THE EFFECT OF A REGISTERED NURSE MENTORING PROGRAM ON JOB SATISFACTION AND INTENT TO STAY IN COMMUNITY HEALTH SYSTEMS FACILITIES

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Abstract

RESEARCH PAPER: The Effect of a Registered Nurse Mentoring Program on Job Satisfaction and Intent to Stay in Community Health Systems Facilities

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Nurse attrition leads to higher costs and difficulty providing quality patient care. Healthcare organizations must implement strategies to retain qualified new registered nurses. The purpose of this study is to compare job satisfaction, intent to stay, and retention rates of new registered nurses hired before and after the implementation of a formal mentoring program at Community Health Systems facilities. This is a replication of Halfer, Graf, and Sullivan’s (2008) study. The study will take place in six Community Health Systems facilities located in six different states across the USA. The sample will include 50 new registered nurses from each facility. Benner’s Novice to Expert Theory (1982) will serve as the study framework. Job satisfaction will be measured by the McCloskey-Mueller Job Satisfaction scale (Mueller & McCloskey, 1990) and intent to stay measured by the Occupational Commitment 2000 survey (Blau, 2003) at 3, 6, 12, and 18 months from hire date. Retention rates will be calculated at 1 and 5 years after the last data collection using human resources records from the facilities. Findings will validate the use of mentoring programs as a way to improve job satisfaction and retention rates, and highlight areas in need of improvement where job satisfaction is lower.
Chapter I

Introduction

Nursing shortages, rising costs, and patient safety are issues that have been at the forefront of healthcare during the past several years. Poor retention rates for new registered nurses not only exacerbate the nursing shortage and put a financial burden on healthcare agencies, but also affect the ability to safely care for patients.

According to the U.S. Bureau of Labor Statistics, practicing as a registered nurse is the top occupation in terms of potential job growth through 2020. Combining job growth with nurse replacement, an estimated 1.2 million nurses will be needed by 2020 (U.S. Department of Labor, 2012).

As the baby boomer generation of nurses near retirement, the capability of new nurses to take over is questioned. New registered nurses experience increased stress, low confidence, a lack of support, and are unprepared to enter the workforce (Pine & Tart, 2007). This results in first year turnover rates that range from 35% to 61% (Pine & Tart). Turnover rates, coupled with an increased demand for nurses, create large nursing shortages.

Previous research has estimated the cost to replace a registered nurse to be approximately $44,000 or an average nurse’s annual salary (Halfer, Graf, & Sullivan, 2008). This number includes costs related to hiring new nurses, replacing staff shortages
through overtime, orientation of new employees, lost productivity, and decreased customer satisfaction (Pine & Tart, 2007).

Many initiatives have been developed to control costs while providing quality patient care. Of these initiatives, nurse mentoring programs may be an effective, economical option to increase nurse job satisfaction, intent to stay, and retention rates (Bratt, 2009; Cottingham, DiBartolo, Battistoni, & Brown, 2011; Gemberling, Tretter-Long, Reiner, Potylycki, & Davidson, 2011; Halfer, et al., 2008; Kooker & Kamikawa, 2011; Mills & Mullins, 2008).

**Background**

The use of nurse mentoring programs as a way to increase job satisfaction and lower turnover rates is well documented. A literature review of the subject revealed numerous research articles detailing the effect of mentoring programs on new nurse confidence, professional development, personal development, job commitment and intent to stay, financial savings, and patient outcomes (Bratt, 2009; Cottingham, et al., 2011; Gemberling, et al., 2011; Halfer, et al., 2008; Kooker & Kamikawa, 2011; and Mills & Mullins, 2008).

No significant change in study variables after the implementation of a nurse mentoring program was found in some of the articles reviewed (Ecklund, 1998; Grindel & Hagerstrom, 2009; and Gwyn, 2011). This lack of consensus necessitates the conduct of further research into the topic of nurse mentoring programs and the effect on job satisfaction, intent to stay, and retention rates of new registered nurses. The following research study is a replication of Halfer, et al.’s (2008) work.
Problem

Nurse attrition leads to higher costs and difficulty providing quality patient care. Healthcare organizations must implement strategies to retain qualified new registered nurses. Formal, well-structured mentoring programs are a way to increase the job satisfaction and intent to stay of new registered nurses.

Purpose

The purpose of this study is to compare job satisfaction, intent to stay, and retention rates of new registered nurses hired before and after the implementation of a formal mentoring program at Community Health Systems facilities.

Research questions

Research questions include: (a) Are there significant differences in level of job satisfaction between nurses involved in a formal mentoring program and nurses who are not involved in a formal mentoring program? (b) Was there an increase in retention rates of new registered nurses at one and five years post implementation of a formal mentoring program?

Definition of terms

Job satisfaction.

Job satisfaction will be conceptually defined as being pleased with the overall job experience. This includes contentment with intrinsic rewards, scheduling, balance of work and family, relationships with co-workers, interaction opportunities, control and responsibility, praise, and professional opportunities (Halfer, et al., 2008). Job satisfaction will be operationally defined using the McCloskey-Mueller Job Satisfaction
survey. The operational definition of job satisfaction will be the summation of scores found on the 31-item instrument.

**Intent to stay.**

Intent to stay will be conceptually defined as the loyalty to one’s profession and staying in the profession out of personal choice or obligation (Gwyn, 2011).

Intent to stay will be operationally defined using the Occupational Commitment 2000 survey. The operational definition of intent to stay will be the summation of scores on instrument items.

**Retention rate.**

The retention rate will be conceptually defined as the frequency with which a healthcare organization can maintain the workforce. Specifically to the study, workforce refers to new registered nurses with less than one year of experience.

Retention rates will be measured using records from human resources. The retention rate will be operationally defined as the percentage of new registered nurses with continued employment at a healthcare organization. Percentages will be calculated at one and five years after date of hire using the following equations:

\[
\frac{\text{# of nurses at 1 year post hire date}}{\text{# of nurses at hire date}} \times 100\% = Retention\ rate
\]

\[
\frac{\text{# of nurses at 5 years post hire date}}{\text{# of nurses at hire date}} \times 100\% = Retention\ rate
\]

**Summary**

Nurse attrition leads to higher costs and difficulty providing quality patient care. Healthcare organizations must implement strategies to retain qualified new registered nurses. Formal, well-structured mentoring programs are a way to increase the job
satisfaction and new registered nurses’ intent to stay with an employer. Using Benner’s Novice to Expert Theory (1982) as a framework, the purpose of this study is to compare job satisfaction, intent to stay, and retention rates of new registered nurses hired before and after the implementation of a formal mentoring program. This is a replication of Halfer, et al.’s (2008) study.
Chapter II

Literature review

A vast amount of research has been conducted on the efficacy of nurse mentoring programs with mixed results. The following literature review will examine study findings that both support and oppose the use of nurse mentoring programs as a means to improve job satisfaction and intent to stay with an employer. Using Benner’s (1982) Novice to Expert Theory as the framework, a replication of Halfer, et al.’s (2008) study will be conducted. Results will serve to strengthen the knowledge base regarding the usefulness of nurse mentoring programs.

Theoretical framework

Over time, nursing has developed from a vocation filled by workers with no formal training to a profession that requires a specialized education and experience with a variety of patient care situations and technologies. Patients are more acutely ill, discharges are occurring more quickly, and treatment modalities are constantly changing. This transformation in nursing has necessitated the retention of skilled, experienced nurses in order to provide the highest quality patient care, but retention rates of new registered nurses in the first year of employment at one hospital were reported as low as 55.97% (Kooker & Kamikawa, 2011). The inability to retain nurses for longer than one year greatly depletes the pool of experienced nurses available.
The purpose of Benner’s (1982) Theory of Novice to Expert was to explore the differences between the novice and expert nurse. The theory was derived from the Dreyfus model of skill acquisition (Dreyfus & Dreyfus, 1980), which stated a person will pass through five stages of skill development based on experience and education: novice, advanced beginner, competent, proficient, and expert (Benner). Benner generalized the Dreyfus model to the nursing profession.

The novice nurse is described as a nurse who uses objective indicators, such as weight, intake and output, and blood pressure, taught in school to identify different situations. The novice nurse has no personal experience with which to identify practice situations. Interventions were based on concrete rules and guidelines for a generalized practice situation. Little personal judgment or critical thinking was used by the novice nurse (Benner, 1982).

The advanced beginner nurse has garnered a small amount of practice experience. This experience is then used in conjunction with objective indicators to identify situations and perform interventions. For example, the nurse in this stage can detect when a patient may be receptive to teaching based on behaviors exhibited in this situation compared to how past patients behaved in a similar situation. However, the advanced beginner was still unable to focus on the whole situation and determine which aspects are most relevant to address. Much attention continued to be paid to remembering rules and guidelines taught in school (Benner, 1982).

Typically, nurses achieved the competent stage after two to three years of on the job experience. This stage was characterized by a nurse who is able to form a patient care plan and set long term goals. The competent nurse was able to develop a routine for
the day’s nursing care. Due to this routine and standardization, institutions support the competent level of nursing. With high attrition rates, healthcare organizations find it easier to replace a competent level nurse than a proficient or expert level nurse. In-service education is often centered on maintaining a competent level nurse (Benner, 1982).

Proficient level nursing continues to build upon the previous levels. The proficient nurse is able to view the whole situation, plan long term care and goals, and execute interventions with more speed and efficiency than a competent level nurse. Higher echelons of experience allow a proficient nurse to anticipate what events will occur in certain situations, what attributes of a situation are more significant, and adjust the plan of care accordingly. The thought process and critical thinking skills of a proficient nurse occur more fluidly. Learning is best accomplished through the use of case studies where the proficient nurse can assess the whole situation and use past experience to individualize the guidelines for care (Benner, 1982).

Finally, the expert nurse uses intuition, honed by massive amounts of practice experience, to guide familiar clinical situations. Firm, context-free rules and guidelines are no longer a part of the expert nurse’s repertoire. Researchers often find describing the expert nurse’s thought process difficult because of the intuitive nature. Assessments and interventions simply “feel” right and the nurse “trust(s) it” (Benner, 1982, p 406). In new situations, or those where expected events fail to occur, the expert nurse will resort back to the analytical, concrete problem solving seen in lower skill levels.

This study aims to discover if the effects of mentoring ultimately lead to increased job satisfaction and lower new registered nurse attrition rates. Benner’s (1982) theory
can be applied to mentoring and serves as the theoretical framework for this replication of Halfer, et al.'s (2008) study. Proficient and expert nurses serve as mentors to novice registered nurses entering the profession. While most education stops at the competent level, the proficient and expert nurses continue to cultivate the critical thinking and intuition skills of mentees. The more highly skilled mentee nurse is then able to holistically view a patient situation, adapt quickly to changes in the patient situation, and work more efficiently, according to the framework.

**Supporting research**

A study by Whitehead (2001), conducted in the United Kingdom, examined the challenges faced by newly qualified staff nurses. Newly qualified nurses believed the transition from student nurse to staff nurse was extremely stressful and public perception of the competence of new nurses was low. Due to staff shortages, seasoned nurses were finding it difficult to take the time to guide new nurses.

The purpose of this study was to describe the overall experience of transition to practice from the nurses' point of view. The following research question was also asked: “What are newly qualified staff nurses' perceptions of the role transition from student nurse to qualified staff nurse?” (Whitehead, 2001, p. 332).

The study population included newly qualified staff nurses with less than one year of experience who were employed by the United Kingdom’s National Health Service (NHS). The convenience sample consisted of six nurses known by the researcher. The participants had been working for an average of 8.9 months with a mean age of 23 years old. All nurses worked for the same NHS trust, and all but one had been trained within the trust (Whitehead, 2001).
Semi-structured interviews were used to collect data. Five predetermined questions were asked, but participants were encouraged to speak freely. Questions included: (a) What were your perceptions about becoming a staff nurse in the lead up to qualification? (b) How were these perceptions fulfilled? (c) How did you feel during your first 6 months in practice? (d) What was it that made you feel the way that you did? (e) How much support did you feel you received in your new role? (Whitehead, 2001, p. 334).

Six themes emerged from the data analysis: uncertainty, responsibility and accountability, support, preparation and training, knowledge and confidence, and management. Uncertainty was described as fear and trepidation of starting on the unit or what unit to start on. Responsibility and accountability included taking on the duty of a registered nurse, legal issues, and shaky skill confidence. Support described issues with lack of support due primarily to staff shortages rather than unwillingness of senior staff to help. Preparation and training included lack of preparation and the feeling of being unable to ever be fully prepared to transition from student to professional nurse. Knowledge and confidence were linked to the previous two themes of support and preparation and training. Initial stress led to feelings of inadequacy. Large amounts of tasks were seen as overwhelming. Finally, management included time management, managing a patient load, and learning to cope with changes (Whitehead, 2001).

New nurses described the transition to professional practice negatively. New nurses were uncertain, unprepared, and inadequate. The themes described lead to dissatisfaction and high attrition rates, further compounding the problems of nursing
shortages and rising healthcare costs. Strategies, such as nurse mentoring programs, must be implemented to change new nurse perceptions of transitioning to the workforce.

Pinkerton (2003) described a mentoring program at the Good Samaritan Regional Medical Center in Phoenix, Arizona. The purpose was to support excellence in nursing and increase professionalism, retention, and job satisfaction.

The mentoring program stressed a difference between the terms precepting and mentoring. Precepting was defined as general unit orientation for all new staff members. Mentoring was a secondary stage fulfilling career and psychosocial goals. A preceptor, after orienting a new employee to the general workings of the unit, could develop into the new nurse’s mentor. As a mentor, the experienced nurse would assist the novice in increasing clinical competence, provide counseling, and continue being a role model (Pinkerton, 2003).

Mentoring included four phases: initiation, cultivation, separation, and redefinition. In the initiation phase, informally assigned mentee/mentor dyads were more likely to match pairs with similar personalities, which created stronger bonds. The cultivation phase continued building stronger relationships and achieved career and psychosocial goals. The redefinition phase was the changing of the mentoring relationship into another form or the end of the relationship (Pinkerton, 2003).

The program was divided into five stages. In stage 1, mentors were interviewed by a program committee. Goals, expectations, and characteristics of a good mentor were explained. Chosen mentors signed 18 month contracts to participate in the program. Stage 2 included mentees choosing mentors and signing 18 month contracts. Stages three
through five occurred in six month increments. Each stage had certain goals and tasks to be accomplished (Pinkerton, 2003).

Approximately 130 mentor/mentee dyads were in the program. Eight dyads had completed the program as of June 2003. All clinical nursing areas could participate in the mentoring program. Evaluation of the program included mentor feedback regarding mentee performance and goal achievement, and mentee feedback regarding mentor effectiveness and classes attended. Registered nurse turnover decreased 3% in 3 years. At the time of publication, feedback data gathered had not been analyzed (Pinkerton, 2003). A decrease in turnover rates was a result common to multiple studies including Halfer, et al.’s (2008) study on how mentoring programs effect job satisfaction and retention rates.

The purpose of Halfer et al.’s, (2008) study was to compare the job satisfaction and retention rates of two groups of new registered nurses: one group hired before the implementation of a Pediatric RN Internship Program and one group hired after. Four research questions were posed by the authors: (a) Does the Pediatric RN Internship Program improve nurse perceptions of the work experience and job satisfaction? (b) Are perceptions confounded by birth generation or shift schedules? (c) Is the pattern of longitudinal job satisfaction consistent over time after the implementation of a Pediatric RN Internship Program? (d) What is the impact of the Pediatric RN Internship Program on 1-year employment retention rates? (Halfer, et al., p. 244)

The population in this study consisted of new registered nurses at a 270-bed, midwestern, urban, Magnet-designated pediatric medical center. Two samples were chosen: 84 new registered nurses hired between September 2001 and August 2002 for the
pre-implementation group and 212 new registered nurses hired between September 2003 and August 2005 for the post-implementation group working in inpatient medical-surgical, neonatal intensive care, pediatric intensive care, and emergency services (Halfer et al., 2008).

Through previous research, Halfer and Graf (2006) developed the Halfer-Graf Job/Work Environment Satisfaction Survey which was used in the current study. The instrument is comprised of demographic questions and a 21-item 4-point Likert scale (1=strongly disagree, 4=strongly agree). Demographic questions gathered data on year of birth, length of employment, and scheduled working shift. The Likert scale questions had subjects rating the organizational work environment.

The instrument was mailed to the participants at 3 months, 6 months, 12 months, and 18 months corresponding to length of employment. Reminder mailings were sent 3 weeks later if responses had not yet been received. A total of 234 (79%) surveys were returned (Halfer et al., 2008).

Data showed a significantly higher agreement with job satisfaction in the post-implementation group compared to the pre-implementation group (p=0.046). No significant difference was noted on the effect of birth generation on job satisfaction; however, night shift nurses scored significantly higher on ability to identify work resources (p=0.002), ability to manage the demands of the job (p=0.04), and having enough information to perform the job effectively (p=0.04). Throughout the course of the study, all items on the Likert scale indicated statistically higher agreement and satisfaction in the post-implementation group except for two: fair staffing decisions and work schedules. Voluntary turnover rates at 1-year post-internship were 12%. The pre-
implementation group averaged a 20% turnover rate (Halfer et al., 2008). Findings from this study indicated that participation in the Pediatric RN Internship Program significantly increased job satisfaction among new registered nurses and lowered nurse turnover rates (Halfer et al., 2008).

Mills and Mullins (2008) examined the usefulness of and ability to replicate a program called the California Nurse Mentor Project. The purpose of the three year long project was to address California’s growing multicultural, multilingual population as well as its large shortage of nurses and high attrition rates. This was achieved by focusing on the support of new nurses, especially those in ethnic, generational, and gender minorities. Support was offered by experienced nurses specially certified in mentoring with additional cultural awareness training.

Four hospital organizations were utilized during this study. Two were located in northern California and two in southern California. Over 450 registered nurses participated over the course of three years. Mentors underwent a 16-hour certification program with an additional six hours of training in cultural awareness (Mills & Mullins, 2008).

LaFrance Associates, LLC was hired to evaluate the program model as well as mentor/mentee outcomes such as job satisfaction, attrition rates, mentor training and professional confidence. Specific measurement tools and questionnaires were not listed in the study. Mills & Mullins (2008) stated surveys and focus groups were the primary method of data collection along with records from human resources at the four facilities.

Findings were resoundingly positive. Participants in the California Nurse Mentor Project were 1/3 less likely to leave their current employment in the first year compared
to non-participants (8% vs 23%, respectively). Cost savings to the hospital were also calculated. After taking into account the cost of the program, hospitals were estimated to save between $1.4 million and $5.8 million in recruitment and training costs over the course of three years due to lower attrition rates (Mills & Mullins, 2008). Training programs were reported to have increased cultural competence when measured one year later. Finally, participants reported an increase in sense of achievement, perceived appreciation and respect, autonomy, and stronger relationships with colleagues and managers.

Mills & Mullins (2008) suggested in order to successfully replicate this program in other facilities, the facility must sign a contract stating commitment to the program, have mentor certification and training, fill a lead mentor role, have similarly matched mentees and mentors based on shift and unit assignments, provide mentor support, encourage staff empowerment, develop internal marketing strategies, and have an advisory committee for oversight of the project. The design and implementation of a successful mentoring program was also studied by Bratt (2009).

Bratt (2009) examined the effectiveness of the Wisconsin Nurse Residency Program (WNRP), a 15 month long collaborative effort between academia and the service industry to retain new registered nurses. Fifty-one public and private, rural and urban, healthcare organizations with over 1,100 new registered nurses and over 400 preceptors participated.

The design of the WNRP included a two day preceptor training workshop, monthly day-long educational sessions, and clinical coaches paired with new registered nurse residents. The purpose was to cultivate critical thinking skills, knowledge, and
professional behaviors in the nurse residents. Once a resident completed the program, the resident served as a clinical coach for incoming generation of nurse residents (Bratt, 2009).

Educational sessions employed a framework of learning and reflection to generate knowledge. Various learning methodologies included simulators, open discussion, and small group work aimed at building capacity in self, building capacity of the team, building capacity as a practitioner, building capacity within the organization, and building capacity within the profession (Bratt, 2009).

Bratt (2009) identified four key areas necessary for a successful residency program: organizational support, social support, learning support, and data support. Organizational support was the commitment of an organization to resource allocation, funding, and administrative support of a mentoring program. Social support included proper training of preceptors and continued support of new nurses. Learning support focused on engaging new nurses with various learning styles and providing a safe haven to build critical thinking skills and ask questions. Data support provided the tangible outcomes in retention rates, cost benefits, and professional development to engage stakeholders in the residency program.

The WNRP was a successful alliance between academia and the service industry to sustain the nursing workforce. The WNRP built morale, enhanced professional development, increased recruitment and retention rates of new registered nurses, and increased leadership and professional development (Bratt, 2009).

Riley and Fearing (2009) examined nurse mentoring from a graduate to undergraduate level. Previous studies had focused primarily on faculty or alumni
mentoring undergraduate nursing students. There was a lack of research related to nurse educator graduate students mentoring undergraduate nursing students and the learning opportunities this could present for both the mentees and mentors. The dual purpose of Riley and Fearing’s (2009) study was to determine how effective using nurse educator graduate students would be in an undergraduate mentoring program and to examine the experienced gained by the nurse educator graduate students and preparedness for roles after graduation.

The study took place at a university school of nursing in southern Illinois and consisted of 18 nurse educator graduate students enrolled in the final practicum course, as well as at-risk, or struggling, undergraduate nursing students. The undergraduate participants were selected by the graduate students with the help of the practicum advisor to identify at-risk students. Of the 18 undergraduate students, 14 were from an ADN program, 2 from a BSN program, and 2 from an LPN program (Riley & Fearing, 2009). The graduate students administered the Visual, Aural, Read/write and Kinesthetic (VARK) survey (Fleming, 2001), which consisted of 13 items to determine a person's preferred modality for learning from the four categories.

The VARK questionnaire did not have long term reliability as a person’s preferred method of learning can change over time. However, multiple studies have shown the validity of this instrument for discovering a person's preferred learning strategy at the time of administration (Riley & Fearing, 2009).

At the end of the semester, a 12-item, 5-point Likert scale (1=strongly agree, 5=strongly disagree) questionnaire was administered to the graduate and undergraduate students to determine the level of satisfaction with and perceived effectiveness of the
mentoring program. Concepts such as communication, level of assistance, accessibility, feedback and response time, support, and attitude were assessed (Riley & Fearing, 2009).

The results indicated that seven undergraduate students were single modal learners while the remaining 11 were multimodal. This guided the nurse educator students in developing individualized teaching strategies for each mentee. The mentors also noticed eight areas of weakness commonly reported by the mentees: difficulty writing, using APA, test-taking skills, time management, preparing for clinical, reading large assignments, resume building, and developing care plans. Finally, the end-of-semester Likert surveys showed that 89% of the undergraduate students agreed or strongly agreed that the mentoring program was effective in increasing academic success. No exact percentages were given regarding the scores of the graduate students, but it was perceived that mentees achieved goals and self-confidence improved in nurse educator skills (Riley & Fearing, 2009).

Cottingham, et al. (2011) studied the development and implementation of a grant funded, collaborative formal mentoring program on new nurse retention, leadership opportunities, and community outreach. Community foundations, acute and long term care facilities, and schools of nursing participated in forming the Partners In Nursing program.

Partners In Nursing consisted of 20 protégé/mentor dyads with three nursing faculty who oversaw six to seven dyads each. The inclusion of new registered nurses, experienced nurse mentors, and nursing faculty allowed for more extensive networking and connections among colleagues and the community. Recruitment brochures yielded few mentors willing to participate and were also unsuccessful in recruiting new registered
nurses at hospital orientation. Word of mouth over the next 18 months became the best method to find participants (Cottingham et al., 2011).

The steering committee decided upon a monthly seminar format for the mentoring program with weekly meetings for each dyad. Weekly meetings included face-to-face, email, telephone, or chat modalities. Due to scheduling conflicts, it was difficult for many dyads to attend the seminars or weekly meetings. Community outreach was achieved through 30-minute television segments on public access channels, community event initiatives, involvement with Girl Scouts, Boy Scouts, and future nurse organizations, and distributing newsletters and brochures (Cottingham et al., 2011).

Measurement of program goals was obtained by various methods of self-reporting which included weekly interaction worksheets, online surveys, semiannual nurse satisfaction evaluations, focus groups, anecdotal reports, and monthly seminar surveys. Measurement tools were frequently revised throughout the first year of the program (Cottingham et al., 2011).

Findings indicated a significant return on investment with costs to support a protégé/mentor dyad estimated at $8,552 compared to an estimated minimum direct cost of $10,000 per RN turnover. Cottingham et al. (2011) stated the Partners In Nursing program achieved goals of increasing new nurse retention rates within the first year and had exceptionally positive feedback in areas of motivation and knowledge of career ladder systems by its second year. Ancillary goals of increasing leadership and community outreach opportunities were also realized.

Gemberling, et al. (2011) studied the development and use of a new clinical position called the Clinical Resource Specialist (CRS) within the Lehigh Valley Health
Network. The position was used to support nurses of any experience level, especially new registered nurses and those working evening and night shifts.

Clinical Resource Specialists were expected to meet a list of characteristics and undergo three months of orientation and training on preceptor updates, hospital orientation processes, transitioning to a new role, critical thinking strategies, and goal setting. A skills checklist booklet also allowed the CRSs to identify areas of weakness and receive additional training from mentors (Gemberling, et al., 2011). After orientation, the role of the CRS was to provide clinical support, in-service training, and respond to codes.

The population included 950 nurses working after 7pm. A convenience sample of 415 participants responded to an online survey sent out two years after the use of CRSs began. Highest response rates were received from Med-Surg (n=169) and critical care (n=112) nurses with over six years of experience (n=156) (Gemberling et al., 2011).

The 27 item survey included 10, 4-point Likert questions (1=negative, 4=positive), 12 questions quantifying the use of CRSs in specific clinical situations, and three open ended questions. Format of the remaining two questions was not identified. Surveys scored the CRSs positively at 3.25 or above in most areas of interest. The ability of CRSs to reduce new registered nurse anxiety was scored 3.75. Overall value of CRSs was rated 8 or greater on a 1-10 scale by 81% of participants (n=338) (Gemberling et al., 2011). Open ended statements reflected positively on the use of CRSs with many nurses stating the CRSs helped reduce errors, lowered anxiety, and kept new registered nurses from leaving current positions. The development of the CRS position was an effective technique to support new registered nurses and those working evening and night shifts.
Kooker and Kamikawa (2011) described the implementation and outcomes of a grant funded program aimed towards improving nurse retention, satisfaction, and patient outcomes in a medical center in Hawaii working towards Magnet status. The Queen’s Medical Center received a grant to improve nurse retention, decrease vacancies, improve patient satisfaction, improve nurse autonomy and decision making satisfaction, and decrease nosocomial decubitus ulcers. The population included new registered nurses with less than one year of experience as well as registered nurses with greater than one year of experience working at the Queen’s Medical Center (Kooker & Kamikawa).

Training programs included the New Nurse Fellowship, a 24 week program focused on personal, cultural, team, and leadership training. Similar training for more experienced registered nurses, the Clinical Coach program, focused on cultural, team, coaching, and mentoring skills. The Nurse Manager Academy was dedicated to training in leadership, personal accountability, and peer-to-peer accountability (Kooker & Kamikawa).

Four units served as pilot programs for Magnet status patient care outcomes. Training included a nurse exchange with another Magnet hospital, Johns Hopkins Medical Center. Phase two was development of unit level performance improvement projects centered on increasing patient and nurse satisfaction, and decreasing nosocomial decubitus ulcers (Kooker & Kamikawa).

Focus groups analyzed by an external evaluator were the methods of data collection. Themes that emerged from the New Nurse Fellowship program included feeling connected to the hospital, feeling valued, and having pride in the organization and Magnet program. Themes from the Clinical Coach program included the need for more
contact between coaches and fellows, the need for more role clarity, and the need for more experienced coaches (Kooker & Kamikawa).

Over 4 years, new nurse retention improved 23% and vacancies decreased 80%; registered nurse satisfaction in autonomy and decision making improved steadily all but one year; nosocomial decubitus ulcers decreased 56%; and patient satisfaction increased from 84.6% to 87.8%. Significant cost savings related to nurse turnover were estimated at $109,824–118,976 per registered nurse. Cost savings per nosocomial decubitus ulcer was estimated at $40,000 (Kooker & Kamikawa). The implementation of the New Nurse Fellowship and Clinical Coach programs were successful in improving nurse and patient satisfaction, improving patient outcomes, and decreasing vacancy rates within the hospital.

**Opposing research**

Ecklund (1998) noted that due to the constant changes in the nursing profession, not only were new nurses struggling, but experienced nurses were also struggling. The purpose of the study was “to examine the relationship between having a mentor and job satisfaction in a sample of critical care nurses” (Ecklund, p 14).

The population consisted of registered critical care nurses within the network of the American Association of Critical Care Nurses. A convenience sample of 230 registered nurses were chosen and sent surveys by mail. Nineteen surveys were excluded due to incorrect addresses leaving 76 (36%) surveys returned. Of the respondents, half (n=38) had a mentor while the other half (n=38) did not. The average age of the mentored group was 39.9 years old. The average age of the non-mentored group was 41.3 years old. The number of years in practice for the mentored group spanned from 4-
30 years while the non-mentored group spanned from 6-33 years. Males made up 8% of the mentored group and 3% of the non-mentored group (Ecklund, 1998).

Job satisfaction was measured by the Index for Work Satisfaction (IWS), a 66-item survey. Seven items were demographic questions, 9 items asked about the nature of the mentoring experience, 44 items were Likert questions on a 7-point scale (1=strongly disagree, 7=strongly agree), and 6 items were rank order questions (1=most important, 6=least important) for concepts of autonomy, pay, task requirements, organizational policies, interaction, and professional status (Ecklund, 1998).

The results of the t-test were non-significant indicating that the null hypothesis, there are no differences in job satisfaction levels between mentored and non-mentored critical care nurses, was true. On the rank order section of the IWS, both groups ranked autonomy as the most important concept related to job satisfaction. A single open-ended question asked for an adjective to describe the mentor. The most common adjectives were ‘supportive’ and ‘knowledgeable.’ Other adjectives included patient, non-threatening, experienced, competent, energetic, and caring. The authors used these results as evidence that mentoring was a positive experience, but ineffective at increasing job satisfaction (Ecklund, 1998).

Grindel and Hagerstrom (2009) studied the effects of a 12-month long mentoring program called Nurses Nurturing Nurses (N3) on new nurses’ job satisfaction, intent to stay, confidence in clinical skills, relationship with the mentors/mentees, and satisfaction with the program. The hypothesis was that a mentoring program would increase job satisfaction, confidence in skills, and build better relationships therefore increasing the nurse’s intent to stay and decreasing attrition rates.
The purpose of Grindel and Hagerstrom’s 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 N3 program among new registered nurses” (p 183).

The population included new registered nurses and mentoring nurses within the Academy of Medical-Surgical Nurses network. The convenience sample consisted of 96 mentor/mentee dyads from 15 participating agencies within the AMSN network reflecting those who completed the first collection of data. Only 11 dyads returned the 4th and final collection of data. No inclusion or exclusion criteria were stated in the selection of new registered nurses and mentors (Grindel & Hagerstrom, 2009).

A background questionnaire was administered at the start of the study, and then data were collected four times throughout the 12-month period at 2 weeks (Time 1), 3 months (Time 2), 6 months (Time 3), and 12 months (Time 4). A total of seven different instruments were used to measure the variables of intent to stay, job satisfaction, new nurse confidence, mentor/mentee relationship, and mentor/mentee satisfaction with the N3 program (Grindel & Hagerstrom, 2009).

Hackman and Oldham’s (1980) Job Diagnostic Survey: Part 3, contained constructs of meaningfulness of work, responsibility for work, and knowledge of the results. The Job Diagnostic Survey (Hackman & Oldham) is comprised of 15 Likert-style questions on a scale of 1-7 (1=strongly disagree, 7=strongly agree). The Job Satisfaction Scale measures concepts grouped together as perceptions of work, work conditions, autonomy, recognition, development, relationships with co-workers and management, and job satisfaction. The Job Satisfaction Scale (Torres, 1988) is a 26
question Likert scale scoring from 1 to 5 (1=very dissatisfied, 5=very satisfied). The New Nurse Confidence Scale (Grindel & Hagerstrom, 2009) was a 26 question 5-point Likert scale (1=very unconfident, 5=very confident). Fifteen questions were developed by the investigator and focused on routine nursing activities. Eleven items were taken from Schutzenhofer’s Professional Nursing Autonomy Scale (Schutzenhofer, 1988). The Mentee “Assessment of the relationship with the Mentor” instrument (Grindel & Hagerstrom) was a 25-item, 5-point Likert scale (1=not at all, 5=very much).

The Mentor “Assessment of the relationship with the Mentee” instrument (Grindel & Hagerstrom, 2009) was a 24-item, 5-point Likert scale (1=not at all, 5=very much). The Mentee’s Satisfaction with N3 Program (Grindel & Hagerstrom) was a 13-question, 5-point Likert scale rating items such as professional development, communication with patients, physicians and other healthcare providers; and satisfaction related to working with the site coordinator and mentor (1=very satisfied, 5=very dissatisfied). The Mentor’s Satisfaction with N3 Program tool (Grindel & Hagerstrom) was a 9-question, 5-point Likert scale (1=very satisfied, 5=very dissatisfied) rating personal and professional growth, communication with mentee, and satisfaction related to working with the site coordinator and mentee.

Mentee results showed that new registered nurse confidence rose significantly from Time 1 to Time 3 (F = 47.5, p = 0.000). Job satisfaction started out moderately high and showed no significant change in the first 6 months, Time 1 to Time 3 (F = 0.195, p = 0.824). No significant change was noted in intent to stay, measured between Time 2 and Time 3 (t = -0.38, p = 0.970). While initially high, a slight, but nonsignificant decrease in mentee’s relationship with the mentor was noted to occur between Time 2 and Time 3 (t
The mentee’s satisfaction with the N3 program remained stable and no significant change was noted, though it did decrease slightly at Time 4 (t = -1.153, p = 0.260) (Grindel & Hagerstrom, 2009).

Mentor results showed the relationship with mentees remained high and fairly stable (peaking at Time 3) with no significant change (t = -0.315, p = 0.775). Mentor’s satisfaction with the N3 program remained stable and no significant changes over time were noted (t = -0.191, p = 0.850) (Grindel & Hagerstrom).

There was an attrition rate of 88.5%. This made it impossible to perform adequate statistical analysis on the majority of Time 4 data. It also brought into question the commitment of the agencies to support the N3 program. New registered nurse confidence was the only variable to significantly change during the 12-month program. This may have been due to the fact that the nurses were gaining job experience naturally over time and not connected with effects of the N3 program. While it cannot be directly related to intent to stay and job satisfaction, the author suggested the increase in confidence may decrease job dissatisfaction, which could have an effect on intent to stay (Grindel & Hagerstrom, 2009). The N3 program and relationships formed between mentors and mentees were ineffective at improving new nurse job satisfaction or intent to stay.

Gwyn (2011) studied the effects of the quality of mentoring relationships and number of years in the profession on affective and normative occupational commitment in nursing faculty using Blau’s (2003) four-dimensional theory of occupational commitment. The dual purpose of the study was to determine if a mentoring program increased occupational commitment (normative and affective) in nursing faculty and to
determine if “affective and normative dimensions of occupational commitment among nursing faculty were affected by the quality of mentoring relationships and their number of years of employment in the professoriate” (Gwyn, p. 293).

The study population included full time nursing faculty in the state of Florida. A voluntary convenience sample of 133 participants consisted of men (n=12, 9%) and women (n=121, 91%) whose ages ranged from 25 to 67 years old (M=44.9, SD=8.14). Of the 133 participants, 94 (70.7%) were involved in some form of mentoring relationship. Of those 94 participants, 40 (30%) were in a formal mentoring relationship where mentors had been assigned. The study reports 93 (70%) were in informal relationships, but this appears to be a typographical error as 93 and 40 add up to more than the 94 subjects involved in mentoring programs (Gwyn, 2011).

The average participant was a 44.5 year-old white female with a master’s degree teaching in a bachelor of science nursing program (49%). Other participants taught in practical nursing programs (2%), RN to BSN programs (7%), associate degree programs (19%), and doctorate programs (6%) (Gwyn).

An internet survey comprised of 3 parts, a demographic questionnaire, the Quality of Mentoring Relationships instrument (Allen & Eby, 2003), and the Occupational Commitment 2000 Instrument (Blau, 2003), was used to collect data. The Quality of Mentoring Relationships instrument measured the quality and effectiveness of a mentoring relationship along with the level of satisfaction with the relationship. The Occupational Commitment 2000 Instrument measured the affective (loyalty to one’s profession and staying in the profession out of personal choice) and normative (loyalty to one’s profession and staying out of obligation) commitment. The Quality of Mentoring
Relationships and the Occupational Commitment 2000 Instrument are Likert-style questionnaires using a 6-point scale (1=strongly disagree, 6=strongly agree) (Gwyn, 2011).

Six hypotheses were tested: (a) There will be a significant relationship between quality of mentoring relationships experienced and number of years in the profession and affective occupational commitment; (b) a significant relationship exists between the quality of mentoring relationships experienced and number of years in the profession and normative occupational commitment; (c) a significant difference in affective occupational commitment scores would be present in those faculty who reported having a mentoring relationship and those who did not; (d) a significant difference in normative occupational commitment scores would be present in those faculty who reported having a mentoring relationship and those who did not; (e) no significant difference in affective occupational commitment scores would be present for those who had been in the profession for many years and those who were newer; and (f) no significant difference in normative occupational commitment scores would be present for those who had been in the profession for many years and those who were newer (Gwyn, 2011).

The only significant relationship found was between the quality of mentoring relationships and affective occupational commitment (r=0.24, p=0.01). This may mean that a mentoring relationship increases one’s emotional attachment to a career, but not one’s obligation to stay in that career (Gwyn, 2011).

Contrary to previous research which stated years in the profession increased normative and affective occupational commitment (Meyer, Allen, & Smith, 1993), this study found no significant relationship between the two variables. This finding may
due to the fact that only 133 subjects took part in the study, when, according to statistical analysis for medium effect size, 460 were needed to adequately perform multiple regression, t-test, and ANOVA procedures.

**Summary**

It has been shown that transitioning into the workforce as a new registered nurse carries negative feelings that, if not addressed, will lead to high attrition rates and staffing shortages (Whitehead, 2001). Evaluation of the literature revealed themes in the supporting and opposing research. The structure of new nurse mentoring programs in the supporting research often included extensive training for mentors and mentees at the inception and throughout the duration of the program (Bratt, 2009; Cottingham et al., 2011; Gemberling et al., 2011; Kooker & Kamikawa, 2011; Mills & Mullins, 2008). Participants in the opposing research did not undergo specialized training, but were often in a less formal mentoring program prior to the start of the study (Ecklund, 1998; Gwyn, 2011). More studies replicating successful mentoring programs are needed to support or refute the use of mentoring programs as a method to keep new nurses from leaving the profession.
Chapter III

Methodology

The culmination of an aging Baby Boomer population, nurses nearing retirement, and escalating health care costs is forcing the health care industry to examine ways to retain nurses and decrease the costs associated with orienting new nurses. It has been estimated to cost approximately $44,000, a nurse’s annual salary, to orient and train a new nurse (Halfer, et al., 2008). The literature has shown mentoring programs as a way to increase job satisfaction and, therefore, retention rates. This study is a replication of Halfer, Graf, and Sullivan’s study.

Problem, purpose, and research questions

Nurse attrition leads to higher costs and difficulty providing quality patient care. Healthcare organizations must implement strategies to retain qualified new registered nurses. Formal, well-structured mentoring programs are a way to increase the job satisfaction and intent to stay of new registered nurses.

The purpose of this study is to compare job satisfaction, intent to stay, and retention rates of new registered nurses hired before and after the implementation of a formal mentoring program at Community Health Systems facilities. Research questions include: (a) Are there significant differences in level of job satisfaction between nurses involved in a formal mentoring program and nurses who are not involved in a formal
mentoring program? (b) Was there an increase in retention rates of new registered nurses at one and five years post implementation of a formal mentoring program?

**Population and sample**

The nurse mentee population is comprised of all new registered nurses with less than one year of experience employed by the Community Health Systems network. Participants may not currently be involved in a formal or informal mentoring program outside of the typical hospital orientation. A random sample of 50 new registered nurses will be chosen from six Community Health Systems facilities for a total of 300 participants in the pre-implementation group. A second random sample following the same guidelines will be chosen for the post-implementation group. The facilities will be chosen from six different states across the United States for geographic diversity.

The mentor population is all registered nurses with more than five years of experience employed by the Community Health Systems network. A volunteer sample of 50 registered nurses will be chosen from the same six Community Health Systems facilities as the mentees. Mentor nurses will preferably be working on the same unit as a paired mentee, however, if there are no mentors available from the same unit, the mentee will be paired with any available mentor.

**Protection of participants**

Permission to conduct this study will be obtained from Ball State University’s Institutional Review Board. Once approved, the study proposal will then be submitted to Community Health Systems Institutional Review Board. Following approval from Ball State University and Community Health Systems, a steering committee will be formed to implement the mentoring program in each of the six chosen facilities. Details regarding
the selection and functions of the steering committee are described in the *procedures* section.

The possible benefits for mentees participating in the mentoring program include educational opportunities, professional growth, increased confidence, increased job satisfaction, lowered job related stress, and strengthened relationships with colleagues. The possible benefits for mentors include educational opportunities, improved leadership skills, professional growth, and strengthened relationships with colleagues. No risks are evident from participation in this study.

Consent for participation for new registered nurses will be obtained during the hiring process. Upon acceptance of employment with Community Health Systems, nurses with less than one year of nursing experience will be given an informed consent form explaining the study. Completion of the informed consent indicates acceptance of participation in the study. Mentor nurse participation is also voluntary, and consent is given by signing an informed consent form. Withdrawal from the study may occur at any time. Data collection will be kept anonymous. No names will be used on job satisfaction surveys or other study documents. Retention rate information obtained from human resources will only include numerical data without personal identifiers.

**Procedures**

Following approval from Ball State University and Community Health Systems’ Institutional Review Boards, steering committees for each facility will be developed. As organizational support is vital to the success of a mentoring program, the steering committees will include nurse managers and hospital administrators dedicated to the success of the research study (Bratt, 2009). Membership in the steering committee will
be voluntary. Under the direction of the researcher, steering committees will be responsible for implementing marketing strategies to obtain mentor volunteers, coordinating mentor training and mentee educational activities, and reporting data statistics.

The pre-implementation group will participate in traditional hospital orientation and training. The McCloskey-Mueller Job Satisfaction scale (Mueller & McCloskey, 1990) and the Occupational Commitment 2000 survey (Blau, 2003) will be mailed to participants at 3, 6, and 12 months from hire date. A reminder mailing will be sent two weeks later to non-respondents.

The post-implementation group will participate in the formal mentoring program. Marketing will include flyers posted in break rooms and emails sent to registered nurses explaining the purpose of the study and asking for volunteer mentors. No marketing will be needed for mentees. Mentees will be chosen randomly from a roster of newly hired nurses with less than one year of clinical experience.

Bratt (2009) identified learning and educational support as a key to the success of a mentoring program. The steering committee will manage the logistics of educational activities for both mentors and mentees. Mentors will undergo a two day training program focusing on mentoring skills, cultural awareness, leadership, personal accountability, and peer-to-peer accountability (Kooker & Kamikawa, 2011). Mentees will attend monthly seminars following Bratt’s (2009) lesson plan.

Month one will focus on personal growth: professional development, managing stress, critical thinking, and decision making. Month two will focus on team growth: time management, delegation, constructive criticism, prioritizing, and conflict resolution.
Months 3-10 will focus on professional development: perioperative care, respiratory subject matter, cardiovascular subject matter, neurological and pain management, gastrointestinal and renal, musculoskeletal and integumentary, endocrine and immune system, and care across the lifespan. Month 11 will focus on organizational growth: customer satisfaction, national patient safety goals, and core measures. Month 12 will focus on building the profession: professional journey and lifelong learning (Bratt, 2009).

In addition to the educational opportunities, mentors and mentees are encouraged to meet weekly. Meetings may be held face-to-face, through phone, email, or chat. When pairing mentor and mentee nurses, every effort will be made to pair those working the same shift and/or unit in order to increase the opportunity to work together and for the mentor to provide guidance.

The formal mentoring program concludes after one year. The McCloskey-Mueller Job Satisfaction scale (Mueller & McCloskey, 1990) and Occupational Commitment 2000 survey (Blau, 2003) will be sent to participants at 3, 6, and 12 months from hire date. A reminder mailing will be sent two weeks later to non-respondents.

**Instruments**

The McCloskey-Mueller Job Satisfaction Scale (MMSS) is a 31-item, 5-point Likert scale (1=very dissatisfied, 5=very satisfied) used to measure job satisfaction in the nurse population. Eight factors are included in the MMSS: extrinsic rewards, scheduling satisfaction, family/work balance, co-worker, interactions, professional opportunities, praise/recognition, and control/responsibility (van Saane, Sluiter, Verbeek, & Frings-Dresen, 2003).
Internal consistency of the MMSS was measured using Cronbach’s alpha. Internal consistency was rated between 0.89-0.90 showing high reliability of the instrument. A second reliability measure, test-retest coefficient, ranged from 0.08-0.64. Two of the lowest scoring sub-scales were removed, but results of a repeated test-retest coefficient were not reported (van Saane et al., 2003).

Convergent validity was measured by comparing the scores of the MMSS with other job satisfaction surveys alleging to measure similar concepts. The MMSS was compared with the Job Diagnostic survey. There was an adequate correlation of 0.53-0.75 indicating moderate validity. Content validity was also measured by comparing the MMSS sub-scales to sub-scales found to be significant in a meta-analysis of job satisfaction surveys. The MMSS scored moderate on content validity (van Saane et al., 2003).

Data analysis

Data gathered from pre- and post-implementation group surveys will be compared using a t-test to determine if significant differences in job satisfaction and intent to stay are present following participation in a formal mentoring program. The steering committee will collect data on retention rates of participants from both groups at 1 and 5 years from hire date. A t-test will also be used to compare retention rates to determine if significant differences exist between groups.

Summary

Mentoring programs can be a cost-effective way to improve new nurse job satisfaction, intent to stay, and retention rates. This study aims to determine if significant differences in level of job satisfaction and retention rates are present between new nurses
who participate in a well-structured, formal mentoring program and new nurses who do not.

Surveys and human resources records will be used to collect data regarding level of job satisfaction and retention rates. Three hundred nurses will be included in each cohort to allow for the detection of small, significant differences in scores, and also for attrition that may occur during the duration of the study. T-tests will be performed for data analysis.

The mentoring program will allow for adequate training of mentors and educational opportunities for mentees. The program will have the support of the organization and administration, which will improve the chance of successful outcomes. Results of the study will likely provide more evidence for the use of mentoring programs in hospitals nationwide.
References


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