

# ROLE CONCEPTION IN NEW GRADUATE NURSES: A SECONDARY ANALYSIS

by

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**Background:** The new graduate transition to practice process affects retention, competency development, healthcare costs, quality, and assimilation into the profession. During the transition, new graduate nurses compare the way they have conceptualized nursing to what they actually experience in practice. If the observed reality is not congruent with their ideal perception, role conflict and a compromised socialization may occur. Residency programs have been instituted at some healthcare facilities to promote a positive organizational socialization process.

**Purpose:** The purpose of the study is to examine the differences in role conception of new graduates. The relationship of role conception and various anticipatory socialization variables such as age, gender, type of education and previous healthcare experience are examined.

**Methods:** This study is a secondary analysis of an existing national database of new graduate nurses who completed a residency program during the years 2011-2013.

**Results:** New graduate nurses were found to have high role conception in professional, competence and service scenarios. There was no relationship between role conception and age, gender, educational level or previous healthcare experience. Role conception did not significantly impact job satisfaction.

**Conclusion:** Adequate role socialization will aid in the new graduate nurse's assimilation into the role of the professional nurse. Continued study on role conception in new graduate nurses is warranted.



ROLE CONCEPTION IN NEW GRADUATE NURSES: A SECONDARY ANALYSIS

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By

Amy Renae Purser Medina

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## DEDICATION

This dissertation is dedicated to my children Natalie and Isabella, who are my inspiration daily. Natalie, you were with me from day one of this journey, and have been one of my biggest cheerleaders. Isabella, you were my blessing along the way and you have kept me motivated. I love you both to the moon and back.

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## **CHAPTER 1**

### **Introduction**

Nursing turnover among new graduate nurses within the first year of practice is estimated to be between 23 and 60 percent (Boamah, & Laschinger, 2016; Kovner, Brewer, Fatehi, & Jun, 2014). This decreased retention of nurses can cost an organization as much as \$64,000 per nurse (Hillman & Foster, 2011). Current researchers have found an increase in job satisfaction is associated with an increase in retention of new nurses (Kenny, Reeve & Hall, 2016). Nursing schools are increasing the number of graduates; however, the supply is not meeting the demand for nurses (ANA, n.d.). The current nurse vacancy rate is over ten percent in a quarter of the hospitals nationwide (NSI Nursing Solutions, 2015). Additionally, the healthcare workplace is considered a high stress work environment, with high patient acuity, extended shifts and staff shortages; often leading to nursing burnout, decreased job satisfaction and ultimately turnover (Bisholt, 2012; Duchescher, 2008; Feng & Tsai, 2012; Kelly & McAllister, 2013; Kramer, Maguire, Halfer, Brewer, & Schmalenberg, 2013). Compounding the need for additional nurses to care for the elderly is the age of registered nurses in the workplace. The average registered nurse is 50 years old (ANA, 2014). As older nurses retire, the American Nurses Association (ANA) predicts a critical nursing shortage to occur in 2025 (ANA, n.d.) The American Nurses Association predicts the nursing shortage is expected to consistently increase over the next 10 years; therefore, it is imperative nurses are retained in the workforce and aggressive recruitment and retention initiatives are taken.

New graduate nurses are a critical source for replacing aging nurses and for increasing the capacity needed in hospitals nationwide. Hence, new graduates are an important focus for retention. A key strategy for retaining these workers in the nursing profession is new graduate transition to practice programs. Within the last decade, nursing has moved from a short,

generalized orientation process to the use of sophisticated nurse residency programs. These residencies are highly recommended for easing the transition burden and promoting positive outcomes for the new graduate nurse and the healthcare organization (IOM, 2000).

A major focus of these programs is role socialization, the assimilation of the new graduate into the role of the professional nurse (Kramer et al., 2013). Current researchers find role socialization is still a challenge with the continued existence of a gap between new graduates' perception of the nurse role and the actual role of the nurse. The cognitive dissonance created by this gap can lead to decreased satisfaction and retention in both the job and the profession (Pennbrant, Nilsson, Ohlen, & Rudman, 2013).

### **Statement of the Problem**

Dissonance between a new graduate nurse's ideation about nursing and experiences of actual nursing once employed, contribute to dissatisfaction and turnover (Young, Stuenkel, & Bawel-Brinkley, 2008). Turnover rates among new graduate nurses are a consistent problem in healthcare organizations (Kenny et al., 2016). Socialization processes such as orientation and residency programs may promote positive role assimilation and ultimately retain nurses both at the place of employment and in the profession. Exploration of role conflict in the new graduate nurse has been a focus of past research but few contemporary studies exist. Instruments used to explore this concept are also dated (Corwin, 1961a). Additionally, few studies examine the influence personal factors such as age, gender, type of entry education, and previous healthcare experience have on the development of the new graduate's role conception. Challenging environmental factors coupled with transition shock could be harmful to nursing and to patients unless effective socialization into the profession of nursing can reduce role conflict and dissonance between the ideal and reality of the nursing profession. Evaluating the contribution

new graduate residency programs are making to the socialization of new nurses is important. Equally important is evaluating and developing instruments that measure role conflict to assure they exhibit evidence of contemporary nursing. Assuring positive role transition is one critical step that nurse educators and administrators can take to decrease turnover and loss of these valued future professionals.

### **Background of the Problem**

The new graduate transition to practice process alters not only retention, but also competence development, healthcare costs, quality, and assimilation into the profession (Friedman, Cooper, Click & Fitzpatrick, 2011). According to Dyess and Sherman (2009), up to 50% of new graduate nurses leave their first nursing job within one year of practice. In a more recent study, Kovner, Brewer, Fatehi and Jin Jun (2014), found that one in five nurses leave their job within the first year, and that rate doubles within the first two years. The financial consequences of such a mass exodus of nurses is estimated to be over a billion dollars annually (Kovner et al., 2014).

One of the more recent trends in new graduate transition to practice has been the advent of residency programs for new graduates (Lin, Viscardi & McHugh, 2014). Residency programs promote retention and competence in the nursing profession (Kowalski & Cross, 2010). According to Hillman and Foster (2011), new graduate residency programs can decrease errors for new graduate nurses and aid in socialization to practice. Socialization to the role of nursing includes evolving the graduate nurse's role identity and role conception (Kramer, Maguire, Schmalenberg, Halfer, Budin, Hall, & Lemke, 2012). The new graduate nurse has a preconceived (ideal) role that may not be congruent with the actual reality of the role of the nurse. If this role dissonance occurs, the graduate nurse experiences a reality shock which may

result in the graduate nurse leaving the job or the profession. Adequate socialization to the role of the nurse is imperative to prevent role dissonance or role conflict (Kramer et al., 2012). Socialization occurs prior to entering the job market (anticipatory socialization) and during transition into the workplace (organizational and professional socialization) (Scott, Engelke & Swanson, 2008).

### ***Anticipatory Socialization***

Anticipatory socialization occurs prior to the graduate nurse beginning work (Scott, Engelke & Swanson, 2008). Graduate nurses can complete a number of different educational pathways that lead to a license to practice nursing. The age of the nurse graduates can vary from young adult to middle age adults. The nurse graduates have varying amounts of healthcare experiences, or possibly none at all. There are different genders represented in the graduate nurse population as well. Each of the differences among the graduate nurses provides a life experience, which aids in forming the individual's frame of reference for what the nursing profession should be.

The expectations of the role of the nurse will be a result of the experiences that each new graduate has encountered. For example, some nurses have previous healthcare experience, which will aid in the formation of their thoughts and ideals regarding the nursing profession. The expectations of the role will be formulated by life experiences as well as educational experiences. There may be some commonality regarding the ideal nursing role among new graduates with similar experiences and backgrounds.

### ***Organizational Socialization***

Organizational socialization is the process by which the nursing graduate is acclimated to the organization. There are currently no national standards in place for new graduate

socialization into nursing practice. In order to achieve positive new graduate outcomes, effective socialization into practice is key. Current researchers support new graduate nurse residency programs include: (a) helpful preceptor/graduate relationships positively impact transition; (b) graduate transition programs increase retention and ease the transition process for the new graduate; and (c) new graduates often experience a reality shock when entering the workplace (Unruh & Nooney, 2011).

### **Purpose of the Study**

The purpose of this study was to examine role conception and changes in role conception in new nurse graduates during an 18-week new graduate residency program. The objective of this research was to examine the relationship between anticipatory socialization factors and role conflict, and more specifically, the influence of role conflict on the organizational outcome of job satisfaction. This researcher conducted a secondary analysis of data collected from a national sample of new graduates using the *Lawler-Corwin Nursing Role Conception Questionnaire* (Lawler & Rose, 1987). The researcher examined the differences in role conception of new graduates when considering various anticipatory socialization variables such as age, gender, type of education and previous healthcare experience.

### **Theoretical Perspectives**

Three theoretical frameworks were converged to explore role conflict and its influence on new graduate nurse satisfaction within the first 18 weeks of practice including: the theory of transition, reality shock, and role socialization were combined (Meleis & Trangenstein, 1994; Kramer, 1974; Van Maanen & Schein's, 1979). In 2008, Scott, Engelke and Swanson merged these theories to provide a conceptual model, *New Graduate Nurse Transition into the Workplace* that will guide this study (see Appendix A). The three dimensions of transition:

anticipatory socialization, organizational socialization and socialization outcomes are portrayed in the model. Anticipatory socialization contributes to the new nurses' development before they enter the workplace and includes personal demographics such as gender and age. In addition, the type of baseline nursing education the new graduate received and previous healthcare experience is a part of this socialization phase.

Reality shock is the gap between anticipatory socialization and organizational socialization. (Kramer, 1974). Kramer (1974) found the socialization of new graduate nurses was a process of transition that often leads to conflicting emotions among new graduate nurses. The term "reality shock" describes the role conflict and emotional conflict occurring during transition to practice. Kramer found that new graduates feel unprepared to handle roles and situations they experienced as new nurses (1974). Reality shock in nursing decreases with less disparate training in the educational and workplace settings (Kramer 1974). Providing support and guidance to the new graduate nurses can also ease the transition process (Kramer, 1974).

Organizational socialization is the next element of the theoretical model. When new graduate nurses enter the healthcare workplace, organizational tactics such as orientation and residency programs foster a positive transition resulting in work satisfaction, competency and retention. The effectiveness of the transition program influences the new graduate's decision to stay or leave the job.

This theoretical model also contains concepts from Corwin's work on role conception and conflict (1961a). Corwin found when a nurse had conflicting role conception; role confusion occurs (Corwin, 1961a). Building on Corwin's work, Kramer found that this role confusion from conflicting role conception leads to greater reality shock. The graduate nurse is thrust from the safety of the educational setting into the discipline with both professional and organizational

norms that may be very different from those perceived as a student nurse. Corwin (1961b) theorizes that a nurse's role conception changes from student to new graduate and continues to change throughout the nurse's career. A skewed role conception may result in work dissatisfaction despite a high-quality orientation or transition program (Corwin, 1961a).

Work satisfaction is a common variable in organizational theory used to evaluate the success of any program orienting new employees. Work satisfaction is associated with intent to stay and turnover at the place of employment.

### **Research Model**

The research model utilized in this study is a modified *New Graduate Transition into the Workplace* model created by Scott, Engelke & Swanson (2008). The original model is a presentation of new graduate transition to practice over a two-year period. In the original model, anticipatory socialization is educational level, age, previous work experience, life events, family and realistic versus unrealistic work expectations. The organizational tactics in the original model were: orientation, preceptor relationship, internship, personality/hardness, meanings/purposes, knowledge/skills, personal life demands, work stress/job demands, opportunity to leave, workplace relationships, organizational/unit culture, autonomy/rewards/equity and supervisor style. Finally, the organizational outcomes in the original model included: job satisfaction, career satisfaction, organizational culture, intent to stay/leave the organization, turnover/stay and intent to leave/stay in the nursing profession Scott, Engelke & Swanson (2008). The original model was modified by the researcher to incorporate the variables in this study and to reduce the study period from two years to 18 weeks.

The current research model depicts anticipatory socialization as the personal factors of role conceptualization at two weeks into a nurse residency, entry educational type, personal work

experiences, and gender. The degree of work adjustment a new graduate experiences during socialization will be considered by measuring the degree of role conflict the new graduate experiences at the end of an 18-week residency program. Work satisfaction will also be examined to determine if role conception influences this socialization outcome.

Figure A1 illustrates the research model and the variables of interest in this study.

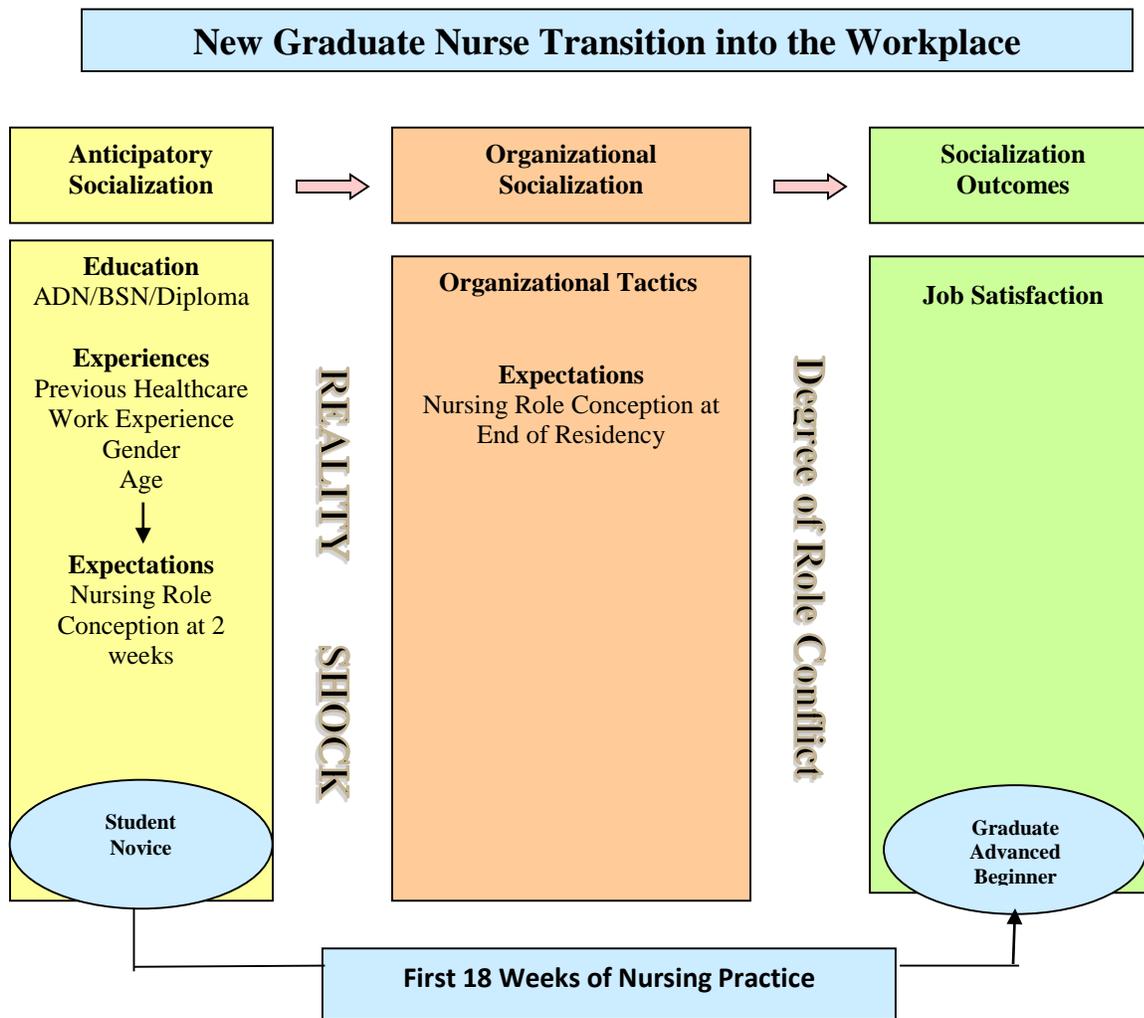


Figure A1. New Graduate Transition into the Workplace (Scott, Engelke, & Swanson, 2008)

Testing the Scott (2008) model will provide a repeat study of the influences of anticipatory socialization and will investigate the effect of a national residency program on new

graduate role conception work satisfaction. A new variable, role conflict, will be evaluated and the relationship it has with residency outcomes will be tested. A revised version of *Corwin's Role Conception Instrument* will be used and tested as well.

### **Significance of Study**

Role conception is the ideal perception a person holds regarding his or her role within a career (Corwin, 1961a). A graduate nurse's role conception begins in nursing school and is largely formed by instructors and clinical experiences (Bisholt, 2012). Transition difficulty and poor socialization into the nurse role may occur when there is dissonance between the role expectations of the student and the reality experienced by the new graduate (Duchscher, 2009). Poorly socialized new graduate nurses do not transition well into the role of the nurse and often experience a decrease in job satisfaction and retention (Newton, Cross, White, Ockerby & Billet, 2011; Beecroft, Santer, Lacy, Kunzman & Dorey, 2006; Kramer et al., 2013). Therefore, understanding and decreasing role discrepancy in new graduate nurses will positively influence the individual nurse as well as the employing organization.

In today's healthcare system, patient safety and improving patient outcomes are major initiatives (DiCuccio, 2015). Mounting medical errors and developing reimbursement practices that deny charges based on negative nursing care practice and patient outcomes mandate transitioning new graduates more effectively into the practice environment (IOM, 2000; CMS, 2014). Multiple researchers indicate that socialization influences nursing turnover that directly affects quality patient care for the patient (Newton et. al. 2011; Beecroft et al., 2006; Kramer et al., 2013, and Pennbrant et. al 2013).

New graduate nurses must be properly socialized into the role of the nurse or they will likely experience reality shock and may leave the organization or the nursing profession entirely

(Kramer et al., 2013). This study will provide information on how a residency program affects nursing role conception and conflict in the graduate nurse. The study will also examine a tested and validated instrument for relevance in measuring contemporary role conception and role socialization in new graduate nurses.

### **Research Questions**

1. What is the nursing role conception in new graduates within the first two weeks of a residency program, and is nursing role conception related to education, gender, age or previous healthcare experience?
2. What is the nursing role conception in new graduates at the end of the residency program, and is end of residency nursing role conception related to education, gender, age or previous healthcare experience?
3. Does nursing role conception change between week 2 and the end of the 18-week residency and is the change in nursing role conception related to age, education, gender or previous healthcare experience?
4. Does nursing role conception or change in nursing role conception at the end of an 18-week residency relate to nurse work satisfaction assessed at the end of residency?

### **Theoretical and Operational Definitions**

1. New graduate nurse- In this dataset a nurse with less than one year of hospital-based nursing experience. (Beecroft, Kunzman, & Krozek, 2001).
2. Anticipatory Socialization- “the sum total of all learning, expectation and experience acquired prior to beginning work (Van Maanen & Schein, 1979); operationalized as the self-reported educational preparation (ADN or BSN), gender, , and previous healthcare experience of the new graduate nurse” (Scott et al., 2008, p33).

3. Organizational Socialization- “the process through which new employees learn to perform and demonstrate desired work behaviors” (Scott, et al., 2008, p33); operationally defined as the orientation process or residency program that is completed in an 18-week timeframe.
4. Orientation- “a one-time combination of training activities that occurs early after entry into an organization used to facilitate employee adjustment” (Scott et al., 2008, p.33). In this study, orientation is an eighteen-week standardized residency program.
5. Job Satisfaction- “the degree to which a nurse likes the job they do” (Scott, et al., 2008); measured in this research as the new graduate nurse’s reported satisfaction with the current job.
6. Socialization Outcomes- the by -products of the socialization process (Scott, et al., 2008, p34); operationally defined in this research as satisfaction or dissatisfaction with work.
7. Role Conception- the ideal norm of the expected role in a situation (Corwin, 1961a).

## CHAPTER 2

### Review of the Literature

This chapter consists of the review of the literature. The researcher discusses the new graduate and the literature related to the *New Graduate Transition to Practice* model.

#### Data Sources

The literature review process was performed by the author using the electronic library databases available at East Carolina University. The search was conducted through the Joyner Library at East Carolina University via Academic Search Elite and included the following databases: Medline PsycARTICLES, PsycINFO, CINAHL Plus with Full Text, CINAHL with Full Text, ERIC, SocINDEX with full text and Nursing and Allied Health Collection Comprehensive. Keywords used in the search included *role conception* and *role socialization* and *new graduate nurse* and *transition to practice*. Terms were expanded to include *socialization, orientation* and *residency*.

The review of the literature on role conception and socialization includes classic studies since a ten-year review resulted in only one article. Therefore, to gain a full understanding of the concepts, research was investigated in a timeframe from Corwin's (1961a) original study until now. The initial results included 382 articles. Next, the articles were reviewed for inclusion, which resulted in 115 articles. To be included in the study the article had to meet the following requirements: research study published 2002-2016 or considered a classic study, English language, focused on new graduate nurses or specifically looking at role conception. The exclusion criteria were as follows: non-English language, literature reviews not focusing on

orientation or residency programs and secondary sources. The final literature review included 56 articles including; quantitative, qualitative and mixed- method approaches.

The literature was reviewed and organized based on the conceptual model and the matrix method described by Garrard (2010). The conceptual model, as discussed in chapter 1, includes anticipatory socialization, organizational socialization, and socialization outcomes. A review matrix was created and the information from each article was included in the matrix. The matrix categories were: author, category, theoretical framework, design, sample method, subject, instrument, metrics, scoring, reliability, validity, analysis, findings, limitations, gaps and notes. The matrix was reviewed to compare and contrast data across the categories, specifically purpose, method/sample, tools and outcomes.

### **The New Graduate**

The transition of new graduate nurses into practice has been heavily researched by the nursing profession. Successful transition to practice is instrumental in retention of nurses within the profession (Dyess and Sherman, 2009; Kramer et. al, 2013; Goode, Ponte and Havens, 2016). Research related to new graduate transition to practice has affirmed that these programs promote various outcomes including self-efficacy, retention, job satisfaction and competence (Friedman et al., 2011).

One of the most notable and classic researchers on the process of transitioning new graduates is Kramer (1974), who first described the concept of reality shock among new graduate nurses. Kramer's work built upon Corwin's (1961a) concept of role conception. Kramer (1968) conducted a study evaluating role conception among newly graduated baccalaureate nurses using Corwin's Role Conception tool as the instrument. Kramer found nurses reported high levels of stress and considered leaving the job or the profession because of

the role discrepancy felt as a nurse (1968). In a second study, she found that “reality shock” was a byproduct of role conflict (1974). Reality shock is a by-product of the realization that the new graduate perception of “being a nurse” is not what the reality is. The result of this reality shock, or unrealistic role expectations can manifest as job dissatisfaction and career dissatisfaction (Kramer, 1974).

Kramer’s theory of reality shock is still relevant in nursing today. New graduates enter the workforce and discover real life experiences sometimes differ immensely from the ideal or believed norms (Kramer et al., 2013). Reality shock leads to decreased satisfaction and increased intent to leave the profession (Friedman et al., 2011; Hickey, 2009; Hillman & Foster, 2011; Kenny et al., 2016). The phenomenon of reality shock continues to be a driving force for improvements in the orientation process and residency programs in order to increase retention of nurses in the healthcare institutions and in the profession.

Retention of new graduate nurses is a major outcome desired from new graduate transition to practice. Poor retention of nursing staff results in an increased cost for the healthcare facility, increased nurse-patient ratios, burnout of seasoned staff, and decreased quality patient care (Kramer et. al. 2012). A high retention rate is an indicator of a positive transition to practice for the new nursing graduate. The articles in this review indicate that a well-planned and prescribed orientation program or residency program increases the retention of new graduate nurses (Fox, 2010; Friedman, et al., 2011 & Hillman & Foster, 2011).

Hillman and Foster (2011) found that retention of new graduate nurses increased from 50% to 72.5% five years after the implementation of a nursing transition to practice program. Hillman & Foster (2011) studied the impact of a nursing transition program on retention and cost savings. The sample consisted of 251 new graduates that completed the residency program. Data

were collected through five different evaluation surveys of the new graduate nurses. Findings suggested that the new graduate residency program reduced turnover, increased competence and confidence and increased job satisfaction (Hillman & Foster, 2011).

Fox (2010) conducted a study of a mentor program designed to increase new graduate retention, which resulted in an 89% retention rate of new graduate nurses. This researcher evaluated the effectiveness of a pilot mentor program with a post program questionnaire for the graduate and the mentor. Prior to program implementation, the retention rate of new graduate nurses in Fox's study was 31% (2010). Although the sample was small, twelve new graduates and twelve mentors, the researcher's findings indicated that a mentoring program increases job satisfaction and increases new graduate retention (Fox, 2010).

Scott, Engelke and Swanson (2008) first determined that the length of an orientation program for new graduates influenced new graduate nursing outcomes. Later, Friedman et al. (2011) conducted a retrospective study of a year-long new graduate orientation program versus a traditional 12-week orientation program, and found an increased retention from 23% to 93% with implementation of the new longer orientation program. The researchers used a retrospective descriptive design with a sample size of 90 which compared retention between two independent groups. The researchers' findings indicated that a longer, more specialized orientation program for new graduate nurses in the critical care setting resulted in a significant increase in retention and a significant decrease in cost (Friedman, et al., 2011).

The period in which a new graduate transitions to practice is a high stress time that can lead to work dissatisfaction. An overall decrease in retention of new graduate nurses often occurs because of the dissatisfaction. Findings support that a formalized orientation/residency program can decrease the stress in the new graduate nurse, and therefore decrease work satisfaction.

Whether or not the program decreases stress attributable to role conception was not examined in any of the recent role studies (Fox, 2010; Friedman, et al., 2011; Hillman & Foster, 2011).

### **Anticipatory Socialization**

Anticipatory socialization is the process that the new graduate undergoes prior to beginning employment in the workplace. Anticipatory socialization includes the new graduate's personal experiences, education, and personal expectations (Scott, Engelke, & Swanson, 2008). Education for the graduate nurse may include an associate degree in nursing (ADN), a bachelor's degree in nursing (BSN) or a diploma in nursing. Personal factors related to anticipatory socialization in this study include role conception, previous work experience, age and gender. Role conception is the personal expectations of what nursing is according to the new graduate.

### ***Role Conception***

The study of role conception began with Corwin's (1961a) study of perceptions of nursing by both new graduates and experienced nurses. Role conception is the ideal norm of the expected role in a situation. (Corwin, 1961a). Role conception was identified as a key component of new graduate socialization in transition to practice almost fifty years ago. Upon entering the role of a new graduate nurse, the nurse often develops a new role conception based on his or her experiences as a student nurse (Corwin, 1961a). Corwin (1961b) theorizes that a nurse's role conception changes from student to new graduate and continues to change throughout the nurse's career. This difference in the ideal and reality is known as role conflict, role discrepancy or role dissonance (Corwin, 1961b).

Corwin originally studied role conflict among the three defined roles of nursing; professional, bureaucratic, and service roles (1961a). Nurses who conceptualize the discipline as a professional role believe nurses should control the standards of their practice and be

accountable for ongoing learning through reading journals or maintaining memberships in professional organizations. Those new graduates whose views align with bureaucratic role conception believe nurses' roles are framed by expectations of their employing organization. These new graduates would include cost containment, shift work, and positive patient outcomes as dimensions of their role accountability. The final role conceptualization defined by Corwin's work is the service role. These new graduates believe nursing is a personal calling to help people (Corwin, 1961a). Corwin calculated role conception by adding the sum of the responses on a Likert scale survey; therefore, a higher level of agreement with an item or subscale correlates with a higher role conception in that area (1961a). Role discrepancy/ conflict/ dissonance is calculated by the difference in the ideal and real world scenarios. Role conflict can occur in any of the three identified roles of the nurse (Corwin, 1961a).

Corwin was interested in the role conflict between the bureaucratic and professional roles, if there were differences among the diploma nurses and baccalaureate prepared nurses, and if the discrepancies between the idealized perception of nursing and reality increase after the student graduates (Corwin, 1961a). The researcher utilized *Corwin's Role- Conception Scale* instrument, administered to 224 hospital nurses and 71 student nurses (Corwin, 1961a). The findings indicated that in all groups the persons with overall high role conceptions had an increased role discrepancy (conflict). Baccalaureate degree students had a higher role conception and therefore higher levels of conflict between the professional and bureaucratic roles. A role conception that is skewed from the actual role may result in role discrepancy and organizational or nursing/job dissatisfaction (Corwin, 1961a). Role conflict has been noted to cause job dissatisfaction, poor performance and leaving the profession (Dushcher & Myrick, 2008; Kramer, 1974; Kramer, et al., 2012; Goode, Lynn, Kresk, & Bednash, 2009). In the current

literature, researchers reference this conflict as role dissonance and assert that role socialization is still relevant in nursing (Pennbrant, et al., 2013). Nursing role conception for the new graduate nurse begins to develop during nursing school (Corwin,1961a).

### ***Education***

Coudret, Fuchs, Roberts, Suhrheinrich, and White, (1994) found that a four-week orientation program during preceptorship decreased role discrepancy among baccalaureate new graduate nurses. Dobbs indicated that an anticipatory socialization program for senior nursing students decreased role discrepancy (1988). Goldenberg and Iwasiw, (1992), conducted a study related to new graduate socialization during a senior clinical preceptorship program. The researchers also found that the new graduates had decreased role conflict and decreased role discrepancy scores ( $p < .00012$ ) after completion of the preceptorship program in their final semester of nursing school (Goldenberg & Iwasiw, 1992). Decreased role conflict among new graduate nurses is associated with an anticipatory socialization program during nursing school (Coudret et al., 1994; Dobbs, 1988, Goldenburg & Iwasiw, 1992).

There were also studies conducted with findings that new graduates were not adequately prepared by their education or hospital orientation for the role of the nurse. Newton, Cross, White, Ockerby, and Billett, (2011) conducted a longitudinal qualitative study on socialization of 23 BSN nurses during their school preceptorship program. The study results indicated that students did not believe their educational experiences adequately prepared them for socialization into the nurse's role (Newton et al., 2011). Kelly and McAllister (2013) conducted a qualitative study of new graduate's post-graduation socialization to unit culture. The researchers found that new graduates perceived their education was lacking in preparing them for socialization into the nursing field. Pennbrant, Nilsson and Ohlen (2013) conducted a study of nurse graduates in

Sweden and found that new graduate nurses did not feel properly trained or socialized for the new graduate role. This sentiment has also been found among new graduates in the United States.

Lawler and Rose (1987) conducted a comparison study evaluating professionalization in baccalaureate, ADN and RN-BSN nurses. The researchers modified the professional subscale of Corwin's *Nursing Role Conception Scale* and then administered to study participants. The results indicated ADN nurses have higher role dissonance than RN-BSN nurses (Lawler & Rose, 1987).

Goldenberg and Iwasiw (1993) conducted a descriptive pre and post-test study on role conception among pre-licensure associate degree and baccalaureate students and RN to BSN students. The researchers also used the *Lawler/Corwin Nursing Role Conception Scale* noted above. The sample included 27 community college students, 24 baccalaureate students and 17 RN to BSN students (Goldenberg & Iwasiw, 1993). All three cohorts' results indicated a decrease in bureaucratic conception and supported the professional role conception of the nurse. One noteworthy finding was that the RN-BSN group had the least amount of role conception change and role discrepancy (Goldenberg & Iwasiw, 1993). This finding is most likely associated with the fact that the RN to BSN group already had experience in nursing.

### ***Experiences***

Personal dimensions in this study include gender, role conceptualization at two weeks of orientation and previous healthcare work-life experiences. There were no studies during the inclusion timeframe that specifically looked at previous healthcare experiences in relation to new graduate transition to practice outcomes such as job satisfaction. Laschinger (2012) conducted a study on job satisfaction and career satisfaction with self-evaluation of the personal factors of self-efficacy, self-esteem, emotional stability and locus of control. The study found that higher

scores in these personal factors correlated with a higher incidence of job satisfaction and career satisfaction.

### ***Age***

Age of the new graduate is one of the anticipatory socialization variables in this study. The age of a new graduate nurse can vary from young adult to late middle age. There were no studies in which researchers evaluated age in relation to role conception or new graduate transition to practice outcomes.

The foundational role conception for the graduate nurse is provided by the anticipatory socialization process. The anticipatory socialization variables differ between individuals and may contribute to alterations in the initial role conceptions of new graduate nurses.

### **Organizational Socialization**

Organizational socialization is a process of acclimation to the organization for the graduate nurse. Recognizing that new graduates are not fully prepared for practice; healthcare organizations have undertaken a number of strategies including orientation periods and/ or residency programs that allow new graduates reduced nursing responsibilities. Organizational socialization occurs when the new graduate begins working and includes all of the new graduate's experiences during the orientation process (Scott et al., 2008). In this model, organizational socialization includes the nurse residency and its influence on role concept development. The amount of role conflict the new graduate nurse experiences is a result of the variance in role concept that occurs during organizational socialization.

### ***Nurse Residency/ Orientation***

Nurse residency programs or orientation programs are the primary method by which organizations socialize new graduate nurses. Numerous studies in this review discuss nurse

residency programs and socialization. Researchers in only two studies in this review directly measured role conception and role dissonance as an outcome of a nurse residency or orientation program in the workplace.

Beecroft, Kunzman and Krozek (2001), conducted a one-year pilot study of a nurse residency program with 50 new graduates and measured multiple variables related to transition, including role dissonance. The researchers included a control group who completed a standard orientation and a group that completed the residency program. The researchers found that both the control and the residency group had no difference in the observed reality of the scenarios on the unit; however, the residency group had less role dissonance than the control group (Beecroft et. al, 2001).

Young, Stuenkel & Bawel-Brinkley (2008), examined a six-week hospital orientation program's instrument, and analyzed the data with t –tests and difference of means (Young, et al., 2008). The researchers results indicated that the service role was the highest held conception, meaning the respondents had a higher level of agreement with the service subscale. The researchers results also indicated some discrepancy among all roles (bureaucratic, professional and service), and the only statistically significant difference in ( $p=.01$ ) role discrepancy being associated with the service role (Young et al., 2008). The researchers utilized Pieta's (1975) *Nursing Role Conceptions Scale* which was a revision of Corwin's (1961a) original instrument,

Role conception and role dissonance are evaluative components of the socialization aspect of residency programs. Based on the studies in this review, the measurement of role conception and role dissonance has been absent since 2008 despite continuing evidence that new graduates are experiencing role conflict.

### ***Degree of Role conflict***

Nursing role conception is the ideal norm of the expected role of the nurse. According to Corwin (1961a), there are three types of role conception: professional, bureaucratic and service. The professional role is centered on standards of practice; whereas the service role aligns with caring for others. The bureaucratic role is associated with organizational expectations (Corwin, 1961). Role conflict can occur when the ideal role conception does not equate with the real-life scenario.

Corwin calculated role conception by adding the sum of the responses on a Likert scale survey; therefore, a higher level of agreement with an item or subscale correlates with a higher role conception in that area (1961a) Role discrepancy/ conflict/ dissonance is calculated by the difference in the ideal and real world scenarios. Role conflict can occur in any of the three identified roles of the nurse (Corwin, 1961a).

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Kramer (1968) had similar findings in a study of BSN graduates. Kramer (1968), studied role deprivation and role conception in new graduate nurses and found that an elevated role

conception in new graduates resulted in role deprivation. The sample for the study included 59 graduates of baccalaureate nursing programs, who were then administered *Corwin's Role Conception Scale* at three different times (Kramer, 1968). Kramer's results indicated consistently at all three times that a high role conception (agreement with the role) was associated with an increased level of role conflict.

Pieta (1976) conducted a study comparing role conception and discrepancy among 1077 student nurses, head nurses and nursing faculty with various degrees such as diploma, associate degree nurse graduates, and baccalaureate graduates. A revised version of Corwin's *Role Conception* instrument was developed by Pieta and utilized in her study (1976). Role discrepancy occurred to the greatest extent in those with high role conceptualization in the service and professional domains (Pieta, 1976). These findings could be associated with the level of experience of faculty and head nurse participants.

A study on student nurses' role conception evaluated socialization in 103 senior baccalaureate-nursing students using *Corwin's Nursing Role Conception Scale* to determine the amount of role discrepancy after the completion of a preceptorship program (Dobbs, 1988). The researcher analyzed the data using a difference of means method and found that there was not a statistically significant change in the role conception of the student nurses before and after the 8-week preceptorship (Dobbs, 1988).

In contrast, two similar studies found no discrepancies in senior student nurses and new graduates. One non-generalizable small study evaluated senior student-nurse role conception before and after completion of a four-week preceptorship program (Coudret et al., 1994). This researcher utilized Pieta's (1975) *Nursing Role Conceptions Scale* that was a revision of Corwin's (1961a) original instrument. The researcher's findings indicated that students had an

increased role discrepancy for the ideal versus real service role between the beginning and the end of the practicum. Taylor, Westcott and Bartlett conducted a small non-generalizable study in the United Kingdom examining role conception and role discrepancy in new graduate nurses (2001). The researchers utilized *Corwin's Nursing Role Conception Scale* to measure role discrepancy and role conception at three time points for 52 baccalaureate graduates and 28 diploma graduates (Taylor et al., 2001). The researchers' findings indicated that there was no role discrepancy or change in role conception at any of three times (Taylor et. al, 2001).

Role conception has also been studied with a population of experienced nurses. In 2006, Takase, Maude and Manias researched role conception in experienced nurses in Australia. The researchers used a *Staff Nurse Role Conception Scale* and analyzed the data using t-test (Takase et al., 2006). The researchers' findings indicated that both groups of nurses experienced role discrepancies in multiple areas.

There is a small amount of literature available that specifically examines role conception and role conflict. Role conception and role conflict is often included as part of the socialization process but may not be measured using a role conception scale. Several researchers evaluated senior nursing students while they were still in school and the students may not be comparable to a new graduate nurse in a hospital residency or orientation program. Role conflict due to role discrepancy is still a problem during the socialization process that leads to reality shock and burnout (Kramer et al., 2013). Additionally, nursing roles have evolved and validation of *Corwin's Role Conception Scale* instrument in contemporary settings with a large sample size has not been conducted.

## **Socialization Outcomes**

Socialization outcomes are influenced by the organizational socialization process and can be positive or negative. Healthcare organizations invest a large amount of money in transition programs for new graduates; therefore, a goal of these programs is retention of the nurses that participate. Scott et. al. (2008), described the job satisfaction intent to leave turnover cycle as a phenomenon that new graduates encounter when they are dissatisfied with elements of their job. When the new graduate leaves his/her position as a nurse, he/she may consider or actually leave the profession of nursing as well. The socialization outcome for this study is work satisfaction.

### ***Job Satisfaction***

The effectiveness of new graduate transition to practice is often measured by how satisfied the employee is with the job or career in which they are employed. Job satisfaction is determined by how satisfied the person is with their current employment. Work satisfaction is another term that is found in the literature to describe the respondents' satisfaction with their work. Researchers use these terms to describe the overall satisfaction with the work that the nurse is doing. New graduate nurses who are satisfied with their job, are less likely to leave their employment and are more likely to have a smooth transition to practice process. The overarching theme in the articles selected for this literature review regarding work satisfaction was that new graduate nurses who have an increased amount of work satisfaction have been through an organized orientation or residency program that includes a transition component (Hafler & Graf, 2006, Kowalski & Cross, 2010, Lee, Tzeng, Lin & Yeh, 2009).

Hafler & Graf (2006), studied new graduate perceptions of his/her work experience during and after an orientation program. The purpose of the study was to evaluate perceptions of the work environment and job satisfaction for new graduate nurses during the first 18 months of

employment. The program provided discussion sessions where the new graduates had an open forum to discuss their role transition. The findings indicated that leadership involvement, professional transitioning and a good mentor relationship were correlated with job satisfaction. Job dissatisfaction was associated with negative attitudes and scheduling issues. The researchers reported that job satisfaction increased over time (Hafler & Graf, 2006). The researchers did not specifically measure role conception but did utilize role transition as a component of their program and linked that program component to job satisfaction.

Kowalski & Cross (2010) researched outcomes related to new graduate nurses who participated in a one-year residency program at two hospitals in Las Vegas, Nevada. The researchers evaluated graduate competency, stress level, anxiety, transition, satisfaction and retention in relation to the residency program. The researchers' findings indicated that after completion of the program the new graduates had increased competency, decreased stress and anxiety, better transition, and an increased rate of retention (Kowalski & Cross, 2010). The researchers used the *Casey-Fink Graduate Nurse Experience Survey* to measure transition and satisfaction. There was not a specific measure of role conception.

Lashchinger (2012) conducted a study among new graduate nurses and found that career satisfaction is linked to personal self-evaluation characteristics of the new graduate nurse, as well as situational characteristics including leadership and orientation/residency characteristics. Laschinger (2012) evaluated the effects of areas of work life on job satisfaction. The researchers also found that empowerment, work engagement and burnout were significant predictors of job and career satisfaction (Laschinger, 2012). The researchers did not specifically discuss role conception in relation to job satisfaction.

Kramer (1974) first described burnout as a symptom of reality shock caused by role conflict related to role discrepancy. These problems are still relevant today in nursing. There is a gap with job satisfaction in the literature. None of the studies in this review looked specifically at role conception and job satisfaction; however, role transition was discussed. Job dissatisfaction may be linked to inadequate socialization of new graduate nurses. Further studies of the relationship of orientation/residency and job satisfaction as it correlates with role conception are recommended.

### **Summary**

Role conception studies are imperative with new graduate nurses to determine the extent of role discrepancy during the transition process. Role conceptions remains an issue in nursing; however, there have been no studies since 2008. There are several noted gaps in the literature related to role conception and new graduate transition to practice.

The first identified gap in the literature is the overall lack of current studies in evaluating role conception in new graduate nurses. A study with a large sample size that includes multiple sites would make the results more generalizable. The second identified gap in the literature is that there are no recent studies evaluating differences between the associate degree nurse (ADN) graduate and the bachelor degree nurse (BSN) graduate. A comparison study may indicate educational preparation influences contemporary role conception and role conflict. The third gap noted in this literature review is that there are no studies regarding role conception before and after completion of a residency program with a large sample size. Finally, there are no studies with researchers examining the interaction of role conception with job satisfaction. A study utilizing a larger population and an instrument which measures differences in role conception

related to educational levels before and after a residency program as well as linking role conception to work satisfaction, would bridge the gaps in the literature.

## **CHAPTER 3**

### **Methods**

The purpose of this study was to examine role conception and changes in role conception in new nurse graduates during an 18-week new graduate residency program. The objective of this research was to examine the relationship between anticipatory socialization factors and role conflict, specifically role conflict on the organizational outcome of job satisfaction. This study used an existing database of new graduate nurses who completed the Versant® RN Residency program during the years 2011-2013. This chapter discusses the study design, sample, data collection instruments, procedure and analytical methods that were used in the study.

### **Population and Sample**

The Versant® RN Residency program was initially founded as a one-year pilot study in California in 1999. The final study consisted of 50 new graduate nurses at Children's Hospital, Los Angeles (CHLA). The aim of the study was to provide a comprehensive orientation program that eased transition and improved the outcomes of retention and satisfaction (Beecroft, Kunzman & Krozek, 2001). There was also a control group of 28 graduates who had completed the previous orientation program immediately prior to this study. The control group had more experience and more education than the intervention group. The program included the following: over 700 hours of clinical experience, an individual preceptor, a mentor, debriefing and self-care sessions, looping the graduates through various practice areas and over 200 hours of classroom instruction (Beecroft et al., 2001). The study found that the control group (n=28) had greater role discrepancy than the intervention group. The retention of new graduate nurses increased from 60% to over 80% after the implementation of the residency pilot program (Beecroft et al., 2001).

In the two years that followed the pilot study, the researchers continued to expand the residency program to three other hospitals, with 118 new graduates completing the program by July of 2003. CHLA officially created the Versant RN Nurse Residency™ program in 2004. Voyager®, a web based management program for the residency data was also created in 2004 when Versant RN Nurse Residency™ was offered to hospitals across the United States (Ulrich, Krozek, Early, Ashlock, Africa, & Carman, 2010). The program began as a research study which officially ended in 2009 (Ulrich et al., 2010). The initial analysis of the longitudinal database was conducted by Ulrich et al. (2010) and evaluated demographical data as well as competence, confidence and retention of new graduate nurses. Although the research project ended, Versant® continues to collect de-identified data to maintain confidentiality of the program participants.

### **Population and Sample for Secondary Data Analysis**

This study uses secondary data analysis to examine a database of 3254 new nurse graduates who started a residency program during the years of 2011 – 2013. These nurses were employed by 31 hospital systems that included 119 separate hospitals located primarily in the Southeast, Midwest and Western United States. The residency program is a standardized evidence-based RN residency implemented in hospitals across the United States. Outcomes data were collected longitudinally from over 15,000 nurses who completed the RN residency from 2000-2015.

## **Protection of Human Subjects**

Prior to beginning the research study, the East Carolina University Institutional Review Board approved this project.

### **Instrumentation**

#### **Corwin Nursing Role Conception Scale (Corwin, 1961)**

The internship period is a time of transition from new graduate nurse to beginning level RN. It was determined that the new graduate RN should acquire the values, attitudes, and goals fundamental to the nursing profession. The Professional subscale from *Corwin's Nursing Role Conception Scale* was used to evaluate this aspect of role transition. The subscale was revised by Lawler (1987) for clarity and current usage. The revised instrument consists of 14 hypothetical situations in which nurses might find themselves. These situations measure perceptions of professional orientation such as independence of practice, standards of excellence, membership in professional organizations, credentialing, continued learning, and interest in research (Appendix B). The 14 role situations can be grouped into four constructs representing different types of role situations. These four constructs include professional (situations 3, 4, 9, and 14); practice (situations 7, 8, 11, 12, and 13); education (situations 6 and 10); and standards (situation 1, 2, and 5). Respondents are asked to indicate on a 5-point Likert scale from strongly agree (1) to strongly disagree (5), the extent to which they think the situation “should be the ideal in nursing” (ideal) or “has been observed in their hospital” (real). Each situation yields two scores, one on the “ideal” scale and one on the “real” scale. In addition to a separate “ideal” and “real” score, a discrepancy score can be derived which is the difference between the “ideal” and “real” scores. The Corwin scale was completed by each intern at the beginning and at the end of the 18-week residency. The content validity of the revised scale was assessed by Lawler, who

also reported an internal consistency reliability of .59. However, this instrument has the characteristics of a formative index where the items, or in this case situations, are causal indicators. The fourteen situations on the scale are distinct components that, when combined, offer a measure of role conception, but the situations are not necessarily correlated. With these types of measures, traditional measures of internal consistency reliability may not be valid (Polit & Yang, 2016).

### **Nurse Work Satisfaction Scale (Hinshaw and Atwood, 1982)**

Hinshaw and Atwood (1982) developed the Nurse Satisfaction Scale (NWS) from an industrial job satisfaction instrument created by Brayfield and Rothe (1951). The Brayfield and Rothe (1951) scale consisted of six subscales consisting of enjoyment, quality of care, care/comfort, job interest, time to do one's job, and feedback. Applying factor analysis, Hinshaw and Atwood (1982) derived three dimensions that explained 53.5% of the total scale variance. The 23 items on the survey evidence three dimensions of satisfaction: quality of care, enjoyment and time to do one's job. Responses to the items use a 5-point Likert scale from strongly agree (1) to strongly disagree (5). In addition, a total score can be derived from summing all the items. Hinshaw and Atwood (1982) reported Coefficient alpha internal consistency reliability coefficients of .77 for the quality of care subscale, .85 for the enjoyment subscale, .76 for the time to do one's job subscale, and .88 for the total scale. In the database used for this study, the nurse work satisfaction scale was modified by eliminating five of the original 23 items, resulting in an 18-item scale. In the revised scale, there are five items in the quality of care subscale, nine items in the enjoyment subscale, and four items in the time to do one's job subscale.

Table 1 is a summary of the research variables in this study. The table includes the theoretical dimension, variable and the corresponding definition.

Table 1

*Summary of Research Variables*

Theoretical Dimension	Variable	Definition
Anticipatory Socialization	Education	ADN or BSN
	Gender	Male or Female
	Age	<30, 30-39, 40+
	Previous Experience	Previous health care experience (yes/no)
	Role Conception (Ideal)	Corwin “ideal” Likert scale score
Organizational Socialization	Role Conception (Real)	Corwin “real/observed” Likert scale score
	Role Conflict	Difference between “ideal” and “real” score
Outcome	Nurse Work Satisfaction	NWS subscales and total score

## **Data Analysis**

Data were analyzed using SPSS version 23.0. Descriptive statistics were utilized to provide generalizations about the sample as well as to determine if there is any missing data or any outliers in the dataset (Pallant, 2010). Analyses also were used to determine if reverse coding was necessary on any of the items (Pallant, 2010).

## **Data Analysis**

### **Preliminary Analyses**

Before any analysis began, each of the 14 Ideal and Observed 5-point Likert scales were dichotomized into 0 = for undecided, disagree, or strongly disagree responses and 1 = strongly agree or agree responses (positive response/agreement). The composite percentage of positive responses were calculated for Ideal and Observed agreement for each of the 14 role situations and for the four role constructs at the beginning of the residency (BOR) and at the end of the residency (EOR). The SPSS Two-Step Cluster Analysis procedure was used to reveal any natural groupings (or clusters) of nurses in the database of 3,254 nurses related to their BOR Ideal positive responses to the 14 situations, and any clusters related to their BOR Observed responses to the 14 situations. This cluster analysis procedure was also applied to EOR positive responses related to ideal and observed ratings of the 14 role situations. This clustering procedure is an exploratory tool designed to find naturally occurring subgroups of individuals or objects in a database that otherwise would not be apparent. Variables used for the clustering can be categorical, continuous, or both. The minimum number of clusters (groups) that could be identified is two, with one group consisting of individuals with high positive responses and one group with lower positive responses to the 14 situations.

### **Research Question 1**

What is the nursing role conception in new graduates within the first two weeks of a residency program, and is role conception related to education, gender, age or previous healthcare experience?

The average percent of positive responses is calculated for each role construct for each group of nurses clustered with high positive or low positive agreement on the 14 role situations as to whether the situations represent the ideal in nursing at the BOR. Mean percent of positive responses for the role constructs were also computed for subgroups of nurses clustered into either a group with high or low positive agreement as to whether the 14 role situations were observed by the nurses in their hospital. Independent samples T tests were used to compare mean percent of agreement on each of the four constructs between the two nurse clusters based on ideal agreement and the two clusters based on observed agreement at the BOR. The separate ideal high/low groups were combined with the observed high/low groups to form four groups of nurses which represent the level of role conception among the study sample at the BOR. These four groups included (a) group 1 nurses who had low positive agreement on both their ideal and observed ratings; (b) group 2 nurses who had low ideal positive agreement and high observed positive agreement; (c) group 3 nurses who had high ideal agreement and low observed agreement; and (d) group 4 nurses who had high positive agreement on both their ideal and observed ratings. The chi-square test of independence was used to investigate the relationship of BOR role conception with nurse age, education, gender, and previous healthcare experience.

## **Research Question 2**

What is the nursing role conception in new graduates at the end of the residency program, and is end of residency role conception related to education, gender, age or previous healthcare experience?

The average percent of positive responses is calculated for each role construct for each group of nurses clustered with high positive or low positive agreement on the 14 role situations as to whether the situations represent the ideal in nursing at the EOR. Mean percent of positive responses for the role constructs were also computed for subgroups of nurses clustered into either a group with high or low positive agreement as to whether the 14 role situations were observed by the nurses in their hospital. Independent samples T tests were used to compare mean percent of agreement on each of the four constructs between the two nurse clusters based on ideal agreement and the two clusters based on observed agreement at the EOR. The separate ideal high/low groups were combined with the observed high/low groups to form four groups of nurses which represent the level of role conception among the study sample at the EOR. These four groups included (a) group 1 nurses who had low positive agreement on both their ideal and observed ratings; (b) group 2 nurses who had low ideal positive agreement and high observed positive agreement; (c) group 3 nurses who had high ideal agreement and low observed agreement; and (d) group 4 nurses who had high positive agreement on both their ideal and observed ratings. The chi-square test of independence was used to investigate the relationship of EOR role conception with nurse age, education, gender, and previous healthcare experience.

### **Research Question 3**

Does nursing role conception change between week 2 and the end of the 18-week residency and is the change in role conception related to age, education, gender, or previous healthcare experience?

Changes in ideal role conception was examined by forming four groups of nurses by cross-tabulating the two BOR ideal clusters with the two EOR ideal clusters and computing the mean percent of positive ideal agreement for the four role constructs in the four groups. These four groups included (a) group 1 nurses who had low positive ideal agreement at both BOR and EOR; (b) group 2 nurses who had low ideal positive BOR agreement and high ideal positive EOR agreement; (c) group 3 nurses who had high ideal BOR agreement and low ideal EOR agreement; and (d) group 4 nurses who had high positive ideal agreement at both BOR and EOR.

Changes in observed role conception was examined by forming four groups of nurses by cross-tabulating the two BOR observed clusters with the two EOR observed clusters and computing the mean percent of positive observed agreement for the four role constructs in the four groups. These four groups included (a) group 1 nurses who had low positive observed agreement at both BOR and EOR; (b) group 2 nurses who had low observed positive BOR agreement and high observed positive EOR agreement; (c) group 3 nurses who had high observed BOR agreement and low observed EOR agreement; and (d) group 4 nurses who had high positive observed agreement at both BOR and EOR. Change in role conception was further analyzed by comparing the change in group membership of the four BOR role conception groups and the four EOR role conception groups. Relationships in changes in ideal role conception and changes in observed role conception were with age, education, gender, and previous healthcare experience were analyzed with the chi-square test for independence.

#### **Research Question 4**

Does role conception or change in role conception at the end of an 18-week residency relate to nurse work satisfaction assessed at the end of the residency?

The chi-square for independence was used to investigate relationships between Nurse Work Satisfaction grade clusters and EOR role conception clusters, BOR to EOR Ideal change clusters, and BOR to EOR Observed change clusters.

#### **Methodological Limitations**

This research study was a secondary analysis of an existing database. Polit and Beck (2017), describe a secondary analysis as studying data that were previously collected for a different study. A limitation of a secondary analysis is that the data were not collected for the current study and may contain missing responses. One clear advantage of this secondary analysis is the large sample size which may result in more accurate research findings that are more generalizable.

## **Chapter IV**

### **Findings**

This chapter contains descriptions of the sample and the results of statistical analyses for each of the four research questions in this study. The researcher examined the relationship of role conception before and after an 18-week residency program for new nurse graduates, and the relationship of role conception with age, gender, education, previous healthcare experience, and nurse work satisfaction.

#### **Research Question 1**

What is the nursing role conception in new graduates within the first two weeks of a residency program, and is role conception related to education, gender, age or previous healthcare experience?

The sample consists of 3254 new graduate nurses who completed an 18-week residency program. The descriptive statistics in this dataset include; gender, age, previous work experience and education level. Most the participants in this study were female (84%). The participants were predominantly young with ages less than 30 years old (63%). Approximately 25 percent of the participants were between the ages of 30 years old and 40 years old; and almost 11 percent were older than 40 years of age. Over half of the participants (59%) held a BSN degree; while the rest (41%) held an ADN degree. Table 2 displays the descriptive statistics of the sample.

Table 2

*Characteristics of New Nurse Graduates (N = 3254)*

Characteristic	n	%
Age		
<30	2043	63
30 – 39	818	25
≥40	347	11
Missing	46	1
Education		
Associate	1333	41
BSN	1921	59
Previous healthcare experience		
No	1411	43
Yes	1827	56
Missing	16	<1
Gender		
Male	485	15
Female	2738	84
Missing	31	1

Table 3 is a presentation of the 14 scenarios in the *Lawler-Corwin Nursing Role Conception Questionnaire* grouped into the four constructs of professional, education, standard and practice.

Table 3

*Corwin Role Situations Grouped by Role Type*

Construct	Situation	Situation Description
Professional	3	All registered nurses in a hospital are active members in professional nursing association, attending most conferences and meetings of the association.
	4	All registered nurses in a hospital spend, on the average, at least six hours a week reading professional journals and taking continuing education courses.
	9	The nursing administrators in a large home health agency encourage their staff members to become active members of the nursing professional organizations.
	14	A nursing friend returning from a workshop claims that “once a nurse graduates from nursing school she/he bears the sole responsibility to maintain competency by regularly reading the professional journals and attending continuing education programs.”
Practice	7	At some hospitals when a registered nurse is considered for Promotion, one of the most important factors considered by the supervisor is her knowledge of and ability to use judgement about nursing care.
	8	The nursing administrators in a large home health agency encourage their staff members to become active members of the nursing professional organizations.
	11	In a certain hospital, a registered nurse is fully responsible/accountable to plan and carry out the total nursing care of clients entrusted to him/her.
	12	A nurse testifies before legislators that the responsibility for setting standards of practice for the delivery of nursing services should rest with the nursing profession alone.
	13	In one hospital nurses develop clinical practice models based on nursing theory for use on specific units.
Education	6	Some registered nurses believe that they can get along very well without a formal education, such as that required for a BSN or MSN.
	10	A director of nursing service tells you “If nursing is to attain full professional status in the near future, the minimum of a baccalaureate degree should be required of all registered nurses.”

Table 3 continued

*Corwin Role Situations Grouped by Role Type*

Construct	Situation	Situation Description
Standards	1	One registered nurse tries to put her standards and ideals about good nursing into practice even is hospital rules and procedures prohibit it.
	2	One registered nurse does not do anything which (s)he is told to do unless (s)he is satisfied that it is best for the welfare of the patient.
	5	Some registered nurses believe that they can get along very well without a formal education, such as that required for a BSN or MS.

Table 4 presents the average percent of agreement on the composite role constructs at the BOR and the EOR or the total sample. Of the 3,254 nurses at the BOR who rated the four professional situations as the ideal in nursing, 79% responded that they agreed that the four situations (3, 4, 9, 14) representing the professional construct should be the ideal in nursing. Fifty three percent agreed that the five situations (7, 8, 11, 12, 13) of the practice construct should be the ideal in nursing and 41% agreed that the two situations (6, 10) representing the education construct should be the ideal in nursing. An average of 49% agreed that the three situations (1, 2, 5) representing the standards construct should be the ideal in nursing. When the nurses rated each construct as to whether they agreed that they observed the situations in their hospital, an average of 36% agreed that they observed the professional situations in their hospital. Seventy-one percent agreed that they observed the practice situations and an average of 38% agreed that they observed the education situations. Thirty nine percent observed the standards situations.

Table 4

*Percent Agreement on Role Constructs at BOR and EOR (N = 3254)*

Construct	BOR		EOR	
	Ideal %	Observed %	Ideal %	Observed %
Professional	79	36	73	40
Practice	53	71	68	53
Education	41	38	41	38
Standards	49	39	48	39

Table 5 presents the results of the BOR cluster analysis which identified two groups of nurses, one with low agreement on the role situations with regard to whether the situations should be the ideal in nursing, and one group of nurses who had higher levels of agreement as to whether the situations should be the ideal in nursing. At the BOR 59% of the study sample were in the low ideal group, and 41% in the high ideal group. The average percent agreement on the professional situations was much higher in the high agreement group (95%) compared to 68% in the low agreement group. The same pattern was observed for the practice situations, with 82% of the high agreement group agreeing that the practice situations should be the ideal in nursing, compared to 64% of the low agreement group. The effect size was large for the difference in means for both the professional and practice constructs. The mean differences for the education and standards constructs had small effect sizes.

Table 5

*Differences Between Role Constructs for Nurses Clustered into Low and High Ideal Agreement Groups at the BOR*

Construct	Ideal				t	$\eta^2$
	Low Agreement (n = 1929)		High Agreement (n = 1325)			
	M	SD	M	SD		
Professional	68	31.4	95	12.7	29.17	.207
Practice	64	21.9	82	16.1	25.31	.165
Education	38	29.1	46	28.4	7.86	.019
Standards	45	26.6	54	26.5	9.25	.026

Table 6 presents the results of the BOR cluster analysis which identified two groups of nurses, one with low agreement on the role situations with regard to whether the situations were observed in their hospital, and one group of nurses who had higher levels of agreement as to whether the situations were observed in their hospital. At the BOR 61% of the study sample were in the low observed group, and 39% in the high ideal group. The average percent agreement on the professional situations was much higher in the high agreement group (65%) compared to 17% in the low agreement group. The same pattern was observed for the practice situations, with 69% of the high agreement group agreeing that they observed the practice situations in their hospital, compared to 43% of the low agreement group. The effect size was large for the difference in means for both the professional and practice constructs. The mean differences for the education and standards constructs had small effect sizes.

Table 6

*Differences Between Role Constructs for Nurses Clustered into Low and High Observed Agreement Groups at the BOR*

Construct	Observed				t	$\eta^2$
	Low Agreement (n = 1990)		High Agreement (n = 1264)			
	M	SD	M	SD		
Professional	17	21.9	65	27.9	55.14	.483
Practice	43	26.1	69	22.1	29.22	.208
Education	33	31.7	43	32.6	8.94	.024
Standards	34	29.8	47	29.8	12.29	.044

Table 7 is a description of the BOR Role Conception among the 3,254 new nurse graduates. Out of the total sample of 3,254, 1324 (41%) were members of the low Ideal cluster and the low Observed cluster. Six hundred five (19%) were classified in the low Ideal cluster and in the high Observed cluster, and 666 (20%) were in the low Observed cluster and high Ideal cluster. Six hundred fifty nine (20%) were members of both the high Ideal and high Observed clusters. Of the 1,929 nurses who were in the low Ideal cluster, 1324 (69%) of them were also in the low Observed cluster and 605 (31%) were in the high Observed cluster. Of the 1,325 in the high Ideal cluster, 659 (50%) were also in the high Observed cluster while 666 (50%) were in the low Observed cluster.

Table 7

*Prevalence of Nurses in BOR Cross-tabulation of Ideal and Observed Clusters*

Observed Cluster	Ideal low Cluster		Ideal high Cluster		$\chi^2$	p	Phi
	n	%	n	%			
Low cluster	1324	68.6	666	50.3			
High cluster	605	31.4	659	49.7	111.61	<.001	.188

Relationships of age, gender, education, and previous healthcare experience with the four patterns of agreement between Ideal and Observed clusters are shown in Table 8. There were no statistically significant relationships with age or gender. There was a statistically significant relationship with education and previous experience, but the effect sizes for those relationships were small.

Table 8

*Beginning of Residency Role Conception Related to Education, Gender, Age and Previous Healthcare Experience (N = 3254)*

Variables	Ideal and Observed Cluster Membership								$\chi^2$	p	Phi
	I-low		I-low		I-high		I-high				
	n	%	n	%	n	%	n	%			
Age											
<30	807	61.8	384	64.1	405	62.0	447	68.8			
30-39	341	26.1	154	25.7	179	27.4	144	22.2			
40+	158	12.1	61	10.2	69	10.6	59	9.1	11.73	.068	.043
Gender											
Male	177	13.5	104	17.4	109	16.6	95	14.5			
Female	1137	86.5	493	82.6	549	83.4	559	85.5	6.51	.089	.045

Table 8 continued

Beginning of Residency Role Conception Related to Education, Gender, Age and Previous Healthcare Experience (N = 3254)

Ideal and Observed Cluster Membership											
Variables	I-low		I-low		I-high		I-high		χ <sup>2</sup>	p	Phi
	n	%	n	%	n	%	n	%			
ADN	554	41.8	269	44.5	219	32.9	291	44.2	24.25	<.001	.086
BSN	770	58.2	336	55.5	447	67.1	368	55.8			
Previous Experience											
Yes	751	57	361	59.9	333	50.4	382	58.2	13.77	.003	.065
No	567	43	242	40.1	328	49.6	274	41.8			

**Research Question 2**

What is the nursing role conception in new graduates at the end of the residency program, and is end of residency role conception related to education, gender, age or previous healthcare experience?

Table 9 presents the results of the EOR cluster analysis which identified two groups of nurses, one with low agreement on the role situations with regard to whether the situations should be the ideal in nursing, and one group of nurses who had higher levels of agreement as to whether the situations should be the ideal in nursing. At the EOR 45% of the study sample were in the low ideal group, and 55% in the high ideal group. The average percent agreement on the professional situations was much higher in the high agreement group (92%) compared to 49% in the low agreement group. The same pattern was observed for the practice situations, with 80%

of the high agreement group agreeing that the practice situations should be the ideal in nursing, compared to 54% of the low agreement group. The effect size was large for the difference in means for both the professional and practice constructs. The mean differences for the education and standards constructs had medium effect sizes.

Table 9

*Differences Between Role Constructs for Nurses Clustered into Low and High Ideal Agreement Groups at the EOR*

Construct	Ideal				t	$\eta^2$
	Low Agreement (n = 1476)		High Agreement (n = 1778)			
	M	SD	M	SD		
Professional	49	32.2	92	16.4	49.23	.427
Practice	54	28.2	80	18.9	30.98	.228
Education	32	30.0	49	28.1	16.49	.077
Standards	37	28.5	56	28.1	18.56	.096

Table 10 presents the results of the EOR cluster analysis which identified two groups of nurses, one with low agreement on the role situations with regard to whether the situations were observed in their hospital, and one group of nurses who had higher levels of agreement as to whether the situations were observed in their hospital. At the EOR 39% of the study sample were in the low observed group, and 61% in the high ideal group. The average percent agreement on the professional situations was much higher in the high agreement group (57%) compared to 14% in the low agreement group. The same pattern was observed for the practice situations, with 71% of the high agreement group agreeing that they observed the practice situations in their hospital, compared to 25% of the low agreement group. The effect size was large for the

difference in means for both the professional and practice constructs. The mean differences for the education and standards constructs had medium effect sizes.

Table 10

*Differences Between Role Constructs for Nurses Clustered into Low and High Observed Agreement Groups at the EOR*

Construct	Observed				t	$\eta^2$
	Low Agreement (n = 1285)		High Agreement (n = 1969)			
	M	SD	M	SD		
Professional	14	20.7	57	33.1	41.68	.348
Practice	25	19.4	71	20.6	63.56	.554
Education	26	29.0	46	32.9	17.69	.088
Standards	25	27.5	48	30.9	21.92	.129

Table 11 is a description of the EOR Role Conception among the 3,254 new nurse graduates. Out of the total sample of 3,254, 815 (25%) were members of the low Ideal cluster and the low Observed cluster, 661 (20%) were classified in the low Ideal cluster and in the high Observed cluster, 470 (14%) were in the low Observed cluster and high Ideal cluster, and 1308 (40%) were members of both the high Ideal and high Observed clusters. Of the 1,476 nurses who were in the low Ideal cluster, 815 (55%) were of them were also in the low Observed cluster and 661 (45%) were in the high Observed cluster. Of the 1,778 in the high Ideal cluster, 1308 (74%) were also in the high Observed cluster while 470 (26%) were in the low Observed cluster.

Table 11

*Prevalence of Nurses in EOR Crosstabulation of Ideal and Observed Clusters*

Observed Cluster	Ideal low Cluster		Ideal high Cluster		$\chi^2$	p	Phi
	n	%	n	%			
Low cluster	815	55.2	470	26.4			
High cluster	661	44.8	1308	73.6	279.61	<.001	.29

Relationships of age, gender, education, and previous healthcare experience with the four patterns of agreement between Ideal and Observed clusters are shown in Table 12. There were no statistically significant relationships with age or gender. There was a statistically significant relationship with education and age, but the effect sizes for those relationships were small.

Table 12

*End of Residency Role Conception Related to Education, Gender, Age and Previous Healthcare Experience (N = 3254)*

Variables	EOR Ideal and Observed Cluster Membership								$\chi^2$	p	Phi
	I-low		I-low		I-high		I-high				
	O-low	O-high	O-low	O-high	O-low	O-high	O-low	O-high			
Age											
<30	481	60	430	65.8	280	60.3	852	66			
30-39	217	27.1	157	24	119	25.6	325	25.2			
40+	103	12.9	66	10.1	65	14	113	8.8	18.28	.006	.053
Gender											
Male	122	15.1	90	13.8	66	14.1	207	16			
Female	686	84.9	561	86.2	401	85.9	1090	84	1.91	.591	.024
Education											
ADN	360	44.2	297	44.9	160	34	516	39.4			
BSN	455	55.8	364	55.1	310	66	792	60.6	18.32	<.001	.075

Table 12 continued

End of Residency Role Conception Related to Education, Gender, Age and Previous Healthcare Experience (N = 3254)

EOR Ideal and Observed Cluster Membership											
Variables	I-low		I-low		I-high		I-high		$\chi^2$	p	Phi
	O-low		O-high		O-low		O-high				
	n	%	n	%	n	%	n	%			
Experience											
Yes	489	60.2	358	54.4	255	54.7	725	55.7			
No	323	39.8	300	45.6	211	45.3	577	44.3	6.69	.082	.045

### Research Question 3

Does nursing role conception change between week 2 and the end of the 18 week residency and is the change in role conception related to age, education, gender or previous healthcare experience?

Table 13 presents the change in percent of ideal agreement of the role constructs from BOR to EOR. Of the 3,254 total nurses, 1129 (35%) were classified in the low ideal agreement group at the BOR and at the EOR (Group 1), 25% were in Group 2 (BOR low and EOR high), 11% in Group 3 (BOR high and EOR low), and 30% were in the BOR and EOR high ideal agreement groups (Group 4). Within each ideal change group, the mean percent agreement for each construct is shown at the BOR and EOR. For the professional construct, the mean percent ideal agreement in Group 1 at the BOR was 63% and 48% at the EOR, while in Group 4 the average agreement at the BOR was 95% and 94% at the EOR. The smallest ideal change between Group 1 and Group 4 was in the education and standards constructs.

Table 13

*Change in Percent of Ideal Agreement of Role Constructs from BOR to EOR*

Construct	Group 1 L – L (n = 1129)		Group 2 L – H (n = 800)		Group 3 H – L (n = 347)		Group 4 H – H (n = 978)	
	BOR %	EOR %	BOR %	EOR %	BOR %	EOR %	BOR %	EOR %
Professional	63	48	75	91	94	54	95	94
Practice	62	53	66	77	79	57	83	81
Education	35	31	42	49	43	35	47	49
Standards	43	37	48	56	52	38	54	56

Table 14 presents the change in percent of observed agreement of the role constructs from BOR to EOR. Of the 3,254 total nurses, 1009 (31%) were classified in the low ideal agreement group at the BOR and at the EOR (Group 1), 30% were in Group 2 (BOR low and EOR high), 8% in Group 3 (BOR high and EOR low), and 30% were in the BOR and EOR high observed agreement groups (Group 4). Within each observed change group, the mean percent agreement for each construct is shown at the BOR and EOR. For the professional construct, the mean percent observed agreement in Group 1 at the BOR was 13% and 12% at the EOR, while in Group 4 the average agreement at the BOR was 67% and 62% at the EOR. The smallest observed change between Group 1 and Group 4 was in the education and standards constructs.

Table 14

*Change in Percent of Observed Agreement of Role Constructs from BOR to EOR*

Construct	Group 1 L – L (n = 1009)		Group 2 L – H (n = 981)		Group 3 H – L (n = 276)		Group 4 H – H (n = 988)	
	BOR %	EOR %	BOR %	EOR %	BOR %	EOR %	BOR %	EOR %
Professional	13	12	21	51	60	19	67	62
Practice	36	25	51	68	61	27	71	74
Education	31	27	36	44	39	22	45	48
Standards	30	25	38	48	43	24	49	49

Table 15 shows the change in role conception cluster membership from BOR to EOR. At the BOR, 41% of the total sample was classified with low ideal agreement and low observed agreement, and 20% were classified high ideal agreement and high observed agreement. At the EOR, 25% of the total sample was classified as low ideal and low observed agreement. And 40% were classified as high ideal and high observed agreement. At the EOR, 20% of the nurses were in a group with high ideal agreement and low observed agreement. Of the 1,324 nurses classified with BOR low ideal agreement and low observed agreement, 39% remained in the low ideal and low agreement group at the EOR, while 23% of them changed to the high ideal and high observed group at the EOR. Of the 660 nurses in the high ideal and low observed group at the BOR, 25% were still in the high ideal and low observed group at the EOR, while 47% of the nurses changed to the high ideal and high observed group at the EOR.

Table 15

*Change in Role Conception Cluster Membership From BOR to EOR*

BOR Cluster Membership			EOR Cluster Membership							
			I-low O-low (n=815) %=25		I-low O-high (n=661) %=20		I-high O-low (n=470) %=14		I-high O-high (n=1308) %=40	
n	%	n	%	n	%	n	%	n	%	
I-low O-low	1324	41	517	39	291	22	210	16	306	23
I-low O-high	605	19	129	21	192	32	43	7	241	40
I-high O-low	660	20	116	17	74	11	166	25	310	47
I-high O-high	659	20	53	8	104	16	51	8	451	68

**Research Question 4**

Does role conception or change in role conception at the end of an 18-week residency relate to nurse work satisfaction assessed at the end of residency?

Table 16 is a presentation of the association of EOR Role Conception with nurse work satisfaction. The association is statistically significant with a medium effect size. The two cells of the crosstabulation table which contribute most to the overall chi-square value is the cell with individuals with high work satisfaction scores and low Ideal and Observed agreement (n = 136) and the cell with individuals with high work satisfaction scores and high Ideal and Observed agreement (n = 460). Of the 802 nurses at the end of the residency with low Ideal and low Observation agreement group, 136 (17.0%) reported high job satisfaction, while 460 (35%) of

the 1303 nurses in the high ideal and high observation group reported high work satisfaction.

Change in Role Conception was not related nurse work satisfaction.

Table 16

*Relationship of EOR Role Conception and Nurse Work Satisfaction (N = 3221)*

EOR Role Conception	Work Satisfaction Cluster						$\chi^2$	Cramer's V
	Low		Moderate		High			
	n	%	n	%	n	%		
I-low O-low	332	41	334	42	136	17		
I-low O-high	202	31	284	43	170	26		
I-high O-low	175	38	188	41	96	21		
I-high O-high	286	22	557	43	460	35	140.47	.148

## **CHAPTER V**

### **Results**

#### **Discussion, Conclusions, Implications and Recommendations**

This study was designed to examine the relationship of anticipatory socialization factors of role conception, education, age, gender, and previous healthcare experience with job satisfaction. This chapter is an overview of the findings of the study. The major findings are discussed as well as implications for practice and research. Study limitations are identified and recommendations for future research are made. The major findings of the study are as follows:

1. In the first research question, the researcher identified the role conception of new graduate nurses within the first two weeks of residency and the relationship of role conception to education, gender, age and previous healthcare experience.
2. In the second research question, the researcher identified the role conception of new graduate nurses at the end of the residency program and the relationship of the end of residency role conception to education, gender, age and previous healthcare experience.
3. In the third research question, the researcher evaluated the changes in new graduate nurses' role conception between week 2 and the end of the 18-week residency.
4. In the final research question, the researcher analyzed the relationship between role conception or change in role conception and nurse work satisfaction.

#### **Discussion of Findings**

##### ***The Sample***

The study sample of the Versant® RN Residency program nurse graduates is a national sample that closely resembles national statistics for age, gender, and educational level of the national population of new graduate nurses. The National Council of State Boards of Nursing

reports the average age of the graduate nurse as 29 years old (2017). Sixty three percent of the respondents in this study were less than 30 years old. Nationally, the percentage of male nurses is 14.1% and the sample in this study included a fifteen percent male population (NCSBN, 2017). In this study, 59% of graduate nurses were BSN prepared. Similarly, the Robert Wood Johnson Foundation found that 53 percent of nurses were BSN prepared in 2012 (n.d.).

### ***Research Question #1***

In the first research question, the researcher identified the role conception of new graduate nurses within the first two weeks of residency and the relationship of role conception to education, gender, age and previous healthcare experience.

The role conception of the new graduate nurses at the beginning of residency (BOR) were high in ideal for the professional and practice constructs. Seventy-one percent of the participants reported the practice constructs were observed in the clinical setting. However, only 39% of the respondents observed the professional constructs in the clinical setting. Both groups that had high ideals for professional and practice situations highly agreed that these situations actually were observed in practice. These findings may indicate that nursing education programs are preparing the new graduates to expect high standards in both the practice and the professional constructs. While there was a drop in the observed professional constructs, those that held high ideal role conception in the professional constructs also reported high observations in those areas.

Approximately 60% of the participants did not experience role conflict at the beginning of residency between the ideal and the observed clinical practice. Interestingly, 60% of the new graduates reported low ideal nursing role conceptions. The 40 percent of new graduates who reported a change in ideal versus observed role conception were split equally between those with

low ideal/ hi observed and hi ideal/low observed. The new graduate nurses (60%) who did not experience role dissonance at the BOR, were less likely to experience reality shock at the BOR. However, the 40% of new graduates who had a change in role conception were likely to have role conflict occurring. With 60% of the new graduates having low ideal nursing role conceptions at the BOR, educational preparation regarding accurate nursing role perception should be evaluated.

The results indicate that the relationship between role conception and age, gender, education and previous healthcare experience at the BOR is not significant. Historically, the research regarding education has indicated that BSN prepared nurses have more professional attributes. The lack of difference in role conception between ADN and BSN prepared nurses may indicate that ADN programs are preparing their students similarly to BSN programs. Role conception and the relationship of age, gender, education and previous healthcare experience have not been previously evaluated in the literature.

### ***Research Question #2***

The second research question identified the role conception of new graduate nurses at the end of the residency program and the relationship of the end of residency role conception to education, gender, age and previous healthcare experience.

The new graduate nurses were almost equal at the EOR for high and low ideal and observed nursing role conception. The role conception of the new graduate nurses at the EOR were high in ideal for the professional and practice constructs. The groups that held high ideal role conceptions for practice and professional constructs also reported high observed role conceptions for these constructs. The low agreement groups also reported lower agreement with professional and practice constructs at the EOR for ideal and observed role conceptions. The

practice and professional nursing role conceptions were important to the nurse graduates at the end of residency. Education and standards constructs did not have a significant result at the end of residency.

At the end of the residency, 55 % of the new graduates were in the low observed cluster and 45% in the high observed cluster. Most of the new graduates who held high ideal nursing role conception also reported high observed nursing role conception at the end of residency. The nursing graduates maintaining a high agreement with ideal and observed indicates they are less likely to experience role conflict.

The results indicate that the relationship between role conception and age, gender, education and previous healthcare experience at the EOR is not significant. The results for nursing role conception at the end of residency and nursing role conception related to age, gender, education and previous healthcare experience closely mirror the results for the BOR. Research question 3 addresses the changes in the nurse's role conception between the BOR and EOR.

### ***Research Question # 3***

The third research question evaluated the changes in new graduate nurses' role conception between week 2 and the end of the 18-week residency.

Sixty- five percent of the new graduate nurses did not have a change in low or high ideal agreement from the beginning to the end of the residency. However, 35 % of the new graduate nurses in this study had a change in ideal agreement from the BOR to the EOR. conception (1968). Only 11% of the new graduates in this study reported a change in overall agreement (high to low) with nursing role conception from BOR to EOR.

The professional construct had a significant change in ideal agreement for group 1 (low to low) moving from 63% to 48%. However, Group 4 (High to High) had only a minimal 1% change in agreement. Education and standards constructs did not have a significant change in ideal agreement from BOR to EOR.

The observed agreement for Groups 1, 2 and 4 were consistent at approximately 30 percent with Group 3 (high to low) reporting 8%. Sixty -one percent of the new graduate nurses did not have a change in agreement from BOR to EOR. Group 1 (low to low) and Group 4 (high to high) also reported a change of 1% and 5% respectively for observed professional construct from the BOR to the EOR. Education and standards constructs did not have a significant change in observed agreement from BOR to EOR.

The biggest change in role conception is noted by a shift in the cluster membership from the BOR to the EOR. At the BOR 41% of the total sample were classified as Group 1 (low-low), which decreased to 25% at the end of residency. Conversely, at the BOR 20% of the total sample were classified as Group 4 (high-high), which increased to 40% at the end of the residency. Only 20% of the sample were in Group 3 (high to low) in change from BOR to EOR. Another change in role conception is found in group 1 (low-low), where 23% moved to group 4 (high-high). Group 3 (high-low) had a shift of 47% of the nurses changing to Group 4 (high-high).

A change in overall agreement with the 14 scenarios may indicate role dissonance, which can result in reality shock. Kramer found that BSN students who held a high role conception (high agreement with the role) were more likely to experience reality shock if the observed role did not meet the ideal nursing role conception. The shift of the new graduates from the low agreement groups at the BOR to the high agreement groups at the EOR indicates that the

residency program is increasing the role conception and decreasing the phenomenon of reality shock among new graduate nurses in the sample.

#### ***Research Question #4***

In the final research question, the researcher analyzed the relationship between role conception or change in role conception and nurse work satisfaction.

Role conception at the EOR was related to nurse work satisfaction, where 17% of nurses with low ideal and low observed agreement had high nurse work satisfaction scores compared to 35% of nurses with high ideal and high observed agreement who had high nurse job satisfaction scores. Over 50% of job satisfaction was related to role conception being the same at ideal and observed times. Change in role conception was not related to nurse job satisfaction. The lack of relationship with role conception and job satisfaction is likely due to the fact that the new graduates reported this data when they had been on the job only 18 weeks. The original conceptual model measured the outcome of job satisfaction at two years after employment.

#### ***Summary of Significant Findings***

There was only a small effect size between role conception and age, gender education level and previous healthcare experience. This was consistent for the beginning of residency, end of residency as well as the change from beginning of residency to end of residency. The variables of age, gender educational level or previous healthcare experience do not affect the role conception or change in role conception in this study sample. The lack of relationship may indicate that the residency program accounts for these variables and is working to decrease the impact of age, education, gender and previous healthcare experience on nursing role conception.

In regard to education, this sample consisted of years 2011-2013 which was after the release of the 2010 IOM report on nursing. The recommendations included faculty with higher degrees as well as ADN nurses continuing education to pursue their BSN.

There was no relationship between change in role conception and job satisfaction in this study. Job satisfaction has been linked to transition to practice and residency programs in the literature (Lashchinger, 2012). While there may be elements of anticipatory socialization that impact job satisfaction, this study found role conception did not have a significant relationship with job satisfaction.

Professionalism and practice constructs were high role conceptions at beginning of residency and at the end of residency. The results indicate professional role development through involvement in professional organizations and attending conferences was important to the new graduate nurses. The respondents in this study indicated that nurses are responsible for total nursing care of the patient. The new graduate nurses reported the nurse is solely responsible for continuing his/her competency. Continuing education was deemed to be of importance to the sample. The findings of this study are similar to Pieta's study which found that students, nurses and faculty held high role conceptions in the professional and service areas (1976). In contrast, Young et. al. (2008) conducted a more recent study on role conception after a six-week hospital orientation program and found that the service role was the only area with role discrepancy.

At least seven of the 14- role conception scenarios gave significant results within the four research questions in this study. The fact that new graduate nurses responded with significant results speaks to the relevancy of the instrument. There was an initial concern that the instrument may not be suited for use in contemporary nursing environment. However, the new graduate

nurses in this study indicated through their responses, that many of the scenarios are still relevant in contemporary nursing practice.

The researcher found a gain in the percentage of new graduates at the EOR who had higher ideals about nursing, and there was an increase in the percentage agreement between ideal and actual experiences of nursing in the hospital. This finding may suggest that the residency is influencing the formation of higher ideals in these nurses and that once nurses get out of the early part of the residency and begin working on the units, those ideals parallel reality. Furthermore, this finding indicates that work units are improving as cultures with reality being close to the ideal nursing environment.

### ***Strengths and Limitations***

New graduate transition to practice is a multi-faceted process that includes role conception of the new graduate nurse where the ideal perception does not always align with the observed reality. There were noted strengths and limitations in this study.

The most limiting aspect of the study is that the database is a secondary database. When a secondary database is used, the validity must be assured. Secondary data is limited only to the data that were previously collected. In a secondary study, any missing data cannot be double checked. The use of the *Lawler-Corwin Nursing Role Conception Questionnaire* provided limitations in that the questionnaire was developed thirty years ago and was not tested for relevance in a contemporary nursing setting.

The biggest strength of the study was the large sample size that was a national sample. The sample is comparable demographically to the national population. When a large national sample size is used, the results are more generalizable. This study is guided by a tested conceptual model of new graduate transition to practice.

## **Education**

The findings in this study offer educational institutions an understanding of the role conception of the new graduate nurse before and after completion of a residency program. The nursing education programs form the foundational role conception for the student nurse. Role conception is derived from both the didactic and clinical practice areas.

Educational institutions are an integral part of the anticipatory socialization process which occurs prior to the graduate nurse starting employment. Increased clinical hours on varied shifts in areas of high acuity may provide students with a clearer role conception and lead to decreased role conflict. Preceptorships with student nurses and staff nurses working one on one may also provide a realistic view of nursing to the student during the educational process.

Didactic and laboratory settings also provide opportunities for formation of role conception. Active learning strategies that allow for real life scenarios to be presented through instructional strategies such as case studies, virtual simulation, or video vignettes may be beneficial to role conception formation. High fidelity simulation in the laboratory setting can offer students the experience of a high acuity client which could potentially decrease role conflict.

### ***Conceptual and Research Model Findings***

The conceptual model of the *New Graduate Nurse Transition into the Workplace* was used as the theoretical framework for this study. In this study, the researcher confirmed that there are changes in role conception within the 18-week residency program. While role conception was not a separate construct in the original model, in the literature role conception is an integral part of the new graduate nurse transition into practice.

The outcome of job satisfaction was not found to have a significant relationship with role conception in this study. The participants in this study were measured for the outcome at the end of an 18-week residency program instead of at two years like the original model. The lack of relationship at the 18-week point, is likely due to the fact that the new graduate nurses are still in the honeymoon phase of the transition process (Kramer, 1974). The new graduates have a plethora of support and resources during the residency program and have not yet experienced the true reality of being novice nurse on the assigned unit.

The modified *New Graduate Nurse Transition into the Workplace* model was not supported by the outcomes of this study. The original model was used over a two-year period with new graduate nurses, which may explain the inconsistency when applied to an 18-week residency program. The model may be beneficial in future role conception research where data are captured over a longer timeframe.

### ***Practice***

The findings in this study allow healthcare organizations to have a better understanding of the ideal and realistic roles of the nurse through the lens of the new graduate. The findings related to professionalism, competence and continuing education support the need for healthcare organizations to continue residency programs. Residency programs provide a standardized organizational socialization process for each healthcare agency.

Additionally, healthcare facilities must continue to measure organizational socialization outcomes including role conception. Role conception measured annually on all staff including new graduates may aid in early identification of role conflict and dissonance. Kramer et al. (2012), have linked organizational socialization to satisfaction outcomes. Healthcare

organizations need to continue to monitor and evaluate the socialization process as well as satisfaction outcomes.

### ***Research***

Future research on role conception as a part of new graduate nurses transition to practice should include more specific and varied measurements of anticipatory socialization and organizational socialization and the effect on organizational outcomes. The variables of race, ethnicity, socio-economic status and marital status should be evaluated in relation to role conception. These variables should also be measured with organizational outcomes such as job satisfaction.

The *Lawler-Corwin Nursing Role Conception Questionnaire* should be reviewed and revised to include contemporary nursing issues. Several of the current scenarios are still relevant in nursing after 30 years; however, a revision of some scenarios is warranted. The revised instrument would need to be tested for validity and reliability.

Role conception had not been tested in a non-acute care environment. New graduate nurses often enter non-acute healthcare settings as their first employment. Researching role conception, anticipatory socialization and organizational outcomes in non-acute settings can provide valuable data to improve orientation processes in those settings.

A future study comparing new graduate role conception in Magnet verses non-Magnet hospitals may be beneficial as well. Magnet hospitals are client care facilities that provide exemplary support to the nursing staff. The ideal nursing environment should be exhibited in a Magnet designated hospital. There are no studies in the current literature comparing role conception at Magnet verses non-magnet hospitals.

A final research recommendation would be to measure role conception in the educational setting and compare with after graduation. A gap in the literature is there are no recent role conception studies in the educational setting in the literature. . A longitudinal study evaluating role conception pre- and post- education may be beneficial in determining future educational strategies.

In summary, role conception is an integral part of the transition into nursing practice. New graduate nurses need residency programs as a foundational introduction to the nurse role. Improper socialization may lead to burnout and negative organizational outcomes. Adequate role socialization will aid in the new graduate nurse's assimilation into the role of the professional nurse.

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## Appendix A

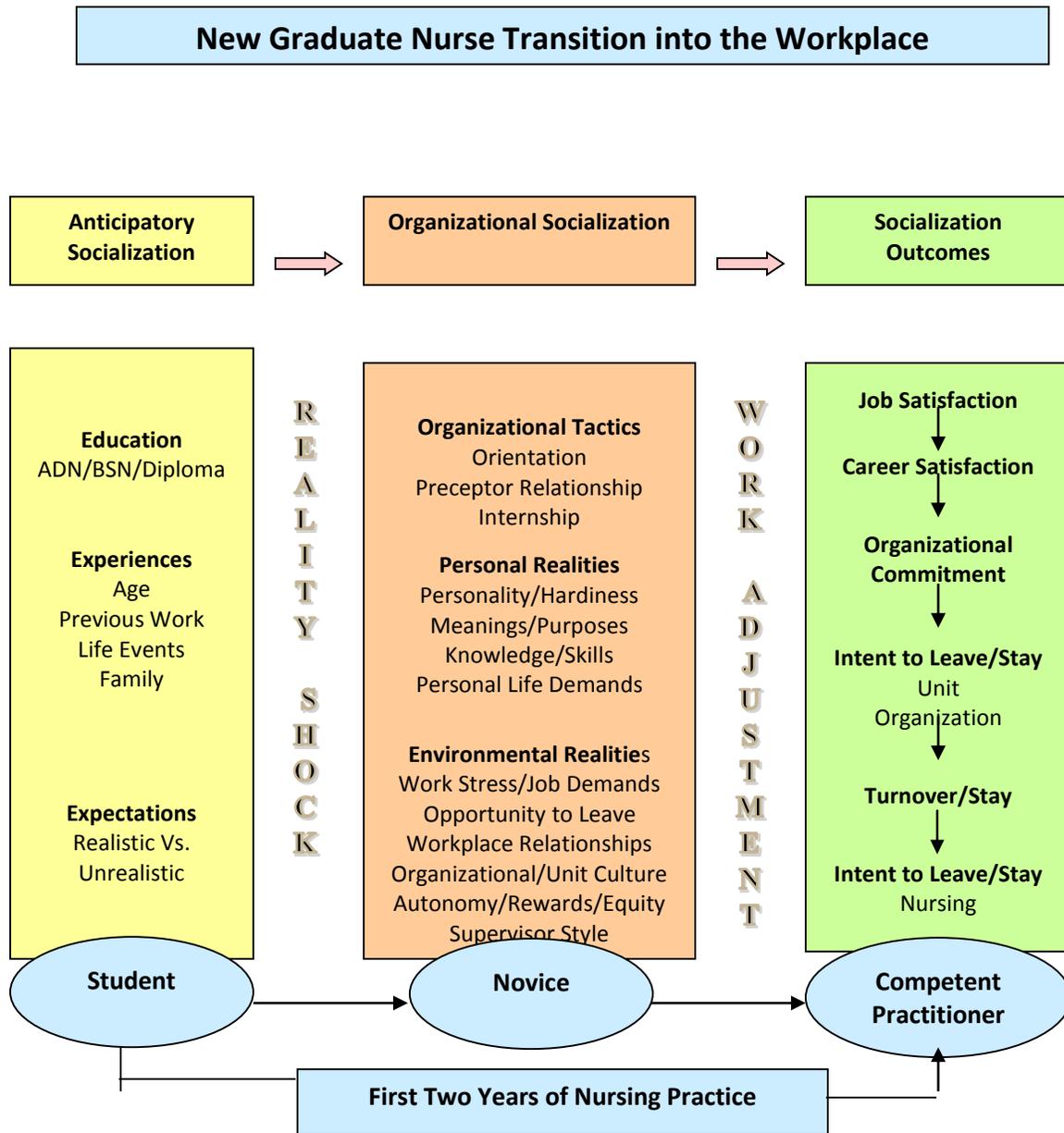


Figure A1. New Graduate Transition into the Workplace (Scott, Engelke, & Swanson, 200

## Appendix B

### Corwin's Nursing Role Conception

This tool is used with the "Week Two" and "Last Week of Program" evaluation packets.

### Corwin's Nursing Role Conception

This scale consists of a list of 14 hypothetical situations in which nurses might find themselves. You are asked to indicate both:

- (A) The extent to which you think the situation should be the ideal in nursing.
- (B) The extent to which you have observed the situation in your hospital.

Notice that two (2) questions (A & B) must be answered for each situation. Consider the questions of what ought to be the case and what is really the case separately; try not to let your answer to one question influence your answer to the other questions. Give your opinions; there are no wrong answers.

Indicate the degree to which you agree or disagree with the statement by checking one of the alternative answers, ranging from STRONGLY AGREE, AGREE, UNDECIDED, DISAGREE to STRONGLY DISAGREE.

- 1) STRONGLY AGREE indicates that you agree with the statement with almost no exceptions.
- 2) AGREE indicates that you agree with the some exceptions.
- 3) UNDECIDED indicates that you could either "agree" or "disagree" with the statement with about an equal number of exceptions in either case.
- 4) DISAGREE indicates that you disagree with the statement with some exceptions.
- 5) STRONGLY DISAGREE indicates that you disagree with the statement with almost no exceptions.

For each item below, select the appropriate response.

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
<b>1- One registered nurse tries to put her standards and ideals about good nursing into practice even if hospital rules and procedures prohibit it.</b>						
1-a	Do you think that this is what registered nurses should do?	<input type="checkbox"/>				
1-b	Is this what most nurses that you have observed actually do when the occasion arises?	<input type="checkbox"/>				
<b>2- One registered nurse does not do anything which (s)he is told to do unless (s)he is satisfied that it is best for the welfare of the</b>						

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
<b>patient.</b>						
2-a	Do you think that this is what registered nurses should do?	<input type="checkbox"/>				
2-b	Is this what most nurses that you have observed actually do when the occasion arises?	<input type="checkbox"/>				
<b>3- All registered nurses in a hospital are active members in professional nursing associations, attending most conferences and meetings of the</b>						
<b>association.</b>						
3-a	Do you think this should be true of all nurses?	<input type="checkbox"/>				
3-b	Is this true of nurses that you have observed?	<input type="checkbox"/>				
<b>4- All registered nurses in a hospital spend, on the average, at least six hours a week reading professional journals and taking continuing</b>						
<b>education courses.</b>						
4-a	Do you think it should be true of all nurses?	<input type="checkbox"/>				
4-b	Is this true of nurses that you have observed?	<input type="checkbox"/>				
<b>5- Some nurses try to live up to what they think are the standards of their profession, even if other nurses on the unit or supervisors don't seem to like it.</b>						

Corwin's Nursing Role Conception

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
5-a	Do you think that this is what registered nurses should do?	<input type="checkbox"/>				
5-b	Is this what nurses that you have observed actually do when the occasion arises?	<input type="checkbox"/>				
<p><b>6- Some registered nurses believe that they can get along very well without a formal education, such as that required for a B.S.N. or M.S.</b></p> <p><b>degree.</b></p>						
6-a	Do you think that this is what registered nurses should do?	<input type="checkbox"/>				
6-b	Is this what nurses actually do believe?	<input type="checkbox"/>				
<p><b>7- At some hospitals when a registered nurse is considered for promotion, one of the most important factors considered by the supervisor is her knowledge of and ability to use, judgement about nursing care</b></p> <p><b>procedures.</b></p>						
7-a	Do you think this is what supervisors should regard as important ?	<input type="checkbox"/>				
7-b	Is this what head nurses/supervisors actually do regard as important?	<input type="checkbox"/>				
<p><b>8- Some hospitals try to hire only registered nurses educated in colleges and universities which are equipped to teach the basic theoretical knowledge</b></p>						

Corwin's Nursing Role Conception

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	<b>of nursing science.</b>					
8-a	Do you think this is the way it should be?	<input type="checkbox"/>				
8-b	Is this the way things are at your hospital?	<input type="checkbox"/>				
	<b>9- The nursing administrators in a large home health agency encourage their staff members to become active members of the nursing professional organizations.</b>					
9-a	Do you think that this is what all nursing administrators should do?	<input type="checkbox"/>				
9-b	Is this what you observed nursing administrators actually doing?	<input type="checkbox"/>				
	<b>10- A director nursing service tells you "If nursing is to attain full professional status in the near future, the minimum of a baccalaureate degree should be required of all registered nurses."</b>					
10-a	Is this the way it should be in nursing?	<input type="checkbox"/>				
10-b	Is this what most nurses you have observed believe?	<input type="checkbox"/>				
	<b>11- In a certain hospital, a registered nurse is fully responsible/accountable to plan and carry out the total nursing care of clients entrusted to</b>					

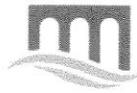
Corwin's Nursing Role Conception

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	<b>her.</b>					
11- a	Do you think that this is how it should be in nursing?	<input type="checkbox"/>				
11- b	Is this what most nurses that you have observed actually do in practice?	<input type="checkbox"/>				
	<b>12- A nurse testifies before legislators that the responsibility for setting standards of practice for the delivery of nursing services should rest with the</b>					
	<b>nursing profession alone.</b>					
12- a	Do you think that this is how it should be in nursing?	<input type="checkbox"/>				
12- b	Is this what you have observed nurses doing?	<input type="checkbox"/>				
	<b>13- In one hospital nurses develop clinical practice models based on nursing theory for use on specific</b>					
	<b>patient units.</b>					
13- a	Do you think this is important for nurses to do?	<input type="checkbox"/>				
13- b	Is this true of nurses that you have observed?	<input type="checkbox"/>				
	<b>14- A nursing friend returning from a workshop claims that "once a nurse graduates from nursing school she/he bears the sole responsibility to maintain competence by regularly reading the professional journals and attending continuing education</b>					

Corwin's Nursing Role Conception

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	<b>programs."</b>					
14-a	Do you think this is what registered nurses should do?	<input type="checkbox"/>				
14-b	Is this what you have observed nurses actually doing?	<input type="checkbox"/>				

## Appendix C



**EAST CAROLINA UNIVERSITY**  
**University & Medical Center Institutional Review Board**  
**Office**

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Office **252-744-2914** · Fax **252-744-2284** ·  
[www.ecu.edu/irb](http://www.ecu.edu/irb)

### Not Human Subject Research Certification

From: Social/Behavioral IRB  
To: [Amy Purser](#)  
CC: [Elaine Scott](#)  
Date: 9/7/2016  
Re: [UMCIRB 16-001282](#)  
Social/Behavioral IRB

On 9/7/16, the IRB Staff reviewed your proposed research and determined that it does not meet the federal definitions of research involving human participants, as applied by East Carolina University.

Therefore, it is with this determination that you may proceed with your research activity and no further action will be required. However, if you should want to modify your research activity, you must submit notification to the IRB before amending or altering this research activity to ensure that the proposed changes do not require additional UMCIRB review.

The UMCIRB appreciates your dedication to the ethical conduct of research. It is your responsibility to ensure that this research is being conducted in accordance with University policies and procedures, the ethical principles set forth in the Belmont Report, and the ethical standards of your profession. If you have questions or require additional information, please feel free to contact the UMCIRB office at 252-744-2914.

