# **Regis University**

# ePublications at Regis University

Regis University Student Publications (comprehensive collection)

**Regis University Student Publications** 

Spring 2017

# Implementing a Residency Program to Affect Float Pool Nurse Retention Rates

Mandy Kautz

Follow this and additional works at: https://epublications.regis.edu/theses

# **Recommended Citation**

Kautz, Mandy, "Implementing a Residency Program to Affect Float Pool Nurse Retention Rates" (2017). *Regis University Student Publications (comprehensive collection).* 825. https://epublications.regis.edu/theses/825

This Thesis - Open Access is brought to you for free and open access by the Regis University Student Publications at ePublications at Regis University. It has been accepted for inclusion in Regis University Student Publications (comprehensive collection) by an authorized administrator of ePublications at Regis University. For more information, please contact epublications@regis.edu.

Implementing a Residency Program to Affect Float Pool Nurse Retention Rates

Mandy Kautz

Submitted to Alma Jackson PhD, RN as partial fulfillment for the Doctor of Nursing Practice Degree

**Regis University** 

April 28th, 2017

# Abstract

As new generations of fresh faced nursing graduates enter the workforce, they are faced with many difficult challenges. Any number of issues can influence nurses' intent to leave especially when coupled with a difficult department such as Float Pool. This project investigated a residency program within Float Pool with the goal of decreasing staff turnover while also decreasing costs associated with high turnover, increasing employee morale, and promoting efficiency with available resources. Using foundational theories such as Social Exchange, Nursing Intellectual Capital, and Dual Satisfaction, this project investigated turnover rates and changes in nurses perceived satisfaction using the Revised Nursing Work Index. A quasiexperimental pre-post design was used and turnover rates for Float Pool and the hospital were established prior to and after completion of five cohort groups each consisting of approximately 20 participants each. Surveys were disseminated prior to implementation and at set intervals after completion of the residency program. Data was analyzed using IBM SPSS software. Preliminary data analyses indicated a slight increase in Float Pool turnover, and a decrease in overall hospital turnover. These results indicated more staff leaving Float Pool, yet remaining within the facility. Recommendations arising from this project may include using Float Pool as the hiring unit for the hospital to help nurses find their niche earlier in their career. Further research is needed to determine if hiring newer graduates into Float Pool yields higher turnover rates than hiring more experienced nurses.

Keywords: DNP Project, Nursing Residency, Turnover Rates, Revised Nursing Work Index

ii

# Copyright

Copyright © 2017 Mandy Kautz. All rights reserved. No part of this work may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the author's prior written permission.

# Acknowledgement

I would like to acknowledge my dear family: my parents Gwen and Perry for instilling in me the value of education, my sisters: Megan, Monica, Melita, Marisa, Micaela, and Meranda, and my nieces and nephews: Tristan, Krista, Jayden, and Madison for all of their love and support over the many years this journey has taken. Also my wonderful husband Todd, for his unwavering support and putting up with a great many long nights of work. I also want to acknowledge my beautiful daughter Cora, whose birth blessed our lives during this journey through the DNP program, and provided the motivation to keep going. Lastly, I want to acknowledge my amazing mother-in-law Sandy, who dedicated so much of her own time to allow me to complete this program.

# **Executive Summary**

Implementing a Nurse Residency Program to Impact Retention Rates

#### Problem

The impetus for this project was the high annual turnover rate for RN's in the SJMC Float Pool (FP) department. At the beginning of the study, the annual turnover rate at SJMC exceeded both that of the state and nation. FP has historically been a very high stress environment for a number of reasons: it is the entry point for most new graduates in the county, cross-training and certification is required for a variety of departments, chronic short staffing practices, frequent float assignments, changing nature of departments, and the lack of managerial/leadership support for float pool personnel. These identified causes among others have contributed to low retention rates and high turnover within the department. The PICO statement for this project is: will implementing a new hire residency program, as compared to no residency program, increase float pool nurse retention and decrease float pool turnover rates?

#### Purpose

The purpose of this study was to explore a possible evidence-based solution to resolve the identified issue of low retention rates within the facility Float Pool department.

#### Goal

The overall goal of this intervention was to increase the FP staff perception of support and morale as well as decrease the amount of turnover experienced by this department.

#### Objective

The overall objective is to provide a supportive learning environment for new hires transitioning to the work environment in FP to decrease staff turnover and increase staff retention and staff satisfaction.

#### Plan

Completion of a literature search and identification of foundational theories followed by detailed planning of the program: duration, content, handouts, supporting documents, course itinerary, survey instrument, recruiting methods, and procurement of resources.

#### **Outcomes/Results**

Preliminary results indicate that the overall FP turnover rate has increased slightly, while the overall facility turnover rate has decreased. This indicates that more FP staff are leaving FP and finding "unit homes" within the facility rather than leaving the facility entirely. FP staff reports of support, morale, and intent to stay thus far have increased dramatically.

# **Table of Contents**

Titlei
Abstractii
Copyright pageiii
Acknowledgements iv
Executive Summary v
Table of Contents vi
List of Tables ix
List of Appendicesx
Problem Recognition/Definition1
Problem Statement1
Project Purpose and PICO 2
Project Significance/Scope 3
Relation to DNP Role4
Foundational Theories
Nursing Intellectual Capital Theory Description
Theory Analysis
Theory Evaluation7
Theory of Social Exchange Description
Theory Analysis
Theory Evaluation
Herzberg's Dual Satisfaction Theory Description10

Theory Analysis	
Theory Evaluation	
Theory Rationale	
Literature Search/Selection	
Scope of Evidence	
Systematic Literature Review	
Project Plan and Evaluation	
Market/Risk/SWOT Analysis	
Force Field Analysis	
Need/Resources/Sustainability	
Feasibility/Risks/Unintended Cons	equences24
Protection of Human Subjects	
Stakeholders/Project Team	
Cost Benefit Analysis	
Mission/Vision/Goals	
Project Objectives	
Methodology/Evaluation Plan	
Research Design	
Population and Sample	
Logic Model	
Data Analysis, Instrument Validity	and Reliability34
Timeline	
Budget and Required Resources	

Project Findings/Results	38
Objectives	38
Statistical Analysis	39
Results Discussion	42
Limitations, Recommendations, Implications for Change	42
Conclusion	43
References	57

# List of Tables

Table 1. Literature Search Results	14
Table 2. Scope of Evidence	15
Table 3. Mean Pre/Post Survey Responses	39
Table 4. Negative Rank Questions	40

# List of Appendices

Appendix A. SWOT Analysis
Appendix B. CITI Training Report45
Appendix C. Logic Model46
Appendix D. Revised Nursing Work Index47
Appendix E. Timeline
Appendix F. Descriptive Analysis
Appendix G. Conceptual Model
Appendix H. Budget and Resources
Appendix I. IRB Approval Letter
Appendix J. Agency Support Letter

Implementing a Residency Program to affect Float Pool Nurse Retention Rates

As acute care facilities nationwide prepare to face the threat of nursing shortages, a closer look is warranted into methods to retain the nurses these facilities already employ. As generations of experienced nurses prepare to retire, a new generation will enter the nursing world full of knowledge, but often times lacking real world experience. Efforts to retain the nurses already employed will be vital to ensure the viability of each health care facility. The annual turnover rate for registered nurses in general...in hospitals is as high as 14%, according to the American Association of Colleges of Nursing (Rosseter, 2014). At this large urban medical Center (SJMC), the Float Pool turnover rate was topping 17%, whereas the overall hospital turnover rate was at 19%, both notably higher than the national average. Increases in vacancies, subsequent short staffing practices, greater job dissatisfaction and emotional exhaustion can all be contributing factors to higher turnover rates experienced by nurses today (Rosseter, 2014). The purpose of this paper is to provide a closer look into one possible solution to solve the nursing turnover issue; implementation of a nurse residency program and its subsequent impact on Float Pool nurse retention rates.

#### **Problem Recognition/Definition**

# **Problem Statement**

The problem that was investigated throughout this capstone proposal is centered around one practice disparity; the retention rate of new RN hires into an acute care facility's Float Pool department. The site facility is a 400 bed acute care site facility which is home to four specialty adult ICU's (including a surgical ICU, a respiratory ICU, a cardiac ICU, a stroke ICU, and a neonatal ICU), two medical surgical wards, six telemetry wards, a

1

pediatrics unit, emergency department, a cardiac catheterization lab, four operating rooms (including a hybrid suite operating room), and maternity service lines (including labor and delivery and post partum units). The hospital is also currently undergoing expansion of their Emergency Department, Maternity Department, Catheterization Lab, and Surgical areas. The Float Pool (FP) department maintains approximately 150 staff members, with the majority being registered nurses but also including LVN's and secretaries. By nature, the FP is the largest department within this facility. Nurses within FP are cross-trained and certified in a variety of specialties in order to allow for the floating to any departments in need of staffing. FP staff must possess the same certifications as regular staff within those units (I.e. ACLS, PALS, NRP, Chemo, etc). Possessing an internal float department negates the need for traveler or registry staff, and eliminates the risk to patient care as opposed to allowing short staffing to occur. The schedules of the FP staff fluctuate daily, and often times multiple times during a shift depending on the needs of any given department.

#### **Project Purpose and PICO**

The purpose and rationale behind selecting this practice disparity was due to the multilayered problem it presents. FP traditionally has been the entry point for the majority of newly graduated RN's within this west coast county. Minimal requirements to be eligible for hire in FP include an active nursing license, associate or higher nursing degree, and ability to read/write/speak English. Unlike many of the surrounding acute care facilities; no experience is required for consideration. Due to staffing demands and the high rate of turnover, new graduates are eligible for hire to fill the numerous vacancies. Due to size of the FP department and therefore its ability to hire a larger than average number of staff, a plentitude of newly graduated RN's are eligible for hire annually. This hiring practice places these vulnerable new graduates in

a highly stressful environment with little to no preparation for what they are to face, especially during the initial orientation period (Kautz, 2015). Reliance on poorly executed new hire orientation programs are typically associated with "increased turnover, nursing dissatisfaction, lack of confidence, poor skill performance, and decreased patient care and safety" (Zigmont et al., 2015, p. 80), which in turn will affect nurse turnover and retention rates. The impact of low retention rates are apparent in a variety of nursing outcomes, including nursing staff morale and productivity yet also in the continuity of patient care as well as the perception of care, regardless of the actual quality of care. With recent focused efforts on patient satisfaction and satisfaction scores, and their subsequent effect on reimbursement values or imposed penalties, this is one area that cannot be ignored and therefore is one of the driving forces behind the selection of this practice disparity. Using a PICO format the research question was as follows: for new hire RN's into the site facility's Float Pool department, will implementing a new hire residency program, as compared to no residency program, increase Float Pool nurse retention and decrease Float Pool turnover rates?

# **Project Significance/Scope**

Preliminary reviews of turnover rates indicate that nursing retention is an issue at SJMC for both the entire facility and more specifically for the FP department. The amount of potential staff being lost annually coupled with the financial impact high turnover brings with it makes this problem significant. As previously outlined, hiring new graduates into the facilities FP department places a number of vulnerable new graduates in a high stress environment, often with little to no support to aid them in being successful. The nature of this problem, coupled with the facilities current rates of turnover, which ranked high above those of the national averages, create quite a significant problem for SJMC. Upon completing a review of evidence based literature,

which will be outlined in later sections, favorable outcomes have been achieved in terms of nursing retention when new hires experience ongoing support such as that with a nurse residency program. These types of residency programs have been used successfully in other disciplines. This project will help to explore its usefulness in the nursing field. The successful completion of this project is anticipated to yield a plethora of solutions; providing the new hire nurses with the support system they so desperately need when entering the Float Pool department, as well as decreasing the rates of turnover while increasing retention rates, and lastly to help contain costs associated with replacing and orienting new staff. In terms of scope, this project was a pilot program, conducted at this medical center, and will consist of 8-week long cohort groups.

#### **Relation to DNP Role**

In terms of the relation of this project and how it fits in alignment with the Doctorate of Nursing Practice (DNP) role, the American Association of Colleges of Nursing, AACN, (2004) published the recommendation within its Position Statement on the Practice Doctorate in Nursing for the DNP prepared nurse to fill the role of nurse educator. Although the AACN Essentials do not directly address an established role of nurse educator, the competencies within each Essential are relevant to the nurse educator role. The AACN Essentials introduction states, "DNP graduates will seek to fill roles as educators and will use their considerable practice expertise to educate the next generation of nurses" (AACN, 2004). The entire premise of this project rests on the ability to support and educate the new hire nurses into this facility. According to Chism, "the initiatives set forth by the Institute of Medicine and the National Research Council call for nursing education that prepares individuals for interdisciplinary practice, information systems, quality improvement, and patient safety expertise" (Chism, 2013, p. 159). Implementing and educating within the context of a nurse residency program would accomplish just that.

# **Foundational Theories**

# **Nursing Intellectual Capital Theory Description**

Prior to conducting a systematic literature review, several theories were readily identified to provide an organizing framework for this practice problem statement. The first theoretical framework to be explored is Covell and Sidani's (2013) Nursing Intellectual Capital Theory. This theory can be described as an explanatory theory, offering insight and understanding into conditions that have the potential to affect both patient and organizational outcomes, such as nurse retention and turnover rates. It also aids to explain the complex relationship between work environment and nursing knowledge, skills, and experiences. The scope of this theory is middle range level due to the limited number of concepts it possesses as well as its ability to theoretically and operationally defines those concepts. This theory originated in fields outside of nursing, specifically economics and accounting, fields in which intellectual capital is not a foreign concept. The first emergence of this theory in nursing occurred in 2008 (Covell, 2008). Major concepts identified by Covell (2008) included human capital, structural capital, relational capital, performance outcomes, social capital, human capital investment, and human capital depletion. Covell (2008) then identified four major theoretical propositions within this theory. First, nurse staffing is directly associated with nursing human capital. Second, the organizations support for nursing professional development is also directly associated with nursing human capital. Third, nursing human capital is directly associated with patient outcomes as well as organizational outcomes such as nursing retention and turnover rates. Fourth, nursing structural capital is directly associated with patient outcomes (Covell, 2008, p. 4). The theorists do not state major assumptions, however, the context for use is included in evaluating the contribution of nursing knowledge, skills, and experience on patient and organizational outcomes.

# **Theory Analysis**

All concepts are both theoretically and operationally defined within this theory. Covell (2008) defines human capital as the organizations intangible assets of knowledge, skills, and experiences of employees. Structural capital is defined as knowledge that has the ability to be stored in the organization's structures, systems, databases, routines, or technology (Covell, 2008, p. 4). Relational capital is defined as knowledge embedded in relationships within the organization (Covell, 2008, p.4). Performance outcomes are defined as the end results that become enhanced secondary to investments in human capital (Covell, 2008). Social capital is defined as the resources that are available within the relationships between an individual and a social unit within the organization (Covell, 2008). Human capital investment is defined as the organizations support for the development of an individual's human capital (Covell, 2008). Lastly, human capital depletion is defined as the loss of human capital experienced whenever an individual leaves the organization as demonstrated in turnover. Linkages made within this theory are explicit such as the link between reducing turnover and retention rates, placing emphasis on developing key employees, and thereby positively influencing the organizations performance outcomes. This theory is very logically organized starting with theoretical and operational definitions of the broadest concepts to the more narrow concepts, this theory is also accompanied by a diagram to help clarify the theory and aide to explain the interrelationships between each concept and the bearing it then has on both patient and organizational outcomes. Each concept is used with consistency throughout the theory. Outcomes are also stated within this theory. Outcomes related to patients include the provision of high quality and safe patient care whereas outcomes related to the organizations performance include recruitment and retention of nurses (Covell, 2008).

# **Theory Evaluation**

Although relatively new in the theory realm, the theory of Nursing Intellectual Capital is in congruence with current nursing standards as well as with current nursing interventions and therapeutics as evidenced by literature search associations between nurse staffing and patient care initiatives, however, further research is needed to evaluate the effects of nurse staffing on the use of human capital. This theory does appear to be accurate and valid. Although this theory appears to have much use in the healthcare setting, more research is needed into the role of human capital for nurses outside of bedside practice; for example, advanced practice nurses, public health nurses, and academia (Covell and Sidani, 2013). This theory has not been tested in these "subcategories" of nursing. This theory has the potential to be applicable to a variety of social settings, for inpatient and outpatient care as well as applicability and relevance cross culturally. Again, more research will be needed into healthcare settings that differ drastically from the traditional "westernized" healthcare structure. This theory contributes much to the discipline of nursing especially in terms of nurse recruitment and retention which in turn impacts patient care and outcomes as well as organizational and performance outcomes. The implications for nursing practice related to implementation of this theory include aiming recruitment efforts to those nurses with a university degree, specialty certification, and experience (Covell and Sidani, 2013). Hospitals can attempt to reimburse for those nurses who opt to advance their academic education or provide scheduling breaks for those nurses who are in the process of advancing their education. Organizations can opt to provide pathways and courses to allow for specialty certification obtainment such as by absorbing the fees associated with such certification. Other implications for practice include investing in professional development for nurses in order to reduce nurse turnover rates as well as providing in-service education programs, workshops, and

conferences (Covell and Sidani, 2013). Obtaining and implementing continuing education or professional development programs with input from the nurses who will be utilizing such programs would be beneficial to the organization in an effort to reduce turnover rates.

# **Theory of Social Exchange Description**

The second theory explored as a theoretical framework for this practice disparity is the Theory of Social Exchange. The purpose of this theory is also explanatory in nature. Its purpose is to understand the relationship between the individual and the organization, as well as to understand attitudes and behaviors within an organization (Trybou et al, 2014). The scope of this theory is also middle-range, with a limited number of concepts and the existence of theoretical and operational definitions for each. Similar to the first theory explored, this theory also originated outside of the field of nursing. This particular theory originated in the field of psychology, but was later applied to the field of management. Major concepts identified within this theory are perceived organizational support, leader-member exchange, and psychological contract breach (Trybou et al., 2014). There are four major theoretical propositions included in this theory. According to Dulac (as cited in Trybout et al., 2014) relational, cognitive, and affective processes will influence intra-organizational activity. The second proposition is that organizational behavior is a direct result of social exchange processes within an organization (Trybou et al., 2014). The third theoretical proposition is the norm of reciprocity, described by Coyle-Shapiro (as cited in Trybout et a., 2014) wherein people respond positively to positive actions and negatively to negative actions. The fourth and final proposition is that employees will aim to enter and maintain fair and balanced exchange relationships with their organization (Trybou et al, 2014, p. 565). Only one major assumption is outlined in the Social Exchange Theory and this assumption is based off of the norm of reciprocity, that employees will have a

tendency to reciprocate beneficial treatment with positive behavior but will also reciprocate negative treatment with negative behavior (Trybou et al., 2014, p. 564). The context for use of this theory centers on the organizations ability to recruit, retain, and continue to motivate nurses.

# **Theory Analysis**

Concepts presented within this theory are theoretically and operationally defined. For instance Eisenberger (as cited in Trybou et al., 2014, p. 565) defined perceived organizational support as the "belief concerning the extent to which an organization values the employee's contributions and/or well-being." Leader member exchange is defined as the quality of the relationship between an employee and their immediate supervisor (Trybou et al., 2014). Psychological contract breach is defined when an employee perceives a discrepancy between the mutual obligations they felt "promised" with employment versus what obligations they are actually receiving. Linkages within this theory are explicit and revolve around the relationship between each of the concepts, perceived organizational support, leader-member exchange, and psychological contract breach, and the relation those concepts have to job satisfaction and nursing retention. This particular theory appears to be logically organized and flows in a predictive manner, it is also accompanied by a model to demonstrate the relationships between each of the three concepts and the impact they have on retention outcomes, job satisfaction, trust, and turnover intentions (Trybou et a., 2014, p. 565). Each of the concepts presented in social exchange are used with consistency throughout the theory, and lead to the explicit statement of its impact on the outline outcomes.

#### **Theory Evaluation**

In evaluation of this theory, it appears to be quite congruent with current nursing standards as well as a valid theory both in and out of the nursing world. This theory has been tested empirically, mostly though descriptive studies (Trybou et al., 2014), however its use by nurse educators, researchers, and administrators has not been fully studied. The theory of social exchange appears to have extensive applicability to a variety of social and cultural settings, partly due to the nature of social exchanges overall no matter what cultural or social settings individuals exist in. However, further research is needed in this realm to determine the exact applicability to alternate cultures and ethnic groups. The implications this theory has for nursing are vast. Every employee regardless of position enters into social exchanges on a daily basis. Evaluating and appealing to the foundation of these exchanges stands to positively affect perceived job satisfaction and subsequently nursing turnover.

# Herzberg's Dual Satisfaction Theory Description

The third and final theory to be evaluated as a theoretical framework is that of Herzberg's dual satisfaction theory. The purpose of this theory is to explain the relation between job satisfaction/dissatisfaction and the different work factors that contribute to each. The scope of this theory would best be described as middle range theory. It contains a limited number of concepts and definitions for each. This theory originated in the field of psychology and was first published in 1959 to explain the role of job satisfaction in engineers, scientists, and accountants (Bockman, 1971). Herzberg's theory contains several major concepts. These concepts include motivators, satisfier factors, dissatisfier factors, hygiene factors, treatment factors, and frequency. There are several major theoretical propositions contained within Herzberg's theory. One proposition is that job satisfaction or dissatisfaction are shaped by different work factors. A second proposition is that motivators can fill an employee's need for growth whereas hygiene factors will help an employee to avoid discomfort/unpleasantness (Herzberg, 1974). Another proposition within this theory is that each hygiene factor is equally weighted. The last major

theoretical proposition is that the end goal of the motivators is personal growth. Herzberg does not explicitly state assumptions, however, there are two major implied assumptions. The first of these two is that if satisfiers are present in an organization in any moderate amount they will bring about work motivation (Herzberg, 1974). The second major implied assumption is that discrepancies in the theoretical profile can occur due to individual differences in motivation (Herzberg, 1974).

# **Theory Analysis**

Each concept presented in the dual motivator theory is both operationally and theoretically defined by Herzberg. Satisfiers, or motivators, are defined as those factors embedded in the content of an employee's work achievement, recognition, pay, interesting work, good working conditions, increased responsibility, growth, and advancement (Herzberg, 1974, p. 19). The motivators are also defined as intrinsic factors, related to the job itself. Dissatisfiers, or hygiene factors, are defined as those factors that are attributed to how employees are treated; for example, policy/procedure and administrative practices, supervision, interpersonal relationships, working conditions, salary, status, and security (Herzberg, 1974, p.19). The hygiene factors are also defined as extrinsic factors, those that related more to the job environment. Herzberg also defines job satisfaction as the total feelings that employees have regarding their job; these feelings are comprised of both job and environmentally related factors. As an employee experiences deprivation of motivators or excess of hygiene factors they move toward either end of a continuum. However, an employee can exist on the continuum in a neutral state experiencing neither job satisfaction nor job dissatisfaction. Herzberg's theory outlines the linkages between motivators, hygiene factors, and their relationship to job satisfaction or dissatisfaction quite well. Herzberg's theory is very logically organized and does include a model to aide with clarification of the theory. This model aids to clarify this theory when used as a complement to the theory, however without explanation of the model, clarification cannot be achieved. All of the statements and concepts used by Herzberg in this theory are used consistently but also interchangeably. Multiple terms are used to convey the same concept. For example, motivators, satisfiers, intrinsic factors, and treatment factors are all used consistently but also interchangeably.

# **Theory Evaluation**

In evaluation of Herzberg's theory, this theory is both congruent with current nursing standards as well as with current nursing management interventions. This theory has undergone extensive duplication research, after its initial empirical testing. However, there have been reported discrepancies between research methods when utilizing this theory and as Bockman (1971) termed it, even sparked the "Herzberg Controversy" (p. 155). According to Bockman (1971) this controversy appeared to be more in relation to different measurement methods and not so much the theory itself, therefore this theory still appears to demonstrate accuracy and validity. The potential for use by nurse educators, administrators, and managers exists, however, there does not seem to be much evidence that has been in use by such entities. This theory does demonstrate relevance socially and cross culturally and will definitely contribute to the discipline of nursing. The implications for nursing related to this theory involve its application. Another implication could be in relation to developing processes that appeal to the motivator-oriented employees and thereby increase levels of reported job satisfaction.

# **Theory Rationale**

The rationale for how these three monumental theories have the potential to serve as the theoretical framework for this problem statement lie in their focus around job satisfaction. As evident in the literature review nursing retention and turnover rates are closely related to job satisfaction. Identifying the factors related to job satisfaction as well as factors related to the relationship a nurse has to their job, supervisor, and organization is a key step before investigating or implementing potential solutions geared at improving retention rates. All three theories identified potential frameworks for creating satisfying work environments and relationships. It is from these frameworks that interventions can grow and stand the best possible chance to improve nursing morale, stress, patient care, and thereby improve nursing retention rates.

# Literature Search/Selection

To gain further insight into the problem identified here, a comprehensive literature review was carried out using the Regis University library search databases of Academic Search Premier, MEDLINE, PsycINFO, ERIC, PubMed, and Business Source Complete. The keywords used for this search included nurse retention, new registered nurses, new graduates, residency program, nurse turnover, nurse retention rate, recruitment, intent to leave, and intent to quit (Kautz, 2015). The total number of articles yielded from this search was 4,185. The results from the literature search are show in Table 1.

Table 1	
Literature Search Results	
Key Search Terms	Articles Yielded
Nurse Retention	1,577
New RN's	822
New graduates	471
Residency program	764
Nurse turnover	158
Nurse retention rate	55
Intent to leave	81
Intent to quit	37
Nurse recruitment	220

The original search was narrowed down by inclusion and exclusion criteria and ultimately yielded 763 articles. 86 of these were reviewed and 39 total articles included in the systematic review. Inclusion criteria included recent articles, within ten years, written in English, defined by acute care facilities and new hire residencies, and conducted within the United States. Exclusion criteria included those with participants with more than six-months of nursing experience.

# **Scope of Evidence**

The scope of evidence for each of the included articles can be found in Table 2.

neout-
Years
08-2016
0-2016
1-2014
0, 2014
4, 2015
9-2015
0

# Systematic Literature Review

At the conclusion of the literature review one major theme had appeared from many of the sources; the retention rate for staff nurses was inversely related to their perceived level of job satisfaction. The perceived levels of job dissatisfaction and their subsequent effects on turnover was discovered by Hayes et al (2005) to be related to the following factors: work stress, short staffing practices, management leadership styles, supervisor-employee relations, presence of advancement opportunities, and inflexible administrative procedures and policies. Hayes et al (2010) identified that dissatisfaction was correlated to differing issues including: autonomy, commitment, recognition, routine practices, communication with peers, age, education, years of experience, fairness, locus of control, and profession practices. One systematic review by Chan et al (2012) elicited the idea that the general level of job satisfaction greatly influenced their tendency to leave. This review also demonstrated that job satisfaction was deeply rooted in associated pay levels, workload, and the satisfaction with supervisors or management and with the organization (Chan et al., 2012). The systematic review by Hayes et al (2010) indicated that dissatisfaction with the supervisor or manager and/or with the organization as a whole could be traced to a deficiency in the amount of recognition of work accomplishments, lack of adequate communication, supervisor's absence especially when difficult clinical events arose, an indifference to the personal needs of staff, presence of excessive employee criticism, and a perceived lack of conflict resolution. Hayes et al (2010) also determined that in facilities with lower rates of retention and higher turnover, the presence of a continuous progressive cycle of dissatisfaction; low retention rates contributed to greater increases in short staffing, as well as increases in workload for the remaining employees, creation of undesirable shifts for remaining employees, increased overtime as a result of short staffing, increased orientation and recruitment costs to replace vacated positions, all leading up to higher levels of job dissatisfaction for remaining employees and therefore more turnover and lower retention rates. Conversely, the review by Hayes et al (2010) indicated that job satisfaction was highly subjective and also varied across time. Hayes et al (2010) also determined that a nurse's personal characteristics, attitudes,

and individual behaviors were all factors that could influence job satisfaction.

Another impression that was apparent after a comprehensive literature review was that of a nurse's individual perception of job satisfaction. Nurse's perceived job satisfaction was established to be inextricably linked to overall life satisfaction (Hayes et al., 2010). Life satisfaction was defined by how nurses perceived that both their physical and psychological needs were being met outside of the work environment. The reviews indicated that job and life satisfaction were both higher in nurses who had devoted the bulk of their nursing career to a single unit as well as in those nurses who described the presence of "friends at work" (Hayes et al, 2010, p. 808). This situation is quite the opposite of what Float Pool nurses typically experience: no set unit, and lack of ability to get acquainted with work mates. Nurses who indicated the presence of effective coping strategies, such as affectivity, behavioral disengagement, and positive reframing also reported higher levels of job satisfaction (Hayes et al., 2010). In reviewing the work of Chan et al. (2012) a singular element emerged, the presence of an ethical climate and its contribution to higher level of job satisfaction. Nurses that had obtained or been exposed to an education on ethics, and subsequently utilized and relied on ethics in the workplace were more apt to remain in their positions, and less likely to indicate an intent to leave, than nurse's who reported no such exposure (Chan et al., 2012).

A final conclusion according to Hayes et al (2005) was that the single greatest predictor of nursing turnover was if he/she has expressed an overt intent to quit. Hayes et al., (2005) expressed that there were intricate individual, organizational, and economic factors that ultimately contributed an influence on a nurse's intent to leave. This same review introduced the concept of "push versus pull" to define a nurse's intent to leave. The "push" factors were found to be grounded in the nurse's "careeristic attitude to work" (p. 239), and encompassed feelings

such as the fear of unemployment or a loss of salaries and/or benefits, or loss of vacation and/or compensation payouts. The opposing "pull" factors were routed in the perceived advantages offered by the organization, and encompassed concepts such as career advancement or future aspirations (Hayes et al., 2005). On the other hand, Chan et al (2012) revealed that burnout was cited as the most common cause preceding the expressed overt intent to leave.

At the completion of this literature review many gaps in knowledge remained. One area identified as inconsistent in all three systematic reviews was in the maintenance of turnover records. The inconsistent record keeping can significantly affect the ability to compare, contrast, or generalize findings from the research studies into practice (Hayes et al., 2005). Another gap identified existed in the differing measurement instruments to capture nurse job satisfaction and dissatisfaction rates (Hayes et al., 2010). Additional elements that can affect the generalizability of these findings are the variety of practice arenas. A majority of the literature reviewed focused only on acute care organizations, excluding rural healthcare systems, private practices, school nurse clinics, or outpatient clinics. Neither did the literature explore the setting, size, structure, or the funding status of each of the organizations included. Additionally, these findings were not explored on an international level, meaning the job satisfaction/dissatisfaction levels of nonwesternized health systems has not been incorporated and therefore is not generalizable at this time. Of interest, one finding warranting further exploration was in regards to in unionization of the hospital system and the associated pay increases and the subsequent effect this played on nurse's reported job satisfaction (Hayes et al., 2010). Gaps were also apparent in the literature in terms of gender, cultural, or generational differences of the nurse's expressing either an intent to stay or leave and the role each of these and other socio-demographic features might exert on both job satisfaction and retention rates.

In certain instances nurse turnover can be advantageous to an organization. For example, in an instance where the organization may benefit financially due to decreased salaries, (as a result of less experienced or educated nurses warranted less pay) on decreased benefits (by eliminating full time positions and substituting with part time or per diem positions), vacation/compensation time (which may not have accrued to a substantial amount for newer nurses) but yet still desires an increase in productivity; however, lower retention rates as a whole still stand to cause an undisputed negative impact on the organizations ability to adequately provide for patient care needs as well as in its provision of high quality, standardized care (Hayes et al., 2005). Lower retention rates are routinely found to negatively impact staff morale and productivity and directly contributes ultimately to an environment plagued with adverse patient outcomes and further increases in staff turnover.

# **Project Plan and Evaluation**

#### Market/Risk/SWOT Analysis

In order to evaluate the feasibility and potential success of such a project, a SWOT analysis is beneficial (see Appendix A). Strengths associated with this project include offering a very stable and consistent social support system via instructors, classmates, and coworkers as they meet each week during the residency program. New hires into the residency program will be provided with a "safe" forum in which to discuss and address their concerns and the issues they are encountering while working on the floors, which serves a twofold purpose; first to convey accurate information and practices to these new hires, and second for leaders to become acquainted with the issues encountered by staff on the floors. Strengths of implementing this program in the Float Pool department include the flexibility of scheduling to allow for course attendance. Successful completion of the residency program may also provide new hires with the

ability to avoid burnout, and provide an increase in employee satisfaction. Strengths also include the number and positions of stakeholders; from the top Chief Nursing Executive, to several directors, and multiple Clinical Nurse Specialists (CNS's). These CNS's have availability built into their job duties and descriptions to be able to assist with program implementation and instruction. Strengths are not only limited to the participating nurses, but are also found on behalf of the institutions. One such institutional strength includes the financial component it stands to gain by decreasing turnover and increasing nurse retention.

This project, however, is not without its own fair share of associated weaknesses. One such weakness identified with this project is the associated costs for offering the residency program. Costs come in the form of instructor wages to conduct the program, materials required to carry out the course, and the wages incurred for each participant attending the residency instead of participating in orientation on the units. A second weakness identified in this project comes in the form of productivity of the instructors involved. The residency program will be instructed only with the currently employed instructors on hand. This means each instructor will be completing on average one less day of "regular" work due to the residency program. Due to the limited number of instructors available, this also means that scheduled meetings, personal time off, and vacations may be difficult to plan/navigate during the course of the residency program. Additional weaknesses include the needs of units requiring staffing will limit the amount of time for participants in the program as well as the location/occupancy of IT rooms. The largest IT room on site hold 20 participants, therefore the potential to grow this program is limited to this number at this time. Another weakness is the amount of time needed to be invested before significance might be noted, especially in terms of employee morale and satisfaction. The last weakness to be noted in this analyses is the required attendance throughout the duration of the program; the program does not account for missed days due to vacation or sick occurrences on behalf of participants.

In light of the weaknesses associated with this project, there are a number of opportunities available to counter. One such opportunity comes in the number of staff that can potentially attend/participate in the residency program. Since Float Pool staff are not initially counted in staffing (until department staffing counts determine they are short), all of the new hires nurses can potentially be prescheduled for the residency program, since it will not take away from the staff on the floor. A second opportunity is found in the recent expansion efforts of the chosen facility. Expansion is occurring in the emergency department, maternity/child service line, catheterization lab, and surgical suites. These expansion efforts will require an even greater number of hired staff, both to those select departments as well as in Float Pool. This provides a great opportunity for the residency program to grow outside of Float Pool as well. Another opportunity is the increased national attention on residencies for nurses as opposed to residencies in place for physicians and pharmacists and other clinical areas. A fourth opportunity for such a project includes the lack of any previously used residency program at the identified setting. This opportunity allows for a blank slate from which to build and develop this program. A fourth and final opportunity is in the rates of turnover currently. With high initial rates of turnover, there really is no place to go but down the path of improvement such as through a residency program.

Although the opportunities available are very promising, the threats to projects are not lacking. One initial threat is from already existing residency programs used in other facilities in and around the county. These existing programs have built a well-developed reputation for success, have stood the test of time, and may be difficult to compete with, especially considering the great outcomes they have procured at other area hospitals. Another threat to this project may

21

be in the attitudes of the participants themselves. Since the program will require attendance at all sessions of the residency program, some participants may feel as though "forced" to attend. Requiring enrollment in the residency program upon hire may also contribute to the shared feelings/attitudes/beliefs of the participants, in a negative manner, and may impact their ability to understand or appreciate the takeaway values of the residency program itself. An additional threat to this project is the high turnover rates, which may affect the number of participants; participants may choose to withdraw and leave the facility during the program itself. Successful programs, therefore making it somewhat difficult to implement. A final threat apparent is the limited space available at the facility in which to host the residency program. The program will require use of technology components (i.e. computers) for some portions of the training, but without adequate numbers of computers, this will affect the number of participants allotted for each cohort group.

#### **Force Field Analysis**

In analyzing the forces for change in regards to implementing a residency program, the driving or sustaining forces includes the need to be fiscally responsible considering the current financial status of the facility. The high rate of turnover at the facility contributes to increased costs related to orientation and preparation of new hires, costing the facility hundreds of thousands annually. The need to contain costs wherever possible is one of the largest driving forces in implementing this change. Another driving force is that of the possibility for increased staff morale, satisfaction, and therefore patient satisfaction as well. With a greater focus on patient satisfaction in recent years, there has also been an associated focus in some healthcare systems on employee satisfaction as well. With a newer generation of employees joining the

workforce, employees come to the facility with an expectation of some type of support system to help integrate them to the work environment. Implementing a nurse residency program may have a direct impact on improving such employee satisfaction scores in future years. With an increase in retention, the potential to decrease costs is paramount. With the issue of retention resolved, hospital resources can be freed up to focus on other more dire initiatives.

In contrast to the driving/sustaining forces there also exists restraining forces, or forces which prohibit or impede the planned change. In analyzing the restraining forces apparent for the proposed change of a new hire nurse residency program, these forces may include the resistance of staff both already employed and the new hires. Staff already employed may not place much stock in the residency program especially at its initiation, considering that short staffing can be a chronic issue and new staff is needed immediately. Accounting for time spent in the residency program means that short staffing issues will not be alleviated quickly. Time spent in the program will also prolong the amount of time spent during the orientation period. The amount of effort and commitment required from both participants and instructors can also be a restraining force. Committing to several months of participation or instruction is a great endeavor, and may be difficult to manage for new hires undergoing such intense changes in light of their new career positions already. Another restraining force comes in the form of the capital required to implement the residency program. Budgets are completed departmentally annually, and without the costs of the residency program factored in to the department budget, this may contribute to resistance on behalf of leadership when implementing.

# Need/Resources/Sustainability

The need for this project is to address the high turnover rates for new hires, especially within the Float Pool department. With such high rates, higher than the national averages, this is

23

one area that requires addressing in order to be fiscally responsible on behalf of the hospital. Ultimately a successful residency program should not only decrease turnover but also will save financially and will serve to improve patient safety and quality of care.

The resources required for this project include the staff involved to instruct and implement the program. This includes CNS's, clinical educators, hiring managers, and staff to participate. Additional resources include adequate facility space in which to hold instruction. As previously mentioned IT rooms only hold 20 participants, but room bookings are often completed up to a year in advance, meaning that if rooms may potentially be booked for other functions. Access is required for the online facility program and IT technology in order to further the knowledge of participants. Programs include the online reporting system, electronic health records, policies and procedures, dietary management, and physician access systems. Resources needed will also include teaching materials in the form of participant booklets and handouts.

This program demonstrates incredible sustainability in that the program can be incorporated into existing job duties for not only the Education department supervisor but also the CNS's and clinical educators. Along the same lines, the nursing education budget can be accommodated annually in future years to account for the costs of the program, as well as should the program grow beyond Float Pool.

#### Feasibility/Risks/Unintended Consequences

With the current resources available to implement this program in terms of clinical staff, stakeholders, materials, scheduling, and locations this program is deemed feasible as is. However, should the program continue to be utilized in future years, accommodations would be required to the Education budget in order to maintain the program. Risks to the participants are minimal in nature but included risk of overtime, stress, anxiety and effort to complete the program. No special benefits were guaranteed in exchange for participation.

# **Protection of Human Subjects**

Prior to implementation of this project, the aspect of human subject protection warranted addressing. Training to ensure protection of human rights was completed as required (See Appendix B). In the realm of nursing, patient rights are not a new concept. Nursing students and new graduates are programmed to consider and abide by the rights of patients in regards to the ethical principles of autonomy, beneficence, and justice. However, when the focus moves from the world to nursing to the world of research, this process then becomes the crux of sound research and the subsequent influence it has on evidence based practice and clinical guidelines. Interestingly, although the last few centuries have given rise to incredible medical and scientific advancements secondary to research, the crucial role of ethics in research has not garnered the spotlight until after World War II (Terry, 2015, p 62).

As Terry alludes to in her work, although the ethical principles of autonomy, justice, and beneficence are necessary to guide the practice of research, other important principles include that of informed consent, confidentiality, HIPAA, and the IRB (Terry, 2015). In terms of the impact each of these has on the proposed outcomes research project, informed consent was obtained from each individual recruited for participation in the research project, although as Terry (2015) points out according to the Code of Federal Regulations it does not require written consent for surveys (unless that information is collected and stored in such a manner that will identify participants). However, there was no difficulty in obtaining such informed consent from participants. Participation was voluntary and the subjects were free to withdraw at any time,

# FLOAT POOL NURSE RETENTION

participants received information about the research upfront and were allowed to ask questions throughout the duration of the program. Since the primary data collection method was from surveys and questionnaires from each participant, no other specific data elements were collected or stored, therefore negating the need for prior authorization for data release. All information pertaining to the identity of the participants was excluded from the data collection. The overall project proposal minimized risk to human subjects, very little is imposed in terms of time, stress, anxiety, or effort on behalf of the participants. Equitable selection of human subjects will occur based off of current hiring practices at the site facility (which utilizes behavioral interviewing in attempts to eradicate any biases during the interview process). No special benefits were guaranteed or promised in exchange for participation in accordance with IRB expectations for approval.

When it came to the IRB process approval, this research project proposal was determined to be exempt by the IRB. This anticipated outcome was due to the Department of Health and Human Services first category for exemption: normal education programs taking place within an educational setting. Additionally this research involved surveys in which the participant could not be identified (Terry, 2015). In order to thwart off a potential point of concern for the IRB, recruitment of participants did not occur via the primary researcher. Recruitment occurred via the first line supervisors of Float Pool and/or the Director of Float Pool who had traditionally been responsible for the hiring practices of the FP department.

At this point, the study did not involve the protected data of any vulnerable population. Data collected was anonymous through a web based survey tool that monitored and quantified responses. This study revolved around new nursing graduates, informed consent included information on the ability of the subject to refuse participation and would not jeopardize their

# FLOAT POOL NURSE RETENTION

employment, promotions, or monetary based rewards. Responses to the survey occurred at previously identified markers (at the start of the program, at the conclusion of the program, and then at the 1 month, 3 month, 6 month and 1 year mark of completion of the program).

Responsibilities as an investigator were to provide the participants with information on what to expect before, during, and after the program, as well as to remain available to anticipate and answer any questions that might arise from their participation. Responsibilities also included maintenance and tracking of responses from each cohort group, and follow up at the predetermined intervals. Responsibilities also included maintenance of records surrounding IRB approval, such as the informed consent form, statement of study hypothesis, research question, purpose, and objectives of research.

Research conducted without a strong focus on ethics is not research at all. Allowing participants to make an enlightened and informed decision must be at the forefront of research prior to beginning on such a research journey. Using the concepts derived from pivotal historical experiences provide modern day researchers with a code of ethics to protect all parties involved; physically, mentally, spiritually, and emotionally.

# **Stakeholders/Project Team**

Identifying and incorporating key stakeholders is fundamental to the success of any new program, let alone that of a residency program. Stakeholders that were vital for this program included first and foremost, the participants themselves, the Chief Nurse Executive of the facility, the Director of Operations, the Director of Float Pool, Director of Education, First Line Supervisor of Education, First Line Supervisor of Float Pool, Clinical Nurse Specialists (CNS), Clinical Educator, DNP student, DNP mentor, DNP capstone chair, hiring recruiters, human resources, physicians, and nurse practitioners. Whereas most of the approval process occurred from the directors and above, the majority of the planning/scheduling/implementing occurred from the supervisors and below. The project team consisted of the author, the critical care CNS, the medical/surgical/telemetry CNS, and the Clinical Educator. Each of these four were responsible for instructing during the program itself. The author bore the responsibility for planning the course outline schedule, the course materials, class instruction, implementation dates, room bookings, participant follow up, and all data analyses.

# **Cost-Benefit Analysis**

In order to better determine the feasibility of such a residency program, a cost-benefit analysis can prove to be useful. In evaluation of the costs associated with this project implementation, new hire day shift wages start at \$37.00/hr. A residency program of 8 hours/week, and 8 weeks in duration with 20 participants will cost \$47, 360. Costs are also associated to cover the CNSs and Educators to prepare/set up/instruct. The average earning for the CNSs and Educators are \$67.00/hr; for the entire program this cost would reach \$4,288. The cost of hand prepared materials, for coil binding and color copies for each participant will approximate \$541.00 for each cohort group. This will equate to a cumulative cost of \$51,648 for each cohort group. If able to offer six cohort groups per year, this will require an average expenditure of \$129,888 per year.

In analyzing the benefits associated with implementation of this project the average cost associated with onboarding and orientation for each new hire is \$106,000. This total includes the recruiter wages and time invested in creating, posting, filtering each position, time invested in the interview process, costs for employee health requirements, and background clearance fees. A

17% turnover rate will yield approximately 26 "replacement" staff for staff not retained.
Factoring these in yields a total cost to the facility for hiring and orientation fees of
\$2,703,000/year. Therefore in comparing the cost to benefit in the equation as below:
Cost of current replacement staff/yr (\$2,703,000) – cost of residency/yr (\$129,888) = a net gain of \$2,573,112; the residency program will offer a large incentive by recouping a substantial amount of funding each year for the facility. The amount the facility stands to gain lends credibility to the notion of implementing such a program as a means to decrease turnover and increase retention.

# Mission/Vision/Goals

In order to be able to adequately evaluate the effects of such a residency program on new hire turnover rates and employee satisfaction levels, it is imperative to develop both a driving mission and vision from which to grow from. The mission statement to guide this project was to provide a supportive environment for new hire Float Pool nurses in an attempt to improve morale, satisfaction, decrease burnout, and improve retention while allowing open feedback, discussion, and role clarity through a residency and mentoring ability. Whereas the mission statement determines where one is going, the vision describes how one can get there The subsequent vision for this program was to help nurture and grow the newest nurses within the facility by demonstrating excellent patient care, great clinical outcomes, and the value of human connections. The overall goals for this program were to first develop and implement the residency program, develop ongoing evaluations to determine any changes in employee morale and satisfaction, and to develop an ongoing improvement process including program adjustment as needed.

#### **Project Objectives**

The objective measures within this project were planned to occur on both the short and long-term scales. Being that the final outcomes would not be apparent for years, intermediate end points would be utilized, which would serve as precursors to the final outcomes (Burns & Grove, 2007, p 307). Specific process objectives goals related to this project included first the creation of an eight-week residency program to facilitate transition of new hires to the work environment. The second objective was to structure education to target the Core Measures and Joint Commission standards as well as contemporary nursing issues. The third objective was to assume a leader and facilitator role in implementing the intervention to monitor progress, and facilitate discussions amongst participants and educators. The fourth objective was to integrate ongoing assessments throughout the intervention to assess participant learning and desired educational offerings. The fifth process objective was to determine whether the intervention had a significant impact on staff retention as well as on staff morale and satisfaction. The first of two outcome objectives identified were at least a five percent decrease in turnover rates for both Float Pool and overall facility after implementation of the residency program as evidenced by data obtained through Human Resources internal software. The second of the two outcome objectives was for newly hired RN's to demonstrate an increase in employee morale and support as evidenced by improved survey responses over 1 month, 3 months, 6 months, and 1-year post residency questionnaire. Serial sampling was selected to determine employee levels of satisfaction over a longer period and to ascertain whether any improvements were sustained over a longer period. Although potential savings was cited as a driving force, the full effects of the implementation and the resultant savings may not be apparent during a short term period, but rather may be fully realized 1-2 years after implementation. The long term measures included a decrease in costs incurred by the organization as related to recruiting, hiring, orienting, and

training new hires, an increase in staff morale due to stability of workforce, and an increase in staff perceptions of confidence, skills, and social support within the first year of hire.

# Methodology & Evaluation Plan

# **Research Design**

Using the study designs outlined by Houser and Oman (2011, p 176), and considering that the question type being addressed was etiology, the most fitting study design selected for this project proposal was that of a pre-test/post-test quasi-experimental study. This study was an epidemiological study that identified a group of people (such as new hire RN's into FP), who experienced a particular event (exposure to a new graduate residency program).

Once the study design was identified, the next step in this journey was to identify the study variables. In this study the independent variable was the implementation of a new hire residency program. This was the intervention to be manipulated. There was a lot of freedom to manipulate this variable such as length of program, inclusion of material in program, number of participants, instructors in program, and so on. The dependent variables identified in this study was the turnover rates, retention rates, staff morale, and perceptions of job satisfaction. According to Burns and Grove (2007, p 537) changes in this variable were presumed caused by changes in the independent variable. As with any study, there was the potential for extraneous variables, which were variables that could affect the measurement and relationship among other variables (Burns & Grove, 2007, p 540). Extraneous variables that had the potential to be present within this study were changes in management, changes to hiring practices, work/school/family obligations on behalf of the participants, lack of instructors, or union activities.

This study utilized convenience sampling in order to select subjects for inclusion. Subjects were selected based upon hire into FP within the time frame of the program. Inclusion criteria included less than 6 months of work experience in FP whereas exclusion criteria included new hires in departments outside of FP or hires with greater than 6 months of work experience. Subjects continued to be recruited until the sample size was reached.

# **Population and Sample**

The last step in the study design was determining the sample size. There were a number of values that went into this equation. For example, in order to minimize the probability of making a Type I error (inferring there is a difference when in fact there is not one) the P value is commonly set at 0.05 or 0.01. In order to minimize the probability of making a Type II error, (concluding there is not a difference, when in fact there is one), common power values are 0.80 or 0.90 (Gordis, 2014, p158). For this study, the P<0.05, and power was set at 80%, with a confidence level of 95%, a margin of error of 5%, and a total population size of 150 (employees currently in FP). Using these values, the minimum sample size for this project would need to be 109 participants. Designing this residency program to be conducted in cohort sessions, limited to about 20 participants in each 8-week program, roughly 7 cohort groups would be needed to provide the adequate number of participants. However, although this could determine the ideal sample size for this study, other factors could influence the adequacy of sample size such as effect size, the type of study, the number of variables present, sensitivity, reliability, and validity of measurement tools, and data analysis techniques (Burns & Grove, 2007, p 341). All of these elements should be factored in when determining the adequacy of sample size. All elements of this project were completed at this large urban medical center, the facility of choice, located in California and conducted within the facility's Float Pool department. This setting was chosen due to its familiarity to the author, as well as in conjunction with the role the author possessed in order to institute and implement change.

# **Logic Model**

In looking at the problem identified for this proposal, namely, high turnover rates for Float Pool new hires, there were a variety of outcomes identified in conjunction with it (See Appendix C). The short-term outcomes included an increase in job satisfaction and work support as identified on the program survey questionnaire. Program evaluations were disseminated prior to new hires beginning the program, at the conclusion of the 8 week program, and at 1 month, 3 months, 6 months, and 1 year post program completion to evaluate the level of support and satisfaction these new hires are experiencing as they move on the continuum from novice to expert. The second outcome identified for this proposal is at least a 5% decrease in Float Pool turnover evidenced by Human Resources internal software within a 1-year period after program implementation.

Long term outcomes identified through this proposal as mentioned earlier included a decrease in costs incurred by the organization as related to the recruitment, hiring, orienting, and training new hires secondary to a decrease in FP new hire turnover. A second long-term outcome identified was an increase in staff morale secondary to the stabilization of a workforce, and consistent team members. The final long term outcomes identified was an increase in staff perception of confidence, skills, and social support as a direct result of having been involved in the new graduate residency program.

The process to be employed in identification of study variables and the determination of outcomes was modeled after the Patient Outcomes Research Teams protocol (PORT) as outlined by Burns and Grove (2007, p294). The first step in this process is to review published literature, identify outcomes measures and their sensitivity to change, identification of internal and external variables that might affect the outcomes, the development of assessment tools or techniques,

# FLOAT POOL NURSE RETENTION

conduction of surveys or focus groups to gain information on outcomes, determine patterns, perform a cohort analysis, determine differences in interventions that are associated with different outcomes, determine significance of improvement, determine cost-benefit ratio or costeffectiveness, synthesize information, disseminate information, conduct trial to evaluate effects of intervention, incorporate findings into clinical guidelines, modify behavior based on guidelines. However, not all steps in this process were employed at the time.

Factors that were taken into consideration to determine what study measures to employ to assess the outcomes included obtaining participation from all key players. FP supervisors and directors required involvement in order for this proposal to be feasible. In addition, determining what study measures to utilize had to be cost effective and minimize disruptions to work flow, maximize participation time, and at the same time be conducted within the guidelines of the collective bargaining agreement. Attrition to the program had to be taken into consideration, as well as when considering survey completion. Another factor that had to be considered was in building the program curriculum; over the course of 8 weeks, newer information may be disseminated and require inclusion in the program. At the same time, too much change to the program would affect the dependent variables if there were multiple cohort groups to experience the new graduate residency program. All of the factors taken into consideration were generic at the time.

In focusing on the end result, the outcomes focused on within this proposal included decreasing FP new hire turnover, increasing staff morale, and job satisfaction, increasing work support, and decreasing costs associated with high turnover rates. Although there were a variety of means to appraise quality; structure, process, and outcome (Donabedian, 1987), the focus of this proposal would be on outcomes at this time.

# Data Analysis, Instrument Validity and Reliability

Once provisions were made for the protection of human subjects, but prior to data analysis occurring, surveys were distributed to all participants through a survey link. Using this survey link allowed all participants to complete the survey anonymously. The survey measurement tool selected to use within this program was the Revised Nursing Work Index (See Appendix D). This tool consisted of 57 questions, using Likert style responses with a scale of 1-4; 1 is equivalent to "strongly agree," 2 is equivalent to "somewhat agree," 3 is equivalent to "somewhat disagree," and 4 is equivalent to "strongly disagree." Therefore a higher mean score indicates more negative responses, and a lower mean score indicates more positive responses. Questions revolved around job satisfaction, support on the floors, employee morale, intent to leave, availability of resources, autonomy, physician-nurse relationships, organizational support, control over practice, and management style.

The Revised Nursing Work Index was selected due to the high validity and reliability it represented. In terms of reliability, this tool demonstrated internal consistency; meaning findings were consistent with previous research. Cronbach's alpha for the entire scale was determined to be at 0.948. Validity was demonstrated by the origin of the instrument, and its ability to explain differences in nurse burnout, as well as capture attributes characteristic of the nursing practice environment.

Threats that were apparent to internal validity of this project included measurement and/or observation. A threat to the internal validity included choice of an appropriate study design. Using a pre-test/post-test quasi-experimental method was one of the most befitting designs for this research project, and therefore aided in minimizing the threat to internal validity. Potential bias was an additional threat to validity and reliability; bias was able to be reduced

# FLOAT POOL NURSE RETENTION

through subject selection, (which in this case occurred through the Float Pool supervisors without the input of the researcher) and in performing measurements. Reliability and validity were also threatened due to data analysis because of the relationship between the researcher and subjects. Threats to external validity included that of generalizability. Although this study was being conducted in an acute care facility, results were not necessarily going to be applicable to community-based clinics, rural hospitals, or to primary practice clinics.

After data collection occurred, data was entered into statistical software for analysis; specifically IBM SPSS software. There were two specific statistical tests that were appropriate for this project; the first one was a one-way multivariate analysis of variance (MANOVA), because there was one independent variable (implementation of a residency program) and two or more dependent variables (effect on job satisfaction, turnover rates, retention rates, and employee morale). The second statistical test that was appropriate was the Wilcox Signed Rank test. Of these two tests, the Wilcox Signed Rank appeared to be the most appropriate and was the statistical test used in this project.

Meaning was brought to the data collected in that it allowed a means to identify the employee perceptions as they relate to job satisfaction, employee morale, and turnover/retention rates before and after participation in the residency program. It helped to identify if such a residency program was beneficial to invest time, energy, and funding into as a means to help retain and support qualified nurses or if those resources might be better invested elsewhere in the same effort to retain such nurses.

#### Timeline

When it came to implementation of the residency program, the original timeline included beginning the initial cohort group in June of 2016. However, in light of the need for IRB

approval, the start date was pushed back to August of 2016. The 8-week program would mean the cohort group was not completed until the end of September 2016. Originally, data collection was to be ongoing at the initial period of involvement in the residency program, and then at 1month, 3-months, 6-months, and 1 year post completion of program. However, during those periods additional cohort groups were ongoing. Data analysis began in November of 2016. Due to the need for at least six cohort groups to meet the necessary sample size, and the time required for each of the cohort groups, the total data completion will not be completed until November 2018. This will mark the completion of the 1-year post residency follow up for all cohort groups. This culmination will allow for dissemination of results no later than the end of November 2018, (see Appendix E).

# **Budget and Required Resources**

As previously mentioned, the total cost of implementing this residency program totaled nearly \$51,648. The majority of this cost arose from the new hire wages. This cost was allocated to the Float Pool department, their hiring department, as was the current practice for any new hire regardless of the existence of a residency program. The costs associated with the CNS/Educator wages were absorbed by the Education Department, which had been the regular cost center for CNS/Educator pay. However, aside from the CNS/Educator pay, the budget for the Education Department was additionally impacted by the need for increased resources such as those resources required for printing, assembling, and binding handout materials and participant booklets. The impact of these provisions to the budget was felt to be minimal and was able to be covered by the normal operating costs of the department. Resources that were required to be provided by the site included the IT room locations, and the education supplies needed for the residency program, (i.e. dry erase boards, projectors, screens, markers, flipcharts, and easels).

37

The majority of those resources are standard provisions when booking locations on site and therefore did not incur any additional financial costs. The resources that were provided by the author included creation of the handout materials, participant booklets, and curriculum development (i.e. PowerPoint presentations).

# **Project Findings/Results**

# **Objectives**

At the completion of the preliminary data collection, each project objective had been met in its entirety. Objective one, creation of an 8-week residency program was accomplished and stable attendance recorded at all sessions. Course plans were drafted in advance of each session, and hardcopies maintained for each subject matter. Objective two included tailoring education for Core Measures, Joint Commission standards, standardized facility policies and procedures, and contemporary nursing issues. This was accomplished through the use of PowerPoint presentations, course handouts, and course materials. Objective three included the author serving in a leader/facilitator role throughout the duration of the program. The author bore responsibility for drafting, developing, and disseminating handouts and course materials as well as training additional instructors, maintaining records, and following up on survey completion. Objective four which outlined ongoing assessments at predetermined intervals had been partially met at the time of writing (April 2017). Pre and post surveys were completed for all 7 cohort groups included in the pilot study however, 1 month post residency surveys were completed for the first five cohort groups, 3 month post residency surveys completed for the first four cohort groups, and six month post residency surveys completed for the first two cohort groups. No cohort

groups made it to the 1-year post residency mark at the time of writing therefore data collection is set to continue until all cohort groups meet the 1-year post residency mark. The fifth and final objective to be met centered on increases in staff satisfaction, morale, and support as evidenced by survey results. Notable increases were met in all post completion survey responses as opposed to those collected prior to the residency program; mean survey responses collected pre and post residency for all questions can be found in Table 3.

Table	e 3										
Mean	Pre/Post	Survey Res	ponses								I
1.	3.358	2.321		21.	3.358	2.839		41.	3.284	2.037	
2.	2.567	1.803		22.	1.765	2.839		42.	3.642	1.173	
3.	2.740	1.173		23.	1.926	1.592		43.	2.877	1.383	
4.	3.062	1.383		24.	2.580	1.926		44.	3.543	1.506	
5.	1.605	1.407		25.	1.988	1.580		45.	2.333	1.901	
6.	3.222	2.062		26.	1.975	1.432		46.	2.432	1.790	
7.	2.975	1.222		27.	2.173	1.901		47.	3.012	1.988	
8.	3.457	1.222		28.	2.000	1.889		48.	2.136	1.605	
9.	3.012	1.580		29.	2.790	1.444		49.	3.728	3.209	
10.	3.432	1.803		30.	2.629	1.209		50.	2.469	1.654	
11.	3.432	2.691		31.	3.321	2.098		51.	3.284	1.877	
12.	3.457	3.259		32.	2.629	2.124		52.	3.049	1.728	
13.	2.679	2.037		33.	2.000	1.617		53.	1.457	1.198	
14.	3.272	1.827	_	34.	3.765	3.012	-	54.	3.037	1.432	
15.	3.457	3.012	_	35.	3.482	2.000	_	55.	2.025	1.457	
16.	3.482	3.419	_	36.	3.629	2.012	_	56.	2.160	1.716	
17.	3.432	2.012		37.	2.469	1.765		57.	2.716	2.062	L
18.	2.543	1.457		38.	3.629	1.642					
19.	1.691	1.348		39.	2.444	1.691					l I
20.	3.383	2.839	1	40.	3.098	1.259	1				l .

# **Statistical Analysis**

A descriptive analysis determined the data collected to be of abnormal distribution.

Despite this finding, survey data was run through IBM SPSS software to determine frequencies,

# FLOAT POOL NURSE RETENTION

mean, median, mode and standard deviation for all pre and post survey responses. Each query from the survey instrument was assessed independently from all other queries (see Appendix F). Due to the abnormal distribution of data, a non-parametric test was opted for. The data included in the survey responses was ordinal in nature, therefore the non-parametric test selected was the Wilcox Signed Rank test. This particular test took into account the differences between pairs of rankings (such as with pre and post responses) as well as the weight of those differences. For example, a score of 4 (strongly disagree) was a higher score than a 1 (strongly agree). The Wilcox Signed Rank test further classified responses into those as negative ranks, positive, ranks, and ties. This test represented an appropriate test to compare such rankings in a dependent sample. Of the 57 questions included on the survey instrument, 42 demonstrated a more negative ranking (i.e. a pre-response of "3-somewhat disagree" or "4-strongly disagree" was more negative in the post-response meaning respondents more often selected "1-strongly agree" or "2somewhat agree"). The greatest improvements in scoring were noted in the survey subscales of autonomy and organizational support. The questions that demonstrated the greatest changes in ranking, from a higher response (3 or 4) to a lower ranking response (1 or 2) can be found in Table 4.

Table 4			
Negative Ranking Question (moves from a response 3 or 4 to a respon	se of 1 o	r 2).	
Question	- Ranks	s + Rai	nks
Ties			
The contributions nurses make to pt care are publicly acknowledged	80	15	22
Nurse managers consults with staff daily on problems	85	13	19
Standardized policies/procedures and ways of doing things	80	16	21

# FLOAT POOL NURSE RETENTION

Use of nursing diagnoses	80	16	21
Each nursing unit determines its own policies	82	15	20
Adequate support services	69	17	31
A good orientation program for newly hired nurses	84	13	20
Supervisory staff is supportive of nurses	86	15	16
Active continuing education programs	87	12	18
Career development opportunity	88	12	17
Opportunity for nurses to participate in policy decisions	84	15	18
Support for new and innovative ideas about patient care	80	16	21
Freedom to make important patient care decisions	82	15	20
Opportunities for advancements	79	16	22
Nursing staff is supported in pursuing degrees	83	14	20
A clear philosophy of nursing pervades patient care	74	15	28
A nurse manager backs up nursing staff in decisions	82	16	19
Admin listens/responds to employee concerns	85	16	16
Nurses are involved in internal governance of hospital	87	16	14
A preceptor program for new nurses	82	14	21
Nursing care is based on a nursing not medical model	83	5	17
Nurses have the ability to serve on hospital committees	91	12	14

Further analysis showed there were no questions that demonstrated a shift from a lower numerical response (1 –strongly agree or 2-somewhat agree) to a higher numerical response (3-somewhat disagree or 4-strongly disagree). However, 17 out of the 57 questions demonstrated

almost no change in pre and post survey responses. These "tied" questions revolved around such issues as floating, working relationships between physicians and nurses, salary, relationships between departments, standards expected from administration, standards of medical care, and competent CNSs who provide direction. The remaining 16 questions on the survey indicate a mild improvement in scoring from a more negative, but higher scoring response ("3-somewhat disagree" or "4-strongly disagree") to a more positive, but lower scoring response ("2-somewhat agree" or "1-strongly agree").

Of the 57 questions on the Revised Nursing Work Index, responses indicated 5 were not statistically significant. These 5 were as follows: enough staff to get work done (p=.659), primary nursing as the nursing delivery model (p=.275), good relationships with other departments (p=.984), physicians give high-quality care (p=.278), enough RN's for quality patient care (p=.162).

#### **Results Discussion**

Although pre and post survey responses demonstrated a notable change in rankings closer to "strongly agree" the same anticipated results were not demonstrated when it came to turnover rates pre and post residency. Post residency turnover rates increased slightly (by 1%) whereas overall turnover rates for the entire facility decreased (by 3%) which was not anticipated with the initial evidence based question. At the time of writing attrition rates for survey responses were at 0%, however, it was anticipated that as the time after post residency increased and neared the 1year post completion mark attrition rates might fall.

Owing to the turnover rates post residency for both Float Pool and the overall facility, this indicated that staff are leaving Float Pool only to find a "permanent home" elsewhere in the facility as opposed to leaving Float Pool and the facility entirely. This latter result was noted to be occurring at the initiation of this program.

# Limitations, Recommendations, and Implications for Change

Planning for implementation of such a project required much foresight and attempts were made to account for all angles during and after implementation. However, limitations were still present. Some limitations of this project included being limited to Float Pool staff, therefore finding may not be generalizable to other departments. This pilot study took place in an acute care facility therefore results may not be generalizable to rural hospitals, long term acute care facilities, or clinics. Results may also not be generalizable to facilities that do not possess an internal Float Pool department. Another limitation that existed is in the length of the program. This pilot study utilized a program 8-weeks long in duration; shortening or elongating the program may affect the results and findings as well. A final limitation was found in the attrition rates; although at 100% at the time of writing (April 2017), rates may fall as the study nears the 1-year post completion mark.

Recommendations derived from these study results include using Float Pool as the hiring department for the hospital as a whole. Allowing nurses the opportunity to float and experience all units may assist in helping those nurses to find their "niche" earlier on in their career which may further aid to continue in decreasing overall facility turnover rates. These efforts will aide nurses to get to the departments they truly desire, while at the same time giving them the much needed experience to get there. Another recommendation may be to enlarge the program to accommodate other departments in an effort to decrease turnover rates one department at a time in an individual fashion which may still continue to decrease the overall facility turnover rates.

# Conclusion

With current issues facing the field of nursing today including ever increasing nursing shortages, the issue of nursing retention and turnover cannot be dismissed. With such a multifaceted problem, there is bound to be a number of possible interventions. More research is needed to determine which intervention may be the best in improving nurse retention, however the use of a residency program to decrease turnover provides a foundation upon which to build.

# **APPENDIX** A

Strengths	Weakness
<ol> <li>Number and position of stakeholders</li> <li>Abundance of literature and EBP to support implementation</li> <li>Availability of CNS's/Clinical Educators to assist in instruction</li> <li>Desire of staff to be involved</li> <li>Stable support system</li> <li>Flexibility of scheduling</li> </ol>	<ol> <li>Staffing and floor needs limits amount of time in residency</li> <li>Locations (IT) limit number of participants</li> <li>Amount of time invested before significance is noted in its entirety</li> <li>Required attendance throughout program for duration</li> <li>Nursing shortages provides many opportunities for nurses to change positions.</li> </ol>
Opportunities	Threats
<ol> <li>Expansion of facility will increase FP hiring.</li> <li>Ability to be flexible in instruction type/materials</li> <li>Ability to grow beyond FP (other departments)</li> <li>Increased attention on residencies for nurses (as opposed to physicians)</li> <li>Ability to incorporate technology into program.</li> </ol>	<ol> <li>Readily available purchased programs.</li> <li>High turnover rates may affect the number of participants</li> <li>Successful programs use differing formats/durations</li> <li>Differing experience rates of participants.</li> </ol>

# (Adopted from Fortenberry, 2010).

**APPENDIX B** 

• Name

#### COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM) COURSEWORK REQUIREMENTS REPORT\*

\* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

Mandy Kautz (ID: 5397992)

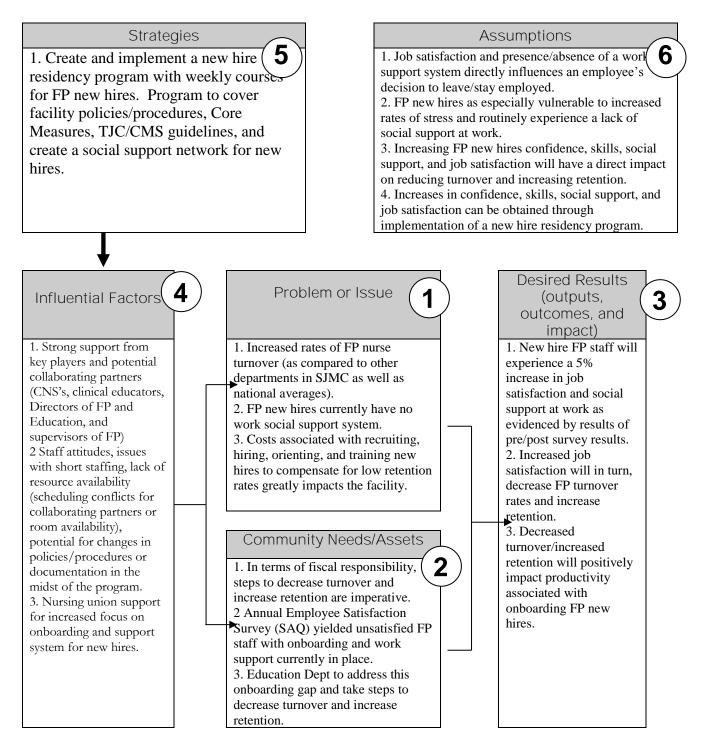
	Mandy Kautz (ID: 5397992)	
• Email:	mkautz@regis.edu	
<ul> <li>Institution Affiliation:</li> </ul>	Regis University (ID: 745)	
Institution Unit:	Nursing	
Curriculum Group:	Human Research	
<ul> <li>Course Learner Group:</li> </ul>	Social Behavioral Research Investigators and Key Personnel	
• Stage:	Stage 1 - Basic Course	
Report ID:	18724048	
Completion Date:	02/15/2016	
Expiration Date:	02/14/2019	
<ul> <li>Minimum Passing:</li> </ul>	80	
<ul> <li>Reported Score*:</li> </ul>	100	
· Reported Score .		
EQUIRED AND ELECTIVE MO		
EQUIRED AND ELECTIVE MO elmont Report and CITI Course	Introduction (ID: 1127)	02/15/16
EQUIRED AND ELECTIVE MO elmont Report and CITI Course istory and Ethical Principles - SI	Introduction (ID: 1127) BE (ID: 490)	02/15/16 02/15/16
EQUIRED AND ELECTIVE MO elmont Report and CITI Course istory and Ethical Principles - SI ne Federal Regulations - SBE (I	Introduction (ID: 1127) BE (ID: 490)	02/15/16 02/15/16 02/15/16
EQUIRED AND ELECTIVE MO elmont Report and CITI Course istory and Ethical Principles - SI ne Federal Regulations - SBE (I ssessing Risk - SBE (ID: 503)	Introduction (ID: 1127) BE (ID: 490) ID: 502)	02/15/16 02/15/16 02/15/16 02/15/16 02/15/16
EQUIRED AND ELECTIVE MO elmont Report and CITI Course istory and Ethical Principles - SI ne Federal Regulations - SBE ( ssessing Risk - SBE (ID: 503) formed Consent - SBE (ID: 504)	Introduction (ID: 1127) BE (ID: 490) ID: 502) .)	02/15/16 02/15/16 02/15/16 02/15/16 02/15/16 02/15/16
EQUIRED AND ELECTIVE MO elmont Report and CITI Course istory and Ethical Principles - SI ne Federal Regulations - SBE (I ssessing Risk - SBE (ID: 503)	Introduction (ID: 1127) BE (ID: 490) ID: 502) .)	02/15/16 02/15/16 02/15/16 02/15/16 02/15/16

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

CITI Program Email: <u>citisupport@miami.edu</u> Phone: 305-243-7970 Web: <u>https://www.citiprogram.org</u>

# APPENDIX C

# Logic Model Development Program: Implementation of new hire FP Residency Program (Adopted from W.K. Kellogg Foundation, 2004).



# **APPENDIX D**

# **Revised Nursing Work Index**

For each item in this section, please indicate the extent to which you agree that the following items are present in your current job. Indicate your degree of agreement by circling the appropriate number.

Pres	ent in Current Job	Strongly Agree	Somewhat Agree	Somewhat Disagree 3	Strongly Disagree 4
1.	Adequate support services allow me to spend time with my patients.	1	2		
2.		1	2	3	4
3.	A good orientation program for newly employed nurses.	1	2	3	4
4.	A supervisory staff that is supportive of nurses.	1	2	3	4
5.	A satisfactory salary.	1	2	. 3	4
6.	Nursing controls its own practice.	1	2	3	4
7.	Active inservice/continuing education programs for nurses.	1	2	3	4
8.		1.1	2	з	4
9.	Opportunity for staff nurses to participate in policy decisions.	1.00	2	3	4
0.	Support for new and innovative ideas about patient care.	1	2	3	4
1.	Enough time and opportunity to discuss patient care problems with other nurses.	1	2	3	4
2.	Enough registered nurses on staff to provide quality patient care.	1	2	3	4
3.	A nurse manager who is a good manager and leader.	1	2	3	4.
4.		1	2	3	4
5.	Flexible or modified work schedules are available.	Carlos and State	2	3	4
6.	Enough staff to get the work done.	1	2	3	4
	Freedom to make important patient care and work decisions.	1	2	3	4
8.		1	2	6	4
9.		1	2	3	4
0.	Team nursing as the nursing delivery system.	1	2	3	4
1.	and the experimental second states and the second second second states and the second second second second second	1	2	3	4
2.	Primary nursing as the nursing delivery system.	1.1.1	2	3	4
3.	Good relationships with other departments such as housekeeping and dietary.	1	2	3	4
4.	Not being placed in a position of having to do things that are against my nursing judgment.	1	2	3	4
5.	High standards of nursing care are expected by the administration.	1	2	3	4
6.	A chief nursing executive is equal in power and authority to other top-level hospital executives.	1	2	3	4
7.	Much teamwork between nurses and doctors.	1	2	3	4
8.	Physicians give high-quality medical care.	1	2	3	4
9.	Opportunities for advancement.	1	2	3	4
0.	Nursing staff is supported in pursuing degrees in nursing.	1	2	3	4
1.	A clear philosophy of nursing pervades the patient care environment.	i i	2	3	4
2.	Nurses actively participate in efforts to control costs.	1 - 1	2	3	4
3.	Working with nurses who are clinically competent.	and the part of	2	3	4
4.	The nursing staff participate in selecting new equipment.	1	2	3	4
5.	A nurse manager backs up the nursing staff in decision making, even if the conflict is with a physician.	1	2	3	4
6.	An administration that listens and responds to employee concerns.	1	2	3	4
7.	An active quality-assurance program.	1	2	3	4
8.			2	3	4
9.	Collaboration (joint practice) between nurses and physicians.	1	2	3	4
0.	A preceptor program for newly hired RNs.	1	2	3	4
	present the second s		an a sharan a sharan Shirin Shirin a sharan	and a set of the set o	Continu

Ovid®

S? Ask A Librarian Support & Training Logged in as rgs999 Close

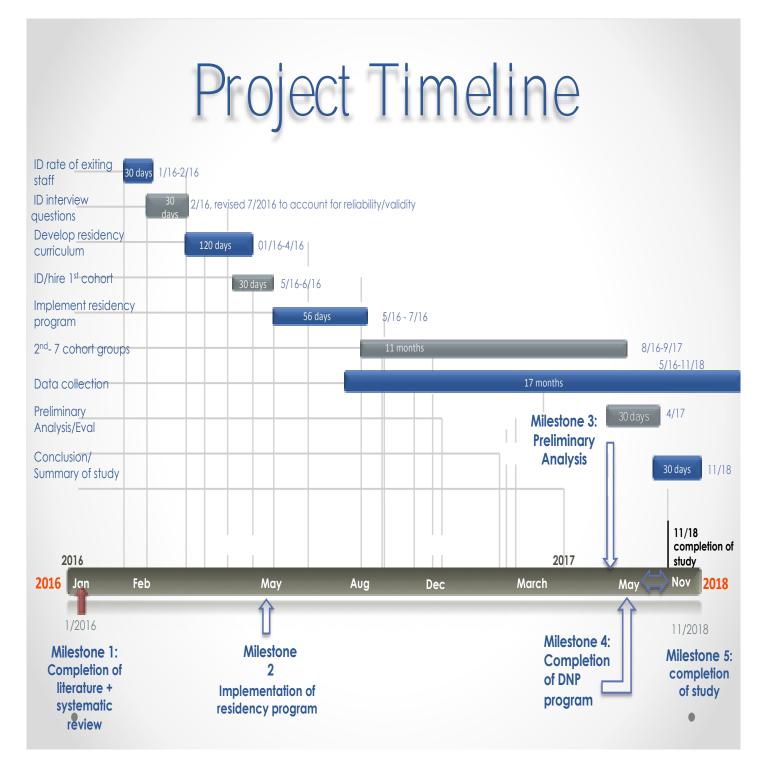
🧐. Wolters Kluwer

Prese	nt In Current Job	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagre
41.	Nursing care is based on a nursing rather than a medical model.	and the second	2	3	4
42.	Staff nurses have the opportunity to serve on hospital and nursing committees.	1	2	3	4
43.	The contributions that nurses make to patient care are publicly acknowledged.	1	2	3	4
44.	Nurse managers consult with staff on daily problems and procedures.	1	2	3	4
45.	The work environment is pleasant, attractive, and comfortable.	1	2	3	4
46.	Opportunity to work on a highly specialized unit.	1	2	3	4
47.	Written, up-to-date nursing care plans for all patients.	1.1	2	3	4
48.	Patient assignments foster continuity of care (i.e., the same nurse cares for the patient from one day to the next).	1	2	3	4
49.	Regular, permanently assigned staff nurses never have to float to another unit.	1	2	3	4
50.	Staff nurses actively participate in developing their work schedules (i.e., what days they work; days off, etc.).	1	2	3	4
51.	Standardized policies, procedures, and ways of doing things.	1.1	2	3	4
52.	Use of nursing diagnoses.	1	2	3	4
53.	Floating, so that staffing is equalized among units.	1	2	3	4
54.	Each nursing unit determines its own policies and procedures.	1	2	3	4
55.	Use of a problem-oriented medical record.	1	2	3	4
56.	Working with experienced nurses who "know" the hospital.	1	2	3	4
57	Nursing care plans are verbally transmitted from nurse to nurse.	1	2	3	4

© 2016 Ovid Technologies, Inc. All rights reserved. OvidSP\_UI03.23.01.015, SourceID 107454

About Us Contact Us Terms of Use

**APPENDIX E** 



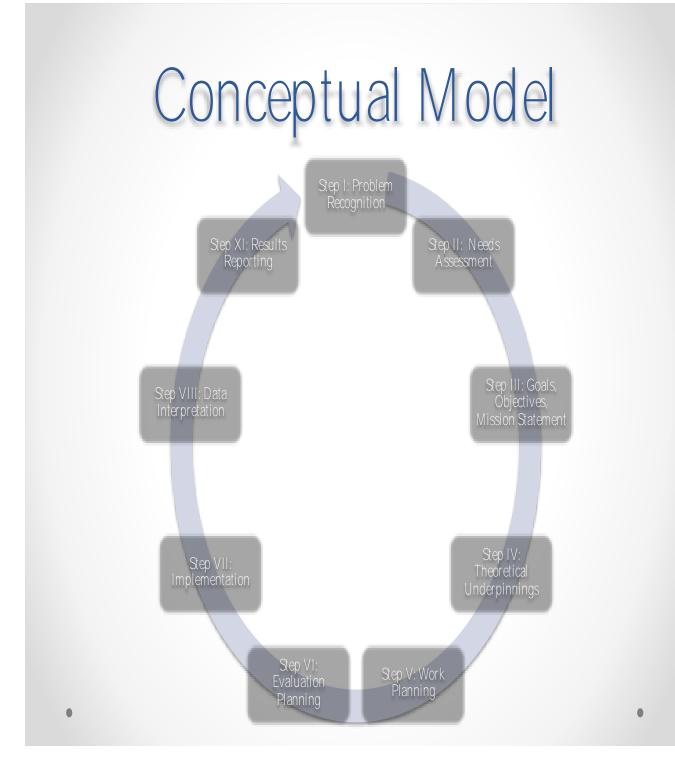
# **APPENDIX F**

# **Descriptive Analysis**

QUESTION	Pre/post MEAN	Pre/post MEDIAN	Pre/post MODE	Pre/post S.D.
1.	3.358→2.321	3.000→2.000	3.00→2.00	.618→.602
2.	2.567→1.803	3.000→2.000	2.00→2.00	.820→.813
3.	2.741→1.173	3.000→1.000	3.00→1.00	.787→.380
4.	3.062→1.383	3.000→1.000	3.0→1.00	.659→.603
5.	1.605→1.407	1.000→1.000	1.00→1.00	.801→1.292
6.	3.222→2.062	3.000→2.000	3.00→2.00	.707→.857
7.	2.975→1.222	3.000→1.000	3.00→1.00	.547→.474
8.	3.012→1.222	3.000→1.000	3.00→1.00	.581→.474
9.	3.457→1.580	4.000→1.000	4.00→1.00	.725→.788
10.	3.432→1.802	4.000→2.000	4.00→1.00	.688→.813
11.	3.432→2.691	4.000→3.000	4.00→3.00	.651→.944
12.	3.457→3.259	4.000→4.000	4.00→4.00	.633→.985
13.	2.679→2.037	3.000→2.000	3.00→2.00	.755→.843
14.	3.272→1.827	4.000→1.000	4.00→1.00	.936→1.104
15.	3.457→3.012	4.000→3.000	4.00→3.00	.852→.968
16.	3.482→3.419	4.000→4.000	4.00→4.00	.635→.892
17.	3.432→2.012	4.000→2.000	4.00→2.00	.651→.733
18.	2.543→1.457	3.000→1.000	3.00→1.00	.708→.549
19.	1.691 <b>→</b> 1.346	1.000→1.000	1.00→1.00	.917 <b>→</b> .635
20.	3.383→2.840	4.000→3.000	4.00→4.00	.930→1.066
21.	3.380→2.840	4.000→3.000	4.00→4.00	.966→1.112
22.	1.765→1.593	1.000→1.000	1.00→1.00	.952→.848
23.	1.926→1.926	2.000→2.000	2.00→2.00	.739→.608
24.	2.580→1.938	3.000→2.000	3.00→2.00	.687→.556
25.	1.988→1.580	2.000→1.000	1.00→1.00	1.006→.705
26.	1.975→1.432	2.000→1.000	1.00→1.00	1.036→.706
27.	2.172→1.901	2.000→2.000	2.00→2.00	.771→.561
28.	2.000→1.889	2.000→2.000	2.00→2.00	.837→.725
29.	2.790→1.444	3.000→1.000	3.00→1.00	.666→.652
30.	2.630→1.210	3.000→1.000	3.00→1.00	.641→.467
31.	3.321→2.099	3.000→2.000	3.00→2.00	.668→.717
32.	2.629→2.124	3.000→2.000	4.00→1.00	1.112→1.053
33.	2.000→1.617	2.000→1.000	2.00→1.00	.791→.784
34.	3.765→3.012	4.000→3.000	4.00→3.00	.618→.968
35.	3.482→2.000	4.000→2.000	4.00→2.00	.673→.652
36.	3.630→2.012	4.000→2.000	4.00→2.00	.642→.661
37.	2.469→1.765	2.000→2.000	2.00→2.00	.867→.676
38.	3.630→1.642	4.000→2.000	4.00→2.00	.660→.639
39.	2.444→1.691	2.000→2.000	2.00→2.00	.671→.682

40.	3.099→1.260	3.000→1.000	3.00→1.00	.831→.543
41.	3.284→2.037	3.000→2.000	3.00→2.00	.656→.715
42.	3.642→1.173	4.000→1.000	4.00→1.00	.645 <b>→</b> .441
43.	2.877→1.383	3.000→1.000	3.00→1.00	.872 <b>→</b> .538
44.	3.543→1.510	4.000→1.000	4.00→1.00	.742→.635
45.	2.333→1.901	2.000→2.000	2.00→2.00	.775 <b>→</b> .735
46.	2.432→1.790	2.000→2.000	2.00→1.00	.865→.958
47.	3.012→1.988	3.000→2.000	3.00→2.00	.661 <b>→</b> .749
48.	2.136→1.605	2.000→1.000	2.00→1.00	.905→.753
49.	3.728→3.210	4.000→4.000	4.00→4.00	.671→1.021
50.	2.469→1.654	3.000→2.000	3.00→2.00	.726 <b>→</b> .574
51.	3.284→1.877	3.000→2.000	3.00→2.00	.729→.812
52.	3.049→1.728	3.000→2.000	3.00→2.00	.723→.725
53.	1.457→1.198	1.000→1.000	1.00→1.00	.742 <b>→</b> .534
54.	3.037→1.432	3.000→1.000	3.00→1.00	.798 <b>→</b> .632
55.	2.025→1.457	2.000→1.000	2.00→1.00	.894 <b>→</b> .593
56.	2.161→1.716	2.000→2.000	2.00→1.00	.858→.729
57.	2.716→2.062	3.000→2.000	3.00→1.00	1.075→1.029

# APPENDIX G



Using Zaccagnini and White DNP Project Process Model

# **APPENDIX H**

# **Budget and Resources**

• Site Provisions:

Staff wages and scheduling provided by Float Pool department

IT room locations

Education supplies (white boards, easels, ppt, markers, etc)

Advertising and recruiting related costs

• Researcher Provisions:

Educational handouts

Participant booklets

Time and effort to arrange course offerings

• Budget:

IT room locations (in house function): Free

Education Supplies: White board (\$75), easel (\$25), markers (\$3): \$103.00

Advertising/Recruiting fees: \$150.00 (County journal publication)

Handouts: ream of paper \$13.00

Booklets/binding: \$275 (for 20 coil bound with tab dividers)

• Total: \$541.00

In order to replicate this particular study, the following budget and resource needs can be anticipated:

•	Staff: (plus cost for benefitted employees)	\$4,288.00
•	Wages for new hires:(based on 20 new hires)	\$47,360.00
•	Researcher supplies/materials:	<u>\$541.00</u>
•		Total \$52,189.00

 \*Funding for staff and new hires came from Float Pool department allocated annual budget for orientation costs. Supplies for project (handouts/materials) came from research student. No other funding sources were utilized for this project.

# **APPENDIX I**

# **IRB** Approval Letter



# **REGIS.EDU**

# Institutional Review Board

DATE:	March 28, 2017
TO:	Mandy Kautz, RN, MSN
FROM:	Regis University Human Subjects IRB
PROJECT TITLE:	[1028965-1] Implementing a Nurse Residency Program to Impact Nurse Retention Rates
SUBMISSION TYPE:	New Project
ACTION:	DETERMINATION OF EXEMPT STATUS
DECISION DATE:	March 28, 2017
<b>REVIEW CATEGORY:</b>	Exemption category # (1)

Thank you for your submission of New Project materials for this project. The Regis University Human Subjects IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations 45.CFR46.101(b).

This is a well-written doctoral project application. It identifies a serious problem in acute care and addresses it with a well-developed curriculum. There are two missing items that need to be submitted:

- · Information on the validity and reliability of the study instrument.
- · CITI verification for Dr. Jackson.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact the Institutional Review Board at <u>irb@regis.edu</u>. Please include your project title and reference number in all correspondence with this committee.

# **APPENDIX J**

# **Agency Support Letter**



1800 N. California St. Stockton, CA 95204 direct (209) 467-6331 fax (209) 461-6881 StJosephsCares.org

August 10th, 2016

To: Regis University Institutional Review Board (IRB),

I am familiar with Mandy Kautz's research project entitled Implementing a Residency Program to Affect Float Pool Nurse Retention Rates. I understand St. Joseph's Medical Center's involvement to be: providing archival data on retention records, allowing employees to attend/participate in such a residency program, allowing employees to be surveyed at set intervals both during and after completion of residency program, allowing residency program to be held on site at this facility, and to utilize teaching resources such as Educators and Clinical Nurse Specialists in carrying out such residency program.

I understand that this research will be carried out following sound ethical principles and that participant involvement in this research project is strictly voluntary and provides confidential data, as described in the proposal.

Therefore, as a representative of St. Joseph's Medical Center, I agree that Mandy Kautz's research project may be conducted at our agency/institution.

Sincerely,

anifull

Dr. Anitra Williams, DNP, RN, HACP, CCRN Director of Nursing Operations, Education, and Medical Library St. Joseph's Medical Center 1800 N. California Street Stockton, California 95204 Office: (209) 467-6300 Fax: (209) 461-6881

#### References

- Ambria, A., and Andrews, D. (2014). Incivility, retention and new graduate nurses: an integrated review of the literature. *Journal of Nursing Management* 22(6), p. 735-742.
- American Association of Colleges of Nursing (2004) Position Statement on the Practice Doctorate in Nursing. Retrieved from:

http://www.aacn.nche.edu/publications/position/DNPpositionstatement.pdf

- Bockman, V. (1971). The Herzberg controversy. Personnel Psychology 24, 155-189
- Burns, N. and Grove, S. (2007). Understanding Nurse Research. St Louis, MO: Saunders, Elsevier.
- Berent, G., Anderko, L. (2011). Solving the nurse faculty shortage exploring retention issues. *Nurse Educator* 36(5), p. 203-207.
- Brunetto, Y., Shriberg, A., Wharton, R., Shacklock, K., Newman, Deinger, J. (2013). The importance of supervisor-nurse relationships, teamwork, wellbeing, affective commitment and retention of North American nurses. *Journal of Nursing Management* 21(6), p. 827-837.
- Chan, Z., San Tam, W., Lung, M., Wong, W., & Chau, C. (2012). A systematic review of nurse shortage and the intention to leave. *Journal of Nursing Management* 21, 605-613.
- Chang, H., Shyu, Y., Wong, M, Friesner, D., Chu, T., and Teng, C. (2015). Which aspects of professional commitment can effectively retain nurses in the nursing profession. *Journal* of Nursing Scholarship 47(5), p. 468-476.
- Chesak, S., Sood, A., Morin, K., Cutshall, S., Douglas, K., Ridgeway, J. (2014). Integration of a stress management and resiliency training program in a nurse residency program. *The Sciences and Engineering* 75(7-B).

- Chism, L. (2013). The doctor of nursing practice; a guidebook for the role development and professional issues. Burlington, MA: Jones & Bartlett Learning.
- Cottingham, S., Dibartolo, M., Battistoni, S., Brown, T. (2012). Partners in nursing, a mentoring initiative to enhance nurse retention. *Nursing Education Perspectives* 32(4), p. 25-255.
- Covell, C. (2008). The middle-range theory of nursing intellectual capital. *Journal of Advanced Nursing* 63(1), 94-103.
- Covell, C., & Sidani, S. (2013). Nursing intellectual capital theory: implications for research and practice. *Online Journal of Issues in Nursing*, 18(2), 91-110.
- Cowden, T., and Cummings, G. (2012). Nursing theory and concept development: a theoretical model of clinical nurse's intentions to stay in their current positions. *Journal of Advanced Nursing* 68(7), p. 1646-1657.
- Daniels, F., Laporte, A., Lemieux-Charles, L, Baumann, A., Onate, K., Deber, R. (2010). The importance of employment status in determining exit rates from nursing. *Nursing Economics* 30(4), p. 201-206.
- Dasgupta, P. (2014). Nurse's intention to leave: a qualitative study in private hospitals. *Management Journal* 8(1), p. 77-87.
- Donabedian, A. (1987). Some basic issues in evaluating the quality of health care. *Outcome measures in home care*, Vol 1, p 3-28.
- Dotson, M., Dave, D., Cazier, J., and McLeod, M. (2011). Nurse retention in the rural United States: a cluster analytic approach. *International Journal of Healthcare Management* 6(3), p. 184-191.
- Fiedler, R., Read, E., Lane, K., Hicks, F., and Jegier, B. (2014). Long term outcomes of a post baccalaureate nurse residency program; a pilot study. *The Journal of Nursing*

Administration 44 (7), p. 417-422.

- Fortenberry, J. (2010). Health care marketing, tools and techniques. Sudbury, MA; Jones & Bartlett Publishers.
- Gambino, K. (2010). Motivation for entry, occupational commitment, and intent to remain: a survey regarding registered nurses retention. *Journal of Advanced Nursing* 66(11), p. 2532-2541.
- Gordis, L. (2014). Epidemiology. Philadelphia, PA: Saunders Elsevier.
- Grace, P., Robinson, E., Jurchak, M., Zollfrank, A., and Lee, S. (2014). Clinical ethics residency for nurses an education model to decrease moral distress and strengthen nurse retention in acute care. *The Journal of Nursing Administration* 44(12), p. 640-646.
- Guthrie, K., Tyrna, J., and Giannuzzi, D. (2012). Transitional orientation: a cost-effective alternative to traditional RN residency programs. *Nursing Economics* 31(4), p. 172-183.
- Hairr, D., Salisbury, H., Johannsson, M, and Redfern Vance, N (2013) Nurse staffing and the relationship to job satisfaction and retention. *Nursing Economics* 32(3), p. 1420147.
- Hayes, B., Bonner, A., & Pryor, J. (2010). Factors contributing to nurse job satisfaction in the acute hospital setting: a review of recent literature. *Journal of Nursing Management* 18, 804-814.
- Hayes, L., O' Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F.,
  Laschinger, H., North, N., & Stone, P. (2005). Nurse turnover, a literature review. *International Journal of Nursing Studies 43*, 237-263.
- Herzberg, F. (1974). Motivation-hygiene profiles, pinpointing what ails the organization. *Organizational Dynamics*, 3 (2), 18-29.

Hillman, L., Foster, R. (2011). The impact of nursing transitions program on retention and cost

savings. Journal of Nursing Management 19 (1), p. 50-56.

Houser, J. & Oman, K. (2011). Evidence-based practice: An implementation guide for healthcare organizations. Sudbury, MA: Jones and Bartlett.

Kautz, M., (2015). DNP literature review. Unpublished manuscript. Regis University.

- Kowalski, S., Cross, C. (2010). Preliminary outcomes of a local residency program for new graduate registered nurses. *Journal of Nursing Management* 18(1), p. 96-104.
- Laschinger, H., Wong, C., and Grau, A. (2012). The influence of authentic leadership on newly graduated nurse's experiences of workplace bullying, burnout, and retention outcomes: a cross sectional study. *International Journal of Nursing Studies* 49(10), p. 1266-1276.
- Letourneau, R., Fater, K. (2014). Nurse residency programs: an integrative review of the literature. *Nursing Education Perspectives* 36(2), p. 96-101.
- Rosseter, R. (April 2014). Nursing shortage fact sheet. Retrieved from <u>http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-shortage</u>.
- Takase, M., Teraoka, S., Kousuke, Y.(2014). Investigating the adequacy of the competence turnover intention model: how does nursing competence affect nurse's turnover intention? *Journal of Clinical Nursing*, 24, p. 805-816.
- Terry, A. (2015). Clinical research for the doctor of nursing practice. Burlington, MA; Jones & Bartlett Learning.
- Tourangeau, A., Cummings, G., Cranley, L., Ferron, E., Harvey, S. (2009). Determinants of hospital intention to remain employed: broadening our understanding. *Journal of Advanced Nursing* 66(1), p. 22-32.

Trybou, J., De Pourcq, K., Paeshuyse, M., and Gemmel, P. (2014). The importance of

social exchange to nurses and nurse assistants: impact on retention factors. *Journal of Nursing Management* 22, 563-571.

- Van Den Heede, K., Florquin, M., Bruynel, L., Aiken, L., Diya, L., Lesaffre, E., Sermeus, W. (2011). Effective strategies for nurse retention in acute hospitals: a mixed method study. *International Journal of Nursing Studies* 50(2), p. 185-194.
- Wallis, A., Kennedy, K. (2012). Leadership training to improve nurse retention. *Journal of Nursing Management* 21(4), p. 624-632.
- Wieck, K., Dols, J., and Landrum, P. (2010). Retention priorities for the intergenerational nurse workforce. *Nursing Forum* 45(1), p. 7-17.
- W.K. Kellogg Foundation (2004). Logic model development guide. Battle Creek, MI.
- Zigmont, J.J., Wade, A., Edwards, T., Hayes, K., Mitchell, J., Oocumma, N. (2015).
   Utilization of experiential learning, and the learning outcomes model reduces RN orientation time by more than 35% *Clinical Simulation in Nursing*, 11(2), 79-94.