variables explained only 9% of the variance of NP role transition. Future research is needed to examine these relationships further in order to separate out the details of these variables as well as identify additional factors that provide the best

support to new NPs. With different pathways to entry into practice, it can be expected that there will be NPs who will enter the role with limited or no prior RN experience. Understanding the difference of the transition to the NP role in an individual who has had RN experience versus someone who has not had any RN experience is important because these NPs may differ in their needs for support during the transition period. Determining those factors that may account for the remaining unexplained variance is prudent because it is expected that NPs will play an increasingly larger role in the nation's health care system. **JNP**

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