

EVALUATION OF NEW GRADUATE NURSES' PERCEPTIONS OF MENTORING

A RESEARCH PAPER

SUBMITTED TO THE GRADUATE SCHOOL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE

MASTERS OF SCIENCE

BY

AMBER K. HARPE

DR. CINDY THOMAS- ADVISOR

BALL STATE UNIVERSITY

MUNCIE, INDIANA

MAY 2012

TABLE OF CONTENTS

TABLE OF CONTENTS..... i

ABSTRACT..... iii

CHAPTER I: INTRODUCTION

Introduction 1

Background and Significance 2

Problem..... 4

Purpose..... 4

Research Question..... 5

Framework..... 5

Definition of Terms..... 5

Limitations..... 9

Assumptions..... 9

Summary..... 9

CHAPTER II: REVIEW OF LITERATURE

Introduction..... 11

Theoretical Framework..... 12

Mentoring and Program Design..... 14

Mentoring and New Nurse Professional Development..... 21

Mentoring and New Nurse Satisfaction..... 30

Mentoring and New Nurse Support and Socialization..... 36

Summary..... 41

CHAPTER III: METHODOLOGY

Introduction.....	43
Research Question.....	43
Population, Sample, and Setting.....	44
Protection of Human Rights.....	44
Procedures.....	44
Research Design.....	45
Data Analysis.....	46
Summary.....	47
References.....	48

Abstract

RESEARCH SUBJECT: Evaluation of New Graduate Nurses' Perceptions of
Mentoring

STUDENT: Amber K. Harpe

DEGREE: Masters of Science

COLLEGE: College of Applied Sciences and Technology

DATE: May, 2012

Mentoring new registered nurses helps to ensure a successful transition to professional practice (Beecroft, Santner, Lacy, Kunzman & Dorey, 2006). The purpose of this study is to evaluate specific components of new registered nurse satisfaction of a nurse mentoring program: (a) the compatibility of the mentor/mentee; (b) perceptions of guidance and support; (c) socialization into the profession; (d) the benefits of role model acquisition of professional behaviors; (e) maintenance of contact between the mentor/mentee; and (f) overall satisfaction with the mentorship program. This is a modified replication of Beecroft *et al.*'s (2006) study which was part of a larger study. The framework for the study is based on Borich and Jemelka's (1982) Education Decision Model for Program Evaluation, and Gefke's (1999) Six Phases of Mentoring. The anticipated sample is 200 new registered nurses who have completed a mentoring program within the past 2 years while employed at Community Health Network located in central Indiana. Community Health Network is a healthcare organization which includes 8 acute care hospitals throughout the central Indiana area. An eight question survey tool designed by Beecroft *et al.* (2006) will be used to measure the study

variables. Information about the new registered nurse perception of mentoring programs will be helpful in restructuring future mentoring programs.

Chapter I

Introduction

Formal mentoring of new registered nurses has been shown to be an effective means in improving new nurse retention rates. While informal nurse mentoring has occurred in healthcare settings in the past, recent research on formalized nurse mentoring programs supports the positive outcomes formalized new nurse mentoring programs have on reducing new nurse turnover rates and improving patient safety. Different from preceptors, who mainly focus on assisting the new nurse to learn task-oriented items during initial orientation, mentors (typically more seasoned nurses), provide a sounding board for the new nurse, assist with socialization and professional development, and provide feedback from a different perspective (Goran, 2001). The mentor and new nurse relationship normally begins a few months after the nurse has been employed and typically continues for a year formally, and longer informally. Interest in nurse residency programs is increasing and current research projects, such as the Transition-to-Practice pilot being conducted by the National Council of State Boards of Nursing (NCSBN, n.d.), will provide additional data on the impact formalized mentoring programs have as a component of standardized new nurse transition-to-practice programs.

Background and Significance

Development of effective transition-to-practice programs for new nurses has been a topic of discussion among nursing leaders for more than 70 years (Benner, 1984; Kramer, 1974). However, evidence-based support of effective transition-to-practice models has been limited. Currently, a national standard for new nurse transition-to-practice programs does not exist. Healthcare organizations are free to use any format desired to transition new nurses into the organization's work setting. At the same time, employers report new registered nurses are not ready to practice. In a study conducted by the National Council of State Boards of Nursing (NCSBN, n.d.), less than 50% of employers rated new nurses as definitely ready to provide safe, effective care.

In a typical hospital, at least 10% of the nursing staff are newly registered nurses (Berkow, Virkstis, Stewart & Conway, 2008). Over the next decade the ratio of newly registered nurses compared to the experienced nurse is predicted to increase (Berkow et al.). Even with the temporary downturn in demand for newly registered nurses, experts caution the supply of available nursing staff will decrease as the demand for nurses increases, and the aging nursing workforce retires. The Tri-Council reports approximately 900,000 of 2.6 million working RNs are over the age of 50 (NLN, 2012) (the Tri-Council is an alliance between the American Association of Colleges of Nursing (AACN), American Nurses Association (ANA), American Organization of Nurse Executives (AONE), and National League for Nursing (NLN)). Between 2004 – 2008, the RN workforce grew by only 153, 806 RNs even though nurses receiving licenses was at 444,678. This imbalance indicates the supply of nurses is not keeping up with the current demand. The gap between supply and demand is expected to worsen as greater numbers

of baby boomer nurses enter retirement age, and an increase in the number of the elderly population occurs (AACN, 2012). The decreasing ratio of experienced nurses to inexperienced nurses will create an experience gap in the nursing workforce, and will increase the numbers of new nurses needed to meet the demand for future nurses.

Over the past decade retention rates of new registered nurses during the first year of practice has been low. New nurse turnover rates during the first year of practice averaged between 35 – 65% (Delaney, 2003; Halfer & Graf, 2006; Kovner, Brewer, Greene, and Fairchild, 2009; Spector & Echternacht, 2010).

The financial burden of replacing new nurses is an area of concern. According to Spector and Echternacht (2010), replacement costs can reach 1.3 times the nurse's annual salary. Jones (2008) estimated nurse replacement costs at \$82,000 to \$88,000 each. PricewaterhouseCoopers Health Research Institute (2007) reported it costs hospitals approximately \$300,000 for each percentage point increase in nurse turnover rates (Ulrich et al., 2010). As healthcare organizations face decreasing margins, ways to reduce direct and indirect turnover costs are gaining attention. Incorporating new nurse residency programs has been found to reduce new nurse turnover rates.

According to Ulrich et al. (2010), Versant conducted a 10-year longitudinal study on new nurse residency programs to evaluate components of programs that prove to be effective. The outcomes of the study indicated, in addition to an 18-week precepted clinical immersion program, ongoing support of the new nurses through a structured mentoring program for the first year of employment was recommended (Ulrich et al.). Ulrich et al. concluded, "Formal RN residencies with measured outcomes should become the norm for new graduate nurses" (p.18).

Identifying the components of a successful mentoring program is important to organizations looking to implement new nurse mentoring programs. Understanding the elements for successful mentoring programs was the focus of the Beecroft, Santner, Lacy, Kunzman, & Dorey (2006) study. Four important themes emerged: (a) formal programme requirements; (b) socialization; (c) support and guidance; and, (d) satisfaction. Data collected and sorted to the main theme areas was used to improve nurse residency programs, including the mentoring sections of the programs. As more emphasis is placed on organizations implementing evidence based transition-to-practice programs for onboarding new nurses into the work setting, outcome data from additional studies of nurse residency programs will be useful in establishing best practices for the programs.

Problem

Mentoring new nurses is important in the successful transition into practice due to technical and emotional demands (Beecroft et al., 2006). Mentors role model, socialize and guide new nurses. Mentor qualifications and skills are critical to the success of the program. Feedback from new registered nurses over time about the mentoring program will provide information to restructure mentoring programs.

Purpose

The purpose of this study is to evaluate a mentoring program over time for new registered nurse satisfaction with the match of the mentor, perceptions of guidance and support, socialization into the profession, role model acquisition of behaviors, maintaining contact over time and program satisfaction. This is a modified replication of Beecroft et al.'s (2006) study.

Research Questions

The research questions for the study are: (a) Were the new nurses satisfactorily matched with the mentor; (b) Did new nurses received guidance and support; (c) Did new nurses attain socialization; (d) Did new nurses benefit from a role model; (e) Did mentors maintain contact throughout the program; and (f) Were new nurses satisfied with the program.

Theoretical Framework

Borich and Jemelka's (1982) Educational Decision Making Model, and Gefke's (1999) Six Phases of Mentoring Model will be used as the theoretical framework for this study.

Definition of Terms

Introduction

Eight questions identified by Beecroft et al. (2006) were used to gather information specific to the mentoring experience. The questions were related to if the mentee was able to meet with the mentor on a regular basis; did having a mentor reduce stress; were the mentor and mentee compatible; did the mentee receive expected feedback and guidance; what the mentee received as a personal benefit from the relationship; would the mentee recommend the mentor to participate as a mentor again; what feedback would the mentee provide to the mentor; and, changes the mentee would like to see in the program. In addition, the comment analysis identified four themes. The four themes identified were "(a) formal programme requirements; (b) socialization; (c) support; and (d) satisfaction" (Beecroft, et al., p. 740).

Conceptual

The concept of mentoring varies in the literature. Beecroft et al. (2006) described the mentor role as a more experienced nurse who provides guidance, role modeling, support and advice to the new resident nurse during the transition to practice. The anticipated outcome of the mentor/mentee relationship is the professional and personal growth of the mentee, and satisfaction with the mentoring program resulting in decreased turnover rates, and improved patient safety.

Operational

For this study mentor/mentoring will be defined as a “nurturing process in which a more skilled and experienced person, serving as a role model, teaches, sponsors, encourages, counsels, and befriends a less skilled and less experienced person for the purpose of promoting the latter’s professional and/or personal development” (Anderson, 1988, p.40). Mentors will be experienced RNs who have completed the Community Health Network Mentor Training Program. Regular basis will be defined as meeting at least twice a month. Measurement of success of the mentoring experience will be assessed from the data collected on the eight question yes/no survey, and analysis of the comments.

Conceptual

A variety of stressors related to new nurses’ transition to practice are described in the literature. Fink, Krugman, Casey and Goode (2008) study found the top three stressors were preparation for the NCLEX™ and awaiting the results; moving away from home to a more independent lifestyle; and, adjusting to the new work environment and expectations. After the initial 6 months of work, stressors identified were family

responsibilities; new pregnancy or marriage; acquiring different housing; and entering graduate school (Fink et al.). Frequent work-related stressors cited by new nurses were concerns with workload, wanting to be more independent at work, but not possessing the skills/knowledge; lack of confidence communicating with physicians; managing and prioritizing; delegating; lack of confidence with certain procedures; and, inconsistent support from staff involved in transition to practice support roles (Fink et al.; Oermann & Garvin, 2002). In content analysis, Beecroft et al. (2006) categorized the question related to having a mentor as being a stress reducer, under the question of “were you able to meet with your mentor on a regular basis” (p.742, Table 5).

Operational

Achievement of stress reduction related to participation in the mentoring program will be measured by the yes/no responses to the survey questions about meeting with the mentor on a regular basis; and, was having a mentor a stress reducer (Beecroft et al, 2006). Comments connected to the questions will be coded as positive or negative.

Conceptual

Socialization in the Beecroft et al. (2006) study referred to the mentor facilitating organization-wide relationships and networking both on the unit and in the hospital. Development of professional behaviors through role-modeling, feedback, or providing career advice was found to be important.

Operational

Socialization for this study will be measured by yes/no responses, and comments categorized as negative or positive to the question ‘What were the personal benefits to you from having a mentor?’ (Beecroft, 2006 p. 741). Measurement of responses to

questions/comments for the question ‘If given the opportunity, what feedback would you give your mentor’ (p. 741) will also provide measurement for the concept socialization.

Conceptual

Anderson, Linden, Allen and Gibbs, (2009) report nurse satisfiers were related to caring for patients, positive patient outcomes and teamwork, while dissatisfiers were found to be staffing, lack of teamwork, and physician disrespect. Kovner, Brewer, Wu, Cheng and Suzuki (2006) reported a strong correlation between work-group cohesion, autonomy, supervisor support, and RN job satisfaction.

Operational

Satisfaction will be analyzed by evaluating the yes/no responses to the questions ‘Would you like to see changes in the mentoring program?’ and, ‘Would you recommend your mentor for a future mentor programme?’ (Beecroft et al., 2006, p. 743).

Categorization of the related comments will be coded as positive or negative by the recorders.

Conceptual

Demographics are identified by Beecroft et al. (2006), as groups of participants according to age groups of <24 years old; 23-30 years old; 31–40 years old; and, 40+ years old. Level of education includes two groups – Diploma/Associate Arts degree and Bachelor of Science in Nursing degree. Additional demographic information includes, if the participants had previous healthcare work experience, and identifying the participant’s first choice of nursing unit. The participants had completed an RN residency program.

Operational

Demographic information will be gathered using paper questionnaires as outlined in the Beecroft et al. (2006) study. Demographics will include age group of participants; level of education; if the participant had previous healthcare work experience; and, identification of the participant's first choice of nursing units. All participants will have completed an RN residency program within the past 5 years.

Limitations

Limitations of the study include the small number of participants available. Another limitation is the sample will be from only one network healthcare organization, and will only be from the viewpoint of the mentee. Mentors potentially could have different views. The number of participants who will add comments to the survey instrument may be limited. Bias in analysis and interpretation of the comments could be a limit.

Assumptions

Newly registered nurse will have some degree of discomfort and dissatisfaction in a new position. Transitioning to a new work environment can be stressful. Expectations versus reality of a new nurse's perception of readiness to practice may result in dissatisfaction regardless of the quality of the transition-to-practice program.

Summary

Healthcare organizations are seeking measures to help reduce costs while improving patient outcomes and safety. New nurse transition-to-practice programs have been shown to improve new nurse retention rates with an overall effect of reducing training costs. Mentoring has been identified as a component to include in successful

transition-to-practice programs. The purpose of this study is to evaluate a mentoring program over time for new registered nurse satisfaction with the match of the mentor, perceptions of guidance and support, socialization into the profession, role model acquisition of behaviors, maintaining contact over time and program satisfaction. This is a modified replication of Beecroft et al.'s (2006) study. Borich and Jemelka (1982) Educational Decision Model is the conceptual framework for this study and Gefke's (1999) Six Phases of Mentoring Model. Findings from this study may provide insight into the components to include in a successful mentoring program.

Chapter II

Review of Literature

Introduction

New nurse residency programs are gaining national attention as a means to improve new nurse transition-to-practice. According to the Indiana State Nurses Association (ISNA, 2011), the Institute of Medicine (IOM) and Robert Wood Johnson (RWJ) Foundation are recommending transition-to-practice residency programs as a means for new graduate nurses to improve knowledge and skills. According to the ISNA (2011) report, components of the new nurse residency program should not only include skills development, but also “those related to leadership, quality improvement, [and] interprofessional collaboration...” (p. 11).

Current literature reports mentoring improves the transition-to-practice experience for new graduate nurses. The purpose of this study is to evaluate a mentoring program over time for new graduate nurse satisfaction with the match of the mentor, perceptions of guidance and support, socialization into the profession, role model acquisition of behaviors, maintaining contact over time and program satisfaction. This is a modified replication of Beecroft et al.'s (2006) study. The literature review consists of selected research studies focusing on the mentoring components for new nurse residency

transition-to-practice programs. The literature is organized into four sections: (a) mentoring and program design; (b) mentoring and new nurse professional development; (c) mentoring and new nurse satisfaction; and (d) mentoring and new nurse support and socialization.

Theoretical Framework

The conceptual framework for this study is based on Borich and Jemelka's (1982) Educational Decision Model for Program Evaluation and Gefke's (1999) Six Phases of Mentoring Model. The Borich and Jemelka Educational Decision Model is a combination of decision, system, value oriented theories and conceptual frameworks. Borich and Jemelka (1982) refer to the Educational Decision Model as an "evaluation trinity" (p.225) that theoretically conceptualizes certain perspectives of decisions, systems and value-oriented conceptual frameworks used in the evaluation of programs.

Developed from the philosophies of the Educational Decision Model, Borich and Jemelka (1982) share a graphically illustrated method (framework) used not only in the evaluation and analysis of programs, such as a RN residency program, but the framework can also be used to plan, develop, describe and communicate program models.

The Educational Decision Model is complex. A large number of concepts are derived from the various systems, values, and decision oriented conceptual frameworks and theories. In fact, Borich and Jemelka (1979) share the dilemma experienced by program evaluation researchers to find an encompassing theory to utilize as a framework for which program evaluation could be studied effectively. The Educational Decision Model was developed by Borich and Jemelka (1979) in the late 70s and early 80s as an attempt to meet the need for a broader encompassing framework or theory to use for

program evaluation. Since the Educational Decision Model can be used both to build and evaluate programs, it has a forward and backward flow. Some of the concepts and terms appear to be derived from this forward and backward flow design.

In the graphical design of the model, a few of the concepts shared are structured decomposition, transactions, inputs, constraints, outcomes, means-end continuum, sequence (simple, mixed and no), and feedback (Borich & Jemelka, 1982). These concepts can be used in both program development and evaluation. Borich and Jemelka (1982) defined concepts of the Educational Decision Model framework as follows:

Structured decomposition is the process of breaking down a program into its component parts. Transactions are the basic units or building blocks of a program model. Inputs are the things the activity uses or acts on: clients or students, test, staff, time, classrooms, etc.

Constraints are things that constrain the activity: funding, program priorities, feedback on results, previous behaviors of the participants, anything that moderates behaviors or influences outcomes. Outcomes are things produced or resulting from the activity: clients with improved outlooks, higher rates of employment, and students with a certain skills. Means and continuum: any event or condition that can be viewed as occupying space on a continuum. Simple sequence is what is attained: from A effects outcomes of B, what is attained by B, effects outcomes of C, etc. Mixed sequence: what is attained from A effects outcomes of B, but B does not affect outcomes of C. A and B do not always proceed C, but A always proceeds B. No sequence. All transactions are

independent of each other. Feedback enables a program to be self-regulating or adapt to its own environment. (Borich & Jemelka, p. 242-258).

The Gefke (1999) Six Phases of Mentoring Model are: Phase 1 - Getting acquainted and establishing rapport; Phase 2 -Goal setting/contracting/action plans; Phase 3- Implementing plans and assessing programme; Phases 4-5 - Evaluating successes, reassessing progress, reprioritizing and selecting additional goal, and, Phase 6 - Letting go/celebration and evaluating programme (Beecroft et al., 2006).

Mentoring and Program Design

Beecroft et al., (2006) identified that healthcare organization's struggle with new registered nurse retention during the first year of professional practice. The researchers noted successful mentor-mentee match may have a positive impact on the new nurse transition, and that financial constraints and feasibility might impact the use of mentoring programs. The purpose of the study was to determine if the inclusion of specific components such as matching the new registered nurse with a mentor that was satisfactory to the new nurse, and the provision of mentor support, socialization into the work environment and role modeling would improve the new nurse's transition experience.

The sample was taken from a larger study of a nurse residency program in the United States. There were 318 participants that met inclusion criteria for the study. The study spanned seven years and included approximately 30 new registered nurse cohorts for each of the two new groups. The majority of the participants were between 23 and 30 years old. There were 60.9% of the participants that had earned a BSN degree while 39.1% had earned an ASN degree (Beecroft et al., 2006).

The conceptual framework was based on Borich and Jemekla's 1982 Educational Decision Model, and Gefke's (1999) Six Phases of Mentoring Model. The design was a comprehensive summative analysis of a descriptive quantitative and qualitative study. An eight item survey instrument with a yes/no format inquired about nurse's perceptions of the residency experience. Program changes were made based on the responses. A comment area was provided. Surveys were completed on the last day of the program. The opened-ended comments were reported based on an analysis and comparison with previously reported themes. Results of the qualitative study identified themes of satisfaction, support and socialization. There were 58% positive comments indicating the mentee's had been satisfactorily matched with mentors. The quantitative results of the study also demonstrated positive results. The quantitative results were related to the mentee's relationship with: (a) the mentor providing stress reduction, 69% responded yes; (b) good match with the mentor, 94% responded yes; (c) mentor providing guidance and feedback, 94% responded yes; (d) recommending the mentor for future mentor programs, 95% responded yes; (e) recommending changes in the mentor program, 55% responded no (Beecroft et al., 2006).

In the final analysis, Beecroft et al., concluded there were some apparent obstacles to the meetings between mentors and mentees, including lack of commitment, time, and scheduling constraints. In addition, findings suggested mentors needed more specific guidelines and information on mentoring. The study findings implied the stress new registered nurses experienced might be influenced by diversities within the sample, such as age and educational level. The choice of the nursing unit may have added to or decreased the level of stress experienced, as well.

Grindel and Hagerstrom's (2009) study adds another dimension to understanding effective mentoring programs. Grindel and Hagerstrom not only examined mentoring from the mentee's perspective, but included survey items to evaluate mentors' perceptions of the mentoring program.

The problem was identified as a strong need for healthcare organizations to pursue methods which supported retention of new nurses. The purpose of the study was to examine the effect of a mentor-mentee program on job satisfaction, new nurse confidence, intent to stay, and satisfaction with both the mentor/mentee relationship and the Nurses Nurturing Nurses (N3) programs.

Initially, eighteen hospitals or hospital systems agreed to participate in the study. Only fifteen of the 18 hospitals returned the survey data. The locations of the hospitals were Northeast (4); South (10); North Central (3); and West (1). Of the 96 mentor/mentee dyads in the sample, 11 returned both the data for time period one and time period four. There were 53.7% of the new nurse participants that had earned an ASN degree, and 35.8% had earned a BSN degree. The number with masters in nursing or bachelor's degree in another field was 6.3%. The average age of the mentee was 30.66, and 95.9% were female. There were, 38% of the mentors that had earned BSN degrees; 28.6% associate degrees; and, 12.4% MSN degrees or masters in a different field. The average mentor age was 41.64 (Grindel & Hagerstrom, 2009).

The researchers used a longitudinal non-experimental predictive design. One instrument used in the study was The Intent to Stay/Job Diagnostic Survey (JDS) (Grindel & Hagerstrom, 2009). The JDS consisted of 15 statements with responses on a 7-point Likert scale. Additional instruments were The Nurse Job Satisfaction Survey; the

New Nurse Confidence Scale; the Mentee Assessment of the Relationship with the Mentor; the Mentor Assessment of the Relationship with the Mentor; and the Mentee's Satisfaction with N3 Program. All of the instruments utilized a Likert scale specific to the instrument.

The survey results indicated the new registered nurse confidence levels had increased from time period 1 to time period 3. Job Satisfaction was moderately high at both time periods 1 and 3. The mentor's relationship with the mentee's was high at time point 2 with no significant change at time point 3. The Mentee's relationship with the mentor decreased slightly at 12 months. Because of the attrition rate of participants, it was determined further study would be needed. However, the study demonstrates the importance of mentoring related to new nurse retention.

Advanced clinical judgment and reasoning are needed to successfully manage acutely ill patients. New nurses may lack the experience needed to develop advanced clinical judgment. Experienced senior RNs, who possess advanced clinical judgment and reasoning, are limited in time available to mentor and teach the new nurse. Removing direct care responsibilities for senior nurses to serve as mentors to new nurses can assist in the development of the new nurse. In the Burritt, Wallace, Steckel, & Hunter (2007) study the authors investigated the effect of a clinical mentor care delivery model in reducing risk-adjusted complication rates. The authors hypothesized that having a clinical mentor for inexperienced nurses would have a positive impact on improving nurse-sensitive outcomes. Burritt et al. used concepts from three theories as the framework for the study. Benner's (1984) framework, including clinical expertise development; Tanner's (2006) description of clinical judgment and reasoning; and, the concept of reflective thinking to

support the transition of learning into practice were used. Donabedian's (1980) model for structure, process, and outcome was used as a framework for planning the mentor model and evaluating the outcomes.

The Burritt et al. (2007) study was conducted at a 372-bed hospital in Southern California. There were 34 full time equivalent mentor positions created covering 12 patient care units. The selected mentors attended a week long orientation program. The authors compared quality patient outcome metrics on fall rates, nosocomial pressure ulcers, failure to rescue, length of stay and complication rates. A longitudinal study compared monthly outcomes for 6 months prior to the mentor program implementation, and for 6 months following the implementation of the mentoring program. Actual expected improvement in risk-adjusted complication rates were compared against expected improvements. At 6 months prior to the mentor program implementation, expected complications rates were 32 %, and actual at 33.5% of the inpatient population. At the month of implementation of the mentoring program expected complication rates were 31%, and actual at 31%. Six months after implementation of the mentoring program the complication rates expected was 30.5%, actual complication rates were 30%. No information was shared on the validity or reliability of the instrument used to compare pre and post program implementation.

The authors concluded the clinical mentoring care model decreased the percentage of patient complications, however recommend further study is needed. The implications from the study were that implementing a mentoring program may decrease costs by decreasing patient complications through facilitating new nurse's clinical judgment and reasoning. While this study was interesting, it would be difficult to validate

whether the improved patient outcomes were correlated with the implementation of the mentoring program.

One-on-one mentoring can be costly and counter-productive if negative factors are experienced by the new nurse. According to Scott and Smith (2008) the demands created on the mentors in one-on-one mentoring situations can result in negative behaviors. The purpose of the Scott and Smith study was to evaluate the effectiveness of a group mentoring program, as a cost-effective alternative to one-on-one mentoring in reducing turnover rates.

Lenior Memorial Hospital (LMH), a 269 bed hospital in North Carolina, was the site of the study. LMH had implemented a one-on-one mentoring program called Successful Transition and Retention (STAR) program that was discontinued after one year due to various problems with time constraints, and scheduling problems. Three LMH Nurse Education Specialist gained approval to evaluate the effectiveness of a group mentoring program as an alternative to the discontinued one-on-one mentoring program. Twenty-five new nurses were included in the sample. The 25 new nurses began in the revised STAR program in July 2005. No specific theoretical framework was named in the study. Concepts of novice nursing, transition to practice, role modeling, socialization, encouragement, guidance, safe delivery of patient care, critical reflection, problem resolution, and mentor/mentee matching were discussed in the study (Scott & Smith, 2008).

The STAR program consisted of three phases. Phase 1 included a 3 day NCLEX review class and 2 weeks of intensive orientation. During the orientation period, the new

nurses met with the Group Mentoring Team to establish an interpersonal relationship with the Team.

The Team consisted of the 3 LMH Nurse Education Specialists. In Phase 2, the new nurses transitioned to the nursing units and were assigned to a nurse preceptor for unit orientation. The Group Mentoring Team made daily rounds on the units where the new nurses worked to meet one-on-one with the new nurses and provide support, and allow the new nurses to verbalize any fears or frustrations. During Phase 2 quarterly 8 hour/day meetings between the new nurses and the Mentoring Team occurred which included specific agenda items to address concerns, provide identified educational needs, and allowed time for the new nurses to share experiences and concerns.

The Vice President of Human Resources also attended. Phase 3 was the final transition phase. This phase incorporated a graduation ceremony for the new nurses, and final time for reflection. A comparative report was used to report the turnover rates. The report shared the number of new nurses who left \leq 18 months after hire and the percent of turnover. In 2002, the percent of turnover was 30.7%; 2003 - 21.7%; 2004 – 26.9%; and, in 2005 – 20% (after completion of the revised STAR program). A satisfaction survey of the STAR program was completed by the participants. A faculty member of the University of East Carolina distributed and collected the surveys. No specific information on statistical reliability was reported on the survey instrument used. The scoring options were “very satisfied, somewhat satisfied to satisfied, or not very satisfied to very dissatisfied” (Scott &Smith, 2009, p. 235). The highest levels of satisfaction were with Orientation to LMH = 92.3% very satisfied; and Being a nurse = 84.6%. For survey question Staffing on your unit, 31.8% were not very satisfied.

Open-ended responses indicated an overall improvement in levels of competence and confidence. Other positive comments were related to support received and being able to meet with other new nurses to discuss concerns and experiences.

The authors shared the need for more rigorous studies to be used to assess the effectiveness of group mentoring versus one-on-one mentoring. This study, while not rigorous in scientific measures, provides an interesting evaluation of the use of group mentoring as an alternative approach to mentoring, and a basis for conducting further scientifically based research on group mentoring. Healthcare organizations are being challenged to control cost and cost-effective transition to practice options that improve retention rates of new nurses will be an important aspect in controlling costs.

Mentoring and New Nurse Professional Development

Mentoring as an interpersonal experience and a career development strategy for women has in recent years gathered increasing attention from women in healthcare. Professional development of nurses was a focus of the Angelini (1995) study. There was a lack of qualitative data on mentoring which led Angelini to: (a) explore and identify perceived mentoring experiences of nurses working in various hospital settings; (b) describe mentoring strategies and career development; (c) identify emerging variables; and (d) to assist with mentoring model development.

Angelini (1995) used a qualitative grounded theory with an exploratory descriptive design. The theoretical framework used concepts from female development, female career development and mentoring as related to nursing (Gilbert & Rossman, 1990; Kram, 1988; Belenky, Clinchy, Goldberger & Tarule, 1986; Gilligan 1979, 1982; Hennig & Jardim, 1977; Vondracek, Lerner, & Schulenberger, 1986; Gallos, 1989; Hall,

1980; Betz & Fitzgerald, 1987; Campbell-Heider, 1986; Sharpiro & Farrow, 1988; Roberts, 1987; Bolton, 1980; Stachura, 1989; Just, 1989; Hinson, 1986).

Female development theories included concepts of socialization and interpersonal relationship. Cited within theories of female development, the tendency of women to avoid actions that might jeopardize relationships or affiliations were discussed. In addition, women tend to be disengaged from their work environments (Hennig & Jardim, 1977). According to Vondracek et al. (1986), there are two main components of the career development concept, “the individual and the environment in which the individual exists” (Angelini, 1995, p. 90). The influence of peer groups has been found to be a main factor in the career development concept.

A variety of definitions for the concept of mentoring exist. Angelini (1995) shared Darling’s (1985) definition of mentoring as “a process where one is taught, guided, or influenced in one’s life work in critical ways” (p. 90). Kram (1988) defined mentoring in terms of two basic types, career functions and psychosocial functions.

The final sample for Angelina (1995) study was 37 registered nurses and 8 nurse managers. The participants were from four acute care hospitals located in the northeastern part of the United States. The average nurse age was 38.2 years. All participants worked 32 or more hours per week on medical surgical units, and had a minimum of 5 years work experience.

The participant interviews were audio-recorded and transcribed verbatim. Selected probe questions were used to facilitate the interview process using a constant comparative analysis, coding, and memos to identify emerging categories from the responses. Interrater reliability was conducted by two independent reviewers. Four data

sources were used: audio-recorded face-to-face interviews with nurses; audio-recorded face-to-face interviews with the nurses' respective managers; biographical and career history questions; and, job descriptions (Angelini, 1995).

Three main categories that influenced mentoring were identified: environment, people, and events. The definition of the category "environment" was acute care organizations or work settings where the nurses worked. Four environment subcategories were identified: (a) barriers; (b) non-barriers; (c) expectations; and (d) rewards. Barriers included value conflicts, limited advancement and recognition, lack of unit level support, and unsafe work conditions (Angelini, 1995). Situations that had a more positive effect were termed non-barriers. Expectations included items such as educational opportunities, flexible scheduling and assistance with tuition. Rewards were mentioned by 84% of the respondents, including internal and external rewards (both tangible and psychological). These rewards included feelings of satisfaction in caring for patients, and monetary related rewards.

Primary and secondary were terms used to identify the category "people". Ninety-five percent of the respondents cited unit peers and managers as the most influential primary people groups. The "event" categories identified by the participants were career incidents (73%); clinical patient situations (54%); and socio-political-cultural circumstances (10.8%) (Angelini, 1995).

Angelini derived a structural model of mentoring from the results of the 1995 study. The model identified four phases of the mentoring process: (a) mentoring characteristics; (b) mentoring dimensions; (c) mentoring strategies; and (d) career development outcomes. Angelini concluded that mentoring is a multidimensional process

that revolves around relationship building, and that mentors are critical to the successful development of the new nurse.

While the Angelini (1995) study is an important work, there were significant limitations; including that the sample was only white female nurses who worked in medical surgical areas. The author recommended using the study results as a basis for a larger study.

Hospitals and other healthcare organizations utilize various orientation programs to prepare new nurses for professional practice. One strategy gaining popularity is pairing new nurses with preceptors/mentors. The purpose of Hickey's (2009) study was to learn how preceptors viewed the competence of new registered nurses using a specific set of criteria. Benner's (1984) Model of Novice to Expert was used as the framework for the study.

Criterion for inclusion in the study was registered nurses (RNs) who had served as preceptors within the past year. The initial sample size was N=200 preceptors from various nursing units in a Mid-Atlantic state teaching hospital. There were 69 participants who met inclusion criteria for the study. Ninety-three percent of the participants were female. The average age of the participants was 41 years and averaged 9 years of preceptor experience. The participants' levels of education were associate degree 35%; diploma 5%; bachelors 55%; and, masters 5%. Ethnic breakdown was White 77%; Black 11.5%; Asian/Indian 9.8% and Pacific Islander 1.6% (Hickey, 2009).

Hickey (2009) employed a descriptive method that used both a quantitative and qualitative design and shared descriptive statistics and content analysis. Study concepts included new nurse competencies; orientation; preceptors; teaching; psychomotor skills;

assessment skills; critical thinking; time management; communication; teamwork; and, preceptors.

The Clinical Instructional Experience Questionnaire (Hickey, 2009) was used with 2 modifications to address preceptor issues. The instrument included 18 items with two subscales. Items were categorized as Clinical Teaching (8 items); and, Development of Clinical Competence (10 items). The first section of the survey used a 5-point Likert scale. Responses ranged from 1-never to 5-always. The second half of the instrument used 1-not important to 5-very important. Five open-ended questions were part of the study. Content analysis was used to analyze the open-ended responses. Reliability estimates were completed and yielded a reliability range on the subscales from $\alpha = .74$ to $\alpha = .90$ (2009).

From the analysis of the open-ended questions, new nurse skill weaknesses were identified as: clinical skills, assessment skills, critical thinking, time management, communication, and teamwork. Responses indicated that the orientation process is a learning process and that the skills of the new nurses improve with time. Preceptors identified that new registered nurses needed more assistance than expected with skills.

The researchers recommended structured preceptor programs be used that include becoming aware of both the preceptor's and new nurses individual learning styles and adult learning principles, including how to provide feedback to new nurses. Additional recommendations included developing ways for the preceptor to understand the learning needs of the new nurse and how to facilitate learning. Developing a resource guide was recommended. As supportive measures, the researchers recommended addressing adequate staffing and support for the preceptor while working with the new nurse.

Support for the new nurse would include weekly meeting for review of the past week related to progress and to set new goals. Finally, socialization of the new nurse was found to be important to a successful preceptor program. The Hickey (2009) study concluded specific areas needing improved in preceptor-guided orientation programs were skills development; caseload management, including prioritizing and organization skills; and, development of critical thinking skills for problem solving and clinical decision making.

Matching new nurses with experienced nurses during the transition period is considered mentoring. While various models of mentoring exist the goal is to increase confidence, improve nurse retention and job satisfaction (Komaratat & Oumtanee, 2009). Komaratat and Oumtanee hypothesized that newly registered nurse's competence will be increased after participating in a mentoring program.

Komaratat and Oumtanee (2009) used a conceptual framework. Concepts included those developed by Taechaveerakorn and Oumtanee (2008) related to nurse competency; and, the concepts of mentoring proposed by Morton-Cooper and Palmer (2000). Four nurse competency concepts not fully developed in the new nurse were: (a) nursing care; (b) human relationship and communications; (c) decision-making and problem-solving; and (d) quality development and quality assurance (Taechaveerakorn & Oumtanee). Morton-Cooper and Palmer (2000) discussed three phases of mentoring including the initiation, working, and termination phases. In the Morton-Cooper and Palmer study, the functional mentor is viewed as being an advisor, coach, counselor, guide/networker, role model, sponsor, teacher, and resource facilitator.

The population for the Komaratat and Oumtanee (2009) study was novice nurses. The sample was 19 new nurses who worked at Chulalongkorn Hospital. A quasi-

experimental method was used. The design was a time series design. New nurse competency was measured at 3 time points; (a) before the experiment began; (b) after one month; and (c) after the mentorship ended.

Three types of instruments were used in the Komaratat and Oumtanee (2009) study; the experimental, the control, and the evaluation instruments. The Mentor Knowledge Scale (experimental instrument) was a pre and post test that tested the mentor's knowledge before and after a preparation class. The 15 question test was developed by the authors. The Kuder-Richardson (2009) reliability of the instrument was 1; difficulty index was 0.43 to 0.83; and, discrimination value was 0.20 to 0.80. The Mentor's Activities Scale (control instrument) was used to evaluate the new nurse's perception of the mentor as an advisor/counselor, teacher, sponsor, and resource facilitator over a four week period of time. The instrument contained 25 questions, and used a do/don't checklist answer format. Reliability was tested using the Cornell (Komaratat & Oumtanee, 2009) technique of Guttman with a coefficient factor of .9. The Nurse Competency Scale (evaluation tool) was 20 questions developed by the authors from an instrument used in the Taechaveerakorn & Oumtanee (2008) study. The instrument used a 5 point rating scale to test new nurse competence in four areas: (a) nursing care; (b) human relations and communication; (c) problem solving and decision making; and, (d) quality development and assurance (Komaratat & Oumtanee, 2009). The reliability of the instrument was tested and yielded a Cronbach's alpha of .96 (2009). The authors did not share specific questions used in the instruments in the report.

Data collection for the study was conducted for both the mentors and the mentees. Data collection for the mentors used the Mentorship Knowledge Scale (Komaratat &

Oumtanee, 2009), and was administered by the authors to 19 nurse mentors before and after the mentor training class. The 19 nurse mentors were selected by using recommendations from head nurses of the hospital's inpatient unit. The mentors selected had at least 3 years of experience, showed interest in the mentor program, and possessed good communication, clinical and decision-making skills. The average pre-training score was 8.35. The 19 nurse mentors then attended a training class that covered the topics of nurse mentorship, adult learning, resolving problems, and the mentor's role as an advisor, teacher, supporter, and facilitator (2009). The mentors also received a course review booklet. The Mentorship Knowledge Scale (2009) was administered again at the completion of the training course. The average score on the post test was 11.76 compared to the pre test average score of 8.35 (2009).

The new nurse competency was evaluated using the Nursing Competency Scale (Komaratat & Oumtanee, 2009) at 3 timepoints. The instrument was administered twice (one month apart) before the new nurses entered the nurse mentoring program, and again at the end of the mentoring program. The mentoring program concluded at the end of four weeks, which was the third timepoint the tool was administered to the new nurse participants.

The Mentor's Activities Scale (evaluation tool) (Komaratat & Oumtanee, 2009) was administered to the new nurse participants weekly during the 4 week nurse mentor program. The authors did not state in the report how the instrument was administered, or who administered it. The results of the Mentor's Activity Scale were not reported.

The mentoring program design included week one (day one) during which the mentors and mentees became acquainted and the mentors introduced the program to the

mentees. Through the end of week 3 the mentors performed the four roles of mentoring. During the fourth and final week of the mentoring program, the new nurse participants were allowed to function independently with indirect support available from mentor (Komaratat & Oumtanee, 2009).

Results from the Nurse Competency Scale (Komaratat & Oumtanee, 2009) showed no difference in the level of the participants' competencies between the pre-experiment time-points 1 and 2. The total average score for pre-experiment time-points 1 and 2 were both 3.00. At the end of the mentoring program (time-point 3) the average total score of the Nurse Competency Scale was 4.10 ($p < 0.05$). The highest difference between time point 1 and 3 occurred in the item human relationships and communication. The median score at time point 1 was 3.0, and at time-point 3 it was 4.25. For the item nursing care, at time-point 1 the median score was 3.0 compared to 4.0 at time-point 3. For the item quality development and assurance, at time-point one the median score was 3.0, and 4.16 at time-point 3. For the item decision-making and problem solving median scores were at time-point 1, 3.0 compared to 4.0 at time-point 3. The authors concluded the nurse mentoring program had a positive effect on the competency of the new nurses.

Further studies are needed to validate the impact of mentoring programs that are similar to the program used in the Komaratat & Oumtanee (2009) study. A larger population is needed to support the results. Also, further studies of the impact of mentoring training programs are needed. One weak area of the Komaratat & Oumtanee study was that there was no control group to compare the effects of a mentoring program compared to a group that did not participate in a mentoring program. Therefore, it would be difficult to determine if the mentoring program resulted in the positive impact of the

nurse competency level, or if no mentoring program may have yielded similar results over the same period of time.

Mentoring and New Nurse Satisfaction

Successful orientation of new nurses through a mentoring program can be costly and time consuming. Although research has supported the mentoring process as a successful method of enculturation of the new registered nurse into the professional environment, questions remain. The purpose of the Halfer, Graf and Sullivan's (2008) study was to compare the job satisfaction and retention rates of two groups of new nurses. The first group had not participated in the Pediatric RN Internship program. The second group was surveyed following completion of a newly implemented Pediatric RN Internship Program. The research questions asked whether the Pediatric RN Internship program had made a difference in job satisfaction between the two groups, and compared job satisfaction over time. One year retention rates were compared, and nurse perceptions of the work experience. No specific framework was identified by the researchers. Concepts included job satisfaction, mentoring, and new registered nurse retention.

The sample consisted of 84 new registered nurses in the pre-implementation group and 212 in the post-implementation group. The setting was a 270 bed Midwestern urban Magnet-designated pediatric medical center. The new nurses worked in inpatient medical and surgical services, neonatal and pediatric intensive care, and emergency service areas. This was a longitudinal descriptive study. The survey was developed by the researchers and demographic information was collected. The instrument contained 21-Likert-type scale items and four open-ended questions. The rating scale ranged from 4-strongly agree to 1-strongly disagree. Validity and retest reliability of the instrument

had been completed in the earlier Halfer and Graf (2006) study. The 21 items had a factor analysis conducted using the Varimax rotation. From the analysis results, the researchers decided to use a seven factor instrument to expedite interpretation of the results. The seven factors were: (a) competency; (b) professional development; (c) practice support; (d) work schedule; (e) becoming Part of a team; (d) resource access; and (e) professional respect (p. 245). Mailed surveys were completed by participants at 3, 6, 12, and 18 months. Seventy-nine percent (N=234) of the participants completed the surveys.

Overall job satisfaction was significantly higher in the post-internship group as compared to the pre-internship group. Improved job satisfaction was reflected in lower turnover rates (12% for post-internship group compared to 20% for group without an internship). The lower turnover rates were sustained at the 2 year period. Agreement with job satisfaction was significantly higher in the post-internship group. No significance was found for the influence of the birth year. The open-ended questions shared new nurse's frustrations with balancing work, life, and work schedules that included working weekends and holidays. Participant comments regarding stressors included lack of experience and organizational skills. Participant comments were more positive at 12 months compared to 3 months in the level of knowledge and confidence. Further study was recommended to identify specific support systems that would assist new nurses during the transition to practice. It is believed that longitudinal study results could assist nurse leaders to support redesign of educational support efforts.

The purpose of the Setter, Walker, Connelly, and Peterman (2011) study was to examine the correlation between commitment of new nurses who had graduated from a national nurse residency program (NRP) and the nurses' participation in the NRP.

Participation in NRPs has been shown to improve new nurse retention rates. However, given the cost associated with NRPs, it is important for organizations to understand the reasons NRPs are contributing to improved retention rates.

The NRP is a 1 year nurse residency program developed by the American Association of Colleges of Nursing, and the University HealthSystem Consortium (UHC) (Setter et al., 2011). The University of Kansas Hospital began using the NRP in 2003. This was the first year the program was released for use. Professional development, leadership and patient outcomes are the focuses of the NRP (Setter et al.). In a study conducted by Duncan (1997), organizational support was found to be associated with new nurses' commitment to an organization and nurse retention rates (Setter et al., 2011). The framework for the Setter et al. study was various models not specifically cited by the authors. The predictive factors examined in the study were: (a) job satisfaction; (b) reasons for staying; (c) years since completion of NRP; and (d) satisfaction with the NRP in relation to commitment to the organization and actual retention rates (2011).

The sample for the Setter et al. (2011) study included 202 nurses still employed by the University of Kansas Hospital who had participated in NRPs at the hospital. The study instruments were questionnaires mailed to the participants. There were N=100 (49.5%) nurses in the final sample. The average age of the respondents was 27 years old, with an age range of 23 to 55 years. Eighty-four percent of the participants were Caucasian.

Four instruments were used: (a) The Commitment Scale (b) The Reason for Staying Scale; (c) The McCloskey/Mueller Job Satisfaction Scale; and (d) The Nurse Residency Satisfaction Scale (Setter et al., 2011). The Commitment Scale had nine items

and used a 4-point scale to measure the participant's commitment and intent to remain in a position. The scale had a Cronbach's α of .904. The Reason for Staying Scale was an 18 item instrument that used a 6 point scale with 5-highly important to 0-possible reason for leaving. There was one open-ended question. The authors did not share the actual question in the article, but indicated the question was related to reasons nurses stayed and other considerations. The scale had a reliability of Cronbach's α of .839. The McCloskey/Mueller Job Satisfaction Scale (Cronbach's α of .922 in one previous study, and .89 in another previous study) included 31 items with an eight-factor subscale. The reliability of the subscales was .31 to .85. The Scale used a 5-response scale that ranged from *very satisfied* to *very dissatisfied*. Section 2 of The Nurse Residency Satisfaction Scale was reworded by the investigators to evaluate the participant's rating of the NRP using a six item subscale. Reliability for the subscale was Cronbach's α =.93 (2011).

The findings for the 18-item Reason for Staying Scale (Setter et al., 2011) were ranked highest to lowest scores. The top five reasons for staying were: (a) Teamwork on my unit (M= 3.87, SD=0.597); (b) Ability to give quality (M=3.71, SD= 0.700); (c) Liking or enjoying my job (M=3.56, SD=0.956; (d) My relationship with coworkers (M=3.56, SD=0.729; and, (e) Benefits (M=3.56, SD=0.624) (Setter et al., 2011). The lowest ranked item was support from nursing residency coordinators (M=2.23, SD 1.04). The McCloskey/Mueller Scale yielded an average satisfaction score of 112.4 (SD=15.54). The regression analysis compared to the predictive model showed no significance between the NRP evaluation and job satisfaction. However, there was significance between NRP evaluation and reason for staying. In the review of the qualitative open-ended questions, the most frequent reasons for staying were being

respected as a nurse; and, liking coworkers. A number of participants reported concerns with conflicts in schedules that hampered the ability to attend the residency classes, and conflicts with managers and coworkers.

The authors found the results of the study to be consistent with findings of similar studies. The findings suggested overall culture of the organization influenced the participants' commitment to the organization and desire to stay more than participation in the NRP. It was noted by the authors that although retention rates of NRP participants after the first year were as high as .94%, a significant decrease (.74%) in retention rates occurs between years 3 and 8. The researchers recommended further research on retention for years 3 to 8 (Setter et al., 2011).

Ongoing analysis of nurse residency programs for organizations will be important to assure cost effectiveness, quality, and opportunities to improve the residency programs. Feedback from participants compared to retention rates and job satisfaction related to residency programs should be included in the analysis.

The interactive nurse residency model is one of several transition-to-practice models healthcare organizations have used to assist new nurses to transition from the academic setting to the work environment. Anderson et al. (2009) explored an interactive nurse residency model implemented by a Midwestern healthcare system. The purpose of the Anderson et al. study was twofold. Anderson et al. examined (a) engagement perception of new nurses and job satisfaction; and (b) the validation and reliability of the Halfer and Graf Job/Work Environment Nursing Satisfaction Survey (2009). The authors did not share a specific framework.

The setting for the study was a Midwestern healthcare system that included 5 metropolitan hospitals. The healthcare system had invested in \$10,000 sign-on bonuses and a didactic nurse residency program to improve new nurse retention rates; however, in 2001 the new nurse retention rate was 60%. By 2006 the retention rate improved to 86% at 1 year, but dropped to 71% at 2 years. A committee formed to address improving the 2 year retention rate. As part of the plan, an interactive nurse residency program was implemented. Anderson et al. (2009) developed the study to collect and analyze data to evaluate the outcomes of the new residency program.

The sample was 120 new nurses hired by a Midwestern healthcare organization in the summer of 2006. Of the 120 hired, 90 new nurses participated in the new nurse residency program. The program lasted for one year, and included interactive sessions utilizing simulation, email communications with peers and faculty, monthly journaling, and interactions with preceptors and mentors. A demographic data form, Employee Engagement survey Nurse Residency Teaching Strategy Effectiveness survey, and the Halfer-Graf Job/Work Environment Nursing Satisfaction Survey were the instruments used in the study (Anderson et al., 2009). Specifics of the demographic data collected were not included by the authors in the report.

The Employee Engagement survey (Anderson et al., 2009) was modeled after the Gallup Q-12 Employee Engagement survey. The revised survey included 14 questions (which were not shared in the report), and used a Likert 5-point scale to score degree of agreement with feelings of value, satisfaction with the organization, inclusion, trust, safety, innovation support, and leadership effectiveness (Anderson et al.). A Mann-Whitney *U* nonparametric test was used to compare the difference between baseline and

post test scores of the quantitative data. No specific information on how the survey was administered was provided by the authors.

Anderson et al. (2009) shared the results of the Halfer-Graf instrument, and that it was completed at points: (a) after the nurse residency sessions were completed; and (b) at one year. However, no specific information on how the tool was administered to participants was provided in the report. Two of the authors classified the open-ended questions on the Halfer-Graf instrument into themes by identifying frequency of responses and coding the key words identified. Anderson et al. categorized the results of the qualitative data collected as Nurse Satisfiers and Dissatisfiers (2009). No specific numeric data was shared in the report. Under the category nurse satisfiers were subcategories of patient, patient satisfaction, and patient outcomes. The report shared that helping patients and observing improvements in patient's conditions indicated a relation existed between new nurse satisfaction and patient satisfaction. Teamwork and support from experienced staff was another subcategory identified under nurse satisfiers.

Mentoring and New Nurse Support and Socialization

New registered nurses experience many stressors as they transition to the professional nurse role. Awareness of new nurse stressors may help mentors and preceptors to improve a successful transition to professional practice. Oermann and Garvin (2002) provided insight into specific stresses and challenges new nurses encounter.

The purpose of the Oermann and Garvin's (2002) study was to describe the worries and challenges new nurses experienced in clinical practice. The research question is: What stresses and challenges do new registered nurses encounter in clinical practice?

No framework was identified for the study. Forty-six new registered nurses with an average of 2.74 months of practice from three Midwestern hospitals participated in the study. Participants (N=26) earned associate degrees and, (N=20) baccalaureate degrees. Distribution of work areas included; medical/surgical (N=24, 52%); critical care (N=17, 37%); and other units (N=5, 11%) The mean age of the participants was 38.83 years.

Oermann and Garvin (2002) utilized the Clinical Stress Questionnaire (CSQ) for the study. The CSQ allowed participants to rate the degree of stress, challenges and emotions experienced using a scaled of 0 (none) to 4 (a great deal). Twenty different emotions were rated by the participants. Emotions included stimulated, hopeful, excited, happy, eager, anxious, exhilarated, overwhelmed, pleased, confident, apprehensive, worried, intimidated, relieved, fearful, disappointed, disgusted, sad, angry, and guilty. Open-ended questions were used to allow participants to express additional information on types of experiences that were stressful or challenging. The construct validity of the CSQ instrument was validated in 1989 by Pagana with alpha coefficients between 0.84 and 0.85. The open-ended question's inter-rater reliability was 0.89.

The results of the Oermann and Garvin (2002) study demonstrated that new nurses rated beginning a new clinical moderately stressful. On a scale of 0 (none) to 4 (a great deal), the mean score was 2.30 (S.D. 1.05); and, challenges had a mean of 2.57, S.D. 0.96. Using ANOVA, no difference was found between stress and the specific unit the new graduate worked on. No difference was reported between the various types of educational programs (associate or baccalaureate) and level of stress. The graduate's age or work experience was not found to make a difference in the level of stress or challenges. Stresses ranked in order were: (a) not feeling confident and competent;

(b) making mistakes because of increased workload and responsibilities; (c) encountering new situations, surroundings, and procedures; (d) inconsistent preceptors; (e) getting to know the staff; (f) encounters with unhappy nurses and other personnel; (g) staffing challenges; and (h) nurses unwilling to help (2002).

Using the CSQ, the participants ranked 20 different emotions experienced in beginning a new clinical practice. The top four emotions were stimulated, hopeful, excited, and happy. Mean score for stimulated was 2.75 (S.D. 0.89), and for happy 2.68 (S.D. 0.68). Participants rated anxious at a mean of 2.46 (S.D. 1.04), while the mean score for the emotion intimidated was 1.61 (S.D. 0.79), and disappointed at 0.93 (S.D. 0.90). Guilty had the lowest mean score of 0.54 (S.D. 0.88) (Oermann and Garvin, 2002). The researchers believed that emotions of feeling overwhelmed and apprehensive were significant findings of the study, even though the most frequent emotions experienced by the new nurses were positive emotions.

Study results indicated that organizations lacking formal preceptor programs, it would be important for the new nurses to have a mentor to guide the orientation process of the new nurse, and to provide emotional, clinical and professional support. Mentors should be aware of specific stressors and challenges the new nurses face. Oermann and Garvin (2002) emphasized the importance of gradually increasing workloads and responsibilities. Other important aspects of new nurse support frequent meetings throughout the day; debriefing and discussion at the end of the day.

The study results indicated that new nurse level of confidence improved when they perceived that the mentors and preceptors were supportive. The researchers believed the mentor should be a clinical expert, possess strong interpersonal skills, want to work

with others, and be enthusiastic. Oermann and Garvin's study (2002) provided important research on areas of support the new graduates need during entry into the clinical setting. A collaborative effort between nurse managers, preceptors, mentors and other staff is needed to plan for the supportive environment for the new graduate nurse. Planning and providing for support can decrease levels of stress the new graduate nurse might experience during orientation.

New registered nurses may experience stress, role conflict and reality shock when transitioning to professional practice. The purpose of Fink et al. (2008) phenomenological qualitative study was to analyze new registered nurses' open-ended responses to a 2004 study. Specifically, the researchers wanted to look for quantitative data that could be used to develop questions for future quantitative studies. The 2004 study had a convenience sample of 1084 new registered nurses who had completed the University Health System Consortium (UHC)/American Association of Colleges of Nursing (AACN) one year nurse residency program. There were 434 participants for the 2008 study obtained from the 2004 study and had completed all three survey collection time points. All participants worked in six Denver metropolitan area hospitals from May 2002 to September 2003.

The survey instrument used was The Casey Fink Graduate Nurse Experience Survey (Fink et al., 2008). The survey was administered when the nurses were first employed then at, 6 and 12 months. Collection of the survey was achieved using UHC's online confidential residency program evaluation database. Two investigators searched for key words in the responses from 3 open-ended questions related to skills and

procedures, and 5 questions related to work environment and role transition. The data were compared and themes were developed.

New nurses were asked to: (a) identify the top three skills and procedures they were uncomfortable performing alone; (b) what were the stressors at each period? ; (c) what difficulties, if any, did they experience with role transition from student to RN?; (d) what could have been implemented to help them feel more supported or integrated into the unit?; and (e) what were the aspects of the work environment that the new nurses found most or least satisfying? (Fink et al., 2008). The average respondent was 26 years old, Caucasian, female, and BSN prepared with most having previous healthcare experience as unlicensed assistive personnel. Over 100 skills were identified during the three periods that new nurses were not comfortable performing independently. The top 3 skills identified varied by period.

At baseline (period-at hire), the participants were not comfortable performing any of the skills or procedures independently. The increase in comfort levels in performing all skills independently only had modest increases at the second and third periods. At 6 months, only 10% believed they were comfortable performing all skills independently, and at 12 months the percentage dropped to 7%.

There were 12 main skills and procedures that caused discomfort in the participants (N=434). At hire the top 3 were, IV starts (N=156); blood draws (N=58); and, assessment skills (N=50). At 6 months the top 3 were IV starts (N=121); Code/emergency response (N=76); and, Arterial/venous/Swan-Ganz (N=50). At 12 months the top 3 were Code/emergency response (N=94); IV starts (N=82); and, Trach/suctioning care (N=57) (Fink et al., 2008). The researchers shared that some skills

remained problematic for new nurses throughout the study, while others skills, such as those connected with life saving, emerged to the top of the lists as the period of time increased. One explanation for this shift was observed as the possibility of the new nurses having to assume a greater level of responsibility without the preceptor being available over time.

Participants were also surveyed about stressors. The study showed the top three stressors were: (a) preparing and waiting for National Council Licensure Examination results; (b) becoming more independent by relocating; and (c) adjusting to new expectations as a new registered nurse (RN).

Summary

New nurses face major challenges when entering the work environment post graduation. Currently, there is limited evidence to assist healthcare organizations in identifying effective transition-to-practice programs. However, research to date has identified consistent themes of concerns new nurses experience when transitioning. Some of the major themes have been difficulty with socialization into the profession; lack of confidence with skills and critical thinking; and, inconsistent, unreliable support. These concerns have led to high percentages of new nurses experiencing feelings of dissatisfaction and high levels of stress which result in high turnover rates for new nurses.

The literature has shown that high turnover rates for new nurses are expensive for healthcare organizations. This expense is coming during a time when healthcare organizations have to find ways to reduce costs. Patient outcomes and safety have been impacted by lack of quality transition-to-practice programs.

As the need for new nurses is expected to escalate, strong national support for standardization of transition-to-practice programs is emerging as a variety of research links new nurses to patient safety issues/outcomes, new nurse satisfaction, and cost containment for healthcare organizations. Identifying components for successful new nurse transition-to-practice programs is key to the successful transition of new nurses into practice.

Chapter III

Methodology

Introduction

Mentoring is a collaborative learning experience between two or more individuals where the more experienced individual assists in the learning and development of the less experienced individual. The mentor typically serves as a guide, expert, counselor, wise teacher, and role model. Incorporating components into a nurse mentoring program that will provide successful outcomes is an important aspect of mentoring programs. The purpose of this study is to evaluate a mentoring program over time for new graduate nurse satisfaction with the match of the mentor, perceptions of guidance and support, socialization into the profession, role model acquisition of behaviors, maintaining contact over time and program satisfaction. This is a modified replication of Beecroft et al.'s (2006) study.

Research Questions

The research questions for the study are: (a) Were the new graduates satisfactorily matched with the mentor; (b) Did new graduates received guidance and support; (c) Did new graduates attain socialization; (d) Did new graduates benefit from a role model; (e) Did mentors maintain contact throughout the program; and (f) Were new graduates satisfied with the program.

Population, Sample, and Setting

A list of new registered nurses who enroll in the Community Health Network New Nurse Residency Program during the next two years will be obtained from Community Health Network Clinical Education Department with the permission of the Community Health Network Human Resource department. Participants will be informed about the study purpose at the beginning of the residency program, and will be provided a document covering the data collection and management for the study. The data will be collected by the participants completing the demographic survey, and the an eight question paper survey developed by Beecroft et al. (2006) which include yes/no responses with an area for comments after each question. The surveys will be completed during a class day of the last week of the mentoring programs. Codes will be assigned to the study participants at the time of the data collection to maintain anonymity. Completion of the survey will be a part of the program requirement. The anticipated sample is ($n = 200$).

Protection of Human Rights

This study will be submitted for approval to the Ball State University Institutional Review Board before permission is granted by the Community Health Network Review Board. The Community Health Network Institutional Review Board will be approached for permission to conduct this study. Once permission is obtained, a cover letter explaining the study, demographic questionnaire, and two surveys will be mailed to the participants at home. Consent is assumed by receipt of the questionnaires. Data collected will be viewed only by the researchers and the statistician. Therefore, anonymity will be maintained. There are no foreseen risks identified in participating in

this study. Benefits will include the opportunity for new registered nurses to gain valuable information regarding successful components of a new nurse residency program. The findings may provide insight into program structures that can assist new registered nurses' transition into practice.

Procedures

After receiving approval from the Ball State University Institutional Review Board, and the Community Health Network Institutional Review Board, a request will be submitted to the Community Health Network Director of Clinical Education and the Community Health Network Director of Human Resources for a list of new graduate nurses who are enrolled in the new nurse residency program during the next two years. Costs incurred will be personally funded.

An information sheet will be provided to the participants explaining the study. The information sheet will be shared during the initial orientation of the new nurse resident. On a class day during the last week of the New Nurse Residency Program, the participants will receive instructions on how to complete the demographic questionnaire and surveys. Participants will complete and submit the completed questionnaires by the end of the class day.

Research design

A descriptive correlational design will be used to examine the relationship between variables. Burns and Grove (2009) define a descriptive correlational design as a design that examines the relationships that exist in a situation with no intervention to control or manipulate the situation.

Data Analysis

Demographic information will be gathered using paper surveys. Demographics data will include age group of participants; level of education; if the participant had previous healthcare work experience; and, identification of the participant's first choice of nursing units. The demographic survey is a replication of the Beecroft et al. (2006) demographic questionnaire. Pearson r correlation will be used to analyze the research questions. Correlation examines the relationship between two or more variables without examining the cause and effect (Burns & Grove, 2009). Data will be double-checked for accuracy. Responses to each item will be summarized using descriptive statistics. Scores will be transformed into a percentage of total responses to facilitate comparison. Logistic regression analysis will be performed on demographics to determine if these variables predicted successful programme outcomes.

Comments will be analyzed to determine if additional themes occur beyond the themes identified in the Beecroft et al. (2006) themes of program requirements, satisfaction, support, and socialization. Theme identification will follow the Morse and Field (1995) manifest content analysis, where commentary is reviewed for words, phrases or descriptors, and commentary central to the research.

Long sentences or ambiguous phrases will be broken down into shorter phrases or words with a single subject or theme prior to analysis. Discussion among recorders will allow for re-coding of uncertain phrases. The data will be analyzed per cohort group and compared. Inter-rater reliability for all themes will be checked using a minimum of two recorders. Agreement of 95% will be deemed sufficient.

Summary

Transition-to-practice has been shown to be a stressful time for new registered nurses. Healthcare organizations are being challenged to improve the transition-to-practice of new nurses. The purpose of this descriptive correlational study is to evaluate a mentoring program over time for new registered nurse satisfaction with the match of the mentor, perceptions of guidance and support, socialization into the profession, role model acquisition of behaviors, maintaining contact over time and program satisfaction. This is a modified replication of Beecroft et al.'s (2006) study and attempt to identify successful components of new nurse mentoring programs across demographic characteristics. An anticipated sample of 200 new registered nurses who have completed a network hospitals' new nurse mentoring program is expected. Data will be collected from new nurses who participate during the next 2 years in the network's new nurse mentoring program using an eight question survey of yes/no questions with comment area for each question and collection of demographic data. Data will be analyzed using Pearson correlation.

References

- American Association of Colleges of Nursing (AACN). (2012). Joint statement from the Tri-Council for Nursing on recent registered nurse supply and demand projections. Retrieved from <http://www.aacn.nche.edu/news/articles/2010/tricouncil>.
- Anderson, E. M. (1988). Toward a conceptualization of mentoring. *Journal of Teacher Education, 39*(1), 38-42.
- Anderson, T., Linden, L., Allen, M., & Gibbs, E. (2009). New graduate RN work satisfaction after completing an interactive nurse residency. *The Journal of Nursing Administration, 39*(4), 165-169.
- Angelini, D. J. (1995). Mentoring in career development of hospital staff nurses: Models and strategies. *Journal of Professional Nursing, 11*(2), 89-97.
- Beecroft, P. C., Santner, S., Lacy, M. L., Kunzman, L., & Dorey, F. (2006). New graduate nurses' perceptions of mentoring: Six-year programme evaluation. *Journal of Advanced Nursing, 55*(6), 736-747.
- Belenky, M., Clinchy, B., Goldberger, N., & Tarule, J. (1986). *Women's ways of knowing*. New York: Basic Books.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, CA: Addison-Wesley.
- Berkow, S., Virkstis, K., Stewart, J. & Conway, L. (2008). Assessing new graduate nurse performance. *The Journal of Nursing Administration, 38*(11), 468-474.
- Betz, N., & Fitzgerald, L. (1987). *The career psychology of women*. Orlando, FL: Academic Press.

- Bolton, E. (1980). A conceptual analysis of the mentor relationship to the career development of women. *Adult Education Quarterly*, 30(4), 195-207.
- Borich, G. D., & Jemelka, R. P. (1979). Traditional and emerging definitions of educational evaluation. *Evaluation Review*, 3(2), 263-276.
- Borich, G. D., & Jemelka, R. P. (1982). *Programs and Systems: An Evaluation Perspective*. New York: Academic Press.
- Burns, N., & Grove, S. K. (2009). *The practice of nursing research: Conduct, critique, and utilization* (6th ed.). St. Louis, MO: Elsevier.
- Burritt, J. E., Wallace, P., Steckel, C., & Hunter, A. (2007). Achieving quality and fiscal outcomes in patient care: The clinical mentor care delivery model. *The Journal of Nursing Administration*, 37(12), 558-563.
- Campbell-Heider, N. (1986). Do nurses need mentors? *Image: The Journal of Nursing Scholarship*, 18(3), 110-113.
- Darling, L. (1985). Mentors and mentoring. *Journal of Nursing Administration*, 15(3), 42-43.
- Delaney, C. (2003) Walking a fine line: Graduate nurses' transition experiences during orientation. *Journal of Nursing Education*, 42(10), 437-443.
- Donabedian, A. (1980). Methods for deriving criteria for assessing the quality of medical care. *Medical Care Review*, 37(7), 653-698.
- Duncan, K. (1997). Student pre-entry experience and first year employment. *Journal of Continuing Education in Nursing*, 28(5), 223-230.

- Fink, R., Krugman, M., Casey, K. & Goode, C. (2008). The graduate nurse experience: Qualitative residency program outcomes. *Journal of Nursing Administration*, 38(7/8), 341-348.
- Gallos, J. (1989). Exploring women's development: Implications for career theory, practice and research. In M. Arthur, D. Hall, & B. Lawrence (Eds.), *Handbook of career theory* (Loc. 110-130). Cambridge, England: Cambridge University Press.
- Gefke, P. (1999). *CHLA Mentoring Program Trainer's Guide*. Los Angeles: Gefke International.
- Gilbert, L., & Rossman, K. (1990). Gender and the mentoring process. In, *Women mentoring women: New theoretical perspectives and their application*. Symposium conducted at the Annual Meeting of the American Psychological Association, Boston, MA.
- Gilligan, C. (1979). Woman's place in a man's life cycle. *Harvard Educational Review*, 49, 431-446.
- Gilligan, C. (1982). *In a different voice. Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Goran, S. F. (2001). Mentorship as a teaching strategy. *Critical Care Nursing Clinics of North America*, 13(1), 119-129.
- Grindel, C., & Hagerstrom, G. (2009). Nurses nurturing nurses: outcomes and lessons learned. *Medical Surgical Nursing*, 18(3), 183-194.
- Halfer, D., & Graf, E. (2006). Graduate nurse perceptions of the work experience. *Nursing Economics*, 24(3), 150-155.

- Halfer, D., Graf, E., & Sullivan, C. (2008). The organizational impact of a new graduate pediatric nurse mentoring program. *Nursing Economics*, 6(4), 243-249.
- Hall, D. (1980). Potential for career growth. In M. Morgan (Ed.), *Managing career development* (p. 87-89). New York: D. Van Nostrand.
- Hennig, M., & Jardim, A. (1977). *The managerial woman*. New York: Doubleday.
- Hickey, M. (2009). Preceptor perceptions of new graduate nurse readiness for practice. *Journal for Nurses in Staff Development*, 25(1), 35-41.
- Hinson, D. (1986). *Identification of the mentor relationship in the career of a staff nurse* (Unpublished master's thesis). University of Utah.
- Indiana State Nurses Association (ISNA). (2011). *Independent study: Visioning the future of nursing: Analysis of the IOM/RWJ Foundation report*. (ISNA Bulletin, August, September, October). Indianapolis: ISNA.
- Jones, C. B. (2008). Revisiting nurse turnover costs: Adjusting for inflation. *Journal of Nursing Administration*, 38(1), 11-18.
- Just, G. (1989). *Mentors and self-reports of professional in hospital staff nurses* (Unpublished doctoral dissertation). New York University.
- Komaratat, S., & Oumtanee, A. (2009). Using a mentorship model to prepare newly graduated nurses for competency. *The Journal of Continuing Education in Nursing*, 40(10), 475-480.
- Kovner, C. T., Brewer, C. S., Greene, W., & Fairchild, S. (2009). Understanding new registered nurses' intent to stay at their jobs. *Nursing Economics*, 27(2), 81-98.
- Kovner, C., Brewer, C., Wu, Y. W., Cheng, Y., & Suzuki, M. (2006). Factors associated with work satisfaction of registered nurses. *Journal of Nursing Scholarship*, 38(1), 71-79.

- Kram, K. (1988). *Mentoring at work*. Lanham, MD: University Press of America.
- Kramer, M. (1974). *Reality shock: Why nurses leave nursing*. St. Louis: Mosby
- Morse, J. M., & Fields, P. A. (1995). *Qualitative Research Methods for Health Professionals*. Thousand Oaks, CA: Sage.
- Morton-Cooper, A., & Palmer, A. (2000). *Mentoring, preceptorship, and clinical supervision: A guide to professional roles in clinical practice* (2 ed.). London: Blackwell Science.
- National Council of State Boards of Nursing. (n.d.) *Transition to practice: Promoting public safety*. Retrieved from www.ncsbn.org.
- National League of Nursing (2012). Joint statement from the Tri-Council for Nursing on recent registered nurse supply and demand projections. Retrieved from http://www.nln.org/governmentaffairs/pdf/workforce_supply_statement_final.pdf
- Oermann, M. H. & Garvin, M. F. (2002). Stresses and challenges for new graduates in hospitals. *Nurse Education Today*, 22(3), 225-230.
- PricewaterhouseCoopers Health Research Institute. (2007). *What works: Healing the healthcare staffing shortage*. Retrieved from <http://www.pwc.com/us/en/healthcare/publications/what-works-healing-the-healthcare-staffing-shortage.html>
- Roberts, P. (1987). *Female mentor relationship* (Unpublished doctoral dissertation). The Wright Institutes, Berkeley.
- Scott, E. S. & Smith, S. D. (2008). Group mentoring: A transition-to-work strategy. *Journal for Nurses in Staff Development*, 24(5), 232 – 238.

- Setter, R., Walker, M., Connelly, L. M., & Peterman, T. (2011). Nurse residency graduates' commitment to their first positions. *Journal for Nurses in Staff Development, 27*(2), 58-64.
- Sharpiro, G., & Farrow, D. (1988). Mentors and others in career development. In S. Rose, & L. Larwood (Eds.), *Women's careers*, 23-39. New York: Praeger.
- Spector, N., & Echternacht, M. (2010). A regulatory model for transitioning newly licensed nurses to practice. *Journal of Nursing Regulation, 1*(2), 18-25.
- Stachura, L. (1989). *Mentoring and other professional socialization relationships of registered nurses after entry into practice* (Unpublished master's thesis). Madonna College, Lavonia, MI.
- Taechaveerakorn, N., & Oumtanee, A. (2008). Staff nurses' competency based on career ladder, tertiary hospitals. *Journal of Songklanakarintara Nursing, 28*(1), 12-25.
- Tanner, C. A. (2006). Thinking like a nurse a research-based model of clinical judgement in nursing. *Journal of Nursing Education, 45*(6), 204-211.
- Ulrich, B., Krozek, C., Early, S., Ashlock, C. H., Africa, L. M., & Carman, M. L. (2010). Improving retention, confidence, and competence of new graduate nurses: Results from a 10 year longitudinal database. *Nursing Economics, 28*(6), 363-375.
- Vondracek, F., Lerner, R., & Schulenberger, J. (1986). *Career development: A lifespan development approach*. Hillsdale, NJ: Lawrence Erlbaum.