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# A Nurse Mentor Program in a Long Term ACUTE Care Hospital

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A Nurse Mentor Program in a Long Term Acute Care Hospital


Submitted in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice

at Eastern Kentucky University.


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Abstract

Nurse turnover is a national problem with the potential to affect quality of care and patient

outcomes.  A Long Term Acute Care Hospital (LTACH) with nurse turnover rates above the

national average as high as 28% sought to address this problem.  A review of the literature

identified nurse mentor programs increasing registered nurse (RN) satisfaction and decreasing

turnover.  Therefore, the purpose of this project was to implement a mentor program for newly

hired RNs.  Mentors were paired with new RNs for a four-week program.  Pre and post

intervention data were collected via the McCloskey Mueller Nurse Satisfaction Survey (MMSS)

and the Intent to Stay in Job Survey (ITS).  Although results of paired samples t-test were not

found to be statistically significant ($p \leq .05$), clinical significance was identified with increased

scores in three of four subscales of the MMSS.  Outcomes of the ITS survey items relevant to the

project were mixed.  Project outcomes suggest a positive influence of the program on RN

satisfaction and intent to stay in the current position.  An increased program length of six months

to one year is recommended to validate the mentor programs value in retaining newly hired RNs

past one year of employment.

*Keywords*: nurse retention, nurse satisfaction, new graduate nurses, cost of recruitment,

and mentor programs.

A Nurse Mentor Program in a Long Term Acute Care Hospital

By

Regina Masters

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A Nurse Mentor Program in a LTACH

Turnover of Registered Nurses (RNs) is a growing concern in healthcare today, jeopardizing quality of care outcomes. RN turnover can impact organizations in areas such as quality outcomes, satisfaction level of the nurse, patient satisfaction, and length of stay concerns, patient falls, medication errors, and cost to the organization (Bae, Mark, & Fried, 2010). In the United States, RN turnover rates have increased from 9.9% in 2010 to 13.4% in 2015 (Seidel, 2017). According to the National Healthcare Retention and Registered Nurse Staffing Report the National RN turnover rate in 2016 was 17.2%. Schroyer, Zellers, & Abraham, (2016) report 35% to 60% of newly graduated RN's leave their job within the first year.

RNs leave the organization for reasons such as not feeling supported and feelings of being overwhelmed (Schroyer, Zellers, & Abraham, 2016). Conditions such as excessive work and poor communication can lead to increased stress, job dissatisfaction, and burnout (Hayes et al, 2012). Additionally, Schroyer, Zellers, & Abraham (2016) identified the aging work force as contributing factor in nurses separating from an organization. Concerns in the environment that can lead to dissatisfaction, burnout, and nurse turnover include: increased acuity of the patient, moral distress, lack of leadership support, and work relationships (Hayward, Bungay, Wolff, & MacDonald, 2016).

RN turnover also impacts agency and health care cost. Kovner et al. (2014) estimate for acute care hospitals with 600 beds, the cost for nurse turnover can be as much as 5.9 to 6.4 million dollars per year. Some of the costs associated with nurse turnover include the costs associated with advertisement, recruitment costs, and nurse training (Li & Jones, 2013). The American Organization of Nurse Executives (2018) estimate the cost of replacing one RN at 50,000 dollars.

**Problem Description**

The RN turnover rate for a long term acute care hospital (LTACH) in Lexington Kentucky exceeds the national average.  Human Resources reports the RN turnover rate for the agency as 28.9% for fiscal year 2015 -2016 and 27.8% for fiscal year 2016 – 2017.  According to the National Healthcare Retention and Registered Nurse Staffing Report (2016) turnover rates for this time period were estimated at 17.2%.  RNs during their first year of employment account for the majority of the RN turnover rate for this same time period (2015-2017).

Nurse mentor programs have demonstrated success in reducing nurse turnover.  Mentors are described as experienced nurses that serve as teachers to a less experienced nurse or a "workplace relationship" where a more experienced nurse is paired with a less experienced nurse to transfer knowledge (Fleig - Palmer & Rathert 2015; Schroyer, Zellers, & Abraham 2016).  Chen & Lou (2014) describe a mentorship as a one on one relationship between a mentor and mentee with specific objectives to meet over the program.  Competency level of the mentor can vary based on personal experience, education, manager support, skills, and personal characteristics (Chen & Lou, 2014).  The purpose of this project was to implement a mentor program in a long term acute care hospital.

**Theoretical Framework**

The theoretical foundation guiding this study was Benner's Stages of Clinical Competence Model.  Benner's model includes five stages novice, advanced beginner, competent, proficient, and expert.  Benner (1982) believed a nurse's level of intuition and career development are associated with the expertise of the nurse with the nurse's ability to teach others dependent on the nurse's level of expertise.  Benner's novice to expert model can be easily applied to a nursing mentor program because the model has various levels of proficiency. The

new nurse starts out as a novice and over time progresses to an expert.  Benner, Tanner, &

Chasla (2009) suggest transitional programs for nurses in the field increase confidence,

competency, and satisfaction.  Once hired the new nurse is assigned a mentor that is proficient or

an expert.  The new nurse would go through an orientation period with a mentor for an allotted

amount of time.  During the orientation period the mentor would work individually with the new

nurse.  After the orientation period the mentor would continue to have focused meetings at

specific time frames with the nurse with a specific agenda.

The overall goal for the mentor program is to provide support by an experienced nurse

for the less experienced novice nurse.  During the orientation period the new nurse would

transition through the different stages of Benner's model novice, advanced beginner, to

becoming competent.  As previously mentioned once the nurse is considered competent to care

for patients independently the mentor will meet with the new nurse at specific times over the

following year.  Patricia Benner's five stages of Clinical Competency have been used to guide

clinical practice (Benner, Tanner, & Chesla, 2009).  The goal is to assist the new RN's transition

from inexperienced novice nurse to an experienced expert nurse.  A novice RN is being paired

with an expert RN advancing them through the various stages of clinical competence.

### Available Knowledge

A comprehensive review of the literature focused on research relevant to nursing turnover

and retention.   CINAHL, Pubmed, and Cochrane data bases were searched using the keyword

nurse retention, nurse satisfaction, new graduate nurses, and turnover of RNs.  The search was

narrowed using the key words mentor program and retention of RNs.  Further review of abstracts

and studies narrowed the search to studies most relevant to mentor programs and intervention

and retention of newly hired RNs.

Bae, Mark, and Fried (2010) investigated patient outcomes on 268 nursing units at 141 hospitals.  Nursing turnover rates were tracked and submitted for a six-month period.  RNs were asked to complete a questionnaire on work cohesion, relationship building, and group learning.  The aim of the study examined nurse turnover and work group cohesion and the effects on patient outcomes.  Turnover rates were compared with medication errors, patient falls, patient satisfaction, and average length of stay.

Data analysis revealed units with moderate turnover had low levels of work group learning ($p <. 01$).  While units with lower turnover rates experienced less falls than units with no turnover ($p < .05$).  The units with higher work group experienced fewer medication errors ($p < .05$).  Nursing turnover can impact operations, patient care, and quality outcomes.  The results support nurse turnover impact on patient care and quality outcomes.  Outcomes of this study support the link between work group interrelationships, nurse turnover, and patient outcomes.

Kovner et al. (2016) conducted a panel survey of newly licensed RNs (N=1337) in a Metropolitan or rural area of the United States.  The study sought to identify factors predicting whether a new nurse would stay on the same unit, position and title through comparison with nurses that changed unit, position, and/or title.  Study objectives included to identify variables for retention that predicted nurses staying in the same job and to identify changes in the work environment from the first to second year of employment.  Thirty percent of new nurses had some type of internal turnover during the first year and the organizational turnover was 13.4% - 22.8%.

Predictors with strong positive correlations to internal turnover included variety (0.072), having another job (0.069), having a bachelor's degree (0.062), negative affectivity (0.047), and job satisfaction (0.042).  Additionally, new nurses who changed unit, position, or title reported

more positive one-year change scores on work attitude than those who did not change unit, position, or title.  High turnover rates impact quality of care and agency cost.  RN job satisfaction is an area identified as affecting turnover that can be addressed in a well-developed mentor program.

Nurse satisfaction is an important consideration in reducing nurse turnover.  Semeachew, Belachew, Tesfaye, and Adinew, (2017) evaluated nurse job satisfaction and the impact on quality outcomes: nursing care, intent to stay, and absenteeism.  A total of 316 RNs with at least six months of nursing experience in one of three public hospitals in Ethiopia participated in the study.  Participants provided socio demographic data and completed the eight subscales of the McCloskey Mueller Satisfaction Survey (MMSS).

The MMSS was adapted to a four-point Likert scale response format from 1 (very dissatisfied) to 4 (very satisfied).  More than half of the participants were found to report high job satisfactions (64.7%).  Variables having significant relationships to job satisfaction included mutual understanding at work, professional commitment, and workload. The highest level of job satisfaction was related to working with coworkers.  Two variables related to low satisfaction included inpatient units and workload and the lowest level of satisfaction was professional opportunities.  Outcomes of the study support a relationship between nurse's satisfaction coworker relationships and turnover.

Fleig-Palmer and Rathert (2015) examined the impact of interpersonal mentoring on affective organizational commitment within an acute care hospital and associated clinics in the Midwest.  Interpersonal mentoring included formal mentors or others perceived as mentors by the participants during the past year.  Clinicians (N=153) providing direct patient care (RNs, nursing managers, patient care assistants, radiology technology, pharmacists) were asked to

complete survey instruments while thinking of the perceived mentor. Outcomes included

organization commitment, knowledge transfer, and turnover intention.

Controlling statistically for education and years of employment, participants with more

perceived interpersonal mentoring were found to have stronger organizational commitment $r^2 =$

.35, F (3, 144) = 25.83, p < .01 (Fleig-Palmer & Rathert, 2015). While knowledge transfer is the

primary goal in a mentorship relationship, interpersonal mentoring may influence retention.

Interpersonal mentoring enhances the mentees feelings of confidence, competence, and

professional identity. The mentor is role model to the mentee immolating behaviors and

responses to situations. This relationship can lead to a friendship between the mentor and

mentee that extends at the conclusion of the program. Additionally, level of organizational

commitment was found to influenced knowledge transfer (skill acquired during work) and

turnover intentions increasing commitment. Participants with higher levels of commitment were

more likely to consider remaining in the current organization. Overall study findings supported

clinicians that received more interpersonal mentoring were more likely to have a stronger

affective commitment to the organization. This study supports the effect of mentoring on intent

to remain within the current employment status.

The outcomes of the above descriptive studies support coworker relationships and

informal mentoring as improving nurse satisfaction and patient outcomes. Building on these

studies, formal mentoring programs have shown positive outcomes. Burr, Stichler, and Poeltler

(2011) implemented a one-year mentor program in a 169 bed acute care Women's and Newborn

Hospital in California. The mentor program included all newly hired RNs or RNs new to the

specialty area. A three-hour orientation occurred for both the mentor and mentee proceeded the

mentor program.  Over a 12-month period mentors and mentees scheduled monthly one-hour mentor sessions.

A written evaluation was completed at the end of the program via the Final Mentoring Program Evaluation survey.  The Final Mentoring Program Evaluation survey is an 11-item self-report instrument with responses selected from a 5-point Likert scale (1 = strongly disagree and 5 = strongly agree).  Cronbach alpha for the instrument was established at 0.78.  Analysis of survey results found strong agreement for the mentor program from mentors (n=43) and mentees (n=43; M = 4.48 and 4.21respectively).  Nurse turnover rate for the one-year period decreased from 20% to 7%.  This represented a cost savings of $300,000 (Burr, Stichler, and Poeltler, 2011).  The cost of the program was estimated at $58,000 annually.  One noted limitation of the study was use of an author developed evaluation tool; however, the decline in nurse turnover rate was derived from validated human resource data.

Chen and Lou (2014) conducted a systematic review on the effectiveness and application of mentorship programs for recently graduated RNs.  A total of five studies meeting study criteria were included in the review.  Sample size for individual studies ranged from 19 – 296 recently graduated RNs.  All studies included performance self-assessments completed by the recent graduate RN's in the mentor programs.  The mentor programs ranged from three months to one year in duration.  All programs included a single mentor.  The training for mentors ranged from 8 to 39 hours.

The instruments in these studies included; structured self-administered questionnaires measuring knowledge of mentorship and mentor activities.  Cronbach's alpha for data collection instruments ranged from 0.86 – 0.96.  Finding from four of the five studies confirmed mentor programs significantly reduced turnover rates.  Additional outcomes supported reduced costs and

negligence rate and increased nursing competency, job satisfaction, and communication skills among recent RN graduates.

The National University Health System (NUHS) in Singapore initiated a three-year mentor-mentee nurse residency program for new graduate nurses called the Graduate Nurse Residency Program (GNRP; Tiew et al. 2017). The GNRP was developed to assist the difficult transition of a new nurse from student to practitioner and decrease the frustration which can lead to low confidence levels. The GNRP implements a specific yearly agenda focused first on clinical competence by working with a "RN buddy". Year two focuses on workplace relationships including a dedicated mentor assigned for coaching in professional development and professional identity. The final year focuses on the clinical rotation and professional role consolidation with preparation for a specialty area.

All graduate nurses were invited to participate in the study. A total of 83 RNs participated in the GNRP with 73 (88%) completing pre- and post-program surveys. Most study participants were female (92.8%) with a mean age of 22.9 years and held baccalaureate degrees (80.7%). The National University Hospital Mentorship Evaluation (NUH-ME) was developed for the study to measure mentorship effectiveness through the graduate nurse's perspective (Tiew et al. 2017). The NUH-ME is a ten-item self-report survey with responses on a four-point Likert scale (1 = Strongly Disagree; 4 = strongly Agree). Higher scores indicate greater help from the assigned mentor. Total scores range from 10 – 40. Internal reliability for the survey was established at Cronbach alpha of 0.92.

A statistically significant difference was found in total pre- and post-program NUH-ME scores. The mean difference was 12.27 ($p < 0.001$). Statistically significant differences were also found for each of the ten items on the NUH-ME pre- and post program. Mean differences

for individualized items ranged from 0.86 – 1.86 ($p < 0.001$).  The RN buddy and mentor program provided individualized guidance and support for the new RNs as they transitioned into practice. Participants evaluated the program as positive and supportive.  The authors suggest mentorships are valuable as a recruitment tool as well as a way to retain nurses.

Schroyer, Zellers, and Abraham (2016) studied the effects of implementing The Academy of Medical–Surgical Nurse (AMSN) mentor program in a 325-bed acute care hospital in Northern Indiana.  This quasi-experimental study compared retention of RN's working in three units (Critical Care Center, Intermediate Care Center, and Progressive Care Unit) six-months after implementing the AMSN mentor program with retrospective data of a cohort of RNs hired six months prior to the mentor program.  Retrospective data were extracted from records supplied by human resources and staff development.

A total of 35 mentees t participated in the mentor program.  Data were analyzed for differences in demographics and retention rates of mentees compared to non-mentored RNs.

The AMSN Mentoring Program was used as a guide.  The non-mentored group retention rate was 66% compared to a 91% retention rate for the mentee group.  The findings were statistically significant with a CI of 95% and a $p > .009$.  Additionally, the increase in retention rate was 25% higher when a mentor was in one of the critical care units.  The AMSN was used as a guide for this project.

## Specific Aims

The objective was to implement a nurse mentor program for newly hired RNs.  The outcome measures of the project were to increase nurse satisfaction and intent to stay.

**Methods**

**Context**

A Long Term Acute Care Hospital (LTACH) in central Kentucky was the site for the

DNP Project implementation.  The LTACH is located inside an acute care hospital which is part

of a larger healthcare system.  The hospital is licensed for 57 beds but currently operating 25.

The patient population includes critically complex patients with acute care needs such as

telemetry, medical-surgical, and intensive care.   Patient referrals for the LTACH are received

from short term acute care hospitals when a longer length of stay is required for acute care.  The

average length of stay for the is 25 days.

The mission of the LTAC is "nurses are leaders distinguished by evidence-based practice,

exquisite service to others, and safe, effective care."  The mission of the agency and this project

were congruent.  Stake holders include LTAC administration, RNs providing patient care, and

patients receiving the care.

**Intervention**

The purpose of this project was to implement a structured mentor program for RNs with

less than one-year service within a LTAC hospital.  RNs hired within the last 12 months were

identified by the Clinical Educator as mentees for the program.  The Clinical Educator next

paired each mentee with an experienced RN mentor having more than one year of service credit

and willing to mentor a new RN.  Considerations when pairing the mentee with a mentor

included: skillset, personality, accessibility, compatibility, experience, and education. The

Clinical Educator provided the list of mentee/mentor pairs to the project leader.

The mentor program was developed as a four-week program following the AMSN Mentoring

Toolkit as a guide (AMSN, 2012).  The AMSN Mentor Program objectives are to develop

supportive and encouraging relationships, guide RN professional, personal, and interpersonal

growth, promote mutuality and sharing, and communicate information concerning expectations,

opportunities, and stressors.

The AMSN Mentoring Program was developed in response to the nursing shortage and

data on the number of nurses leaving their positions. within the first year of employment. The

program has evolved from a structured program in 2002 to a self-directed format in 2012.  Using

Patricia Benner's Novice to Expert as theoretical guide and incorporating adult leaning principles

the program pairs a less experienced nurse as learner with an experienced nurse as teacher.  The

program toolkit includes three components or guides: Mentor Guide, Mentee Guide, and Site

Coordinator Guide.  Permission to use and customize all information provided is included on the

AMSN web site.

The Mentor Guide and Mentee Guide were adapted for relevance to the agency

environment and four-week timeline.  All documents were distributed and reviewed during the

Welcome Session and implemented by each mentor/mentee dyad in the program. Appendix E

presents the outline and documents adapted for the project.

Participants were recruited through emails and flyers posted on the nursing unit.  Initially

two "Welcome" sessions were scheduled to explain the program components, answer questions,

gain informed consent and collect initial data.   Only one session was needed as all

mentor/mentee pairs attended the first session on January 10, 2018.  Attendance by new

employees was required as a condition of employment.  However, completion of the data

collection instruments for the DNP Project was voluntary.

The welcome session began with distribution of the program packet to each mentor and

mentee. Each packet included: the cover letter (appendix C) with the project leaders contact

information, a copy of the power point education for the mentor program, instruction sheet for

generation of a unique four-digit code, (appendix D), 4-week mentor/mentee schedule (appendix

E), AMSN tools for mentor/mentee, and demographic tool (appendix F).  At the end of the

welcome session each mentor and mentee was asked to fill out the demographic form.  Mentees

were asked to complete two survey instruments: The McCloskey Mueller Satisfaction Survey

(MMSS, Appendix G) and the Intent to Stay in Job Survey (ITS, Appendix H).

Over a period of four weeks the mentor and mentee met weekly at a prearranged date and

time selected by the mentor/mentee.  Text message reminders of meeting dates and times were

sent by the project leader.  The mentee was asked to prepare a specific agenda in advance of the

meeting for review/discussion during each meeting.  The agenda items were developed by the

mentee specific to any nursing topic the mentee needed to discuss and review.  The clinical

educator provided a list of suggested topics for the mentee including: calling physicians, new

equipment, new procedures, continuous ambulatory peritoneal dialysis (CAPD), arterial lines,

assisting with intubation, recognizing deteriorating patients, code blue experience/observation,

patient mobility, medications, utilizing rapid response team, delegation,

admitting/transferring/discharging patients, patient documentation, and wound care.

**Measures**

An adaptation of The Academy of Medical – Surgical Nurses (AMSN) Mentoring

Program Toolkit was used for the mentoring program.  Two measurement tools from the toolkit

were used pre and post intervention to evaluate outcomes of project outcomes: the MMSS and

the ITS.  A Demographic Survey was distributed at the welcome session and used to describe the

mentor/mentee participants.  The Demographic Survey included five questions following a list of

choices or fill in the blank format.  Demographic data were used to describe the mentees and

mentors.  Questions included: mentor or mentee, age, current degree, employment length of time, and years of experience.  Demographic data were collected once at the end of the Welcome Session.

**McCloskey Mueller Satisfaction Scale (MMSS)**

The MMSS is a 31-item self -report instrument developed to measure nursing satisfaction (McCloskey, 1990).  McCloskey (1990) identified autonomy and social integration for newly hired nurses important for job satisfaction. He believed when nurses have both were satisfied and committed to the organization.   The survey consists of eight domains:  Extrinsic rewards, scheduling, family/work balance, coworkers, interaction, professional opportunities, praise and recognition, and control and responsibility.  Four of the eight domains were selected as relevant for this project:  coworkers, opportunities, praise and recognition and control and responsibility.  Responses to survey items are recorded on a 5-point Likert scale from 1 (very dissatisfied) to 5 (very satisfied).  Higher scores indicate greater satisfaction.

The MMSS has been used extensively in nursing satisfaction research.  Reliability of the instrument has been established with Cronbach's alphas for each domain ranging from .52 - .84.  Alpha for the global scale was 0.89.  Validity is demonstrated by moderate positive correlations for all expected relationships.  The subscales were correlated with the Brayfield-Rothe general job satisfaction scale & subscales from Hackman & Oldman's Job Diagnostic Survey.  Correlations on subscales from .53 to .75 for similar dimensions indicate criterion-related validity.  Permission to use the instrument was granted by the Associate Professor College of Nursing at The University of Iowa (Appendix I).

**Intent to Stay in Job Survey (ITS)**

The ITS was developed in 2002 by the AMSN in response to the nursing shortage and the number of new grads leaving the job within the first 12 months.  The instrument is used to measure intent to stay or leave a current position and is most effective when used for 12 months. The ITS is a 15-item self – report survey included in the AMSN Toolkit.  Responses follow a 7-point Likert scale format from 1 (disagree strongly) to 7 (agree strongly).  Possible scores range from 15 - 105.  Reliability has been established with Cronbach's alpha of 0.68.  Permission to use the instrument were granted by The AMSN Association Services Coordinator via email (Appendix J).

## Analysis

A pretest/posttest design was used for program evaluation.  IBM SPSS (Version 24) software was used for data analysis.  Data were collected on the MMSS and ITS surveys at the end of the Welcome Session and two weeks post program completion.  Data were analyzed for mean differences in pre- and post-test scores using paired samples t-test (two-tailed). Demographics were analyzed using descriptive statistics.

## Ethical Considerations

The Internal Review Board (IRB) approval for expedited review was obtained from Eastern Kentucky University (EKU) IRB on January 4, 2018 (appendix K) following deferral from the agency.  The cover letter included a signature line required by the IRB reviewer.  The cover letter was reviewed with the mentees during the welcome session and signatures obtained from mentees choosing to participate in the project data collection.  The signed cover letter was stored in a locked file cabinet in a limited access office.  To protect the identification and confidentiality of each participant, all participants were instructed to enter a four-digit code unique to them on all of the project documents (Appendix F).  The four-digit code included the

participant's mother's birthday month and day.  A leading zero was added for single digit months
or days.

<div align="center">

**Results**

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A total of five mentor/mentee dyads participated in the mentor program.  The mean years

of experience as an RN for mentors was 15.8 (Table 1).  All participants were female.  Most

mentors held BSN degrees while all of the mentees were educated at the associate degree level

(Table 2).

**Table 1**

Mentor/Mentee Work Experience

|                      | Mentor M(Range) | Mentee M(Range) |
|----------------------|:---------------:|:---------------:|
| Work Experience      |                 |                 |
| RN                   | 15.8(7-38)      |                 |
| Current position     | 5.6(6-15)       | $\leq 1$        |

**Table 2**

Mentor/Mentee Gender and Highest Degree Earned

|              | Mentor %(n) | Mentee %(n) |
|--------------|:-----------:|:-----------:|
| Gender       |             |             |
| Female       | 100(5)      | 100(5)      |
| Degree       |             |             |
| ADN          | 40(2)       | 100(5)      |
| BSN          | 60(3)       |             |
| MSN          |             |             |

Pre- and post-intervention data included the four subscales of the MMSS relevant to this

project:  1. Satisfaction with Coworkers (table 3); 2. Satisfaction with interaction opportunities

(Table 4); 3. Satisfaction with praise and recognition (Table 5) and 4. Satisfaction with control

and responsibility (Table 6).  Paired samples t-tests were used to analyze the difference in pretest

and posttest mean scores.  There were no statistically significant differences ($p \leq .05$) in pretest

and posttest mean scores for any of the four relevant subscales.  Mean differences were assessed

and eta square statistic calculated following the guidelines proposed by Cohen (1988).  For

subscale 1 Satisfaction with Coworkers (Table 3), there was a mean increase in scores of .6 with

eta square statistic of .59 indicating a large effect size.  For subscale 2 Satisfaction with

Interaction Opportunity (Table 4), there was a mean increase in scores of .35 with an eta square

statistic of .45 indicating a large effect size.  For subscale 3 Satisfaction with Praise and

Recognition (Table 5), there was a mean increase in scores of .20 with an eta square statistic of

.14 indicating a large effect size.  For subscale 4 Satisfaction with Control and Responsibility

(Table 6), there was a mean decrease in scores of .16 with an eta square statistic of .05 indicated

a small effect size.

**Table 3**

 *MMSS - Subscale 1 - Satisfaction with Coworkers.*

|  | M | *SD* | *t* | *p* | η |
|---|---|---|---|---|---|
| Pretest | 3.80 | .548 | -2.449 | .070 | .59 |
| Posttest | 4.40 | | | | |

**Table 4**

*MMSS - Subscale 2 - Satisfaction with Interaction Opportunities*

|  | M | SD | *t* | *p* | η |
|---|---|---|---|---|---|
| Pretest | 3.65 | .306 | -1.826 | .142 | .45 |
| Posttest | 3.90 | | | | |

**Table 5**

*MMSS – Subscale 3 - Satisfaction with Praise and Recognition*

|          | M    | SD    | t     | p     | η   |
|----------|------|-------|-------|-------|-----|
| Pretest  | 3.80 | .562  | -.795 | .471  | .14 |
| Posttest | 4.0  |       |       |       |     |

**Table 6**

*MMSS – Subscale 4 - Satisfaction with control and responsibility*

|          | M    | SD    | t     | p     | η   |
|----------|------|-------|-------|-------|-----|
| Pretest  | 3.80 | .792  | -.451 | .675  | .05 |
| Posttest | 3.64 |       |       |       |     |

There were two statements in the Intent to Stay in Job Survey relevant to this project:  1. Generally speaking, I am satisfied with this job and 2. I frequently think of leaving this job. Responses to the first statement "Generally speaking, I am very satisfied with this job" are presented by the bar graph (table 7).  Agreement with the statement is indicated by the blue bar and disagreement is indicated by the grey bar.  A mean decrease of .6 from pretest mean of 6.2 to posttest mean of 5.6 was not statistically significant at p ≤ .05.  However, the decrease in scores indicates lower satisfaction.

**Table 7**

*Intent to Stay in Job – Generally speaking, I am satisfied with this job*

Generally Satisfied with this Job
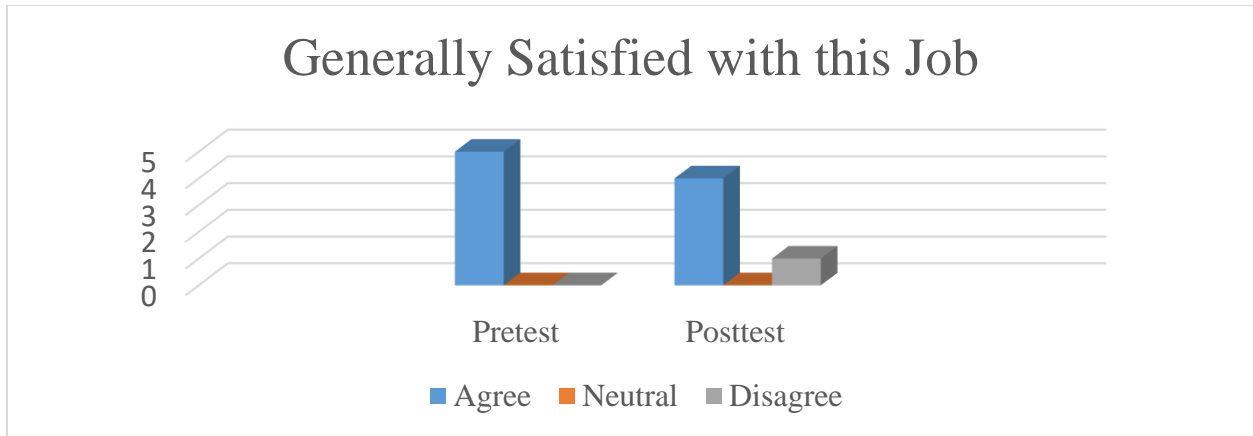
Responses to the second statement on the Intent to Stay in Job Survey "I frequently think of leaving this job" are presented in table 8. The decrease between the mean pretest scores (.6) and posttest (2.2) of 1.6 was not statistically significant, however the scores did decrease indicating lower agreement with the statement and therefore less frequent thoughts of leaving the job.

**Table 8**

*Intent to Stay in Job – I frequently think of leaving*



Frequently Think of Leaving
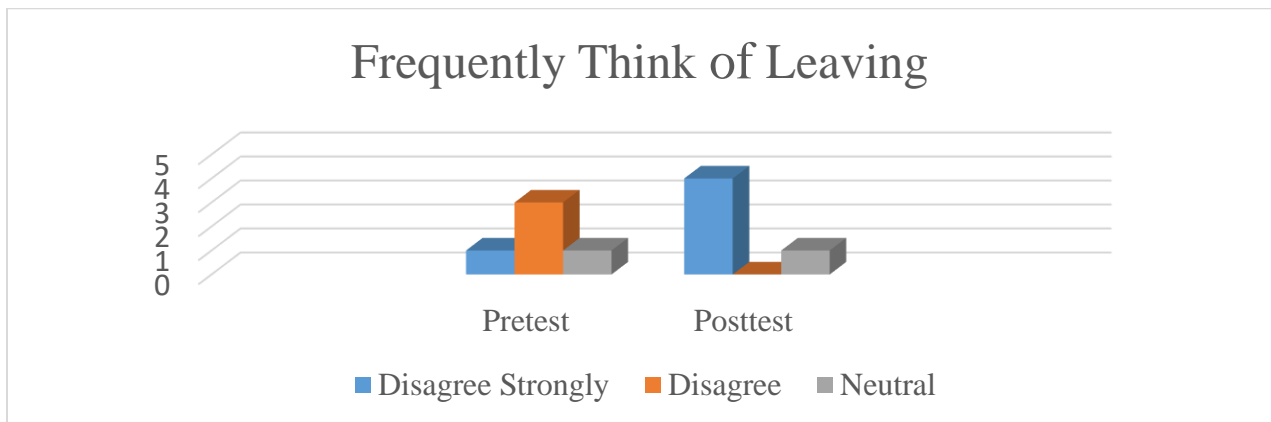
**Discussion**

**Summary**

The purpose of this project was to implement a mentor program in a long term acute care hospital. The specific outcome measures were to increase nurse satisfaction and intent to stay.

Satisfaction with Co-Workers, Satisfaction with Interaction Opportunities, and Satisfaction With Praise and Recognition as measured by the MMSS were clinically significant components of this mentor program as the mean scores increased with a large effect size calculated for each of the three subscales ($\eta$ = .59, .45, .14 respectively). However, Satisfaction with Control and Responsibility subscale mean scores decreased after the four-week period although the effect size was small ($\eta$ = .05). There were five questions associated with the Satisfaction with Control and Responsibility subscale: Control over what goes on in your work setting, opportunities for career advancement, your amount of responsibility, your control over work conditions, & participation in organizational decision making.

The decrease in mean score for this subscale is not surprising as newly hired RNs may not feel in control or responsible for decision making in the organization. They are newly hired RNs learning their role. ITS responses on the two questions found to be relevant to the project may provide insight as the project will continue within the organization. Agreement to "I am very satisfied with my job" decreased following the four-week mentor program. The literature supports measuring this change further into a mentor program at six months & one year giving individuals time to experience the mentor program and settle into their current position.

### Limitations

The limitations of the study can impact the findings and the interpretation. In this project the sample size of 5 participants was a factor. The sample size was small but it included the entire population of newly hired RNs within the agency. Additional limitations include self-reporting instruments and time frame were limitations to this project. A review of the literature did suggest a longer mentor program (Chen and Lou (2014).

**Funding**

Costs associated with the mentor program include labor costs for time spent at the welcome session and the scheduled time together for the mentor/mentee dyads during the program.  Most of the mentoring time occurred while on shift.  Some dollars under productivity time will be allocated for introductory meetings to the program.  The total time spent during the mentor program was a one-hour educational session for 10 participants (mentor and mentee) and four one-hour sessions for the same number of participants.  The average staff RN pay at this LTACH was $24/hr.  The total estimated at 10 hours over time for the mentor and mentee at the average pay would cost $240 (10 hours/participant).

In addition, the Clinical Educator will continue the mentor program.  The pay for Clinical Educator averages $40/hr. with a minimum of 20 hours spent on preparation for the mentor program.  The Clinical Educators time for preparation was estimated at $800 (20 hours' x $40/hr.).  The estimated cost of $800 for the mentor program is substantially less than the estimated $50,000 (AONE) cost of replacing one RN.

**Conclusions**

The administrative team at CCH were briefed on the findings of the mentor program. The purpose of this project was to implement a mentor program for newly hired RNs.  The overall response to the mentor program was positive from both mentors and mentees.  The outcome measures to increase nurse satisfaction and intent to stay demonstrated positive outcomes consistent with the review of the literature.  Semeachew, Belachew, Tesfaye, and Adinew, (2017) linked nurse satisfaction and intent to stay.  Burr, Stichler, and Poeltler (2011) and Chen & Lou (2014) found similar results with a cohort of RNs when a nurse mentor program was in place the nurse turnover rates decreased.  The actual cohort in this project will continue

with their mentor work in a less formal way.  The agency will adopt the Mentor Program as a

requirement for all newly hired RNs.

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