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The Experienced Critical Care RN's Perception of New Graduate RNs Competence in Critical Care Using Benner's Novice to Expert

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by

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Abstract

The purpose of the study was to describe the experienced critical care RNs' perception of the new graduate RNs' competence in critical care areas. Using the Six-Dimension Scale of Nursing Performance (Six-D Scale) by Patricia Schwirian, experienced nurses from critical care areas with at least three years of experience were asked to rate new graduate RNs in their critical care area on specific nursing activities. Benner's theory of Novice to Expert is used as the theoretical framework. Findings revealed that experienced critical care RNs perception of new graduate RNs is greater than expected. All activities on the Six-D Scale were performed at least "occasionally". Of the six subcategories, Professional Development had the greatest overall mean score. Teaching/Collaboration and Leadership had the least scores. Implications from the study show involving experienced nurses in selection, educating, and mentoring of new staff can be pivotal to each person's success, departmental success, and improved recruitment and retention. Linking relationships between the experienced critical care RN and the new graduate RN can contribute.

Key words: competence, experienced nurse's perception, new graduate RN, Benner, Six-D Scale, critical care

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Chapter 1

Introduction

New graduate RNs working in critical care areas has been a controversial issue for many years especially since nurses are known to *eat their young*(Hippeli, 2009; Truman, 2004). According to Hippeli (2009), nurses in general do not care and support each other resulting in about 60% of new graduates leaving their first position within six months of employment. Experienced nurse's perception and treatment of new graduates can make or break their confidence. Investment in staff is important, multifactorial, and costly if poor retention results especially in critical care areas. Choosing appropriate preceptors is important and allows for adequate performance and growth of the new graduate RN. According to Truman (2004), "Preceptors were chosen carefully based on experience, commitment, professionalism, and enthusiasm for teaching and learning" (p. 46).Pairing of a new graduate RN with an experienced RN results in performance adequacy and a decrease turnover rate, but just acceptance of new graduate RN is not enough. The new graduate RN needs to be competent, confident, and professional in providing care to their patients (Truman, 2004).

Gaps exist between educational preparation and actual clinical practice (Axley, 2008; Tilley, 2008; Ramritu & Barnard, 2001). According to Tilley (2008), new graduate RNs are considered competent for safe nursing practice unless otherwise demonstrated. The new graduate RN is an advanced beginner in Benner's theory and has to move quickly to the competent level in the critical care setting developing expert clinical judgment. A new graduate RN program that is geared toward combining theory, clinical competency, and evaluation methods can help those nurses

become competent, confident, and professional preparing for certification in the chosen critical care area (Kingsworth-Hinrichs, 2009).

The question that arises is "What is the experienced critical care RNs perception of new graduate RNs competence in critical care areas?" Perception is awareness of the environment based on wisdom and experience. The experienced critical care RN can evaluate the new graduate RN's competence using a keen sense of insight that only comes from experience. One of the biggest concerns is the inadequate agreed on definition of competence (Axley, 2008; Tilley, 2008). Competence in this research focuses on Benner's Novice to Expert level of competent which views being competent as having consistent, planned, and predictable patient care. Benner states "the competent stage is most pivotal in clinical learning, because the learner must begin to recognize patterns and determine which elements of the situation warrant attention and which elements of the situation can be ignored" (Tomey & Alligood, 2006 p. 146).

Background

This is the beginning of an ongoing study of the experienced critical care RNs perception of competence of new graduate RNs in critical care areas in a regional medical center. In light of the economic condition, recruitment and retention are affected by this phenomenon. Hospitals need to find cost effective methods to hire, train, and retain employees. Truman (2004) states the estimated cost for investing in the education of new graduate RNs recruitment and retention is cost efficient.

Each year a local regional medical center in North Carolina has chosen to hire a large number of new graduate RNs in the critical care areas and train them to fit into the

established culture. The preceptorship has moved through different models in recent years in an attempt to provide the best method. According to a phenomenological research study by Ramritu and Barnard (2001), they determined new graduate RNs need ongoing educational support as competence is an evolving process. Lin, Hsu, and Tasy (2003) and Lofmark, Smide, and Wikblad (2006) suggest an integrated model of cognitive, psychomotor, and affective teaching domains in developing expert clinical judgment.

According to Allison Abernathy, RN, MSN a regional hospital educator (2010), RNs in the regional medical center who intend to precept new staff have to attend a four hour educational program in preparation for precepting. After attending the class, the RN preceptors practice with RN students in the final semester of nursing school during a 120 hour clinical rotation required for graduation. The new graduate RNs have a more active style of learning that creates a smoother transition with greater responsibility and accountability striving to maintain competent nursing care through lifelong learning (Lofmark, Smide, & Wikblad, 2006; Kingsworth-Hinrichs, 2009).

After the clinical rotation, both staff and the student have an idea about the fit within the department. Peer interviews allow for the team approach in the selection of new graduate RNs who best fit with the department. All new nursing employees have a nursing orientation that includes use of a simulation lab. Simulation labs can help counter criticism of using new graduate RNs in critical care and provide a smoother transition into actual practice and a new role (Lofmark et al., 2006).

The department educators work closely with the new graduate RNs for three to four weeks teaching them the basic departmental mechanisms. After the basic information is taught, the model is to pair the new graduate RN with a preceptor with at least three years or more experience noting the best fit for personality and learning type. Both have to agree with the pairing and have the option to change if there is any problem that results. The new graduate RN tracks the same schedule as the preceptor. The preceptor integrates all learning domains into a step-by-step process with regard for how the new graduate RN learns.

Critical care new graduate RNs also attend a Critical Care Internship for a required amount of hours. Departmental educators and experienced critical care RNs impart expert knowledge with regard for hospital policy and physician preferences in patient care. The internship aids in pulling the pieces of critical care together and allow the new graduate RN to be competent and begin critically thinking. Unspoken concerns that develop early in practice but are squashed due to inexperience and a desire to follow the rules can be cultivated into expert intuitive practice (Lyneham, Parkinson, & Denholm, 2008).

Theoretical Framework

Benner studies clinical nursing practice to find knowledge within the practice that will broaden its base. She defines skill and skilled practice as implementing in actual clinical situations within the context of nursing practice blending practice and theory together (Tomey & Alligood, 2006). The Dreyfus model was used by Benner in her

theory with the five levels of skill acquisition to fit nursing: novice, advanced beginner, competent, proficient, and expert.

New graduate RNs come into the work force as advanced beginners according to Benner's model and are guided by rules and tasks but don't quite see the *big picture*. Clinical situations are self-oriented rather than based on patient need and response (Toomey & Alligood, 2006). Advanced beginners while enthusiastic about learning can be easily burdened with multiple responsibilities (Kingsworth-Hinrichs, 2009). Nurses in general have a course to what is good and right. Clinical situations and involvement with patients and families become recognized as important to developing nursing experience. Experience, according to Benner, is an active process of changing the nurses predetermined ideas and not just passage of time.

Benner defines competence as being consistent, predictable, and timely. Through the learning process the nurse moves from advanced beginner to competent with a sense of mastery. Reliance on abstract principles moves to a full commitment in a situation. Critical thinking and expert knowledge is learned through experiential learning, reflection, concept mapping, and advanced questioning techniques (Toomey & Alligood, 2006). These important concepts encourage new graduate RNs to move toward critical care areas and develop the necessary skills to become the experts.

Purpose and Rationale

The purpose of this study is to determine the experienced critical care RNs perception of the new graduate RN's competence during the preceptorship. Benner's theory states the competent level is so pivotal in the development of a nurse (Toomey &

Alligood, 2006). Determination of the experienced critical care nurse's perception can improve the preceptorship and encourage further recruitment, retention, and cost effectiveness while aiding in promoting individual new graduate RN success and improving departmental processes. Once the new graduate RNs become experienced and are expert critical thinkers, then they can pass the baton to the next generation of newcomers. It would be interesting to compare what the new graduate RN assessed themselves at graduation and again in three to six months post-employment in the critical care setting as well as the preceptor's assessment.

Research Question

What is the experienced critical care RNs perception of new graduate RNs competence in critical care areas?

Chapter II

Literature Review

A literature search review of the term nursing competence in Cumulative Index to Nursing and Allied Health Literature (CINAHL)produced 143 articles revealing there is no concrete definition of the term; it is multifaceted and difficult to measure; and includes knowledge, understanding, and judgment (Khomeiran, Yekta, Kiger, & Ahmadi, 2006; Meretoja, Leino-Kilpi, and Kiara, 2004; Lofmark et al., 2006). A search using Benner and competence in CINAHL resulted in 321,000 articles. While there are many studies to choose from, there are limited studies on the experienced RNs perception of competence of new graduate RNs that have been developed and none identified for those in critical care areas.

In a qualitative study using phenomenographic methods that consist of semi-structured interviews (pre-established questions for the interviews) and drawings, new graduate nurses in two pediatric settings were analyzed in their understanding of competence. The study by Ramritu and Barnard (2001) revealed competence as eight concepts with a hierarchical relationship where one step expands on the next. Competence as safe practice is the initial or *referential aspect* that is required to move to a succeeding level. The *structural aspect* exemplifies concepts 2-7 building on safe practice. The eighth concept or culmination of competence is the concept of competence as evolving. Competence as evolving helps to clarify and define entry-level nursing competence.

In a study by Lofmark, et al. (2006) a descriptive design was used comparing the new graduate RNs perception of competence with that of experienced nurses at the time

of graduation. A convenience sample was used from two universities resulting in 127 nursing student participants while 200 experienced nurses from two area hospitals were also enlisted. An 18 item questionnaire used at both universities consistently in the previous five years was used to gather data. There was some difference of assessment and determination of student nurses readiness to enter the nursing profession. The students rated their competence in nursing care higher than the experienced nurse when all 18 items were combined. As in other studies reviewed, the definition of competence is elusive but is based on a combination of knowledge, understanding, judgment, skills, attitudes, and attributes.

Competence, according to Meretoja, Leino-Kilpi, and Kiara (2004) and Lin, et al. (2003), is an integration of cognitive, psychomotor, and affective learning domains in practice and is transferrable over different nursing settings. It "is achieved by a process where knowledge and skills are combined with attitudes and values required in a particular context to perform a prescribed standard" (Meretoja et al., 2004).The study by Meretoja determined a set of clinical indicators that described competent level practice. The typical nurse surveyed was 36 years old with nine years of employment at a Finnish University Hospital and worked in the Operating Room (OR), Emergency Department (ED)/Outpatient Department (25%), Intensive Care Unit (ICU) (19%), or Medical wards (Meretoja et al., 2004). The self-assessment on their level of competence revealed overall competence as "good" but different areas of nursing had different levels of self-assessed competence (Meretoja et al.).

Lin, et al. (2003) did a qualitative descriptive study using semi-structured in-depth interviews that occurred in Taiwan using 10 nursing faculty at a nursing college that had both a two year and a four year nursing program. The faculty consisted of masters prepared nurses with three to 15 years of experience in educational instruction. The purpose of study by Lin, et al.was to describe clinical judgment teaching in a Taiwanese nursing school providing a baseline for future educational endeavors. Limitations to the study were a small sample size and difficulty making the results generalizable. Despite the limitations, the information was consistent with information in the previously obtained research. Nursing education consists mainly of cognitive and psychomotor domains but development of critical thinking and increasing competence should include the affective domain (Lin et al., 2003).The affective domain in nursing competence can be modeled through the nurse educator, preceptor or mentor.

Summary

The literature reveals several concepts related to competence and its association with new graduate RNs:

1. Competence is an evolving process that helps to clarify entry-level practice for the new graduate RN.
2. Integration of cognitive, psychomotor, and affective domains of learning are essential to developing competence, but the affective domain is most important for development toward critical thinking skills.

3. New graduate RNs tend to rate self-competence higher than experienced RNs rate the new graduate RNs competence when graduating from nursing school.
4. Different areas of nursing practice have different levels and categories of competence that progress with experience and maturity.

The concepts determined from the literature relate to new graduate RNs in general but not specifically to critical care areas like ICU and ED. Input from experienced critical care nurses can improve processes and promote individual success in each new graduate RN in the critical care setting. The proposed research will aid in establishing the experienced critical care RN's perception of the new graduate RNs competence as defined through Benner's Novice to Expert Theory.

Chapter III

Methodology

This chapter will address the study design, survey instruments, and demographic data used in the identification of the study sample, data collection, and the process used for conducting the research.

Research Design

A descriptive survey design was used to describe the experienced critical care RN's perception of new graduate RNs competence in the critical care setting. The instrument used in the study is a 52-item Likert-scale developed by Patricia Schwirian (1978). The scale was developed and tested from 1974-1977 and has high reliability (Schwirian, 1978). "The Six-D Scale is a useful instrument of the development of a substantive body of valid information regarding the most effective means of preparing, organizing, and evaluating performance of graduate nurses in administering the highest quality of nursing care"(p. 351). Demographic data was collected by means of a researcher-developed questionnaire.

Sample

A convenience sample of eight full-time experienced critical care RNs precepting new graduate RNs in critical care areas of a regional medical center were used in the study. Six of the instruments were completed and returned. General participant information was obtained from the experienced critical care RNs and the new graduate RNs to include years of nursing experience, area of expertise, gender, age range, and type of degree. Inclusion criteria for the research participants included experienced critical

care RNs from ED and ICU precepting new graduate RNs. Experienced critical care RNs have three or more years of experience in their area of expertise.

Setting

Research for this study was done in a Western NC regional medical center. The NC regional medical center has a 241 bed acute care capacity with an average daily census of 102 (NCDHHS, 2010). The ED treated approximately 59,000 patients in 2009. The regional medical center has an 18 bed ICU and a 36 bed ED. Both areas employ new graduate RNs twice per year based on staffing needs and new graduate RN availability.

Instruments

The study was performed using the Six Dimension Scale of Nursing Performance (Six-D Scale) developed by Patricia Schwirian, Ph.D., RN. The scale was developed and tested from 1974-1977 and has high reliability (Schwirian, 1978). It consists of a list of nursing activities that nurses engage in at different degrees of frequency and quality. The scale was chosen for its ability to evaluate the quality of performance and developmental patterns of newly graduated nurses over the first one to two years of practice. The scale can be broken into the subscales to determine six subcategories of nursing performance (Table 1). Schwirian (1978) states, “The Six-D Scale is a useful instrument for the development of a substantive body of valid information regarding the most effective means of preparing, organizing, and evaluating performance of nurse graduates in administering the highest quality of nursing care” (p. 351).

The Six-D Scale was pilot tested on a small group of recently graduated RNs that worked in a local hospital based on requirements from the US Department of Health, Education, and Welfare (Schwirian, 1978). Construct validity was established through collaboration of developers, consultants, and pilot respondents. Reliability was established using Cronbech's alpha with coefficients ranging .844 to .978 (Schwirian, 1978).The behaviors included in the scale were representative of what school of nursing faculty deemed as "effective nursing performance" and a "successful nurse" (Schwirian, 1978). The scale was initially 76 items that were decreased to 52 items deleting items that were least useful in determining nursing performance. Schwirian (1978) states, "The uniformly high reliability values of the Six-D subscales attest to their potential utility for assessing nursing performance" (p. 350).

Table 1: *Distribution of questions for subcategories.*

Scale	Item Number	Item Content
Leadership	3	Give praise and recognition for achievement to those under his/her direction.
	23	Delegate responsibility for care based on assessment of priorities of nursing care needs and the abilities and limitations of available health care personnel.
	25	Guide other health team members in planning for nursing care.
	26	Accept responsibility for the level of care under his/her direction.
	41	Remain open to the suggestions of those under his/her direction and use them when appropriate.
Critical Care	11	Perform technical procedures: e.g. oral suctioning, tracheostomy care, IV therapy, catheter care, dressing changes.
	18	Use mechanical devices: e.g., suction machine, Gomco, cardiac monitor, respirator.
	19	Give emotional support to family of dying patient.

	27	Perform appropriate measures in emergency situations.
	30	Perform nursing care required by critically ill patients.
	37	Recognize and meet the emotional needs of a dying patient.
	40	Function calmly and competently in emergency situations.
Teaching/ Collaboration	1	Teach a patient's family members about the patient's needs.
	4	Teach preventive health measure to patients and their families.
	5	Identity and use community resources in developing a plan of care for a patient and his/her family.
	12	Adapt teaching methods and materials to the understanding of the particular audience: e.g., age of patient, educational background and sensory deprivation.
	14	Develop innovative methods and materials for teaching patients.
	28	Promote the use of interdisciplinary resource persons.
	29	Use teaching aids and resource materials in teaching patients and their families.
	31	Encourage the family to participant in the care of the patient.
	32	Identify and use resources within the health care agency in developing a plan of care for a patient and his/her family.
	38	Communicate facts, ideas, and professional opinions in writing to patients and their families.
	39	Plan for the integration of patient needs with family needs.
Planning/Evaluation	2	Coordinate the plan of nursing care with the medical plan of care.
	6	Identify and include in nursing care plans anticipated changes in patient's conditions.
	7	Evaluate results of nursing care.
	9	Develop a plan of nursing care for a patient.
	10	Initiate planning and evaluation of nursing care with others.
	13	Identify and include immediate patient needs in the plan of nursing care.
	36	Contribute to the plan of nursing care for a patient.

IPR/Communications	8	Promote the inclusion of patient's decision and desires concerning his/her care.
	15	Communicate a feeling of acceptance of each patient and a concern for the patient's welfare.
	16	Seek assistance when necessary.
	17	Help a patient communicate with others.
	20	Verbally communicate facts, ideas, and feelings to other health care team members.
	21	Promote the patients' rights to privacy.
	22	Contribute to an atmosphere of mutual trust, acceptance, and respect among other health team members
	24	Explain nursing procedures to a patient prior to performing them.
	33	Use nursing procedures as opportunities for interaction with patients.
	34	Contribute to productive working relationships with other health team members.
	35	Help a patient meet his/her emotional needs.
	42	Use opportunities for patient teaching when they arise.
Professional Development	43	Use learning opportunities for ongoing personal and professional growth.
	44	Display self-direction.
	45	Accept responsibility for own actions.
	46	Assume new responsibilities within the limits of capabilities.
	47	Maintain high standards of performance.
	48	Demonstrate self-confidence.
	49	Display a generally positive attitude.
	50	Demonstrate a knowledge of the legal boundaries of nursing.
	51	Demonstrate knowledge in the ethics of nursing.
	52	Accept and use constructive criticism.

The Six-D Scale first rates the frequency of the nursing activity on a scale of one to four. The frequency of the nursing activity is rated as *not expected in this job* to *frequently*. Any activity that is not performed is excluded from the data analysis (Schwirian, 1978). The Six-D Scale also rates the quality of performing the nursing

activity on a scale of one to four. The quality of performing the nursing activity is rated as *not very well* to *very well*.

Procedures

Permission to complete the research project was obtained from Gardner-Webb University Institutional Review Board (IRB) (Appendix C) and the Chief Nurse Executive at the institution contributing to the study (Appendix D). Information about the project and purpose of the study was provided to the participants by the researcher. A cover letter assuring anonymity and implied consent (Appendix E) with the data collection tools were included. Return of the questionnaires functioned as implied consent. One month was given to complete the questionnaires. Anonymity was maintained throughout the study to protect participants.

Data Analysis Procedure

Data was entered into a computer for analysis utilizing the Statistical Package for the Social Sciences (SPSS): An International Business Machines (IBM) Company 19.0. Frequency statistics were used to determine the demographic data. Descriptive statistics were used to designate the measures of central tendency, standard deviation, range, and variance of the data collected. Correlation between sub categories of nursing activity frequency and nursing activity quality of the Six-D Scale (Appendix A) was also determined using Pearson's Correlation with significance at the 0.05 level.

General information about participants was obtained with a researcher-developed tool (Appendix B) including information about the experienced critical care nurses' years

of experience, specialty care area, gender, age, and degree earned. General information about the new graduate RNs included gender, age, and degree earned.

Chapter IV

Results

The purpose of the study was to determine the experienced critical care RNs perception of the new graduate RNs competence in the critical care area. The study is intended to contribute to successful implementation of new graduate RNs in the critical care arena. Acceptance of new graduate RNs by experienced nurses is import to successful implementation departmentally and personally.

Statistical Presentation

Sample Characteristics

Descriptive statistics were used to describe the demographic data of the study participants. Frequencies and valid percentages were conducted for the demographic data including experienced critical care RN specialty, experience, degree, gender, and age, and new graduate RN specialty, degree, gender, age. Of the eight experienced critical care RNs surveyed, six completed the Six-D Scale in reference to the new graduate RN each was precepting representing a 75% return rate. Of these, one was from the ICU (16.7%), four were from the ED (66.7%), and one was from both areas(16.7%). Years of nursing experience ranged from more than one year to more than 25 years. The highest degree held was a Baccalaureate Degree (16.7%) with the most frequent being an Associate Degree (66.7%). Sixty-seven percent of the experienced critical care RNs were female and 33.3% male. The majority (66.7%) of the sample was 26-45 years of age.

The Six-D Scale was given to the preceptor with a demographic data collection tool for distribution to the new graduate RN. Six of the packages were returned for a 75% return rate. One new graduate RN was from ICU (16.7%) and five were from the ED (83.3%). Of the new graduate RNs, the highest and only degree obtained was an Associate Degree (100%). The ratio of female to male was the same for both groups of experienced critical care RNs and new graduate RNs. The age ranges for the new graduate RNs were 19-25 years of age at 33.3% and 26-35 years at 66.7%.

Six-D Scale

Data analysis of the Six-D Scale utilized two separate sets of data consisting of 1) the frequency of activities performed, and if performed, 2) the quality of the activity performed in the current critical care setting. Both sets of data were analyzed using descriptive statistics including range, mean score of central tendency, variability, minimum, and maximum.

Table 2 presents the mean and the standard deviation for the subsets reported for the experienced critical care RN's perception of the frequency of the activity performed by the new graduate RN. Table 3 presents the mean and the standard deviation for the subsets reported for the experienced critical care RN's perception of the quality of the activity performed by the new graduate RN. Table 4 presents the correlation between subcategories of the frequency and the quality of nursing activities using Pearson's Correlation with its significance.

Table 2: *Means and Standard Deviations for Subset for the Frequency of Nursing Activity*

Frequency of Nursing Activity	*M*	*SD*
Leadership	3.17	.497
Critical Care (CC)	3.57	.221
Teaching/Collaboration (T/C)	3.09	.249
Planning/Evaluation (P/E)	3.48	.380
Interpersonal Relationships/ Communications (IRP/C)	3.64	.202

Table 3: *Means and Standard Deviations for Subset for the Quality of Nursing Activity.*

Quality/Nursing Activity	*M*	*SD*
Leadership	2.60	.810
Critical Care (CC)	2.76	.972
Teaching/Collaboration (T/C)	2.41	.549
Planning/Evaluation (P/E)	2.67	.907
Interpersonal Relationships/ Communications (IRP/C)	3.01	.797
Professional Development	3.05	.883

Table 4: *Correlation of Subsets of Nursing Activity Frequency and Nursing Activity Quality*.

Nursing Activity	Correlation of Frequency and Quality	
	Correlation	Significance
Leadership	.338	.512
Critical Care (CC)	.095	.858
Teaching/Collaboration (T/C)	.642	.243
Planning/Evaluation (P/E)	.956	.003*
Interpersonal Relationships/ Communications (IRP/C)	.400	.432

*****Correlation is significant at the 0.05 level (2-tailed)

Chapter V

Discussion

The purpose of this study was to determine the experienced critical care RNs perception of the new graduate RNs competence in the critical care setting. The findings of the demographic information suggest the nursing population is getting younger (< 35) and includes more males (33.3%) than previously thought. The age factor could be a result of the fast paced ED setting as most of the data was derived from the ED. The sample was principally comprised of nurses with an Associate Degree which represents the majority education for nurses in the immediate area.

According to the data regarding the frequency of nursing activities obtained from the Six-D Scale, all of the 52 items were performed at least *occasionally* during job performance of the new graduate RN. The mean score ranged from 3.09-3.64. The Leadership subcategory mean score is 3.17 with a range of 1.40, a minimum score of 2.40, and a maximum score of 3.80. The CC subcategory mean score is 3.57 with a range of .43, a minimum score of 3.29, and a maximum score of 3.71. The T/C subcategory mean score is 3.09 with a range of .64, a minimum score of 2.73, and a maximum score of 3.36. The P/E subcategory mean score is 3.48 with a range of 1.00, a minimum of 3.00 and a maximum of 4.00. The IPR/C subcategory mean score is 3.64 with a range of .50, a minimum of 3.33, and a maximum of 3.83.

The study also found that experienced critical care RNs' perception of new graduate RNs quality in performing activities was *satisfactorily* to *well* at their current job. The mean scores ranged from 2.40-3.05 suggesting an average to higher than

average score for the new graduate RNs. The Leadership subcategory mean score is 2.6 with a range of 2.20, a minimum of 1.80, a maximum of 4.00. The CC subcategory mean score is 2.76 with a range of 2.57, a minimum score of 1.43, and a maximum score of 4.00. The T/C subcategory mean score is 2.41 with a range of 1.27, a minimum score of 1.82, and a maximum score of 3.09. The P/E subcategory mean score is 2.67 with a range of 2.14, a minimum of 1.86 and a maximum of 4.00. The IPR/C subcategory mean score is 3.01 with a range of 2.00, a minimum of 1.92, and a maximum of 3.92. The Professional Development subcategory mean score is 3.05 with a range of 2.10, a minimum of 1.90, and a maximum of 4.00.

Of the six subcategories in Table 3, Professional Development had the highest mean score of 3.05 or well. Personal and professional growth of the new graduate RN is affected by relationships and communication with patients and team members. The two subcategories that had the lowest mean scores were T/C and Leadership. The two subcategories would be expected to be lowest in the scheme of the collection tool. New graduate RNs should be concentrating on critical care thinking versus more complex nursing activities or roles.

The subcategory of CC includes activities associated with emergent situations and critically ill patients. The skills in this subcategory had a mean score of 2.76 suggesting these activities are performed satisfactorily to well on the scale. Since gaps exist between nursing education and initial clinical practice for new graduate RNs, transition to the work arena can be difficult. Ongoing educational support and early instillation of

critical thinking can support critical care skills. This active learning process provides experience that leads to building and developing competence in the critical care setting.

Success of new graduate RNs in critical care areas includes personal growth, clinical skills, and professional development, but can be highly influenced by experience critical care RNs established in a department. Involving experienced staff in the process contributes to positive outcomes for the new graduate RN, the experienced critical care RN, and the department.

Interpretation of Findings

Overall perception of the experienced critical care RN regarding the new graduate RN was higher than initially anticipated suggesting some acceptance of the new graduate RNs in the critical care setting. Based on the mean scores of the subcategories of the Six-D Scale, the experienced critical care RN perceived the new graduate RNs quality of performing nursing activities as satisfactory to well. Referring to Benner's theory of Novice to Expert, the new graduate RNs are moving to the competent stage with more consistent and predictable nursing care that is less task-oriented. Potentially higher functioning new graduate RNs may be moving to higher functioning areas like critical care.

Correlation of the frequency of nursing activities performed and the quality of the activities was thought to be higher than the information obtained from the statistics. The subcategory of Planning/Evaluation correlated strongly and was the only category that

was statistically significant. The information determines the frequency of performing nursing activities does not necessarily impact the quality of nursing performance.

There is potentially less eating of the young when new graduate nurses are grown to fit the critical care setting. Investing in the critical care department and the staff employed allows for positive outcomes with success in the department and in relationships between experienced critical care RNs and new graduate RNs.

Implications of Findings

Involving experienced nurses in selection, educating, and mentoring of new staff can be pivotal to each person's success. The study contributes to the developing body of nursing knowledge in the perception of new graduate RNs in the critical care setting. Strengthening evidence-based nursing practice is imperative to nursing's professional future. Involving experienced RNs in the process of hiring, precepting, and mentoring new graduate RNs in the critical care areas. Retention and recruitment for critical care departments is important to cost effective initiatives. Linking relationships between experienced critical care nurses and new graduate RNs can contribute.

Limitations of the Study

Limitations of the study include limited data due to the number of participants and the convenience of the sample. The small sample size may not allow the information to be generalizable to other clinical settings. Greater strength can be applied to the findings when similar data is collected from larger studies. Assessment of competence is a

combination of attitudes and personal and professional experiences that affects data collection.

Implications for Further Research

The intent of this study is to continue collection of data in the present new graduate RN preceptorship. Continued collection of the data with the present preceptorship will assist in improving the processes and provide a course for other critical care departments in other facilities to pattern. The trend in the future is to grow the staff to our needs. A positive culture and positive attitudes in experienced staff is necessary to grow new nurses in critical care areas.

References

Abernathy, A. (2010). Cleveland Regional Medical Center, Center for Lifelong Learning.

Axley, L. (2008). Competency: A concept analysis. *Nursing Forum* 43(4), 214-221. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2010112884&site=ehost-live

Hippeli, F. (2009). Nursing: Does it still eat its young, or have we progressed beyond this? *Nursing Forum* 44(3), 186-188. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2010381131&site=ehost-live

Khomeiran, R. T., Yekta, Z. P., Kiger, A. M., & Ahmadi, F. (2006). Professional competence: Factors described by nurses as influencing their development. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2009128665&site=ehost-live

Kingsnorth-Hinrichs, J. (2009). Growing new graduates: It takes a village. *RN* 72(1), 40-41, 44. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2010180149&site=ehost-live

Lin, P., Hsu, M., & Tasy, S. (2003). Teaching clinical judgment in Taiwan.*Journal of Nursing Research* 44(3), 159-165. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=11423814&site=ehost-live

Lofmark, A., Smide, B., & Wikblad, K. (2006).Competence of newly-graduated nurses-a comparison of the perceptions of qualified nurses and students. Journal of Advanced Nursing 53(6), 721-728. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2009139003&site=ehost-live

Lyneham, J., Parkinson, C., & Denholm, C. (2008).Explicating Benner's concept of expert practice: Intuition in emergency nursing.*Journal of Advanced Nursing* 64 (4), 380-387. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2010085495&site=ehost-live

North Carolina Department of Health and Human Services (2010). Retrieved from http://www.ncdhhs.gov/index.htm

Meretoja, R., Leino-Kilpi, H., & Kaira, A. M. (2004).Comparison of nurse competence in different hospital work.*Journal of Nursing Management* 12 (5), 329-336. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2004202918&site=ehost-live

Ramritu, P. L. & Barnard, A. (2001).New nurse graduates' understanding of competence.*International Nursing Review* 48(1), 47-57. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2001050603&site=ehost-live

Redd, M. L. & Alexander, J. W. (1997). Does certification mean better performance? *Nursing Management* 28(2), 45-49. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=9709205383&site=ehost-live

Rischel, V., Larsen, K., & Jackson, K. (2008). Embodied dispositions or experience? Identifying new patterns of professional competence.*Journal of Advanced Nursing* 61(5), 512-521. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2009801513&site=ehost-live

Schwirian, P. M. (1978). Evaluating the performance of nurses: A multidimensional approach.*Nursing Research* 27(6), 347-351.

Scott-Tilley, D. D. (2008). Competency in nursing: A concept analysis. *The Journal of Continuing Education in Nursing* 39(2), 58-64. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2009798305&site=ehost-live

Tomey, A. M.,& Alligood, M. R. (2006).*Nursing Theorists and Their Work*. 6th Ed St. Louis, MO: Mosby Elsevier.

Truman, K. M. (2004). Education enhances R&R in the ED: Don't eat your young; nurse them. *Nursing Management* 35(7) 45-48. Retrieved from http://ezproxy.gardner-webb.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2004180188&site=ehost-live

Appendix A

Six-Dimension Scale of Nursing Performance

SIX DIMENSION SCALE OF NURSING PERFORMANCE

Patricia M. Schwirian, Ph.D., R.N.
The Ohio State University College of Nursing
1585 Neil Avenue- Columbus, OH43210

Instructions: The following is a list of activities in which nurses engage with varying degrees of frequency and skill.

1. **IN COLUMN A:** please enter the number that best describes how often the nurse performs the activities in the performance of his/her current job.
2. **IN COLUMN B:** for those activities that the nurse does perform please enter the number that best describes how well he/she performs them.

PLEASE USE THE KEY AT THE TOP OF EACH COLUMN

COLUMN A	COLUMN B
How often does this nurse perform these activities in his/her current job?	How well does this nurse perform these activities in his/her current job?
1- Not expected in this job	1- Not very well
2- Never or seldom	2- Satisfactorily
3- Occasionally	3- Well
4- Frequently	4- Very Well

	Column A	Column B
1. Teach a patient's family members about the patient's needs.		
2. Coordinate the plan of nursing care with the medical plan of care.		
3. Give praise and recognition for achievement to those under his/her direction		

4. Teach preventive health measure to patients and their families.		
5. Identity and use community resources in developing a plan of care for a patient and his/her family.		
6. Identify and include in nursing care plans anticipated changes in patient's conditions.		
7. Evaluate results of nursing care.		
8. Promote the inclusion of patient's decision and desires concerning his/her care.		
9. Develop a plan of nursing care for a patient.		
10. Initiate planning and evaluation of nursing care with others.		
11. Perform technical procedures: e.g. oral suctioning, tracheostomy care, IV therapy, catheter care, dressing changes.		
12. Adapt teaching methods and materials to the understanding of the particular audience: e.g., age of patient, educational background and sensory deprivation.		
13. Identify and include immediate patient needs in the plan of nursing care.		
14. Develop innovative methods and materials for teaching patients.		
15. Communicate a feeling of acceptance of each patient and a concern for the patient's welfare.		
16. Seek assistance when necessary.		
17. Help a patient communicate with others.		
18. Use mechanical devices: e.g., suction machine, Gomco,		

cardiac monitor, respirator		
19. Give emotional support to family of dying patient.		
20. Verbally communicate facts, ideas, and feelings to other health care team members.		
21. Promote the patients' rights to privacy.		
22. Contribute to an atmosphere of mutual trust, acceptance, and respect among other health team members.		
23. Delegate responsibility for care based on assessment of priorities of nursing care needs and the abilities and limitations of available health care personnel.		
24. Explain nursing procedures to a patient prior to performing them.		
25. Guide other health team members in planning for nursing care.		
26. Accept responsibility for the level of care under his/her direction.		
27. Perform appropriate measures in emergency situations.		
28. Promote the use of interdisciplinary resource persons.		
29. Use teaching aids and resource materials in teaching patients and their families.		
30. Perform nursing care required by critically ill patients.		
31. Encourage the family to participant in the care of the patient.		
32. Identify and use resources within the health care agency in developing a plan of care for a patient and his/her family.		
33. Use nursing procedures as opportunities for interaction		

with patients.		
34. Contribute to productive working relationships with other health team members.		
35. Help a patient meet his/her emotional needs.		
36. Contribute to the plan of nursing care for a patient.		
37. Recognize and meet the emotional needs of a dying patient.		
38. Communicate facts, ideas, and professional opinions in writing to patients and their families.		
39. Plan for the integration of patient needs with family needs.		
40. Function calmly and competently in emergency situations.		
41. Remain open to the suggestions of those under his/her direction and use them when appropriate.		
42. Use opportunities for patient teaching when they arise.		

The following PROFESSIONAL DEVELOPMENT behaviors should be evaluated in terms of quality only--i.e. COLUMN B.

	Column A	Column B
43. Use learning opportunities for ongoing personal and professional growth.		
44. Display self-direction.		
45. Accept responsibility for own actions.		
46. Assume new responsibilities within the limits of capabilities.		
47. Maintain high standards of performance.		
48. Demonstrate self-confidence.		
49. Display a generally positive attitude.		
50. Demonstrate a knowledge of the legal boundaries of nursing.		
51. Demonstrate knowledge in the ethics of nursing.		
52. Accept and use constructive criticism.		

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Further information regarding the development, use and scoring of the Six Dimension Scale of Nursing Performance can be found in: Schwirian, P.M. (1978). Evaluating the performance of nurses: A multi-dimensional approach. Nursing Research, 27, 347-351.

Appendix B

Demographic Questionnaire

Generic Participant Information

Years of Nursing Experience: **New RN**
1-5
6-10
11-15
16-20
21-25
>25

Special Care Area: **ICU**
ED
Both

Gender: **M**
F

Age: **19-25**
26-35
36-45
46-55
>55

Degree: **ADN**
Diploma
BSN
MSN
DNP

Appendix C

Gardner-Webb University IRB Approval Letter

Appendix D

Chief Nurse Executive (CNE) Approval Letter

Appendix E

Consent to Participate Cover Letter

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Gardner-Webb University (GWU)

PRINCIPAL INVESTIGATOR:

Name: Denise Reid, RN, BSN, CEN

Email:denisestarling@hotmail.com; denise.reid@carolinashealthcare.org

Telphone: Mobile: 704-300-5402; Work: 980-487-3069

Department: GWU Nursing Department

INTRODUCTION:

You are being invited to volunteer as a subject in a research project being conducted within the Cleveland County Healthcare System (CCHS) for GWU. This consent form provides you with the information you will need when considering whether to participate. All evaluation and research studies at GWU are governed by federal and state laws regulating human subjects' research. If you decide to participate, you will be asked to sign this consent form which states that you have read the purpose, that any questions you have about the evaluation have been answered, and that you agree to participate. You will be given a copy of this form to keep for your records.

STUDY PURPOSE:

The purpose of this study is to determine the experienced critical care nurse's perception of new graduate RNs competency in the critical care setting. Typically new graduate nurses did not go directly into critical care at graduation. This research study is to examine the perceptions related to the change in nursing practice. Preceptors with > 5 years of experience, who are precepting new graduate RNs, will evaluate the new graduates nursing performance.

STUDY PROCEDURES:

The study information will be obtained by using the Six Dimension Scale of Nursing Performance. Permission has been granted for use from the original designer Patricia Schwirian. General generic participant information will be obtained using a short data collection form.

STUDY RISKS:

Your participation in this evaluation involves no risk. Confidentiality will be maintained.

STUDY BENEFITS:

Benefits to you may include

COSTS TO THE SUBJECT:

There are no costs for participating in this evaluation.

COMPENSATION:

There is no compensation for completing the evaluation.

CONFIDENTIALITY:

If you consent to participate in this evaluation, your personal information will be kept confidential.

VOLUNTARY PARTICIPATION IN, AND WITHDRAWAL FROM, THE STUDY:

The decision whether to be in this evaluation is entirely up to you. Participation is voluntary. You can refuse to participate, or withdraw from the evaluation at any time, and such a decision will not affect your relationship with GWU or CCHS, either now or in the future. Nor will a refusal or withdrawal of participation result in the loss of any other benefits to which you are otherwise entitled. Signing this form does not waive any of your legal rights.

CONTACTS:

If you have any questions, please ask, and I will do our best to answer them**. If you have additional questions in the future, please contact Denise Reid, RN, BSN, CEN @ 704-300-5402 or email denisestarling@hotmail.com.** Copies of this consent form are available by request. If you have any questions on your rights as a research subject, you can contact the Institutional Review Board at GWU for information.

STATEMENT OF CONSENT:

I have reviewed the evaluation design outlined above and have had any questions I have about the evaluation answered to my satisfaction. I understand that my participation is voluntary and that I can withdraw from the evaluation at any time without prejudice. Consent to participate is determined by return of the data collection tool.

Appendix F

Author Permission Letter

RE: Using Six Dimension Scale

From: **Pat Schwirian** (schwirian.1@osu.edu)
Sent: Tue 7/13/10 10:59 PM
To: 'denise starling' (denisestarling@hotmail.com)

Denise: I'm glad you decided to use the Six Dimension Scale of Nursing Performance for your research. You certainly have my permission to do so. If your research advisor or institution requires a more formal permission format, please let me know--along with the name of your project, as well as advisor's name and address and I will be glad to provide it.

pms

Patricia M. Schwirian, PhD, RN
Professor Emeritus, College of Nursing & Family Medicine
The Ohio State University
Ph. (614) 488-2830
FAX (614) 488-4740
e-mail: schwirian.1@osu.edu

-----Original Message-----
From: denise starling [mailto:denisestarling@hotmail.com]
Sent: Tuesday, July 13, 2010 6:40 PM
To: Patricia Schwirian
Subject: Using Six Dimension Scale

Dr. Schwirian,

I contacted you earlier this summer about using the Six Dimension Scale of Nursing Performance. You were gracious enough to send me the information. I have decided to use your scale for my thesis. I need permission from you to use the scale. I plan to use the scale in full as it is. Thanks so much for your help. Denise Reid