

Boise State University

ScholarWorks

Doctor of Nursing Practice Projects

School of Nursing

Spring 2023

**Transformational Leadership and Structural Empowerment for
Nurse Managers to Improve Nursing Job Satisfaction,
Engagement, and Retention**

Leah M. Gehri

Boise State University

Transformational Leadership and Structural Empowerment Training for Nurse Managers to
Improve Nursing Job Satisfaction, Engagement, and Retention

A Scholarly Project Presented to the Faculty of the School of Nursing
Boise State University

In partial fulfillment of the requirements
For the Degree of Doctor of Nursing Practice

By

Leah M. Gehri, MHA, MN, RN, NEA-BC

Committee Chair (Faculty Mentor): Cara Gallegos, PhD, RN

Committee Member (Second Reader): Katherine Doyon, PhD, M.Ed, RN, CHPN

Table of Contents

Executive Summary	6
Problem Description	8
Problem Background	8
Local Problem.....	10
Available Knowledge.....	11
Literature Review.....	11
Synthesis of the Evidence	12
Rationale	13
Theoretical Model.....	13
Project Framework – Role of the Logic Model in Project Development	14
Specific Aims.....	14
Context.....	14
Population	14
Local Care Environment.....	15
Project Setting.....	16
Organizational Culture and Readiness for Change.....	16
Strengths and Weaknesses	16
External Funding.....	17
Interventions	17
Logic Model.....	19
Correlation of Interventions with the Theoretical Model Elements	21
Timeline	22

Measures	22
Knowledge Uptake and Utilization.....	22
Engagement.....	22
Analysis.....	25
Ethical Considerations	28
Ethical Considerations and Protection of Participants.....	28
Conflicts of Interest.....	28
Biases	29
Threats to Quality	29
IRB Application and Project Determination.....	29
Project Budget.....	29
Results.....	30
Data Results/Outcomes Analysis.....	32
Contextual Elements and Potential Interactions with Interventions and Results.	34
Missing Data.	35
Interpretation.....	35
Summary of Key Findings.....	35
Reasons for Differences between Observed and Anticipated Outcomes.....	35
Project Limitations.....	36
Policy Implications	36
Conclusion	37
Usefulness of the work.....	37
Sustainability.....	37

Potential for spread to other contexts.....	37
Implications for practice	37
Suggested next steps and dissemination	388
References.....	399
Appendices.....	46
A. Literature Summary Table	466
B. Theoretical Model	577
C. Logic Model	588
D. Memorandum of Understanding	688
E. SWOT Analysis.....	711
F. Education Outline	722
G. Timeline	744
H. Institutional Review Board Approval	755
I. Outcomes Evaluation Table.....	766
J. Scholarly Project Expense Report.....	799
K. 3-Year Budget Plan.....	811
L. Statement of Operations	822
M. Recruitment Letter- Managers.....	833
N. Recruitment Letter - RNs.....	844
O. ISA Engagement Scale Survey	855
P. ISA – Leadership Engagement Scale Survey	866
Q. LOKUS Transformational Leadership Survey	877
R. LOKUS Structural Empowerment Survey.....	933

S. Pre-Post Project Transformational Leadership LOKUS data.....	999
T. Pre-Post Project Structural Empowerment LOKUS data.....	100
U. Manager ISA-Leader Engagement Scale Pre & Post Results.....	1011
V. Registered Nurse ISA Engagement Scale Pre & Post Project	1022
W. Registered Nurse ISA Engagement Scale Pre & Post Project	1033
X. Pre & Post Project Nurse Responses to Survey Questions	1044

Executive Summary

Problem Description

Low nurse job satisfaction and engagement have historically been associated with high attrition. While it is too soon to fully quantify the impact of Covid-19 on nurse satisfaction, engagement, and turnover, evidence is emerging that high chronic fatigue and persistent feelings of being overwhelmed are causing nurses to either leave the bedside or quit nursing altogether, exacerbating existing nurse staffing challenges caused by a decades long nursing shortage that, pre-pandemic, predicted a national deficit of over one-half million nurses by 2030. The financial impact of competing for experienced nurses, and recruiting, hiring, and training new nurses to replace those who have left, is high. Additionally, chronic short staffing and/or an overreliance of new graduates negatively impacts the quality and safety of patient care by either not having enough resources to perform necessary care or by diluting the experience level at the bedside.

Setting

This project occurs in a middle sized tertiary acute care hospital in California. Project participants are the managers and registered nurses from the Intensive Care Unit, Emergency Department, Nursing Float Pool, General Medical-Surgical unit, and Oncology unit.

Rationale

Kanter's Theory of Structural Empowerment states that empowerment is promoted in work environments that provide employees with access to information, resources, support, and the opportunity to learn and develop. The literature reveals a theme of successful interventions that fall within these four constructs and contribute to nurse job satisfaction and engagement, which has been shown to reduce turnover and contribute to nurse retention.

Transformational leaders create an empowered work environment where employees can innovate, create, and problem solve. The behaviors associated with transformational leadership cultivate and enable structural empowerment to not only exist but thrive. Nurses who perceive their manager's leadership style as transformational have lower intention to leave than nurses who view their manager's style as transactional or passive avoidant.

These traits are associated with hospital Magnet Status, and thus are desirable attributes for organizations to achieve.

Specific Aims

This project aimed to improve nursing leadership by implementing an evidence-based education and coaching program. Managers received education, coaching, and mentoring on structural empowerment and transformational leadership concepts and behaviors.

Project Outcomes

This project has nine short term change outcomes. Five outcomes were developed based on select questions from the organization's annual caregiver engagement survey that measure specific elements of structural empowerment and nurses' intent to stay directly and by asking about burnout. Four additional outcomes were developed to assess overall leader engagement and uptake and utilization of knowledge obtained during the implementation phase of the project.

Implementation and Evaluation Plan

Managers and the registered nurses from participating units were emailed a pre-project survey. Following a three-week period for completion of the surveys, managers participated in an education session on transformational leadership and structural empowerment. Each manager subsequently participated in weekly 1:1 coaching and mentoring sessions with their DNP-student coach/mentor. The project culminated in post-project surveys to assess project outcomes.

Results

While there was improvement in four outcome measures, only one was met and one was partially met. Four of nine outcomes had decreased scores compared to pre-project survey scores and one outcome remained unchanged overall. The best improvements were in leader level of uptake and utilization of transformational leadership and structural empowerment, and appreciation demonstrated by the nurse leader. Communication, access to supplies and equipment, and the ISA scores for registered nurses decreased. Burn out was unchanged.

A contextual element that may have interacted with the results was the implementation of a new, all-in-one, timekeeping, payroll, procurement, human resources and talent acquisition platform that resulted in widespread pay discrepancies, procurement problems for minor but necessary supplies and equipment, and position requisition issues that delayed hiring, exacerbating staffing challenges.

Interpretation

The five managers who responded to the Level of Knowledge Use Surveys (LOKUS) had significant individual improvement in their individual knowledge uptake and utilization (KUU) for both transformational leadership (TL) and structural empowerment (SE). While the 50% threshold for SE KUU was not reached, each manager had individual improvement of two to four levels in TL and SE. While the contextual issues experienced at the hospital during the project implementation period had a significant impact on individual employees, small improvements in some ISA domains, only small increases in others, and lack of change in burnout suggests that TL with SE can prevent a bad situation from getting worse.

Conclusions

Although the stated outcomes were not met seven of nine times, multiple outcomes did improve despite significant organizational adversities. TL and SE may serve as stabilizing forces during the time of organizational strife. This model is dependent upon senior nurse leaders who value TL characteristics and the empowerment of staff. Embarking on a Magnet journey could serve to embed and codify this into the organization's nursing leadership DNA. TL and SE should be nurtured so that the desired behaviors do not degrade during times of stress or high transactional demands from nursing leaders.

TL and SE are not exclusive to nursing. Including other health disciplines in this training has the potential to create a standard and aligned leadership approach. An engaged and empowered workforce is primed to collaborate across disciplines, embracing evidence-based practice to and improve patient care.

Transformational Leadership and Structural Empowerment Training for Nurse Managers to Improve Nursing Job Satisfaction, Engagement, and Retention

Employee dissatisfaction is not a new problem. Positive employee satisfaction and engagement is attributed to multiple desirable business outcomes including customer satisfaction (Chi & Gursoy, 2009; Jeon & Choi, 2012) and financial performance (Call et al., 2015; Chi & Gursoy, 2009). Conversely, when employees are dissatisfied, they may leave their organizations (Labrague et al., 2020; Lee, 1988; Nowrouzi-Kia & Fox, 2020) thus causing their now former employer to incur the cost of recruiting, hiring, and training their replacements. Worse than leaving, they may choose to stay, negatively impacting the organization with low productivity (Fassoulis & Alexopoulos, 2015), low quality work, and high rates of absenteeism (Hom et al., 2017).

Problem Description

Problem Background

Although satisfaction and engagement are conceptually distinct, the terms are often used interchangeably due to overlap in the factors that impact them. Henne and Locke (1985) define job satisfaction as “an emotional response to value judgments by individual workers” (p. 222), that encompass elements of the work itself, pay, and coworker and supervisor behaviors. Abraham (2012) defines job satisfaction as “the extent to which employees like their work” (p. 27) and lists attributes from the Society of Human Resource Management (SHRM) job satisfaction survey such as job security, compensation, benefits, and relationship with immediate supervisor as key factors impacting one’s job satisfaction.

Engagement is described as an employee’s “commitment to and satisfaction with their jobs” (Dempsey & Reilly, 2016, p.1) and according to Schaufeli (2014) is a combination of

“vigor, dedication, and absorption” (p.19) that includes the relationship with the organization. Job satisfaction is frequently regarded as a precursor to engagement. Abraham (2012) asserts that employees must first be satisfied before they can be engaged, and Schaufeli (2014) notes that employee surveys measure the perception of job-related resources as antecedents to employee engagement.

In healthcare, poor nurse satisfaction can have multiple serious consequences, including, but not limited to, lower financial reimbursement due to low patient satisfaction (Letourneau, 2016) and high turnover (Brewer et al., 2011), which results in increased costs to the healthcare organization (Duffield et al., 2014), short staffing and/or an overreliance of new graduates that can affect the quality and safety of patient care (Carthon et al., 2019; Lake et al., 2019; Lee & Sim, 2017).

Prior to the Covid-19 pandemic, national estimates of nursing turnover ranged from 8.8% to 37% (Haddad et al., 2020). Common reasons for turnover have historically included retirement (Haddad et al., 2020), burnout, stress, job dissatisfaction, managerial style, and lack of supervisory support (Halter et al., 2017). While it is too soon to quantify the full impact of Covid-19 on nurse job satisfaction and turnover, evidence is emerging that high chronic fatigue caused by persistently feeling overwhelmed is causing nurses to explore ways to leave the bedside or quit nursing altogether (Lavoie-Tremblay et al., 2022). Whatever the cause, high nursing turnover exacerbates existing staffing shortages caused by a decades long nursing shortage that, pre-pandemic, predicted a national deficiency of over one-half million nurses by 2030 (Zhang et al., 2018). Under these circumstances, all avoidable turnover including turnover not related retirement, geographical move due to spouse job or personal reasons, employee illness or death, and involuntary termination should be mitigated and strategies to reduce

voluntary turnover should be employed. Reducing or eliminating job dissatisfiers, improving job satisfiers, and supporting and empowering staff through transformational leadership behaviors are tactics that drive toward these goals.

Local Problem

The setting for this scholarly project is a general acute care hospital with 283 licensed inpatient beds. Located in California, it is part of a larger faith-based not for profit system in hospitals in multiple states. The organization's mission includes service to the poor and vulnerable; compassion and excellence are two of its stated core values.

Like many hospitals, it has operational goals of employee/caregiver engagement, patient satisfaction, quality and safety, and financial performance. To assess employee/caregiver engagement and job satisfaction, the hospital conducts an annual employee engagement survey of nurses, allied health professionals, and ancillary and support services employees. Physicians and advanced practice clinicians are not included in this survey as they are surveyed separately.

The hospital's 2020 caregiver employee engagement survey revealed that 56% to 64% of the registered nurses who responded were either detached or actively disengaged. Previous interventions to prior years' surveys have not yielded improvement with the 2020 results measurably worse than those obtained in 2019. Of notable concern, 43% of the 615 respondents across all nursing departments reported high levels of burnout, with 12% indicating a lack of intent to stay.

The predictive value of the 2020 survey indicated that potentially 12% of the 615 respondents would exit the organization within the following year, resulting in 74 resignations. This number is on par with previous years and therefore not unexpected or surprising. However, in the first 5 months of 2021, 70 nurses had already quit their jobs, and by year end the number

of nurses who exited the organization was 204, nearly three times what was predicted in the 2020 annual survey.

The high resignation rate had a significant impact on all aspects of hospital clinical operations. To keep beds open, procedural areas functioning, and the emergency department suitably staffed, the hospital relied on travel nurse labor at crisis rates exceeding \$200/hr. It is important to note that the pandemic also disrupted the new graduate nursing pipeline, compounding the nursing shortage, and presenting a bleak outlook for attaining future new graduate nurses. Dewart et al. (2020) and O'Flynn-Magee et al. (2020) have observed that nursing students faced challenges completing their required clinical rotations amid the pandemic, thereby delaying program completion, and decreasing the availability of new graduate nurses. California carries 27% of the nation's nursing shortage (Zhang, et al, 2018). With fewer new graduate nurses and a worsening nursing shortage, retention strategies to decrease attrition are more important than ever.

Available Knowledge

Literature Review

The following PICO question was developed: In Registered Nurses, what factors impact job satisfaction, engagement, and intent to stay? A comprehensive review of the literature was conducted to gain understanding of the relationship between satisfaction, engagement, and turnover, and determine evidence-based strategies and tactics to improve them. CINAHL Google Scholar, PubMed, Medline, and APA PsychInfo were searched using the following key words and phrases: *nurse engagement, nurse job satisfaction, empowerment, interventions, determinants, intent to leave, stay, quit, turnover, leader behavior and/or style, and manager/management behavior and style*. Additionally, the reference lists for selected articles

were evaluated for additional relevant sources. Initial findings within the literature revealed two additional search terms that were subsequently added to the above list: *transformational leadership* and *structural empowerment*. Twenty scholarly articles (Appendix A) were selected because they either contributed to the understanding of the problem or because the researchers proffered solutions to improve engagement and satisfaction, and the downstream effects of reduced burnout, intent to leave, and turnover.

Synthesis of the Evidence

Multiple studies link leadership style and behavior to employee job satisfaction, engagement, and retention. Leader attitudes, actions, and behaviors are instrumental in creating a work environment that fosters nurse job satisfaction and engagement. Evidence exists that the transformational leadership style is more positively correlated to these outcomes than other styles of leadership or management (Cowden et al., 2011; Specchia et al., 2021; Suliman et al., 2020).

Kanter's theory of structural empowerment is a specific empowerment method exemplified by transformational leaders that is shown to improve job satisfaction (Boamah et al, 2018). It contains four main constructs: (a) access to information, (b) support, (c) resources, and (d) opportunities to learn and develop (Callicut, 2015; Clavelle et al., 2013; Larkin et al., 2008). Specific behaviors demonstrated include providing tools, resources, supplies, education, training, and support, all which have been shown to improve nurse job satisfaction (de Almeida & Orgambidez, 2019) and retention (Leurer et al., 2007). Bakker (2011) ascertains that job and personal resources (the structural empowerment element *resources*) are drivers of employee engagement. Other leader behaviors positively correlated with intent to stay, and demonstrative of structural empowerment are engaging with staff (*access to information*), being sensitive to staff needs (*support*), and assisting in their professional development (*opportunity to learn and*

develop) (Roche et al, 2015). Shimp (2017) reiterates the themes of empowerment, equipment, professional growth, authentic and transformational leadership, collaboration, staffing, and rewards and recognition as drivers of nurse retention.

Transformational leaders create an empowered work environment where employees can innovate, create, and solve their own problems. Central to empowerment is trust, which is developed and nurtured (Barker, 1992). Three leadership behaviors associated with developing mutual trust are: communication that is accurate, comprehensive, and frequent, (*access to information*), acceptance of others' ideas and openness to influence by others (*support*) and imposing the fewest controls as reasonably possible (*empowerment*) (Barker, 1992). Nurses who perceive their manager's leadership style as transformational have lower intention leave than nurses who view their manager's style as transactional or passive avoidant (Suliman et al., 2020). Importantly, managers should avoid autocratic leadership, management by exception (Kleinman, 2004), passive-avoidant and laissez-faire styles (Specchia et al., 2021) as these styles are negatively correlated with job satisfaction and produce results contrary to engagement and retention.

Rationale

Theoretical Model

Kanter's Theory of Structural Empowerment (Appendix B) states that empowerment is promoted in work environments that provide employees with four key things: Access to information, resources, support, and the opportunity to learn and develop (Callicutt, 2015; Clavelle et al., 2013; Larkin et al., 2008). The literature reveals a theme of successful interventions that fall within these four constructs and contribute to nurse job satisfaction and engagement, which is positively correlated to nurse retention. Examples include timely access to

and ease of information; tools, equipment, and adequate staff to perform necessary work; a supportive manager and work environment; and education, training, development, growth, and opportunities for promotion (de Almeida & Orgambidez, 2019).

Project Framework – Role of the Logic Model in Project Development

The W. K. Kellogg Logic model was constructed to guide the development of both long and short-term outcomes, identify resources necessary to accomplish key tasks, and set realistic operational timeframes. The logic model is intended to be a living document that is updated throughout the life of the project (Appendix C).

Specific Aims

The purpose of this project is to implement an evidence-based education and coaching program to improve nursing leadership. This is accomplished through an education program and mentoring sessions for nurse managers on transformational leadership concepts and exemplified behaviors, and the complementary construct of structural empowerment. Nurse managers will have an improvement in their knowledge uptake and utilization of key concepts taught and an improvement in their leadership engagement score on the leadership intellectual, social, affective (L-ISA) scale. One potential consequence of improved manager leadership is improved staff nurse engagement as demonstrated by improvement in the intellectual, social, affective (ISA) engaging scale score. A second potential consequence is a decrease in nurses' intention to leave the organization post project implementation as compared to pre-project survey responses.

Context

Population

There are two populations of interest. The primary population of interest is registered nurses working in inpatient nursing and hospital-based outpatient units with historically low

caregiver engagement scores. The second population of interest is nurse leaders as project participants. These nurse leaders directly manage the nursing departments where the primary populations of interest work. Five nursing managers and one assistant manager working in these roles received education, training, and mentoring sessions on transformational leadership behaviors and structural empowerment. The primary population of interest, front line staff registered nurses, is the recipient of improved nursing leadership and the execution of structural empowerment. Enhancing leadership skills of nurse managers has the potential to improve job satisfaction and engagement of nursing staff.

Local Care Environment

Situated in California, the local facility a faith based, not-for profit, general acute care, regional tertiary care hospital with 283 licensed beds. Its primary core service lines and business units include women and children's services, Trauma Level II, general surgery, Joint Commission accredited stroke program, cardiovascular surgery, orthopedics/joint surgery, gastrointestinal, neurosurgery, and acute rehabilitation. These service lines are supported by a master's prepared Chief Nursing Officer, five master's prepared nursing directors, and 14 nursing department managers with educational preparation ranging from bachelor's degree in nursing to doctorate. Additionally, the hospital employs 754 union represented registered nurses. This number represents approximately 100 nurses who have left and are not yet replaced. 89 of the 754 (11.8%) are over the age of 60 and thus are approaching retirement age. California hospitals are subject to mandatory nurse to patient staffing ratios under Title 22 of the California Code of Regulations, intensifying pressure to maintain an adequate number of nurses to meet daily staffing demands. The penalty for violating nurse to patient ratios in California is \$15,000 for the first violation, and \$30,000 for the second and all subsequent violations substantiated

during complaint investigations or discovered during periodic inspections of hospitals' compliance with Title 22 staffing requirements (California Department of Public Health, 2020).

Project Setting

This project occurs with the managers and registered nursing staff of five nursing units, encompassing medical-surgical, intensive care, nursing float pool, and the emergency department within a community acute care hospital. The medical-surgical units participating in this are oncology and general medical subspecialties. The intensive care unit is a 26-bed general intensive care unit that provides care for trauma, cardiothoracic, neurosurgical specialty patients along with general critical care patients. In addition to supporting all medical-surgical units, the float pool staffs the hospital's Covid unit.

Organizational Culture and Readiness for Change

The hospital's executive team has emphasized that caregiver engagement is a priority. Magnet status is an organizational system level strategy for nursing engagement and excellence, with several hospitals currently magnet designated, and many more on the magnet journey. Locally, structures are in place to support nurses' professional development. This includes shared governance, a clinical ladder, and an accredited clinical academy training program with a year-long transition to professional practice program. A memorandum of understanding (Appendix D) is in place to outline mutual expectations of the scholarly project including access to frontline leaders and non-monitory resources.

Strengths and Weaknesses

A SWOT analysis (Appendix E) was performed to assess organization strengths, weaknesses, opportunities, and threats that would impact the scholarly project. A major strength for nursing is access to resources inherent with being part of a large organization. This includes a

formalized American Nurses Credentialing Center (ANCC) accredited clinical academy training program for new graduate nurses and nurses entering specialty areas. The new graduate program also contains a yearlong transition to professional practice component. Locally, a shared governance structure is in place that serves as a platform for nursing empowerment. Major weaknesses include high leader and front-line nurse turnover, with 17 nursing leaders exiting the organization within the past three years (some positions turning over more than once), and a historical average of approximately 100 nurses leaving annually. Nurse leader turnover, which includes managers, directors, and nursing supervisors, threatens unit stability and the ability to sustain short term gains and achieve long term goals. In 2021, 204 registered nurses left the bedside. Of these, 96% left the organization while 4% moved into nonclinical roles such as education or management.

External Funding

There are no sources of external funding,

Interventions

Education and training are fundamental activities for imparting new knowledge and is foundationally necessary before a deliberate and proposed change can occur. However, education alone has been shown to be a low-level intervention when it comes to producing change (Institute for Safe Medicine Practices, 2020; Soong & Sjojanian, 2020). This scholarly project utilizes a multi-modal approach to change, encompassing education, competency evaluation, practice opportunity, and 1:1 coaching and mentoring. The initial intervention includes education for nurse managers on transformational leadership behaviors and structural empowerment, known key drivers of employee job satisfaction and engagement.

There are three phases to this project. The first phase is the Pre-Implementation Phase. From May 1-15, 2022, pre-project measurement of nurse manager leadership ISA engagement score and knowledge uptake and utilization (KUU) of transformational leadership and structural empowerment occurred. ISA engagement scores for the staff registered nurses working in participating managers' departments was also measured.

The second phase, project implementation, occurred between May 15-August 15, 2022. During the week of May 15, managers received a two-hour education session on transformational leadership and structural empowerment. Beginning the week of May 22 and continuing through the week of August 7, managers participated in weekly coaching and mentoring sessions for ongoing development in the domains of transformation leadership and structural empowerment.

While coaching and mentoring are technically distinct activities, they are complementary and often occur concurrently; therefore, these terms are often used together or interchangeably. Al Hilali et al., (2020) define mentoring as “professional learning related to transfer of knowledge and professionalism between an experienced, knowledgeable employee and less experienced knowledgeable employee” (p. 49). Business definitions of coaching primarily focus on skill attainment specific to particular job, role performance and goal achievement (Al Hilali et al, 2020). The weekly sessions focused on mentoring nurse managers by evaluating the previous week's opportunities to practice transformational leadership behaviors and engage in activities to foster nurses' structural empowerment. Coaching activities also occurred during the sessions with reflection, discussion, and feedback stemming from both missed and seized opportunities, with a forward look to incorporating lessons learned into the following week's daily activities.

The project concluded with the post-intervention phase. Between August 15-August 30, 2022, nurse manager leadership ISA engagement score and KUU of transformational leadership and structural empowerment was remeasured. The ISA engagement scores for registered nurses working in participating managers' departments was also remeasured.

Logic Model

A Kellogg Logic Model was created to align inputs, resources, activities, outputs to the project outcomes. This project has nine short term change outcomes. Five outcomes developed were based on select questions from the organization's annual caregiver engagement survey that measure specific elements of structural empowerment and intent to stay either directly or by asking about burnout. Four additional outcomes were developed to assess overall engagement and leader knowledge utilization and uptake of information learned during the implementation phase of the scholarly project (SP).

1. 50% or more of the managers who received training in their level of knowledge use and uptake for transformational leadership on the LOKUS instrument achieved a minimum level of ***intended use: routine*** post-project implementation in August 2022 as compared to pre-project in May 2022.
2. 50% or more of the of the managers who received training in their level of knowledge use and uptake for structural empowerment on the LOKUS instrument achieved a minimum level of ***intended use: routine*** post-project implementation in August 2022 as compared to pre-project in May 2022.
3. There was a 25% improvement in the overall ISA engagement survey score for nurse managers post-project implementation in August 2022 as compared to pre-project in May 2022.

4. There was a 10% improvement in the overall ISA engagement survey score for front line nurses post-project implementation in August 2022 as compared to pre-project in May 2022.
5. There was a 10% improvement in the total favorable responses for intention to stay by nurses who responded to a survey question post-project in August 2022 as compared to pre-project in May 2022.
6. There was a 10% improvement in the total favorable response score for feeling appreciated by their supervisor by nurses who responded to a survey question post-project in August 2022 as compared to pre-project in May 2022.
7. There was a 25% improvement in the total favorable response score for having the supplies and equipment necessary to do the work by nurses who responded to a survey question post-project implementation in August 2022 as compared to pre-project in May 2022.
8. There was a 25% improvement in the total favorable response score for receiving the information needed to do job effectively by nurses who responded to a survey question post-project implementation in August 2022 as compared to pre-project in May 2022.
9. There was a 50% improvement in the total favorable response score for burnout by nurses who responded to a survey question post-project implementation in August 2022 as compared to pre-project in May 2022. It is noted that the initial results were very low, causing the smallest of improvement in raw score to result in a large change in percentage.

Frontline nursing leaders were recruited to participate in a SP to improve their leadership by providing education about transformational leadership and structural empowerment and coaching and mentoring of behaviors and interventions to improve nursing job satisfaction, engagement, and ultimately decrease the nursing staff's stated intention to leave the organization. An informational session was scheduled, and managers were invited to learn more about the project, expectations for participation, and intended outcomes. It was also made clear that participation was voluntary and that they could withdraw at any time.

Leaders who opted in were subsequently scheduled for an educational session (Appendix F) on transformational leadership, specific behaviors of a transformational leader, and how transformational leadership benefits the nursing workforce by enabling structural empowerment to occur. Structural empowerment was defined, and examples of relevant interventions and tactics were presented. Topics included communication strategies, support and recognition of nurses, and ensuring that tools, equipment, and staffing resources were adequate.

The nursing managers who participated in the project were given a survey to measure their knowledge utilization and uptake (KUU) prior to receiving any education or training and again at the conclusion of the project. During the implementation phase, the managers met weekly with the DNP student to discuss progress on in their interventions and receive mentoring and guidance on transformational leadership behaviors and implementation of structural empowerment elements.

Correlation of Interventions with the Theoretical Model Elements

The Structural Empowerment model has four major elements: Access to information, access to support, access to resources, and access to opportunities. While all four elements were taught during the manager education session, only the first three received ongoing attention

during weekly 1:1 coaching sessions where dialogue occurred regarding specific tactics and interventions managers would incorporate into their leadership behaviors.

While access to opportunities was not addressed specifically in this project due to time constraints, it was included in the education and managers were encouraged to incorporate this element into future activities. Leader behaviors and actions were correlated to access to information, support, and resources. Since worker structural empowerment is predicated on leader behavior, education and training on transformational leadership was a necessary foundation.

Timeline

Project planning began in May 2021 with the development of a detailed timeline leading up to the project implementation in May 2022 and culminating in final submission in May 2023. The timeline (Appendix G) was constructed to track relevant milestones and ensure activities were completed on time and in accordance with the overall project timeframe.

Measures

Knowledge Uptake and Utilization (KUU)

The level of knowledge use survey (LOKUS) is a customizable 20-item survey that assesses the degree to which knowledge is assimilated into practice by the respondent. KUU is stratified to ten levels of KUU ranging from non-awareness to use with modification, the highest level possible (Lane et al., 2015). Measures 1 and 2 pertain to KUU.

Engagement

The Intellectual Social Affective (ISA) Engagement Scale is a nine question self-assessment tool that assesses employee engagement on the three domains stated. There are three questions in each domain. For each question, survey participants rate the degree to which they

agree with the statement on a one to seven scale. A score of 1 represents “strongly agree” while a score of 7 represents “strongly disagree” (Soane et al., 2012). The ISA engagement scale has also been modified for leadership assessment of engagement and is scored in the same manner (Soane, 2014). Measure 3 pertains to manager engagement and measure 4 pertains to staff RN engagement.

Nurses were asked five additional questions replicated from the annual caregiver engagement survey to assess their intent to stay (measure 5), their level of perceived appreciation by their manager (measure 6), their access to the resources supplies and equipment (measure 7), the receipt of information necessary to perform their job effectively (measure 8), and their level of burnout (measure 9).

1. 50% or more of the managers who received training in their level of knowledge use and uptake (KUU) for transformational leadership on the LOKUS instrument achieved a minimum level of *intended use: routine* post-project implementation in August 2022 as compared to pre-project in May 2022. The KUU was evaluated by comparing pre-and post-project KUU levels and calculating the change in level as well as the number of level changes post implementation as compared to pre-implementation.
2. 50% or more of the of the managers who received training in their level of knowledge use and uptake for structural empowerment on the LOKUS instrument achieved a minimum level of *intended use: routine* post-project implementation in August 2022 as compared to pre-project in May 2022. The KUU was evaluated by comparing pre-and post-project KUU levels and calculating the change in level as well as the number of level changes post implementation as compared to pre-implementation.

3. There was a 25% improvement in the overall ISA engagement survey score for nurse managers post-project implementation in August 2022 as compared to pre-project in May 2022. This ISA Engagement score was evaluated by calculating the percentile change in answers for each of the domains on a 1-7 Likert Scale post project implementation as compared to pre-project responses.
4. There was a 10% improvement in the overall ISA engagement survey score for front line nurses post-project implementation in August 2022 as compared to pre-project in May 2022. This measure was evaluated by calculating the percentile change in answers for each of the domains on a 1-7 Likert Scale post project implementation as compared to pre-project responses.
5. There was a 10% improvement in the total favorable responses for intention to stay by nurses who responded to a survey question post-project in August 2022 as compared to pre-project in May 2022. The change in intent to stay was evaluated by calculating the percentile change in the mean response on a 1-5 Likert Scale post project implementation as compared to pre-project responses.
6. There was a 10% improvement in the total favorable response score for feeling appreciated by their supervisor by nurses who responded to a survey question post-project in August 2022 as compared to pre-project in May 2022. The change in perceived appreciation by their supervisor was evaluated by calculating the percentile change in the mean response on a 1-5 Likert Scale post project implementation as compared to pre-project responses.
7. There was a 25% improvement in the total favorable response score for having the supplies and equipment necessary to do the work by nurses who responded to a

- survey question post-project implementation in August 2022 as compared to pre-project in May 2022. The change in the nurses perception that of availability of supplies and equipment was evaluated by calculating the percentile change in the mean response on a 1-5 Likert Scale post project implementation as compared to pre-project responses.
8. There was a 25% improvement in the total favorable response score for receiving the information needed to do job effectively by nurses who responded to a survey question post-project implementation in August 2022 as compared to pre-project in May 2022. The change in the nurses' perception that they had the information they needed to do their job effectively was evaluated by calculating the percentile change in the mean response on a 1-5 Likert Scale post project implementation as compared to pre-project responses.
 9. There was a 50% improvement in the total favorable response score for burnout by nurses who responded to a survey question post-project implementation in August 2022 as compared to pre-project in May 2022. As noted previously, the initial results for this measure were very low, causing the smallest of improvement in raw score to result in a large change in percentage. The change in the nurses' feelings of burnout was evaluated by calculating the percentile change in the mean response on a 1-5 Likert Scale post project implementation as compared to pre-project responses.

Analysis

Analysis of each of the nine project outcomes are as follows: The pre and post project LOKUS surveys for both transformational leadership and structural empowerment were assessed

by matching confidential participant IDs and determining the number of levels of KUU improvement.

1. 50% or more of the managers who received training in their level of knowledge use and uptake for transformational leadership on the LOKUS instrument achieved a minimum level of *intended use: routine* post-project implementation in August 2022 as compared to pre-project in May 2022. The pre and post project LOKUS surveys for transformational leadership was assessed by matching confidential participant IDs and determining the number of levels of KUU improvement.
2. 50% or more of the of the managers who received training in their level of knowledge use and uptake for structural empowerment on the LOKUS instrument achieved a minimum level of *intended use: routine* post-project implementation in August 2022 as compared to pre-project in May 2022. The pre and post project LOKUS surveys for structural empowerment was assessed by matching confidential participant IDs and determining the number of levels of KUU improvement.
3. There was a 25% improvement in the overall ISA engagement survey score for nurse managers post-project implementation in August 2022 as compared to pre-project in May 2022. The mean scores of ISA engagement survey response scores in each of the domain and overall score were analyzed at the end of the project to evaluate for changes in mean scores when compared to pre-project mean scores to assess for improvement in scores.
4. There was a 50% improvement in the total favorable response score for burnout by nurses who responded to a survey question post-project implementation in August 2022 as compared to pre-project in May 2022. As noted previously, the initial results were very low, causing the smallest of improvement in raw score to result in a large change in

percentage. The mean scores of the question responses were analyzed at the end of the project to evaluate for changes in mean scores when compared to pre-project mean scores to assess for improvement in scores.

5. There was a 10% improvement in the total favorable responses for intention to stay by nurses who responded to a survey question post-project in August 2022 as compared to pre-project in May 2022. The mean scores of the question responses were analyzed at the end of the project to evaluate for changes in mean scores when compared to pre-project mean scores to assess for improvement in scores.
6. There was a 10% improvement in the total favorable response score for feeling appreciated by their supervisor by nurses who responded to a survey question post-project in August 2022 as compared to pre-project in May 2022. The mean scores of the question responses were analyzed at the end of the project to evaluate for changes in mean scores when compared to pre-project mean scores to assess for improvement in scores.
7. There was a 25% improvement in the total favorable response score for having the supplies and equipment necessary to do the work by nurses who responded to a survey question post-project implementation in August 2022 as compared to pre-project in May 2022. The mean scores of the question responses were analyzed at the end of the project to evaluate for changes in mean scores when compared to pre-project mean scores to assess for improvement in scores.
8. There was a 25% improvement in the total favorable response score for receiving the information needed to do job effectively by nurses who responded to a survey question post-project implementation in August 2022 as compared to pre-project in May 2022.

The mean scores of the question responses) were analyzed at the end of the project to evaluate for changes in mean scores when compared to pre-project mean scores to assess for improvement in scores.

9. There was a 10% improvement in the overall ISA engagement survey score for front line nurses post-project implementation in August 2022 as compared to pre-project in May 2022. The mean scores of ISA engagement survey response scores in each of the domain and overall score were analyzed at the end of the project to evaluate for changes in mean scores when compared to pre-project mean scores to assess for improvement in scores.

Ethical Considerations

Ethical Considerations and Protection of Participants

As a nursing leader in the organization where this project was implemented, an ethical consideration is the power gradient between a senior nursing leader to more junior nursing leaders, including one direct reporting relationship. To mitigate this consideration, participation by nurse managers was voluntary and they were notified that they could quit participation at any time during the project. A pre-meeting was scheduled to inform them of project goals and the expected participation, and answer questions. Prior to implementation, the project was approved by organization's Institutional Review Board (IRB) and was approved as a Quality Improvement project (Appendix H). Additionally, the memorandum of understanding with the organization delineates the roles and responsibilities of nursing leaders for the project as distinctly separate from their job performance. Registered nurse participation from the partaking managers' departments was also voluntary and survey data was anonymous.

Conflicts of Interest

No conflict of interest was identified.

Biases

No biases were identified.

Threats to Quality

Three potential threats to quality were identified. The first threat is potential for nonadherence to learned transformational leadership behaviors and failure by leaders to support and enable structural empowerment at the unit level. The second potential threat is that either nurses will decline to take a brief survey or that nurses who take the pre-survey will not be the same as those who take the post survey. The third potential threat is nursing burnout and attrition due to unanticipated reasons, for example, high levels of enduring burnout or leaving the nursing profession in a post-pandemic world. The impact of a global pandemic could undermine interventions to improve job satisfaction due to the overall experience of nursing during the pandemic. To control for these threats to quality, weekly meetings with nursing managers were conducted to guide and mentor leaders during the project implementation phase. Survey questions for nurses were designed to account for the impact of the pandemic on their job satisfaction, burnout, and intention to leave either the organization, care setting, or profession.

IRB Application and Project Determination

The project was submitted to the organization's institutional review board and determined to be a process improvement project. Approval to proceed was granted.

Project Budget

The total expense for this scholarly project is \$42,286. The primary expense is from labor in the form of salaries and wages, and account for 89.3% of expenses. Other expenses include space for meetings and classes, equipment, and informational technology support (Appendix J).

Should this project be continued in year two and three, year two expense are estimated at \$40,257. While startup costs are eliminated in subsequent years, labor expense for initial training for an expanded audience as well as quarterly meetings with previously trained managers to ensure alignment with processes has been added. In year three there is a significant drop in overall program cost as the program transitions to maintenance mode (Appendix K).

Project revenue to cover wage and salaries expense are from in-kind donations from the DNP student and from the hospital, who subsidizes the labor expense for managers and staff participating in the project by virtue of agreeing to allow the project to occur. Other all in-kind donations from the hospital for space, equipment, and IT infrastructure (as described above) are estimated at \$3379. Supplies and miscellaneous expense (e.g., mileage, office supplies) are covered by in kind donations from the DNP student and are estimated at \$898 (Appendix L).

Results

This project consisted of nine short term change outcomes. Four outcomes were developed to assess overall engagement of staff and leaders, and leader knowledge utilization and uptake of information regarding transformational leadership and structural empowerment. Five additional outcomes developed were based on select questions from the organization's annual caregiver engagement survey that measured specific elements of structural empowerment and intent to stay. All outcomes were measured in August 2022 at the conclusion of the scholarly project intervention, and results compared to pre-project survey data obtained in May 2022.

The project was launched when a recruitment letter (Appendix M) was emailed to the five nurse managers who had verbally agreed to participate in the DNP scholarly project. The letter explained the project and invited them to participate. All five managers confirmed their commitment, with one manager requesting that her assistant nurse manager be offered the

opportunity to participate as part of her professional development and to also create alignment and a consistent leadership approach in the department. The assistant manager was subsequently offered the opportunity to participate and opted in. Following confirmation of manager participants, registered nurses in the five departments with leader participants were sent a recruitment letter (Appendix N) outlining the project background and objectives and soliciting their participation by taking an online pre-and post-project assessments administered via Microsoft Forms. A link to the nine question Intellectual Social Affective Engagement (ISA) Scale survey plus five additional focus questions was provided (Appendix O).

Contemporaneously, managers were sent links to three pre-project assessments, the ISA Leadership Engagement Survey (Appendix P), and Level of Knowledge Uptake and Utilization Surveys (LOKUS) for transformational leadership (TL) (Appendix Q) and structural empowerment (SE) (Appendix R). All pre-project assessment surveys were initially opened for two weeks, coordinated to close a day prior to the launch of manager education and the commencement of weekly coaching 1:1s. However, due to an unannounced visit by the California Department of Public Health, manager education was postponed until the following week. An email announcing that there was another week to complete assessments was sent to both the RN and manager groups, informing them of the extended timeframe to complete survey for anyone still wanting to participate.

Managers subsequently participated in a 90-minute education session with 30 minutes reserved for questions and answers. Managers received education on the types of leadership styles and differences between them, traits, characteristics, and behaviors of transformational leadership, and domains and elements of structural empowerment. Following that, nurse managers participated in weekly 1:1 coaching and mentoring sessions with their DNP-student

coach/mentor. Initially scheduled for 30-minutes weekly, by week two it was evident that 30-minutes was not sufficient to allow manager participants the time necessary to discuss relevant issues and activities. The sessions were subsequently rescheduled to allow for up to one-hour per week to allow for adequate time for discussion of key topics.

Data Results/Outcomes Analysis

Five managers and one assistant nurse manager participated in the education and 1:1 coaching/mentoring sessions. Of these, five of the six leader participants answered the pre and post project surveys and demonstrated improvement in their level of knowledge uptake and utilization for both transformational leadership and structural empowerment.

Outcome 1 was that 50% or more of the managers who received training in their level of knowledge use and uptake for transformational leadership on the LOKUS instrument achieved a minimum level of ***intended use: routine*** post-project implementation. Five managers responded to both the pre and post LOKUS survey for transformational leadership; all five demonstrated improvement in their level of utilization and uptake with 60% of the participants achieving the ***intended use: routine*** level or higher (Appendix S). This outcome was met.

Outcome 2 was that 50% or more of the of the managers who received training in their level of knowledge use and uptake for structural empowerment on the LOKUS instrument achieved a minimum level of ***intended use: routine*** post-project implementation. While all managers demonstrated improvement in their level of utilization and uptake of structural empowerment, only two of five (40%) met the goal threshold of ***intended use: routine*** (Appendix T). Therefore, this outcome was not met.

Outcome 3 was that there was a 25% improvement in the overall ISA engagement survey score for nurse managers post-project implementation. Leader engagement improved slightly in

the intellectual and social engagement domains and decreased slightly in the affective engagement domain (Appendix U). The overall ISA leader score improved by 1.79%. This outcome was not met.

Outcome 4 was that there was a 10% improvement in the overall ISA engagement survey score for front line nurses. The overall ISA engagement score decreased in all but one department. Department six is excluded from the department level analysis due to low survey response. For all departments combined, the overall score decreased by 1.41% (Appendix V). This outcome was not met.

Outcome 5 was that there was a 10% improvement in the total favorable response by nurses for intention to stay. Post-project survey results demonstrated a 11.32% decrease in intent to stay for all departments combined (Appendix W). Three of the four departments analyzed had a decrease in intent to stay. Department 5 was excluded from the department level analysis due to low survey response. This outcome was not met.

Outcome 6 was that there was a 10% improvement in the total favorable response score for feeling appreciated by their supervisor. Two departments outperformed against this goal, improving their scores by 29.41% and 31.82% respectively. However, the overall score for all departments combined only improved by 2.8%. (Appendix W). This outcome was partially met.

The seventh outcome measure was that there was a 25% improvement in the total favorable response score for having the supplies and equipment necessary to do the work. The score for all departments decreased by 2.9%. This outcome was not met.

The eighth outcome measure was that there was a 25% improvement in the total favorable response score for receiving the information needed to do job effectively. Two departments had

slight improvement of 2.86% and 4.88%. Overall, all departments combined and a decrease of 4.88%. This outcome was not met.

The ninth outcome measure was that there was a 50% improvement in the total favorable nurse response for burnout. The score for burnout was unchanged, therefore this outcome was not met.

Contextual Elements and Potential Associated Interactions with Interventions and Results

Several contextual elements exist that may have interacted with the survey results. In late June 2022, the organization implemented a large-scale change to the timekeeping and payroll platforms resulting in widespread paycheck discrepancies for hourly workers. This includes the nursing staff. As the organization's payroll department is located offshore and the Human Resources department had transitioned to an online ticket method to process transactional requests, these issues were not resolved quickly, and communication was inadequate to address questions raised. Pay discrepancies persisted for many weeks, resulting in an increase in union activity in the form of grievances, picketing, and press releases complaining about the hospital's pay practices and lack of timely resolution.

Around this same time, the organization also published a net operating loss of several hundred million dollars systemwide. A freeze on capital expenditures ensued. Although managers worked with staff to address bedside supply issues, several smaller capital items aged out and were beyond repair, including bladder scanners, the rapid infuser, and an ultrasound machine. The inability to replace these items may have potentially impacted the question regarding having necessary equipment.

The third potential contextual element is the hiring of a large new graduate cohort in the medical surgical units. These new graduates were not hired into the float pool or specialty

nursing units. While the demographics of the nurses responding to the survey is unknown, this may explain improved scores for intent to stay, especially in the setting of increased burnout for the same unit (Appendix X).

Missing Data

One nurse manager or the assistant manager did not take the pre and post project implementation surveys. Demographic data was not collected on nurses who participated in the surveys. In retrospect, length of employment would have been useful.

Interpretation

Summary of key findings

Nurse managers were willing to learn about and adopt TL and SE enabling behaviors. A consistent theme during the 1:1 coaching sessions was a desire to become a better leader. Current situations were discussed in the context of TL and SL, and how to frame one's leadership approach in a manner consistent with these constructs. At the conclusion of the project, the five managers who responded to the LOKUS surveys had significant individual improvement in their individual KUU for both TL and SE. While the 50% threshold for SE KUU was not reached, each manager had individual improvement of two to four levels in TL and SE.

Reasons for differences between observed and anticipated outcomes

The LOKUS survey directs participants to rate various behaviors that then match to a level of KUU. Three of five managers rated themselves one level below *intended use: routine*. The behaviors are self-assessed and subject to interpretation by the person evaluating themselves. It is not implausible that a participant would underestimate their KUU level.

The leader ISA and the ISA survey taken by staff both saw decreases in the social and affective engagement domains. Specific questions in the social engagement domain includes

sharing values, work goals, and attitudes as one's colleagues; questions in the affective engagement domain include feeling positive, energetic, and enthusiastic about work. The widespread expression of anger and frustration by staff related to pay issues and managers related to the significant addition of work attempting to resolve issues on behalf of employees provides a reasonable possibility for the observed difference in observed outcomes.

Another potential reason for the difference between the observed and anticipated outcomes is the amount of time necessary to overcome and improve significant work-related sentiment such as intent to leave or burnout. These are associated with major emotions and outlook and are not likely to be amenable to a short-term intervention.

Project Limitations

This project has several limitations, the most evident being time. Twelve weeks is not enough time for staff to recognize a significant and sustained improvement in their manager's behavior, especially when substantial organizational contextual issues exist that impact the overall work environment as well as the staff member's personal finances. Additionally, when a major issue emerges in the workplace, it must be resolved and far enough in the past to not continue to impact the current opinions and emotions of staff.

Policy Implications

A consistent and sustained approach to nursing leadership with the adoption of transformational leadership behaviors and a focus on structural empowerment may anchor nursing staff to their direct leaders, and therefore the organization, during challenging times. Nurse leaders should adopt behaviors that support and empower their teams. Senior nurse leaders should hire and promote nurses to leadership positions who have an aptitude for these traits, and time, energy, and resources should be devoted to cultivating them.

Conclusion

Usefulness of the work

This project contributes to the knowledge regarding the impact of TL and SE on nursing job satisfaction, engagement, and intent to leave, because although the stated outcomes were not met seven of nine times, the outcome measures were aggressive and optimistic, and multiple outcomes did improve despite significant organizational chaos. TL and SE may serve as stabilizing forces during the time of organizational strife.

Sustainability

This model is dependent upon senior nurse leaders who value TL characteristics and the empowerment of staff. Embarking on a Magnet journey could serve to embed and codify this into the organization's nursing leadership DNA. In the meantime, it will need to be continually nurtured so that the desired behaviors do not degrade during times of stress or high transactional demands from nursing leaders.

Potential for Spread to Other Contexts

Transformational leadership and structural empowerment are not exclusive to nursing. Locally, this can be spread to other leaders and departments to create a standard and aligned leadership approach.

Implications for practice

An engaged and empowered nursing workforce is primed to embrace evidence-based practice to solve their own problems and improve care that directly impacts patients at the bedside. The support of leaders directly impacts nursing empowerment.

Suggested Next Steps and Dissemination

Next steps include continuing with the behaviors learned during this project, expanding it to other nursing and non-nursing leaders. Dissemination is to nurses, nurse and non-nurse leaders, hospital administrators, and aca

References

- Abraham, S. (2012). Job satisfaction as an antecedent to employee engagement. *SIES Journal of Management*, 8(2), 27-36.
- Al Halali, K.S., Al Mughairi, B.M., Kian, M. W., Karim, A.M. (2020). Coaching and mentoring. Concepts and practices in development of competencies: A theoretical perspective. *International Journal of Academic Research in Accounting, Finance and Management Sciences* 10(1), 41-54. <http://dx.doi.org/10.6007/IJARAFMS/v10-i1/6991>
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20(4), 265–269. <https://doi.org/10.1177/0963721411414534>
- Barker, A. M. (1992). *Transformational nursing leadership: A vision for the future*. National League for Nursing Press.
- Boamah, S. A., Spence Laschinger, H. K., Wong, C., & Clarke, S. (2018). Effect of transformational leadership on job satisfaction and patient safety outcomes. *Nursing outlook*, 66(2), 180–189. <https://doi.org/10.1016/j.outlook.2017.10.004>
- Brewer, C. S., Kovner, C. T., Greene, W., Tukov-Shuser, M., & Djukic, M. (2012). Predictors of actual turnover in a national sample of newly licensed registered nurses employed in hospitals. *Journal of Advanced Nursing*, 68(3), 521–538. <https://doi.org/10.1111/j.1365-2648.2011.05753.x>
- California Department of Public Health. (2020, January 16). *All facilities letter: Notice of new penalties for violating nurse to patient staffing ratios*.
<https://www.cdph.ca.gov/Programs/CHCQ/LCP/CDPH%20Document%20Library/AFL-20-04.pdf>

- Call, M. L., Nyberg, A. J., Ployhart, R. E., & Weekley, J. (2015). The dynamic nature of collective turnover and unit performance: The impact of time, quality, and replacements. *Academy of Management Journal*, 58(4), 1208–1232.
<https://doi.org/10.5465/amj.2013.0669>
- Callicut, J.D. (2015). Structural empowerment's influence on nursing outcomes in Magnet and non-Magnet healthcare organizations. Proquest Dissertations Publishing.
- Carthon, J. M. B., Davis, L., Dierkes, A., Hatfield, L., Hedgeland, T., Holland, S., Plover, C., Sanders, A. M., Visco, F., Ballinghoff, J., Guidice, M. Del, & Aiken, L. H. (2019). Association of nurse engagement and nurse staffing on patient safety. *Journal of Nursing Care Quality*, 34(1), 40–46.
<https://doi.org/10.1097/NCQ.0000000000000334.Association>
- Chi C.G., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction, and financial performance: An empirical examination. *International Journal of Hospitality Management*, 28(2), 245-253. <http://dx.doi.org/10.1016/j.ijhm.2008.08.003>
- Clavelle, J. T., O'Grady, T. P., Drenkard, K. (2013). Structural Empowerment and the Nursing Practice Environment in Magnet® Organizations. *JONA: The Journal of Nursing Administration*, 43(11), 566-573 doi: 10.1097/01.NNA.0000434512.81997.3f
- Cowden, T., Cummings, G., Profetto-McGrath, J. (2011). Leadership practices and staff nurses' intent to stay: a systematic review. *Journal of Nursing Management*, 19, 461-477.
DOI: 10.1111/j.1365-2834.2011.01209.x
- De Almeida, H., & Orgambidez, A. (2019). Workplace empowerment and job satisfaction in Portuguese nurses: An explicative model. *The Health Care Manager*, 38(3), 220–227.
<https://doi.org/10.1097/HCM.0000000000000265>

- Dempsey, C., Reilly, B., (January 31, 2016). Nurse engagement: What are the contributing factors for success? *The Online Journal of Issues in Nursing* 21(1).
DOI: 10.3912/OJIN.Vol21No01Man02
- Dewart, G., Corcoran, L., Thirsk, L., & Petrovic, K. (2020). Nursing education in a pandemic: Academic challenges in response to COVID-19. *Nurse education today*, 92, 104471.
<https://doi.org/10.1016/j.nedt.2020.104471>
- Duffield, C.M., Roche, M.A., Homer, C., Buchan, J., Dimitrelis, S. (2014). A comparative review of nurse turnover rates and costs across countries. *Journal of Advanced Nursing*, 70(12). 449-456. <https://doi.org/10.1111/jan.12483>
- Fassoulis, K., & Alexopoulos, N. (2015). The workplace as a factor of job satisfaction and productivity: A case study of administrative personnel at the University of Athens. *Journal of Facilities Management*, 13(4). 332-349. <http://dx.doi.org/10.1108/JFM-06-2014-0018>
- Haddad, L. M., Annamaraju, P., & Toney-Butler T.J. Nursing shortage. (2020 Dec 14). *StatPearls*. <https://www.ncbi.nlm.nih.gov/books/NBK493175/>
- Halter, M., Boiko, O., Pelone, F., Beighton, C., Harris, R., Gale, J., Gourlay, S., & Drennan, V. (2017). The determinants and consequences of adult nursing staff turnover: a systematic review of systematic reviews. *BMC health services research*, 17(1), 824.
<https://doi.org/10.1186/s12913-017-2707-0>
- Henne, D., & Locke, E. (1985). Job dissatisfaction: What are the consequences? *International Journal of Psychology*, 20(2),221-240. <https://doi.org/10.1080/00207598508247734>
- Hom, P.W., Lee, T.W., Shaw, J.D., Hausknecht, J.P. (2017). One hundred years of employee turnover theory and research. *Journal of Applied Psychology*, 102(3), 530-545.

<https://doi.org/10.1037/apl0000103>

Institute for Safe Medicine Practices (2020, June 4). Education is “predictably disappointing” and should never be relied upon alone to improve safety.

<https://www.ismp.org/resources/education-predictably-disappointing-and-should-never-be-relied-upon-alone-improve-safety>

Jeon, H., & Choi, B. (2012). The relationship between employee satisfaction and customer satisfaction. *Journal of Services Marketing*, 28(5), 332-341.

DOI:10.1108/09976041211245236

Kleinman, C. (2004). The Relationship between managerial leadership behaviors and staff nurse retention. *Hospital Topics: Research and Perspective on Healthcare*, 82(4), 2–9.

DOI: 10.3200/HTPS.82.4.2-9

Labrague, L.J., Nwafor, C. E., & Tsaras, K. (2020). Influence of toxic and transformational leadership practices on nurse’ job satisfaction, job stress, absenteeism and turnover intention: A cross-sectional study. *Journal of Nursing Management*, 28. 1104-1113.

DOI:10.1111/jomm.13053

Lake, E. T., Sanders, J., Duan, R., Riman, K. A., Schoenauer, K. M., & Chen, Y. (2019). A Meta-Analysis of the Associations between the Nurse Work Environment in Hospitals and 4 Sets of Outcomes. *Medical Care*, 57(5), 353–361.

<https://doi.org/10.1097/MLR.0000000000001109>

Lavoie-Tremblay, M., Gelinias, C., Aube, T., Tchouaket, E., Tremblay, D., Gagnon, M. P., & Cote, J. (2022). Influence of caring for COVID-19 patients on nurse’s turnover, work satisfaction, and quality of care. *Journal of Nursing Management*, 30(1). 33-43.

DOI: 10.1111/jonm.13462.

- Lane, J. P., Stone, V. I., Nobrega, A., & Tomita, M. (2015). Levels of knowledge use survey (LOKUS): A validated instrument for tracking knowledge uptake and use. *Studies in health technology and informatics*, 217, 106-110. Doi:10.3233/978-1-61499-566-1-106
- Larkin, M., Cierpial, C., Stack, J., Morrison, V., & Griffith, C. (2008, March 31). Empowerment theory in action: The wisdom of collaborative governance. *OJIN: The Online Journal of Issues in Nursing*, 13(2). DOI: 10.3912/OJIN.Vol13No02PPT03
- Lee, J. E., & Sim, I. O. (2019). Gap between college education and clinical practice: Experience of newly graduated nurses. *Nursing open*, 7(1), 449–456.
<https://doi.org/10.1002/nop2.409>
- Lee, T.W. (1988). How job dissatisfaction leads to employee turnover. *Journal of Business and Psychology*, 2(3), 263-271. <https://doi.org/10.1007/BF01014043>
- Leurer, M. D., Donnelly, G., & Domm, E. (2007). Nurse retention strategies: advice from experienced registered nurses. *Journal of health organization and management*, 21(3), 307–319. <https://doi.org/10.1108/14777260710751762>
- Letourneau, R. (2016, September 28). Better HCAHPS scores protect revenue. Health Leaders Media. <https://www.healthleadersmedia.com/finance/better-hcahps-scores-protect-revenue>
- LOKUS instrument (n.d). Downloaded on October 2, 2021 from
<https://publichealth.buffalo.edu/content/dam/sphhp/cat/kt4tt/pdf/the-lokus-pdf-revly.pdf>
- Nowrouzi-Kia, B., & Fox, M. T. (2020). Factors Associated With Intent to Leave in Registered Nurses Working in Acute Care Hospitals: A Cross-Sectional Study in Ontario, Canada. *Workplace Health and Safety*, 68(3), 121–128.
<https://doi.org/10.1177/2165079919884956>

- O'Flynn-Magee, K., Hall, W., Segaric, C., & Peart, J. (2020). GUEST EDITORIAL: The impact of Covid-19 on clinical practice hours in pre-licensure registered nurse programs. *Teaching and learning in nursing: official journal of the National Organization for Associate Degree Nursing*, 10.1016/j.teln.2020.07.007. Advance online publication. <https://doi.org/10.1016/j.teln.2020.07.007>
- Roche, M. A., Duffield, C., Dimitrelis, S., & Frew, B. (2015). Leadership skills for nursing unit managers to decrease intention to leave. *Nursing: Research and Reviews*, 5(May), 57-64. DOI: 10.2147/NRR.S46155
- Schaufeli, W. B. (2014). What is engagement? In C. Truss, R. Delbridge, K. Alfes, A. Shantz, & E. Soane (Eds.), *Employee Engagement in Theory and Practice* (pp. 15-35). Routledge.
- Shimp, K. M. (2017). Systematic review of turnover/retention and staff perception of staffing and resource adequacy related to staffing. *Nursing Economics*, 35(5).
- Soane, E., Truss, C., Alfes, K., Shantz, A., Rees, C., & Gatenby, M. (2012). Development and application of a new measure of employee engagement: The ISA engagement scale. *Human Resources Development International*, 15(5). 529-547.
- Soane, E. (2014). Leadership and employee engagement. In Truss, C., Delbridge, R., Alfes, K., Shantz, A., & Soane, E. (Eds). *Employee engagement in theory and practice*, 149-162. Routledge.
- Soong, C. & Sjojanian, K. G. (2020). Education is a low-value improvement intervention: often necessary but rarely sufficient. *British medical journal of quality and safety*, 29, 353-357. <http://dx.doi.org/10.1136/bmjqs-2019-009897>
- Specchia, M. L., Cozzolino, M. R., Carini, E., DiPilla, A., Galletti, C., Ricciardi, W., & Damiani, G. (2021). Leadership styles and nurses' job satisfaction. Results of a systematic review.

International Journal of Environmental Research and Public Health, 18(1552), 1-15.

<https://doi.org/10.3390/ijerph18041552>

Suliman, M., Almansi, S., Mrayyan, M. (2020). Effect of nurse managers' leadership style on predicted nurse turnover. *Nursing Management*, 27(5), 23-28.

DOI:10.7748/nm.2020.e1928

Zhang, X., Tai, D., Pforsich, H., & Lin, V. W. (2018). United States Registered Nurse Workforce Report Card and Shortage Forecast: A Revisit. *American journal of medical quality: The Official Journal of the American College of Medical Quality*, 33(3), 229–236.

<https://doi.org/10.1177/1062860617738328>

Appendix A
Literature Summary Table

TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
Determinants of nurse job dissatisfaction: Findings from a cross-sectional survey analysis in the UK	Senek, M., Robertson, S., Ryan, T., King, R., Wood, E., Taylor, B., Tod, A. (2020)	To explore the levels of dissatisfaction and demoralization in nurses	Quantitative Non-experimental Cross-sectional mixed-methods study	Level III Quality: A	Convenience sample of 1742 nurses from all four UK nations who responded to survey	Understanding of determinants of job satisfaction. Logic regression analysis used to determine what impacts job satisfaction.	Nurses were 5 times more likely to feel demoralized if they missed care. Lack of support had similar impact. Staffing issues and failures in leadership left them feeling disempowered and demoralized.
Factors affecting job satisfaction among acute care nurses working in rural and urban settings	Yasin, Y.M., Kerr, M. S., Wong, C.A., Belanger, C.H.	Aim: To: (a) identify the differences and similarities in the extrinsic and intrinsic factors that influence job satisfaction among nurses and (b) determine the impact of job satisfaction on nurses' turnover intention.	Quantitative Non-experimental Cross-sectional correlational study	Level III Quality: A	349 acute care nurses in Ontario, Canada in rural and urban settings. A stratified sampling technique was used for recruiting the sample population and participants were given the option to respond either on line or by mailed survey.	Understanding of factors that affect Job satisfaction and intent to leave. The Acute Care Nurses Job Satisfaction Scale (ACNJSS) and the Anticipated Turnover Scale (ATS) were administered to study participants. Binary logistic regression was to identify factors that affect nurses' job satisfaction	. Data were modeled 3 ways with findings below: 1. Demographics (age, gender, marital status, education, years of experience, employment status) were not significantly associated with job satisfaction. 2. Rurality (rural vs. urban work settings) were not significantly associated with job satisfaction. 3. The six ACNJSS factors (Peer support, work conditions, quality of supervision, and achievement/job interest/responsibility) were significant

TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
							predictors of job satisfaction.
Frontline registered nurse job satisfaction and predictors over three decades: A meta-analysis from 1980-2009	Saber, D.A.(2014)	Purpose of study was to examine the largest, moderate, and smallest predictors of frontline registered nurse job satisfaction comprehensively and quantitatively from 1980-2009.	Meta-analysis	Level III Quality A	62 studies and 27 job satisfaction predictors were analyzed. Studies were included if the quantitatively examined the predictors of frontline RN job satisfaction in the work environment. Inclusion criteria required disclosure of the Cronbach alpha for the job satisfaction tool. A Cronbach alpha of .65 was the acceptable metric for inclusion.	Identify factors that impact frontline nurse work place job satisfaction and gain understand weighted relevance of findings. This study pooled effect sizes for each predictor of job satisfaction. Analysis was conducted using correlational statistics.	Large summary effect sizes were found for three predictors: 1. Task requirement (r=.61, 95% CI) 2. Empowerment (r=.55, 95% CI) 3. Control (r=.52, 95% CI)
Building work engagement: A systematic review and meta-analysis investigating the effectiveness of work engagement interventions	Knight, C., Patterson, M., Dawson, M.	Assess the effectiveness of work engagement interventions	Meta-analysis		20 studies across multiple industries	Work satisfaction	Significant results for intervention style, with medium to large effect for group interventions.
Effects of Job Satisfaction and Organization Commitment on Nurse Retention: A Systematic Review	Putra, A.P. , Kusnanto, K., Yuwono, S.R.	This study aims to explain the effects of job satisfaction and organizational commitment on nurse retention,	Systematic Review		25 articles selected and divided into two themes: job satisfaction and organizational commitment.		Job satisfaction and organizational commitment have an influence on nurse retention.

TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
Workplace empowerment and job satisfaction in Portuguese Nurses: An explicative model	De Almeida, H., Orgambidez, A. (2019)	The purpose of this study was to evaluate the relationship between empowerment and job satisfaction	Non-experimental descriptive survey study design	Level III Quality: B Convenience sample cannot rule out bias but analysis thorough.	Convenience sample of 151 nurses with a minimum of 1 year nursing experience from public Portuguese hospitals.	Understanding of relationship between global empowerment, structural empowerment, and job satisfaction Structural empowerment was evaluated through the Conditions for Work Effectiveness Questionnaire II (CWED-II). Global Empowerment was evaluated through the two questions in the CWED-II. Job satisfaction was evaluated through an 8-item questionnaire derived from an article by Lima et al.	Global empowerment, defined as the process to grant power and professional support to people at work to enable them to overcome the sense of helplessness and lack of influence and know how to recognize their resources, <i>is a mediator</i> of structural empowerment (as defined by Kanter). Job satisfaction correlates positively ($P < .01$) with structural empowerment and global empowerment, with Pearson correlation coefficients of: 0.55 – Access to opportunities 0.41 – Information 0.43 – Support 0.37 – Resources 0.52 – Global empowerment
Highly engaged but burned out: Intra-individual profiles in the US workforce.	Moeller, J., Ivcevic, Z., White, A.E., Megnes, J.I., & Bracket, M. A. (2021)	Five research questions: 1. Are engagement and burnout negatively correlated? 2. Which intra-individual engagement-burnout profiles can be identified, and	Quantitative Non-experimental study	Level III Quality: A	1085 US employed adults greater than 18 years of age and working more than 30 hours per week. Participants were recruited via survey provider Qualtrics to recruit a demographically representative sample based on reflected	This study used job demands-resources model to investigate intra-individual engagement-burnout profiles and demands-resources profiles, contributing to the understanding of the relationship between them.	Engagement and burnout are negatively correlated across individuals, however, high engagement occurs often in combination with high burnout. These individuals are engaged and exhausted. Pearsons correlation for turnover intention and the studied variables: • Engagement ($r = -.07$, $p < .05$)

TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
		<p>what is the prevalence of different profiles?</p> <p>3. How do engagement-burnout profiles differ in outcomes?</p> <p>4. Which intra-individual profiles of demands can be identified and how frequent are different profiles?</p> <p>5. How do demands-resources profiles relate to engagement-burnout profiles?</p>			representative distributions of gender, geographical region, race/ethnicity, and age in the US workforce according to US Bureau of Labor statistics.	Comparisons across measures were brought to the same metric by transformation to scale ranging from 0 to 1, using the Proportion of Maximum Scaling method (POMS).	<ul style="list-style-type: none"> • Burnout ($r=.56$, $p < .01$) • Workload ($r = .33$, $p < .05$) • Information processing demands ($r=.13$, $p < .01$) • Cumbersome bureaucracy ($r=.44$, $p < .01$) • Supervisor support ($r= -.19$, $p < .01$) • Rewards/Recognition ($r= -.13$, $p < .01$) • Self-efficacy ($r= -.01$, $p < .05$) • Positive emotions ($r=.23$, $p < -.23$) • Negative emotions ($r=.38$), $p < .01$) • Skill acquisition ($r= -.08$, $p < .05$)
Nurse retention strategies: advice from experienced registered nurses	Dietrich-Leurer, M., Gonnely, G., Domm, E. (2007)	The purpose of this paper is to explore the insights of experienced nurses regarding initiatives they believe would effectively retain nurses like themselves in the nursing profession	Qualitative investigative design using semi-structured interviews	Level III Quality: B Level B: Although sample size small, efforts to recruit additional participants because strong consistent themes were developed	16 RN participants from various sectors of long-term care in Saskatchewan, Canada. To be eligible to participate, nurses had to have a minimum of ten years of nursing experience.	Identification of retention Strategies from the experienced nurse's perspective. The results provide a deeper understanding of the attitudes, emotions, and contextual issues behind the nurse retention strategies	Seven themes identified: <ol style="list-style-type: none"> 1. Consultation and communication with nurses. 2. Recognition 3. Adequate staffing 4. Supportive management 5. Flexible work schedules 6. Support for new nurses 7. Professional development

TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
				across diverse practice areas.		through the tenured nurse's lens.	(Structural empowerment elements)
Systematic review of turnover/retention and staff perception of staffing and resource adequacy related to staffing	Shimp, K. M.	The purpose of the systematic review was to identify common themes that impact RN turnover, retention, and staff perception of staffing adequacy	Systematic Reviews for: 1. Turnover and retention (my topic) 2. Staffing and resource adequacy	Level III Quality: B	Ten papers were reviewed for reported processes aimed at assessing turnover and retention. (12 more were chosen for staffing adequacy; these are outside the scope of this project)	Identification of themes related to turnover, retention, and perception of staffing adequacy	<u>Regarding Retention:</u> 1. Empower RNs to influence the work environment by lending them a voice of change. 2. Having proper equipment available to Rn staff to prevent injuries and increase time spent at bedside can positively influence retention. 3. Continuing professional development/Staff growth through lifelong learning opportunities (e.g., clinical ladder, training within work environment). 4. A relationship of trust, fostered by leaders being present and approachable, and empowering clinical nurses in being a part of changes that affect their work. 5. Collaborative practice environment and teamwork.

TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
							6. Recognizing and rewarding clinical RNs in ways that underscore RNs value to the organization.
An evidence-based model of work engagement	Bakker, A. B. (2011)	This article presents an overview of the concept of work engagement and discusses the antecedents and consequences of engagement.	N/A	Level V Quality: A Opinion of recognized expert based on experiential evidence and literature. Quality Level A because there are clear aims, definitive conclusions, and consistent recommendations with thorough reference to scientific evidence.	N/A	N/A	Drivers of work engagement are: 1. Job resources 2. Personal resources (structural empowerment elements) Engaged employees perform better than non-engaged workers.
Effect of transformational leadership on job satisfaction and patient safety outcomes	Boamah, S.A., Spence-Laschinger, H.K., Wong, C., Clarke, S.	The objective of this study was to investigate the effects of nurse manager's transformational leadership behaviors on job satisfaction and patient safety outcomes.	Non-Experimental Descriptive Study				1.

TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
Leadership practices and staff nurses' intent to stay: a systematic review	Cowden, T., Cummings, G., Profetto-McGrath, J. (2010)	The aim of this study was to describe the findings of a systematic review of the literature that examined the relationship between managers' leadership practices and staff nurses intent to stay in their current position.	Systematic Review	Level III Quality: A	23 articles selected for review.		<ol style="list-style-type: none"> 2. Three studies found transformational leadership style had a positive significant relationship with intent to stay. 3. Three studies found that autocratic leadership and management by exception were negatively correlated with intent to stay. 4. Seven studies found supervisor support was positively correlated with intent to stay. 5. Praise, recognition, and trust were also correlated with intent to stay.
Work engagement in nursing: an integrative review of the literature	Garcia-Sierra, R., Fernandez-Castro, J., & Martiniz-Zaragoza, F. (2015)						
The relationship between managerial leadership behaviors and staff nurse retention	Kleinman, C. (2004)	<p>What specific managerial behaviors contribute most to staff nurse retention?</p> <p>What leadership behaviors are strong deterrents to staff nurse retention and</p>	Prospective correlational design	<p>Level III Quality: B</p> <p>Despite single site and relatively small sample size, this study was able to provide</p>	10 nurse managers and 79 staff nurses working in both ambulatory and acute services in a 465-bed community hospital in the Northeast region of the United States.	<p>Evidence of relationship between manager behaviors and either nurse retention or nurse turnover.</p> <p>Participants rated their manager</p>	Based on staff nurse perceptions of nurse management leadership behaviors, active management by exception was the only specific leadership behavior significantly correlated with staff nurse turnover ($r=.26$, $p=.03$).

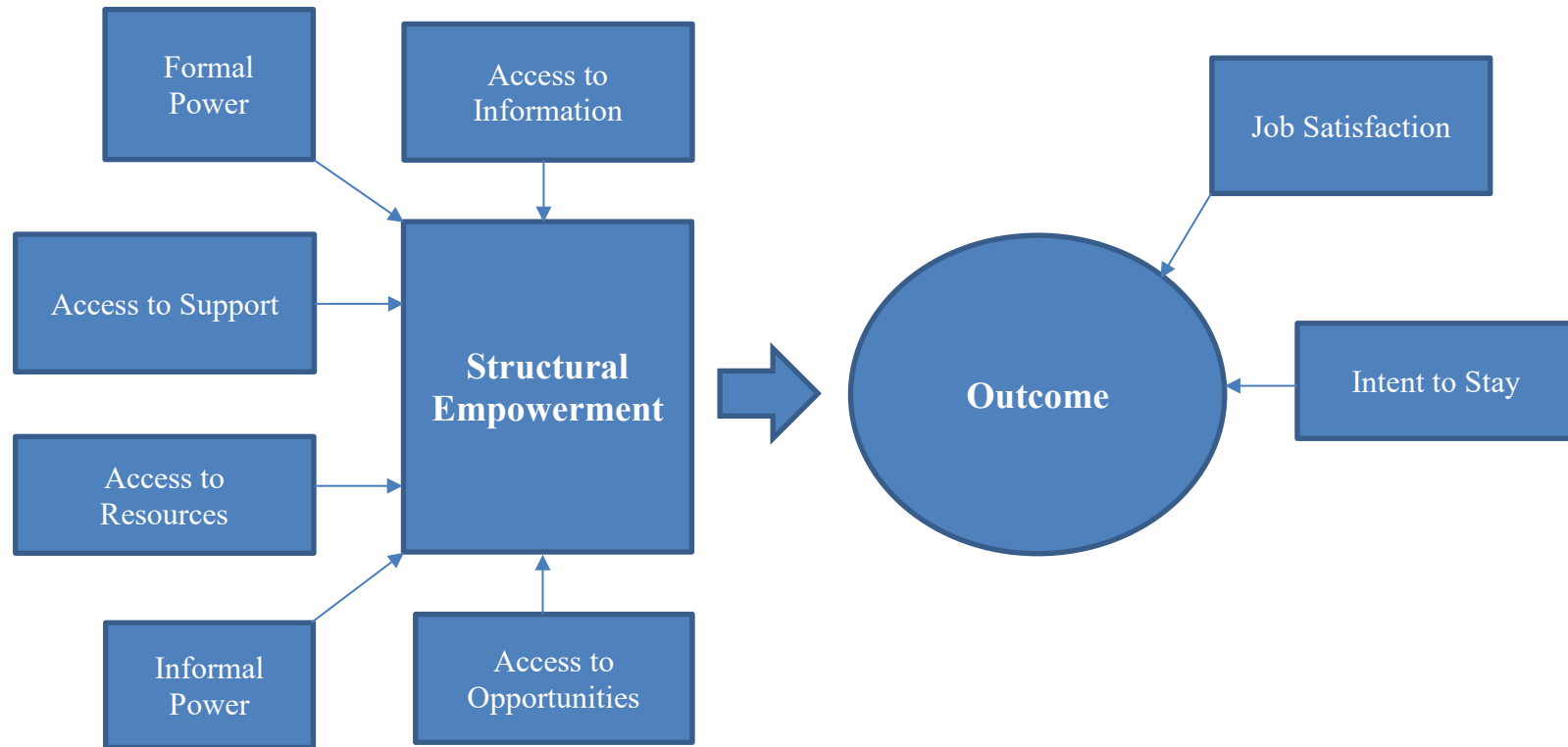
TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
		stimulate higher levels of turnover?		one significant finding relating leader behavior and turnover: Management by exception. While not strong enough to determine other specific behaviors, this one item is significant as a specific behavior to avoid.		behaviors based on specific leadership behaviors contained on Multifactor Leadership Questionnaire (MLQ) .	<p>No other leadership behaviors were found to be significantly correlated with staff nurse turnover (which does not mean they do not exist, they were just not evident in this study).</p> <p>Staff nurses who have limited interactions with their nurse managers have a less favorable perception of their manager's leadership style; therefore, visibility and contact is important (ex: night shift).</p>
The impact of ED nurse manager leadership style on staff nurse turnover and patient satisfaction in academic health center hospitals	Raup, G.H.	The aim of this study was to determine what types of leadership styles were used by ED nurse managers in academic health center hospitals and examine their influence on nurse turnover and patient satisfaction.	Nonexperimental descriptive survey design	Level III Quality: C	15 managers and 30 staff nurses from 15 of 98 US academic health centers	Evidence of causal relationship between leadership style and nurse turnover and patient satisfaction.	A trend of lower staff turnover with transformational leadership style compared to non-transformational leadership styles was identified. The type of leadership style did not have an appreciable effect on patient satisfaction. Results not statistically significant.

TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
Leadership skills for nursing unit managers to decrease intention to leave	Roche, M. A., Duffield, C., Dimitrelis, S., & Frew, B. (2015)	To examine specific elements of nursing leadership linked to intention to leave, in public acute care hospitals.	Non-experimental descriptive study.	Level III Quality: A	1673 nurses from 62 randomly selected medical-surgical and mixed medical/rehab units in 11 public acute care hospitals in Australia.	<p>Understanding of correlation between specific leadership behaviors and intent to leave.</p> <p>Instruments: The Practice Environment Scale (PES) and Shortell Leadership Scale (PLS).</p> <p>Factor analysis was performed to determine which of the specific items loaded most strongly on the leadership domain. Separate univariate logistic regression models were conducted on nurses' intent to leave.</p>	<p>For each point increase in the PES, there was a 44% decrease in the odds of intention to leave.</p> <p>Nurses perceive more positive leadership when the nurse manager engages with nursing staff, provides support and motivation, is sensitive to their needs, and facilitates professional development.</p> <p>Factor Analysis & Loading Results (Top 3):</p> <ul style="list-style-type: none"> • Unit leadership in touch with nurse perceptions & concerns (0.815) • Nurses clear when they stand with unit nursing leadership (0.773) • Unit nursing leadership does not make decisions without input from nurses (0.738).
Leadership styles and nurses' job satisfaction. Results of a systematic review	Specchia, M. L., Cozzolino, M. R., Carini, E., Di Pilla, A., Galletti, C., Ricciardi, W., & Damiani, G. (2021).	To identify and analyze the knowledge to date concerning the correlation between leadership styles and nurses' job satisfaction.	Systematic review of non-experimental studies	Level III Quality B	12 cross sectional studies of inpatient registered nurses. Sample size ranged from 83-1216 participants with all but one study having a sample size > 308 participants.	<p>Understanding of the relationship between nurse job satisfaction and the following leadership styles:</p> <p><i>Transformational</i> <i>Transactional</i> <i>Authentic</i> <i>Resonant</i> <i>Servant</i> <i>Passive-Avoidant</i> <i>Laisses-Faire</i></p>	<p>Transformational leadership style had the highest number of positive correlations to nurse job satisfaction of all styles examine, followed by authentic, resonant, and servant styles.</p> <p>Passive-avoidant and laissez-faire styles were negatively correlated with job satisfaction.</p>

TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
							The transactional style had both positive and negative correlations with job satisfaction.
Effect of nurse managers' leadership styles on predicted nurse turnover	Suliman, M., Almansi, S., Mrayyan, M.	To assess the effect of nurse managers' leadership style on predicted nurse turnover in Jordanian hospitals.	Non-experimental, descriptive, cross sectional, correlational design.	Level III	250 nurses from four hospitals in Jordan.	Correlating the perception of nurse manager leadership style utilizing the Multifactor Leadership Questionnaire with nurse turnover intention using the Anticipated Turnover Scale.	Transformational leadership style was found to reduce predicted nurse turnover as compared to passive-avoidant and transactional leadership styles.
Manager leadership and retention of hospital staff nurses	Taunton, R. M., Boyle, D. K., Woods, C. Q., Hansen, H. E., & Bott, M. J.	This study focuses on an investigator-developed Organizational Dynamics Paradigm of Nurse Retention that represents the theoretical links between nurse manager leadership and hospital staff retention.	Prospective correlational design using Causal modeling	Level III Quality: B	95 nurse managers and 1171 staff nurses from four large acute care hospitals in a midwestern metropolitan area. Because initial data was skewed (leavers vs. stayers), a balance of stayers and leavers was obtained by randomly selecting the same number of "stayers" from the overall stayer group to match the number of leavers (n=124 each). Three were private, non-profit, faith-based institutions and the 4 th was a	Commitment, Intent to stay, Promotional opportunity, Job stress, Job satisfaction.	Manager's consideration of staff in terms of concern, valuing their input, and support for personal development has a direct impact on retention. Manager leadership behaviors influence staff retention directly through experiences in their work that represent repetitiveness, individual decision making, and communication of essential information.

TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
					public academic medical center, representing the diversity of the area.		
The impact of nurse leadership styles on nurse burnout: A systematic literature review	Wei, H., King, A., Jiang, Y., Sewell, K. A., Lake, D. M. (2020)			Level III Quality A			<ul style="list-style-type: none"> • Nurse leadership plays a significant role in alleviating nurse burnout. • Authentic and transformational leadership are two styles identified that help leaders demonstrate self-awareness and high moral standards, which are essential to building genuine nurse-leader relationships.

Appendix B
Theoretical Model: Structural Empowerment



Adapted from Callicut, J.D. (2015)

Appendix C Kellogg Logic Model

Scholarly Project Title: Evidence-Based Tactics to Improve Nursing Job Satisfaction, Engagement, and Intent to Leave

Step 5	Step 3	Step 4		Step 2a	Step 2b	Step 1
Resources/Inputs	Activities	Outputs		Outcomes: Short term	Outcomes: Intermediate	Outcomes: Long term
What we invest: resources and contributions	What we do	What we accomplish or produce from the activities	Who we reach with our activities	The expected changes attainable during the DNP Scholarly Project timeline.	The expected changes attainable 6 months - 2 years after the DNP Project is implemented.	Fundamental changes for participants or community because of project activities, 3-5 years after project implementation.
The human, financial, organizational, and community resources available to direct toward the project activities.	The processes, tools, events, technology, and actions that are intended to bring about changes	Direct products and services generated from program activities	Intended targets of the program services and activities	Specific changes in program. SMART. Label as Process Outcome (PO) or Change Outcome (CO) Number each outcome (down the column)	Specific changes in program. SMART. Label as Process Outcome (PO) or Change Outcome (CO) Number each outcome (down the column)	Represent changes in status, condition or well-being. Consider: health impacts, economic impacts, environmental impacts, societal impacts. Number each outcome (down the column)

Step 5 Resources/Inputs	Step 3 Activities	Step 4 Outputs		Step 2a Outcomes: Short term	Step 2b Outcomes: Intermediate	Step 1 Outcomes: Long term
<p>DNP student time to develop end product (Transformational leadership/Struct, Empowerment toolkit/tactics).</p> <p>DNP student time to develop education.</p> <p>DNP student time to teach tactics, validate behaviors.</p> <p>Manager time to learn tactics</p> <p>Manager time required, ongoing, to implement and incorporate tactics into leadership practice.</p> <p>DNP student and manager time for weekly 1:1's to monitor utilization of key tactics and behaviors.</p>	<p>Teach managers key leadership behaviors and tactics (leadership style and structural empowerment) that lead to nursing satisfaction and engagement.</p> <p>Observe, coach, and mentor managers or the key behaviors.</p> <p>Schedule and conduct regularly scheduled 30-minute meetings to track progress and provide ongoing coaching and mentoring.</p> <p>Survey managers prior to education</p>	<p>Manager toolkit of high value tactics and behaviors to foster relationships with staff, bolster structural empowerment, and improve nursing satisfaction.</p> <p>Standardized approach to leading through transformational leadership, addressing elements of structural empowerment, and ensuring that basic work needs are met.</p>	<p>Managers receive training and tools to improve leadership skills and understanding of how to obtain, strengthen, and sustain structural empowerment.</p>	<ol style="list-style-type: none"> 80% of managers selected to and agreeing to participate in project completed training in May 2022 (PO). Managers who received training were able to verbalize understanding of transformational leadership (TL) behaviors and components of structural empowerment, and how to utilize TL to improve structural empowerment (PO). There was a 10% improvement in total favorable response for intention to 	<p>14. Managers were able to demonstrate transformational leadership behaviors and focus these behaviors to enhance and enable structural empowerment on their units with their staff.</p> <p>15. Fewer union complaints/grievances that consume leader time and strain relationships. The leaders now have more time to round on both patients, thereby improving patient satisfaction, and staff, thereby sustaining improvement gains. (C.O.) Complaints from union decreased by 50% in nursing units with managers participating in SP education and interventions.</p>	<p>16. Low nursing turnover and the ability to recruit and retain skilled nurses. Attrition is below Providence system benchmarks. (C.O.)</p>

Step 5 Resources/Inputs	Step 3 Activities	Step 4 Outputs		Step 2a Outcomes: Short term	Step 2b Outcomes: Intermediate	Step 1 Outcomes: Long term
	<p>(May 2022) and at conclusion of project (Aug 2022).</p> <p>Survey nurses at beginning of project and at conclusion (May & August 2022).</p>			<p>remain employed in August 2022 by nurses whose manager participated in the SP (CO).</p>		
<p>DNP Student time to develop end product and education.</p> <p>DNP student time to teach tactics, validate behaviors.</p> <p>Manager time to learn tactics</p> <p>Manager time required, ongoing, to implement and incorporate tactics into daily practice.</p> <p>DNP student and manager time for weekly 1:1's to</p>	<p>Teach managers key behaviors and actions that recognize staff and demonstrate sincere and authentic appreciation, ensure that supplies and equipment are available for staff.</p> <p>Observe, coach, and mentor managers or the key behaviors</p>	<p>Manager toolkit of high value activities and tactics to enhance and enable the following structural empowerment components:</p> <ul style="list-style-type: none"> • Appreciation and recognition • Supplies and Equipment 	<p>Managers receive training and tools to:</p> <ul style="list-style-type: none"> • improve behaviors that consistently demonstrate recognition and ongoing appreciation. • identify and manage tools, equipment, and supply demands of department; 	<p>4. 100% managers selected to and agreeing to participate in project completed training in May 2022 (PO).</p> <p>5. Managers who received training were able to verbalize understanding behaviors that authentically convey appreciation and</p>		

<p style="text-align: center;">Step 5</p> <p style="text-align: center;">Resources/Inputs</p>	<p style="text-align: center;">Step 3</p> <p style="text-align: center;">Activities</p>	<p style="text-align: center;">Step 4</p> <p style="text-align: center;">Outputs</p>		<p style="text-align: center;">Step 2a</p> <p style="text-align: center;">Outcomes: Short term</p>	<p style="text-align: center;">Step 2b</p> <p style="text-align: center;">Outcomes: Intermediate</p>	<p style="text-align: center;">Step 1</p> <p style="text-align: center;">Outcomes: Long term</p>
<p>monitor utilization of key tactics and behaviors.</p> <p>Computer PowerPoint Documentation template for meeting notes Conf room</p> <p>Budget for recognition items. For example:</p> <ul style="list-style-type: none"> • Thank-you cards • Postage • Certificates • Candy • Coffee 	<p>and interventions..</p> <p>Incorporate this topic in regularly scheduled 30-minute meetings to track progress and provide ongoing coaching and mentoring.</p> <p>Survey managers prior to education (May 2022) and at conclusion of project (Aug 2022).</p> <p>Survey nurses at beginning of project and at conclusion (May & August 2022).</p>		<p>track purchases and orders; communicate with staff.</p>	<p>how to assess and procure necessary supplies and equipment for based on staff feedback. (PO).</p> <p>6. There was a 10% improvement in the total favorable response score for feeling appreciated by their supervisor by nurses working at Santa Rosa Memorial in Medical-Surgical departments and the Emergency Department between in August 2022 (CO).</p> <p>7. There was a 25% improvement in the total favorable response score</p>		

Step 5 Resources/Inputs	Step 3 Activities	Step 4 Outputs		Step 2a Outcomes: Short term	Step 2b Outcomes: Intermediate	Step 1 Outcomes: Long term
				for having the equipment and supplies necessary to do the work in August 2022 by nurses working in Departments whose managers participated in leader training.		
DNP Student time to develop communication strategy. Manager time to work with DNP student and group of front line nurses to solicit input how they want to receive necessary communication, and what they want to receive communication about.	Develop and implement communication plan. Ensure managers understand and can maintain communication plan. Survey managers prior to education (May 2022) and at conclusion of	Standardized approach and timing for communication based on nursing input (communication plan). Communication is an element of structural empowerment.	Managers and front line nursing staff collaborate on communication plan that meets needs of the department.	8. 100% of managers participating in project participated in meeting to collaboratively develop communication plan (PO). 9. 10% of nursing unit staff participate in meeting to develop communication plan (PO).		

Step 5 Resources/Inputs	Step 3 Activities	Step 4 Outputs		Step 2a Outcomes: Short term	Step 2b Outcomes: Intermediate	Step 1 Outcomes: Long term
Supplies/equipment associated with nurse input. Examples: <ul style="list-style-type: none"> • Computer • Email • Paper 	project (Aug 2022). Survey nurses at beginning of project and at conclusion (May & August 2022).			10. There was a 50% improvement in the total favorable response score for receiving the information needed to do job effectively by nurses working at Santa Rosa Memorial in Medical Surgical and the Emergency Department in August 2022. (Baseline favorable score from 2020 annual Caregiver Engagement Survey = 33 of possible 100).		

<p style="text-align: center;">Step 5</p> <p style="text-align: center;">Resources/Inputs</p>	<p style="text-align: center;">Step 3</p> <p style="text-align: center;">Activities</p>	<p style="text-align: center;">Step 4</p> <p style="text-align: center;">Outputs</p>		<p style="text-align: center;">Step 2a</p> <p style="text-align: center;">Outcomes: Short term</p>	<p style="text-align: center;">Step 2b</p> <p style="text-align: center;">Outcomes: Intermediate</p>	<p style="text-align: center;">Step 1</p> <p style="text-align: center;">Outcomes: Long term</p>
<p>DNP Student time to develop end product and education.</p> <p>DNP student time to teach tactics and behaviors to manage staff burnout, and to deal with environmental and organizational cultural factors that contribute to burn out.</p> <p>Manager time required, ongoing, to implement and incorporate tactics into daily practice.</p> <p>DNP student and manager time for weekly 1:1's to monitor utilization of key tactics and required communication.</p>	<p>Teach managers process to identify components of work environment that contribute to burn out and address.</p> <p>Teach managers key behaviors to manage staff burnout.</p> <p>Observe, coach, and mentor managers or the key behaviors and interventions.</p> <p>Incorporate this topic in regularly scheduled 30-minute meetings to track progress and provide ongoing</p>	<p>Education module for managers on how to decrease work stress and relieve burnout by addressing top contributors to burnout.</p>	<p>Managers receive training and tools to identify factors that contribute to burn out, and training on how to manage issues in department and also key behaviors to manage human interactions.</p>	<p>11. 100% managers selected to and agreeing to participate in project completed training in May 2022 (PO).</p> <p>12. Managers who received training were able to verbalize understanding work environment attributes that contribute to burnout and demonstrate behaviors and actions that manage burnout (PO).</p> <p>13. There was a 100% improvement in the total favorable response score for <i>burnout</i> by</p>		

Step 5 Resources/Inputs	Step 3 Activities	Step 4 Outputs		Step 2a Outcomes: Short term	Step 2b Outcomes: Intermediate	Step 1 Outcomes: Long term
	coaching and mentoring. Survey managers prior to education (May 2022) and at conclusion of project (Aug 2022). Survey nurses at beginning of project and at conclusion (May & August 2022).			nurses working at Santa Rosa Memorial in Medical Surgical and the Emergency Department in August 2022. (Baseline favorable score from 2020 annual Caregiver Engagement Survey = 14 of possible 100).		

Step 5 Resources/Inputs	Step 3 Activities	Step 4 Outputs		Step 2a Outcomes: Short term	Step 2b Outcomes: Intermediate	Step 1 Outcomes: Long term
Satisfied nursing staff that leads to tenure and longevity of employment (not a resource but as an input).	Ongoing retention activities	Tactics that, over time, result in measurable improvement in cost related to replacing nursing staff.	Frontline managers Nursing directors Chief Nursing Officer Chief financial officer Chief Executive Officer			17. Improved finances: <ul style="list-style-type: none"> • Significant cost avoidance for recruitment and onboarding. This is manifested by a year over year decrease in the total cost for this line item. • Decrease in overtime and premium pay due to short staffing. Able to reach overtime threshold of < 2% (C.O>)
Highly engaged nursing levels Highly engaged and tenured nursing staff	A focus on all experience, both employee and patients	A reputation for excellence.	The Community as a whole All staff, including physicians Community partners			18. Better perception of nursing care in the community (CO). Reputation evidenced by yelp reviews, Facebook posts, other social

Step 5	Step 3	Step 4		Step 2a	Step 2b	Step 1
Resources/Inputs	Activities	Outputs		Outcomes: Short term	Outcomes: Intermediate	Outcomes: Long term
						media platforms, word of mouth.
Highly engaged nursing levels Highly engaged and tenured nursing staff	A focus on quality that emerges once the inward focus on self is mitigated	A program of nursing excellence.	Nursing Nursing leaders Patients			19. The organization is meeting quality benchmarks for nursing sensitive quality indicators as measured by NDNQI. (C.O)

Adapted from: Logic Model Foundation Development Guide, pg 4.

<http://www.wkkf.org/resource-directory/resource/2006/02/wk-kellogg-foundation-logic-model-development-guide>

Appendix D Memorandum of Understanding

Memorandum of Understanding

Memorandum of Understanding

Between

Leah M. Gehri, Doctor of Nursing Practice (DNP) student

Boise State University

and

██████████ Hospital

This Memorandum of Understanding (MOU) outlines the terms and understanding between *Leah M. Gehri*, a DNP student at Boise State University, and ██████████ to pilot a program of tactics and interventions to improve nursing job satisfaction and engagement and decrease nurses intent to leave the organization.

Background

Employee dissatisfaction is not a new problem. When employees are dissatisfied, they may leave their organizations (Labrague et. al., 2020); Lee, 1988; Nowrouzi-Kia & Fox, 2020) thus causing their now former employer to incur the cost of recruiting, hiring, and training their replacement. Worse than leaving, they may choose to stay, negatively impacting the organization with low productivity (Fassoulis & Alexopoulos, 2015), low quality work, and high rates of absenteeism (Hom et al, 2017). In healthcare, poor nurse satisfaction can have multiple serious consequences, including but not limited to, lower financial reimbursement due to low patient satisfaction (Letourneau, 2016) and high-turnover (Brewer et. al, 2011), which results in increased costs (Duffield, et al., 2014), short staffing and/or an overreliance of new graduates that can affect the quality and safety of patient care (Carthon et. al, 2019; Lake et. al, 2019; Lee & Sim, 2017).

Current national estimates of nursing turnover range between 8.8% and 37% (Haddad, et al, 2020). High nursing turnover exacerbates existing staffing shortages caused by a decades long nursing shortage that, pre-pandemic, predicted a national deficiency of over one-half million nurses by 2030 (Zhang, et al, 2018). Under these circumstances, all avoidable turnover (turnover not related to such things as retirement, geographical move due to spouse job or personal reasons, attrition due to employee illness or death, involuntary termination) should be mitigated and strategies to reduce voluntary turnover should be employed. Reducing or eliminating job dissatisfiers and improving job satisfiers are two strategies that drive toward these goals.

Purpose

The purpose of this project is to improve front line nurse job satisfaction and engagement as evidenced by improved survey scores and a reduction in the percentage of respondents who express an intent to leave. This is accomplished by 1) developing leader transformational behaviors and 2) supporting and addressing the elements of structural empowerment and job resource demands. An additional aim is to improve leader confidence in their ability to lead utilizing the transformational leadership style.

Intended Project Outcomes

- Improved manager knowledge and utilization of transformational leadership behaviors
- Improved manager knowledge of and utilization of structural empowerment behaviors
- Improved manager knowledge of job-resources demands theory and impact on job satisfaction
- Improved nurse engagement

Duration

The implementation of the scholarly project will occur between May 2022 and August of 2022. Between August 2022 and May 2023, data will be aggregated, analyzed, and final reports and submissions in accordance with the program objectives will occur.

Reporting

The DNP Scholarly Project will include a final abstract to the organization in March 2023 and potential publication. The DNP student will submit a Final Project Report for publication in ScholarWorks. ScholarWorks is a collection of services designed to capture and showcase all scholarly output by the Boise State University community, including doctoral dissertations and doctoral project reports.

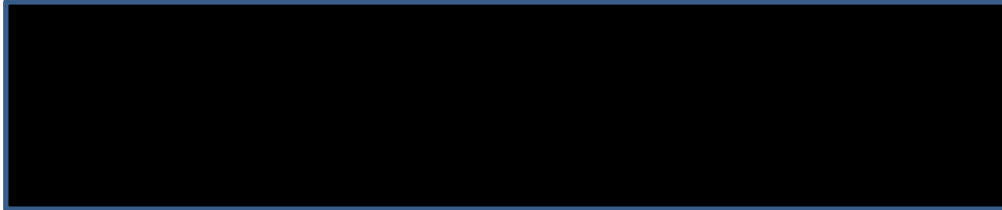
No personal identifiers will be included, and all data will be reported in aggregate form. The author welcomes any comments or suggestions from [REDACTED] Hospital but reserves the right to publish findings and analysis according to professional standards and principles of academic freedom. For any work of a scholarly nature, the author agrees to follow the organization(s) preferences in how it is to be named (or not) in the work.

Agency preferences for how they are named/referred to within the student's work: by general type of agency within a region.

In the student's Final Report? A community based non-profit organization in Northern California
In an abstract? A community based non-profit organization in Northern California
In professional presentations? A community based non-profit organization in Northern California
In professional publications? A community based non-profit organization in Northern California
Any restrictions in the discussion of project details? No

Student Contact Information

Leah M. Gehri Date: 2/4/2022
(Leah M. Gehri, Boise State University DNP student)



Appendix E SWOT Analysis

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Large health system with economies of scale for shared resources. 2. Mission-oriented to serve poor and vulnerable. 3. Level II Trauma Center – Only Level II in that region of California. 4. Tertiary center for hospital defined core services: Trauma, neurosurgery, cardiology, orthopedics, GI, pediatrics, obstetrics. 5. Joint venture in place with university for specialty care 6. Structured clinical academy for new graduate registered nurses (with a yearlong transition to practice program) and nurses entering specialties. 7. Shared governance structure in place; underwent recent reset. 8. Magnet – system strategy for nurse empowerment and patient quality, several system hospitals currently Magnet status. 9. Strong organizational financials. 	<ol style="list-style-type: none"> 1. Very few private patient rooms with competing hospitals having mostly all private rooms. 2. High nursing turnover: approximately 100 nurses leave the bedside annually over the past 3 years. In 2021 this number more than double to 204. 3. High leader turnover: 17 nursing leaders (manager/director level) have left organization in 3 years, representing nearly 100% leader turnover. 4. High percentage of new grads concentrated on nights and on certain nursing departments. 5. Internal investigations, regulatory findings 6. Lack of formal recruitment and retention strategy.
Opportunities	Threats
<ol style="list-style-type: none"> 1. Expand clinical academy to include formal mentoring program. 2. Education and mentor nursing leaders in transformational leadership behaviors. 3. Implement Just Culture as a management expectation. 4. Nursing Collective Bargaining Unit willing to collaborate with nursing leaders to improve nurse experience. 5. Regionalize nursing resources, creating additional economies of scale. 6. Develop and implement recruitment and retention strategy. 	<ol style="list-style-type: none"> 1. Local competitor hospital (#1) highest paying in region. 2. Market dominance by one local competitor (#1). 3. Another local competitor (#2) hospital adding additional beds and expanding emergency department. 4. Competitor (#2) hospital has market dominance for OB and ortho-joints. 5. Under-funded patient population (poor/vulnerable). 6. Despite historical strong financials, \$700M loss in 2020 as compared to 2019. Large pandemic related losses continue to 2021 and 2022. 7. Very few part-time/per diem nursing positions, exacerbating the nursing exodus in setting of burnout and fatigue

Appendix F Education Course Outline

TRANSFORMATIONAL LEADERSHIP AND STRUCTURAL EMPOWERMENT: LEVERAGING EVIDENCE BASED TACTICS TO IMPROVE NURSE JOB SATISFACTION AND ENGAGEMENT AND DECREASE TURNOVER.

Objectives

- State the four constructs of transformational leadership
- Identify key behaviors exemplified in each of the four transformational leadership constructs
- Describe the attributes attributed to transformational leadership
- Discuss and describe the components of structural empowerment
- Identify transformational leadership behaviors that demonstrate structural empowerment

Leadership Styles:

- Full range leadership model
- Passive vs. Active
- Ineffective vs. Effective
- Transactional vs. Transformational

Transformational Leadership: Four constructs

1. Idealized Influence
2. Inspirational Motivation
3. Intellectual Stimulation
4. Individualized Consideration.

Attributes of Transformational Leaders

- Visionary
- Empowering
- Participative leadership
- Authentic/Genuine
- Trustworthy, reliable, believable

Transformational Leadership Foundations

Link to Leadership Competencies (AONL)

- Relationship Management
- Influencing Behaviors
- Effective Communication
- Foundational Thinking Skills

Structural Empowerment: The theory of structural empowerment explains how leaders can influence employees to accomplish their work effectively by providing access to these four organizational structures:

- Information
 - Refers to having knowledge of organizational goals, values, and policies as well as the technical knowledge and expertise required to be effective at work.
- Support
 - Includes guidance and feedback provided by peers, subordinates, and supervisors as well as social and emotional support from colleagues
- Resources
 - Refers to having materials, supplies, time, equipment needed to accomplish the job
- Opportunities
 - Access to challenges, rewards, increased status, recognition for competence and skills, and professional development opportunities that increase one's knowledge and skills.

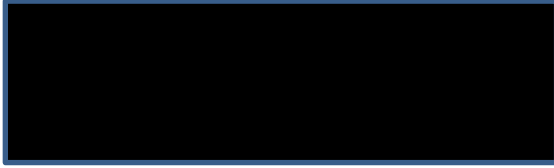
Tactics to Develop: Group Discussion

- Discussion: What opportunities have you identified in your department to implement and strengthen these concepts?

Appendix G Project Timeline

Month/Year Activity	May '21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	APR 23	May 23	
Write SP Proposal	X	X	X	X	X	X	X	X	X	X	X	X	X													
Develop Logic Model		X	X	X	X	X	X	X	X	X	X	X														
Finalize Project Participants (PP)		X	X								X	X														
Meet w/PP		X	X																							
Project Approval by Org			X	X						X	X															
IRB Approval if necessary										X	X	X														
Develop education and project tools					X	X	X																			
Plan/confirm education dates & location							X	X	X	X																
Project Implementation													X	X	X	X	X									
Survey Nurses w/ focus questions from CES															X											
Survey Managers Pre and Post Education													X				X									
Assess pre and post education and intervention with nurse managers															X	X	X	X								
Data Analysis																X	X	X	X							
Develop Final Report																		X	X	X	X	X				
Present findings																					X	X				
Final submission																							X	X	X	

**Appendix H
IRB Determination Letter**



PROJECT DETERMINATION

Date: April 26, 2022

To: Leah Gehri
 leahgehri@boisestate.edu



Cara Gallegos
caragallegos@boisestate.edu

From: 

Project Title: "Evidence-Based Leadership Tactics to Improve Nursing Job Satisfaction, Engagement, and Retention"


This represents the IRB determination for the above referenced project.

The IRB has determined that this project, as submitted, does not meet the definition of human subjects' research and does not require IRB review as defined in the federal regulations.

The determination is based upon the information submitted only, revisions must be submitted to the IRB prior to implementation.

The project may proceed as described in the documents submitted for review.

This determination does not exempt you from following hospital policies and procedures as they relate to conduct of this project. It is your responsibility to ensure compliance with those policies.

If you have questions related to this determination, please contact:
, Behavioral and Minimal Risk Panel

If you have questions related to QI/PI/EBP review, please contact us at:



Appendix I
Outcomes Evaluation Table

Outcome	Data Collection Instrument/Data	Analysis Goal	Analysis Technique
<p>1. Fifty percent (50%) or more of the six nursing managers who were offered the opportunity to participate in training (that included ongoing coaching and mentoring regarding transformational leadership and structural empowerment) accepted the offer and participated in training.</p>	<p>Participant Recruiting Tool for Managers to demonstrate that nurse managers were offered the opportunity to participate and they either accepted or declined.</p> <p>Instrument: A recruitment tool that outlines project scope, intended outcomes, participation requirements, duration of project.</p>	<p>The goal of this data collection tool is to ensure recruitment and participation information is communicated succinctly and consistently and that participation rate is captured.</p>	<p>Determine percentage of managers who agreed to participate.</p>
<p>2. Fifty percent (50%) or more of managers agreeing to participate completed training in May 2022 (PO).</p>	<p>Participant attendance roster developed by DNP student.</p> <p>Instrument: Attendance roster for attendance tracking purposes for initial group training of managers and individual coaching sessions.</p>	<p>The goal of this tool is to track manager participation rate.</p>	<p>Determine percentage of managers who completed training.</p>
<p>3. Fifty percent (50%) or more of managers who received training improved in their level of knowledge use and uptake on the LOKUS instrument, achieving a minimum level of <i>intended use: routine</i>.</p>	<p>Level of Knowledge Use Survey (LOKUS).</p> <p>Instrument: The Level of Knowledge Use Survey is a 20 question, 47-item survey tool that assesses uptake and utilization (KUU) of new knowledge based on self-report. The LOKUS tool was developed by researchers from the University of Buffalo under a grant from the U.S. Department of Education and evaluates KUU on four levels of knowledge use: non-awareness, awareness, interest, and use. Expanded dimensions exist within these domains that indicate the degree to which the new knowledge is adopted into practice.</p> <p>Data: Knowledge use and uptake levels</p>	<p>The goal of this instrument is to determine the level of new knowledge uptake of introduced concepts by managers.</p>	<p>Descriptive statistics and comparison of pre and post results, specifically mean scores in each category and the percept of improvement.</p>

Outcome	Data Collection Instrument/Data	Analysis Goal	Analysis Technique
	<ol style="list-style-type: none"> 1. Non-awareness 2. Awareness 3. Interest 4. Preparation 5. Intended use: Initial 6. Intended use: routine 7. Modified use: expanded 8. Modified use: Collaboration 9. Modified use: Integration 10. Modified Use: Modification 		
<p>4. Managers who participated in the training has a 25% improvement in their leadership engagement score as compared to pre-project survey.</p>	<p>Intellectual, Social, Affective (ISA) Engaging Leadership Scale. Open source tool.</p> <p>Instrument: Adapted by Sloane et al from their 2012 ISA Engagement Scale, the ISA-Leadership is a 9-question tool that asks participants to rate statements on a 1-7 Likert scale. The answers reveal engaging leadership on the 3 domains of intellectual, social, an affective, and overall engagement.</p> <p>Data: Engaging Leadership Scale domains</p> <ul style="list-style-type: none"> • Intellectual engagement • Social engagement • Affective engagement • Overall engagement 	<p>The goal of this instrument is to determine the manager’s engaging leadership score both pre and post project and determine the effectiveness of the program on the leader’s engaging leadership.</p>	<p>Descriptive statistics and comparison of pre and post results, specifically the mean scores in each category, percent improvement, and standard deviation of responses in all 3 categories and overall engagement score.</p>
<p>5. Staff nurses who participated in the pre-scholarly project survey had a 25% improvement in their engagement score in post-project survey.</p>	<p>Intellectual, Social, Affective (ISA) Engagement Scale. Open source tool.</p> <p>Instrument: Developed by Soane et al (2012), the ISA Engagement Scale is a 9-question tool that asks participants to rate statements on a 1-7 Likert scale. The answers reveal engagement on the 3 domains of intellectual, social, an affective, and overall engagement.</p>	<p>The goal of this instrument is to determine nurses’ engagement score both pre and post project on the three domains (intellectual, social, affective) and determine the effectiveness of interventions on nurse engagement.</p>	<p>Descriptive statistics and comparison of pre and post results, specifically the mean scores in each category, percent improvement, and standard deviation of responses in all 3</p>

Outcome	Data Collection Instrument/Data	Analysis Goal	Analysis Technique
	Data: Engaging Leadership Scale domains <ul style="list-style-type: none"> • Intellectual engagement • Social engagement • Affective engagement • Overall engagement 		categories and overall engagement score.

Appendix J
Scholarly Project Expense Report

Expense Category	Expense Description	Explanation of Expense	Type of Cost (variable/fixed)	Volume	Cost per Unit	Total
Material & Supplies	Sticky Easel Pads	Tools to guide communication focus group	fixed	2 sticky easel pads	\$ 52.99	\$ 52.99
Material & Supplies	Markers	Tools to guide communication focus group	fixed	1 8-pk	\$ 11.79	\$ 11.79
Material & Supplies	Paper	10 educational packets, 10 pre & post surveys, 5 unit flyers	fixed	1 ream of paper	\$15/ream	\$ 15.00
Space	Conference Room	Rooms to conduct education, training, and team meetings. AV equipment included in room.	fixed	2 meetings x 2 hrs = 4 hrs	\$150/hr	\$ 600.00
Space	Office	Meeting place for manager 1:1's. The value of the office space provided as priced on open market.	variable	72 meetings x 30 minutes each = 36 hrs	\$35/hr	\$ 1,260.00
Equipment	Computer	Program development, communication, planning.	fixed	1 computer	\$1420/computer	\$ 1,420.00
IT	Software	Survey Monkey	fixed	free version	0	\$ -

Expense Category	Expense Description	Explanation of Expense	Type of Cost (variable/fixed)	Volume	Cost per Unit	Total
IT	Software	Microsoft 365 - office products: outlook email, word, power point, excel.	fixed	1-year annual subscription	99.00/yr	\$ 99.00
Travel	Mileage expense	Mileage for DNP Scholarly Project work.	variable	36 miles round trip. 36 miles x 2 tips per week x 12 weeks = 864 miles	\$ 0.56/mile	\$ 484.00
Incentives	Miscellaneous incentives	Cards/postage, candy, coffee	variable	Discretionary. 2 bags coffee: \$30 + 2 book stamps: 19.60 + 3 bags candy: \$45 + 5 boxes of thank-you cards: \$50 + tax: \$13 = \$158	\$ 158.00	\$ 158.00
Incentives	Lunch	Lunch for staff/managers for communication planning meeting (Panera Bread)	variable	1 DNP student + 6 managers + 12 staff nurses = 19 sandwiches and 19 drinks	\$7.99/sandwich + \$1/drink.	\$ 170.00

**Appendix K
3-Year Budget Plan**

Expense Category	Year 1	Year 2	Year 3	Rationale
Yearly Totals:	\$ 40,286.67	\$ 40,257.00	\$ 16,810.00	
Personnel	\$ 36,010.00	\$ 36,205.00	\$ 14,790.00	Year 1: Labor expense includes director/DNP student, 6 managers and 12 RNs. Year 2: Expanded beyond 12-week pilot project to nursing leadership program. Expanded to include 7 additional nurse managers. Initial training, validation, and 1:1's and weekly time commitments consistent from previous year for newly trained managers (39 hrs x 7 = 273). Four quarterly 2-hr meetings for the 6 initially trained managers added (8 x 6 = 48 hours total). Year 2 DNP hours = 59. Nurse manager hourly wage increased by 2.5% annually. Year 3 program assumes maintenance with 4 quarterly 2-hr meetings and onboarding one new manager.
Material & Supplies	\$ 85.67	\$ 6.00	\$ 6.00	One time startup costs in year 2 and 3 not required. Paper costs include 5.3% increase for inflation.
Space	\$ 1,860.00	\$ 3,052.00	\$ 1,486.00	Inflation assumptions: Office space and conference room increases 2.6% year over year. Year 2: Conference rooms = 10 hours. Office space for 1:1s = 42 hours. Year 3: Conference rooms = 8 hours, office space for 1:1s = 6 hours.
Equipment	\$ 1,420.00	\$ 0	\$ 0	Computer purchased in year 1 utilized in years 2 and 3
IT	\$ 99.00	\$ 99.00	\$ 99.00	Renewal of annual Microsoft office subscription
Travel	\$ 484.00	\$ 564.00	\$ 81.00	Mileage remains unchanged in year 2 or 3, based on fact that IRS lowered the mileage reimbursement in 2021. Added 4 round trip in Year 2 for quarterly meetings. Year 3: 18 round trips total.
Incentives	\$ 328.00	\$ 331.00	\$ 348.00	Lunch in year 1 is one-time expense. Incentive amount minus lunch, multiplied by 2 due to expansion of program. Incentive expense assumes 4.9% increase.

**Appendix L
Statement of Operations**

Operating Income		\$ -
	Revenue Total	\$ 40,287.67
Source	Description	Amount
Scholarly Project	Non-revenue producing activity	\$ -
In kind contributions	Salaries	\$36,010.00
	Office Supplies	\$85.67
	Office/Conference Rooms	\$1,860.00
	Computer	\$1,420.00
	Software	\$99.00
	Mileage	\$484.00
	Food/beverage	\$329.00
	Expenses Total	\$ (40,287.67)
Expenses	Description	Amount
Personnel	Salaries	\$(36,010.00)
Materials & Supplies	Office Supplies	\$(85.67)
Space	Office/Conference Rooms	\$(1,860.00)
Equipment	Computer	\$(1,420.00)
IT	Software	\$(99.00)
Travel	Mileage	\$(484.00)
Incentives	Food/beverage	\$(329.00)

Appendix M

Nurse Manager DNP Project Recruitment Letter (via email)

Dear (Nurse Manager),

Multiple studies dating back more than half a century and encompassing a wide variety of industries describe both the positive correlates of employee satisfaction and the negative consequences resulting from the lack thereof. On one end of the spectrum, positive employee satisfaction and engagement is attributed to multiple desirable business outcomes including customer satisfaction (Chi & Gursoy, 2008; Jeon & Choi, 2012) and its resultant financial outcomes (Call et al., 2015; Chi & Gursoy, 2018). Conversely, when employees are dissatisfied, they may leave their organizations (Labrague et. al., 2020); Lee, 1988; Nowrouzi-Kia & Fox, 2020) thus causing their now former employer to incur the cost of recruiting, hiring, and training their replacement. Worse than leaving, they may choose to stay, negatively impacting the organization with low productivity (Fassoulis & Alexopoulos, 2015), low quality work, and high rates of absenteeism (Hom et al, 2017).

While job satisfaction is clearly important, hospitals routinely measure nurse and other employee engagement. Abraham (2012) notes that employees must first be satisfied before they can be engaged. Dempsey and Reilly (2016) describe engagement as a combination of “commitment to and satisfaction with their jobs” (p.1). Therefore, while technically different, the terms *satisfaction* and *engagement* are sometimes used interchangeably. In healthcare, poor nurse satisfaction can have serious consequences, including but not limited to: lower reimbursement due to low patient satisfaction (Letourneau, 2016), high-turnover (Brewer et. al, 2011) resulting in increased costs (Duffield, et al., 2014), and short staffing and/or an overreliance of new graduates that can affect the quality and safety of patient care (Carthon et. al, 2019; Lake et. al, 2019; Lee & Sim, 2017).

You are invited to participate in a DNP-student led quality improvement project that utilizes evidence-based tactics to improve nurse job satisfaction, engagement, and retention by teaching nurse managers concepts of transformational leadership and structural empowerment and giving managers opportunities to practice and implement behaviors and tactics learned.

Required Activities:

- **Participate in One (1) training session on the topics of transformational leadership and structural empowerment lasting approximately 120 minutes.**
- **One-time pre-and one-time post- project surveys to assess on the following:**
 - **Knowledge uptake and utilization of transformational leadership**
 - **Knowledge uptake and utilization of structural empowerment**
 - **Engagement**
- **Weekly meeting with coach/mentor for 12 weeks. Each meeting is approximately 30 minutes.**

Your participation is voluntary and may be terminated by you at any time.

Pre and post project assessment data is collected utilizing Microsoft Forms. It is anonymous and will be destroyed at the conclusion of the data analysis portion of the project.

Kind Regards,

Leah Gehri
Boise State University
leahgehri@u.boisestate.edu
Leah.Gehri@ [REDACTED]

Appendix N
Registered Nurse DNP Project Recruitment Letter (via email)

Dear Registered Nurses,

Multiple studies dating back more than half a century and encompassing a wide variety of industries describe both the positive correlates of employee satisfaction and the negative consequences resulting from the lack thereof. On one end of the spectrum, positive employee satisfaction and engagement is attributed to multiple desirable business outcomes including customer satisfaction (Chi & Gursoy, 2008; Jeon & Choi, 2012) and its resultant financial outcomes (Call et al., 2015; Chi & Gursoy, 2018). Conversely, when employees are dissatisfied, they may leave their organizations (Labrague et. al., 2020); Lee, 1988; Nowrouzi-Kia & Fox, 2020) thus causing their now former employer to incur the cost of recruiting, hiring, and training their replacement. Worse than leaving, they may choose to stay, negatively impacting the organization with low productivity (Fassoulis & Alexopoulos, 2015), low quality work, and high rates of absenteeism (Hom et al, 2017).

While job satisfaction is clearly important, hospitals routinely measure nurse and other employee engagement. Abraham (2012) notes that employees must first be satisfied before they can be engaged. Dempsey and Reilly (2016) describe engagement as a combination of “commitment to and satisfaction with their jobs” (p.1). Therefore, while technically different, the terms *satisfaction* and *engagement* are sometimes used interchangeably. In healthcare, poor nurse satisfaction can have serious consequences, including but not limited to: lower reimbursement due to low patient satisfaction (Letourneau, 2016), high-turnover (Brewer et. al, 2011) resulting in increased costs (Duffield, et al., 2014), and short staffing and/or an overreliance of new graduates that can affect the quality and safety of patient care (Carthon et. al, 2019; Lake et. al, 2019; Lee & Sim, 2017).

You are invited to participate in a DNP-student led quality improvement project that utilizes evidence-based tactics to improve nurse job satisfaction, engagement, and retention by teaching your nurse manager concepts of transformational leadership and structural empowerment and giving managers opportunities to practice and implement behaviors and tactics learned. **The purpose of your participation is to assess the impact of the intervention with them on these elements for you.**

As a staff nurse working in a unit that has a manager participating in the project, information regarding the impact of concepts learned and tactics implemented is of interest and will be measured.

Project Requirement:

- **Take one-time electronic survey to assess satisfaction, engagement, burnout, and intention to leave the organization pre-project implementation (End of May – Beginning of June 2022). The survey is 14 questions and should take less than 5 minutes of your time.**
- **Take one-time electronic survey to assess satisfaction, engagement, burnout, and intention to leave the organization post-project implementation (August 2022).**

Your participation is voluntary, and you can decline to participate in a survey measuring your engagement, burnout, and intention to stay with the organization.

Pre and post project assessment data is anonymous and will be destroyed at the conclusion of the data analysis portion of the project.

To participate, please click on the link below to take the 14-question survey.

<https://forms.office.com/██████████>

Kind Regards,

Leah Gehri
DNP student
Boise State University
Leahgehri@u.boisestate.edu
Leah.Gehri@██████████

Appendix O
Intellectual Social Affective (ISA) Engagement Scale survey plus additional focus questions

ISA Engagement Scale

Intellectual

I focus hard on my work. 1 2 3 4 5 6 7

I concentrate on my work. 1 2 3 4 5 6 7

I pay a lot of attention to my work. 1 2 3 4 5 6 7

Social

I share the same work values as my colleagues. 1 2 3 4 5 6 7

I share the same work goals as my colleagues. 1 2 3 4 5 6 7

I share the same work attitudes as my colleagues. 1 2 3 4 5 6 7

Affective

I feel positive about my work. 1 2 3 4 5 6 7

I feel energetic in my work. 1 2 3 4 5 6 7

I am enthusiastic in my work. 1 2 3 4 5 6 7

1= “strongly disagree” to 7= “strongly agree”

Additional Questions

I intend to stay with this organization for the next 12 months. 1 2 3 4 5 6 7

I feel appreciated by my supervisor 1 2 3 4 5 6 7

I have access to the equipment and supplies I need to do my work 1 2 3 4 5 6 7

I receive the information I need to do my job effectively 1 2 3 4 5 6 7

I feel burned out from my work. 1 2 3 4 5 6 7

Appendix P
Intellectual Social Affective - Leadership (ISA-L) Engagement Scale survey

ISA-Leadership Engagement Scale

As a leader, I encourage my direct reports to:

Intellectual

Focus hard on their work. 1 2 3 4 5 6 7

Concentrate on their work. 1 2 3 4 5 6 7

Pay a lot of attention to their work. 1 2 3 4 5 6 7

Social

Share the same work values as their colleagues. 1 2 3 4 5 6 7

Share the same work goals as their colleagues. 1 2 3 4 5 6 7

Share the same work attitudes as their colleagues. 1 2 3 4 5 6 7

Affective


Feel positive about their work. 1 2 3 4 5 6 7

Feel energetic in their work. 1 2 3 4 5 6 7

Be enthusiastic in their work. 1 2 3 4 5 6 7

1= “strongly disagree” to 7= “strongly agree”

Appendix Q
Transformational Leadership LOKUS

**TRANSFORMATIONAL LEADERSHIP Level of
Knowledge Uptake & Utilization Survey
(LOKUS) **

* Required

1. Please make up and enter a ID code that is unique to in the space below. This ID code is visible to me (Leah) but will be known to you only. Please save this code as you will need it for the post-project assessment. *

2. Are you familiar with the concept of "transformational leadership?"

- Yes
 No

3. Does the following statement describe your current state of awareness, interest, or use of "transformational leadership?" Select YES or NO based on the entire statement.

"I have heard of transformational leadership, but I do not know very much about it."

- YES
 NO

4. Does the following statement describe your current state of awareness, interest, or use of transformational leadership? Select YES or NO based on the entire statement.

"I am seeking or have sought information about the effectiveness of transformational leadership; however, I have not yet decided to utilize it."

- YES
 NO

5. You indicated that you seeking details about transformational leadership but have not made a decision to utilize it.

Please review each statement and check all options that represent your current position.

- I am aware of the transformational leadership style and that it might be effective.
- I have received information that explains what transformational leadership is and how to use it through the internet, reading about it in journals, going to conferences, classes, etc.
- I discuss transformational leadership with others and exchange information, materials, or ideas about it and also learn more about what is involved in being a transformational leader.
- In order to make a decision about adopting a transformational leadership style, I am analyzing information about it, such as what it contains, what is required, evaluations of it, what I (or others) can get out of it, and its strength and weaknesses.
- I have explored transformational leadership and what is required for it. I am ready to decide if I am for or against adopting it as my leadership style.

6. Does the following statement describe your current state of awareness, interest, or use of transformational leadership. Select YES or NO based on entire statement.

"I am preparing to use the transformational leadership style but have not done so yet."

- YES
- NO

7. You indicated that you are preparing to use transformational leadership but that you have not used it yet.

Please review each statement and choose all options that represent your current position.

- I am aware of the benefits of using transformational leadership but I need more information such as practical application, specific behaviors, tactics, etc.
- In order to prepare for using transformational leadership style, I am looking for information and resources specifically relating to it.
- I am sharing information with others about adopting a transformational leadership style. To prepare myself for adopting this style, I join others in education, training, case studies, practical application, etc.
- I have identified information, behaviors, and tactics used in transformational leadership as well as what steps are necessary for me to begin using it.
- I have prepared myself for using transformational leadership by reading or studying about how to be a transformational leader or attending courses or seminars.

8. Does the following statement describe your current state of awareness, interest, or use of transformational leadership? Please select YES or NO based on the entire statement.

"I have just begun to use transformational leadership but have not yet mastered it."

- YES
 NO

9. You indicated that you have just begun to use transformational leadership but that you have not yet mastered it.

Please review each statement and check all options that represent your current position.

- I am still looking for information to be more effective at transformational leadership. This includes seeking feedback and evaluating the effects of my leadership.
- I am examining what it takes to be an effective transformational leader, including evaluating the effectiveness of other leadership styles as compared to transformational leadership.
- I am making modifications to my leadership behavior to incorporate a more transformational leadership style based on feedback and/or the results of evaluating effects of my leadership style.

10. Does the following statement describe your current state of awareness, interest, or use of transformational leadership? Please select YES or NO based on the entire statement.

"I am using transformational leadership style regularly and am comfortable with my own mastery of this style. However, I have not expanded it by helping others (peers, direct reports who are also leaders) learn about transformational leadership."

- YES
 NO

11. You indicated that you use transformational leadership regularly and are comfortable with your own mastery, but that you have not expanded it by helping others learn about transformational leadership.

Please review each statement and choose all options that represent your current position.

- I am aware of what is required for transformational leadership behaviors and consistently utilize these behaviors.
- I am comfortable with my own abilities as a transformational leader but do not feel like I have the expertise to teach and coach others.
- I am continuing to focus on my own growth as a transformational leader and am not yet concerned about sharing my knowledge with others
- I feel like I have the ability to teach and coach others but I do not have the time or opportunity to do so.

12. Does the following statement describe your current state of awareness, interest, or use of transformational leadership? Please select YES or NO based on the entire statement.

"Based on my own evaluations and feedback from others, I am skilled at transformational leadership. Additionally, I share my knowledge with other leaders (peers and direct reports) to help them learn about transformational leadership and develop these skills."

YES

NO

13. You indicated that you are skilled at transformational leadership and share your knowledge with other leaders in order to help them learn about transformational leadership and develop their skills.

Please review each statement and choose all options that represent your current position.

I am expanding my own skills as a transformational leader and also helping others learn and grow.

I look for information and materials about transformational leadership that will continue to help me grow, and I share information obtained with peers and direct reports.

I look for ways to expand my own transformational leadership (take it to the next level)/

I look for ways to expand the transformational leadership skills of peers and direct reports.

I provide feedback and coaching to peers and direct reports on transformational leadership.

14. Does the following statement describe your current state of awareness, interest, or use of transformational leadership? Please select YES or NO based on the entire statement.

"I am considering collaborating with others or have already started to collaborate with other on how we can improve our transformational leadership skills and abilities."

YES

NO

15. You indicated that you are either considering collaborating with others or have already started to collaborate with others on how you, as a group, could improve your transformational leadership skills and abilities.

Please review each statement and chose all options that represent your current status.

- I am aware that collaborating with others will likely result in improved transformational leadership skills and ability for those involved in the collaborative process.
- I am seeking information and opinions from others on how my/our transformational leadership can be improved.
- I am talking with others about working together to improve the transformational leadership of our team
- I am planning and scheduling time for collaborating with others on how to improve transformational leadership skills and abilities.
- I am discussing with others different ways that collaborative efforts could improve transformational leadership skills and abilities.

16. Does the following statement describe your current state of awareness, interest, or use of transformational leadership? Please select YES or NO based on the entire statement.

"My collaboration with others on transformational leadership has led to different ways that we can expand and enhance our transformational leadership skills and abilities.

- YES
- NO

17. You indicated that your collaboration with others on transformational leadership has led to different ways to expand and enhance your leadership skills and abilities.

Please review each statement and choose all options that represent your current position.

- Collaborative efforts have led to the development of tactics to improve my/our transformational leadership skills and abilities
- I have incorporated ideas obtained from collaboration into my own transformational leadership behaviors.
- I am evaluating how to integrate other leaders' transformational leadership tactics into my own transformational leadership style.
- I have learned many new ideas about transformational leadership by collaborating with others

18. Does the following statement describe your current state of awareness, interest, or use of Transformational Leadership? Please select YES or NO based on the entire statement.

"I am making modifications to my own transformational leadership style, developing a style that is all my own."

- YES
 NO

19. You indicated that you are involved in making modifications to your own transformational leadership style by developing a style that is all your own.

Please review each statement and choose all options that represent your current position.

- Transformational leadership is something that I do daily without having to think about it too much.
- I may modify my approach from time to time, but always within the constructs of a transformational leadership style.
- I have developed innovative ways to leverage transformational leadership in order to support others.
- I have developed innovative ways to leverage transformational leadership in order to empower individuals and teams.
- I have developed innovative ways to leverage transformational leadership in order to drive results.

20. Mark all of the options that describe your state of awareness, interest, or use of Transformational Leadership that you had before you began taking this survey.

- I am not familiar with the concept of "transformational leadership?"
- I have heard of transformational leadership, but do not know very much about it.
- I am seeking or have sought information about the effectiveness of transformational leadership; however, I have not yet decided to utilize it.
- I am preparing to use the transformational leadership style but have not done so yet.
- I have just begun to use transformational leadership but have not yet mastered it
- I am using transformational leadership style regularly and am comfortable with my own mastery of this style. However, I have not expanded it by helping others (peers, direct reports who are also leaders) learn about transformational leadership.
- Based on my own evaluations and feedback from others, I am skilled at transformational leadership. Additionally, I share my knowledge with other leaders (peers and direct reports) to help them learn about transformational leadership and develop these skills.
- I am considering collaborating with others or have already started to collaborate with other on how we can improve our transformational leadership skills and abilities.
- My collaboration with others on transformational leadership has led to different ways that we can expand and enhance our transformational leadership skills and abilities.
- I am making modifications to my own transformational leadership style, developing a style that is all my own.

Appendix R
LOKUS Structural Empowerment

STRUCTURAL EMPOWERMENT Level of Knowledge Utilization & Uptake Survey (LOKUS)

1. Unique User ID that only YOU know

2. **Are you familiar with the concept of *structural empowerment*?**

- NO, I have not heard of structural empowerment until now.
- YES, I have heard of structural empowerment before.

3. **Does the following statement describe your current state of awareness, interest or use of structural empowerment? Please click yes/no based on the entire statement.**

I have heard of structural empowerment, but I have not tried to get more information about it.

- YES
- NO

4. **Does the following statement describe your current state of awareness, interest or use of the new knowledge about structural empowerment? Please click yes/no based on the entire statement.**

I am seeking details on whether structural empowerment will be useful; however I have not yet decided to use it.

- YES
- NO

5. **You indicated that you are seeking details about *structural empowerment* but have not made a decision to use it yet.**

Please review each statement and check all options that represent your current position.

- I am aware of the existence structural empowerment that it might be useful.
- I am obtaining information that explains structural empowerment through the internet, journals, conferences, meetings, etc
- I am discussing structural empowerment with others. I exchange information, materials, or ideas about it and also learn about what is involved in using it.
- In order to make a decision about structural empowerment, I am analyzing and comparing further information about it – such as what it contains, what is required for using it, evaluation reports about it, what I can get out of it, and its strengths and weaknesses.
- I have explored structural empowerment and also what is required for its use. I am ready to decide if I am for or against using the new knowledge.

6. **Does the following statement describe your current state of awareness, interest or use of structural empowerment: (Please click yes/no based on the entire statement).**

I am preparing to use structural empowerment but have not used it yet.

- YES
- NO

7. **You indicated that you are preparing to use knowledge of *structural empowerment* but have not used it yet.**

Please review each statement and choose all options that represent your current position.

- I am aware of the benefits of using structural empowerment, but I need more information such as practical needs, resources and timing
- In order to prepare to use structural empowerment, I am looking for information and resources specifically related to using it.
- I am sharing information with others about resources needed for initial use of structural empowerment. To prepare myself for first use, I join others in opportunities such as pre-use training, planning for resources, practical set up and scheduling
- I am identifying the resources needed and available, as well as the steps and procedures necessary for initial use structural empowerment
- I have prepared myself for initial use of structural empowerment - such as, studying reference material, sharing information, arranging my schedules, resources and practical set up, and receiving any needed training.

8. Does the following statement describe your current state of awareness, interest or use of *structural empowerment*? Please click yes/no based on the entire statement.

I have just begun to use structural empowerment, but I have not yet mastered how to use it.

- YES
 NO

9. You indicated that you have just begun to use *structural empowerment* although you have not yet mastered how to use it.

Please review each statement and check all options that represent your current position.

- I am still looking for information to better manage structural empowerment. This includes such things as practical set up, resolving initial problems, scheduling, and identifying the amount of time and work it takes for me to use the new knowledge.
- I am examining what it takes to use structural empowerment. My assessment is usually related to resolving practical problems and difficulties related to time, schedules and resources.
- Based on the information obtained and my assessment, I have begun to use structural empowerment.

10. Does the following statement describe your current state of awareness, interest or use of the new knowledge of *structural empowerment*?

I am using *structural empowerment* regularly and I do so with ease. However, I have not tried using it in an expanded way.

- YES
 NO

11. You indicated that you are regularly using *structural empowerment* and have not tried expanded ways of using it.

Please review each statement and choose all options that represent your current position.

- I am aware of what is required for structural empowerment, both short term and long term
- I am evaluating my routine use of structural empowerment
- I am planning to continue using structural empowerment. I am not yet concerned about expanding my use of this.
- I use structural empowerment routinely and very basic ways.

12. **Does the following statement describe your current state of awareness, interest or use of structural empowerment? Please click yes/no based on the entire statement.**

Based on my own evaluations, I am using structural empowerment in different and innovative ways.

- YES
 NO

13. **You indicated that you are using structural empowerment in different ways based on your own evaluations.**

Please review each statement and choose all options that represent your current position.

- I am aware that it would be beneficial to expand the use structural empowerment; that is, to use it in ways different and innovative ways
- I am looking for information and materials that relate specifically to expanding my current use of structural empowerment.
- I am discussing with others how I would expand my current use of structural empowerment.
- I am reviewing best practices for structural empowerment for the purpose of expanding my current use of it.
- Based on my evaluation, I am developing intermediate and long-range plans to expand the use of structural empowerment.
- I have explored and tried different ways of incorporating structural empowerment with existing leadership practices.

14. **Does the following statement describe your current state of awareness, interest or use of structural empowerment? Please click yes/no based on the entire statement.**

I am either considering collaborating with others, or have started to do so, on the use of structural empowerment.

- YES
 NO

15. **You indicated that you are either considering collaborating with others, or have started to do so, on the use of structural empowerment.**

Please review each statement and choose all options that represent your current status.

- I am aware that collaborating with others about structural empowerment would be beneficial.
- I am seeking information and opinions for the purpose of working with others in the use of structural empowerment
- I am talking to others about working together to use structural empowerment.
- I am evaluating how to work with others and use structural empowerment, including the advantages and disadvantages of such collaboration.
- I have started working with others on the use structural empowerment .

16. **Does the following statement describe your current state of awareness, interest or use of structural empowerment? Please click yes/no based on the entire statement.**

My collaboration with others has led to a different way in which we use structural empowerment.

- YES
- NO

17. **You indicated that your collaboration with others has led to a different way in which you use structural empowerment.**

Please review each statement and choose all options that represent your current position.

- I am aware that integrating my work on the use of structural empowerment with the work of others would be beneficial.
- I am seeking information and opinions for the purpose of integrating my work with the work of others on the use of structural empowerment
- I am evaluating the integration of my work with the work of others regarding the use of structural empowerment f, including the strengths and weaknesses of such integration.
- I have integrated my work with the work of others leading to joint expansion of the use of structural empowerment.

18. **Does the following statement describe your current state of awareness, interest or use of the new knowledge of structural empowerment? Please click yes/no based on the entire statement.**

I am making modifications to how structural empowerment on my unit is accomplished, individually or jointly with others.

- YES
 NO

19. **You indicated that you are involved in making changes to the new knowledge of structural empowerment individually or jointly with others.**

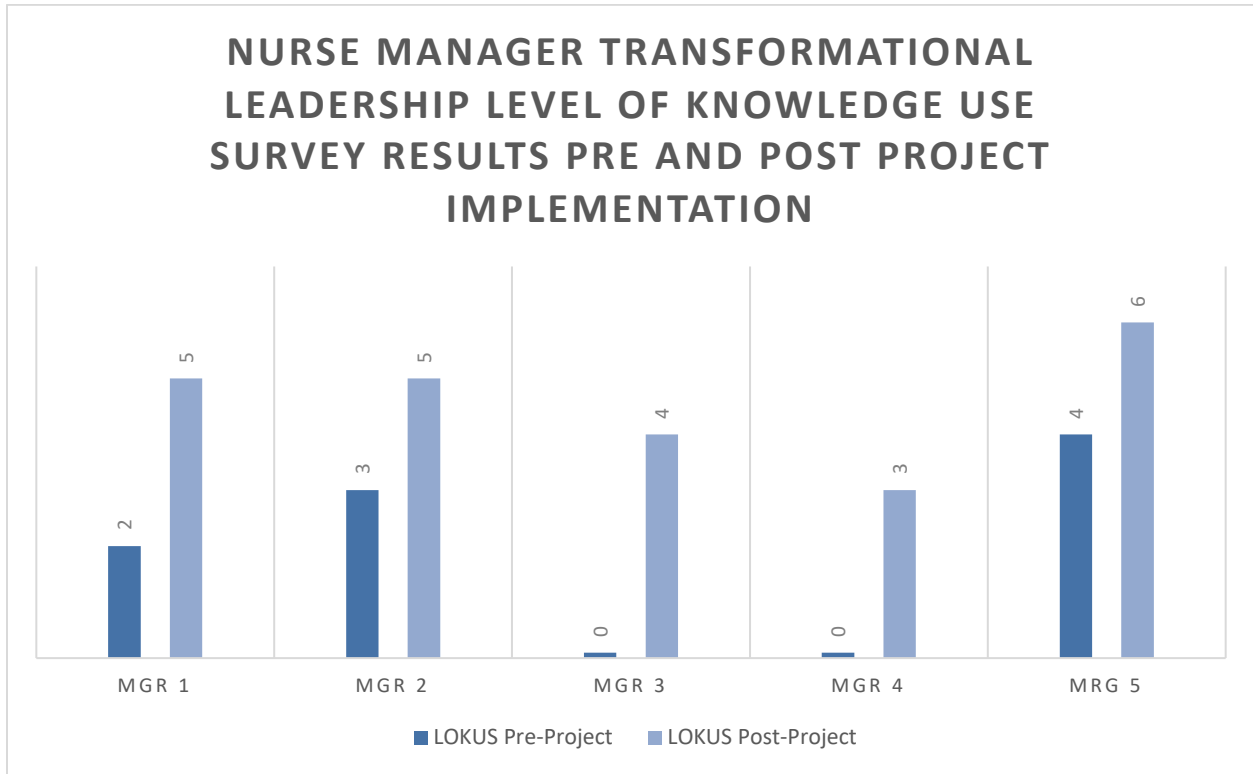
Please review each statement and choose all options that represent your current position.

- I am aware that making modifications to structural empowerment individually or jointly with others, would be beneficial.
- I am seeking information and materials in order to modify structural empowerment individually or jointly with others.
- I am weighing the advantages and disadvantages of making modifications structural empowerment, individually or jointly with others.
- I have made modifications to structural empowerment , individually or jointly with others.

20. **Mark all the options that describe your state of awareness, interest, or use of the new knowledge regarding structural empowerment:**

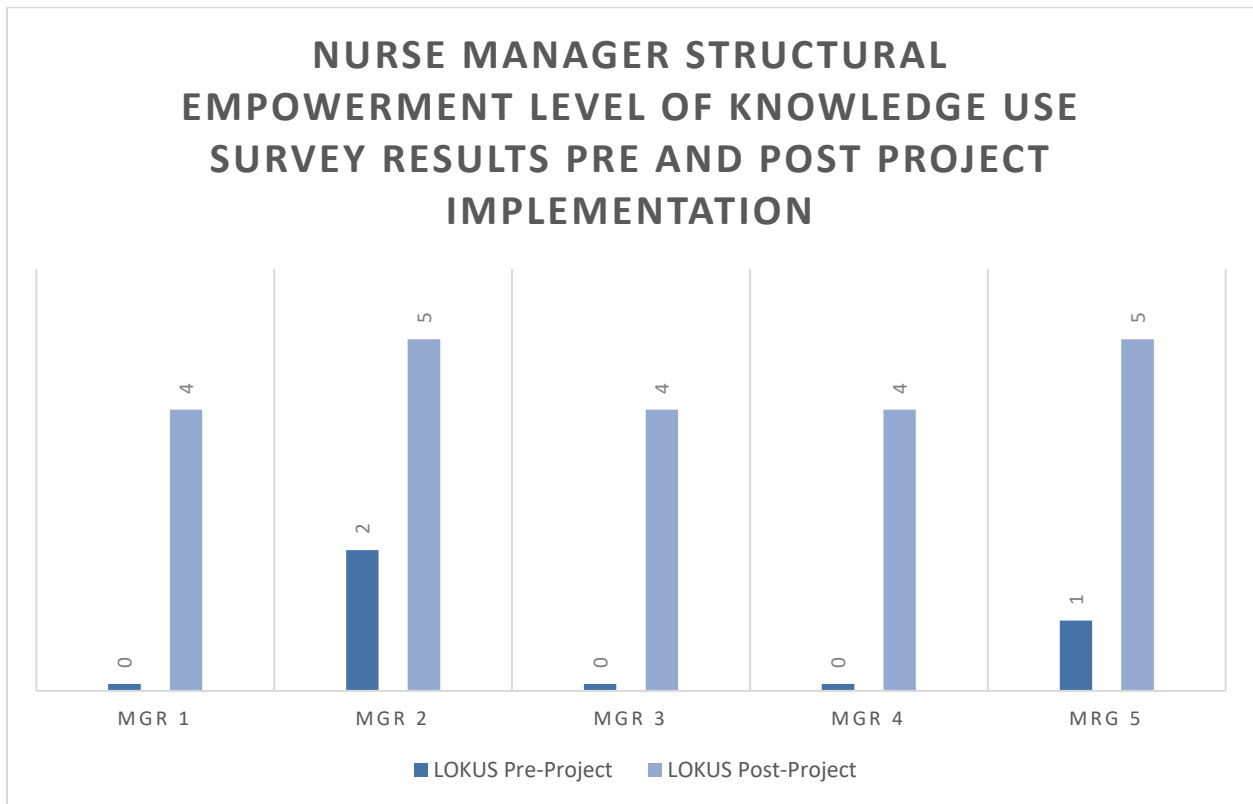
- I had not heard of structural empowerment until now.
- I had heard of structural empowerment but I have not tried to get more information about it.
- I am seeking details on structural empowerment, however I have not yet decided to use it.
- I am preparing to use structural empowerment, but have not used it yet.
- I have just begun to use structural empowerment, but I have not yet mastered how to use it.
- I am using structural empowerment regularly and I do so with ease. However, I have not tried using it in an expanded way.
- Based on my own evaluations, I am using structural empowerment in different and innovative ways.
- I am either considering collaborating with others, or have started to do so, on the use of structural empowerment.
- My collaboration with others has led to a different way in which we use structural empowerment.
- I am making modifications to how structural empowerment on my unit is accomplished. individually or jointly with others

Appendix S
Pre-Post Project Transformational Leadership LOKUS data



The eight levels of knowledge use correspond as follows: Level 0 = non-awareness; Level 1 = awareness; Level 2 = Interest; Level 3 = preparation; Level 4 = intended use: initial, Level 5: intended use: routine; Level 6 = modified use: expanded; Level 7 = modified use: collaboration; Level 8 = modified use: integration; Level 9 = Modified use: modification.

Appendix T
Pre-Post Project Structural Empowerment LOKUS data

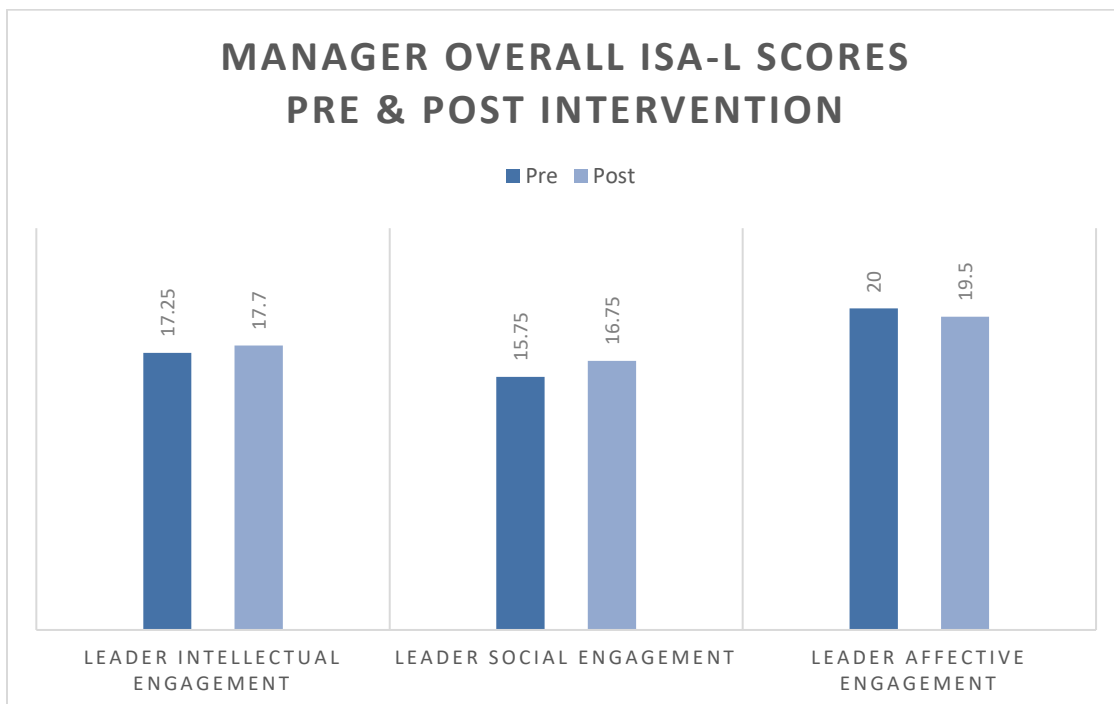


The eight levels of knowledge use correspond as follows: Level 0 = non-awareness; Level 1 = awareness; Level 2 = Interest; Level 3 = preparation; Level 4 = intended use: initial, Level 5: intended use: routine; Level 6 = modified use: expanded; Level 7 = modified use: collaboration; Level 8 = modified use: integration; Level 9 = Modified use: modification.

Appendix U Manager ISA-Leader Engagement Scale Pre & Post Results

Pre & Post Project Implementation: Individual manager Leadership Intellectual Social and Affective (L-ISA) scores and percentage change

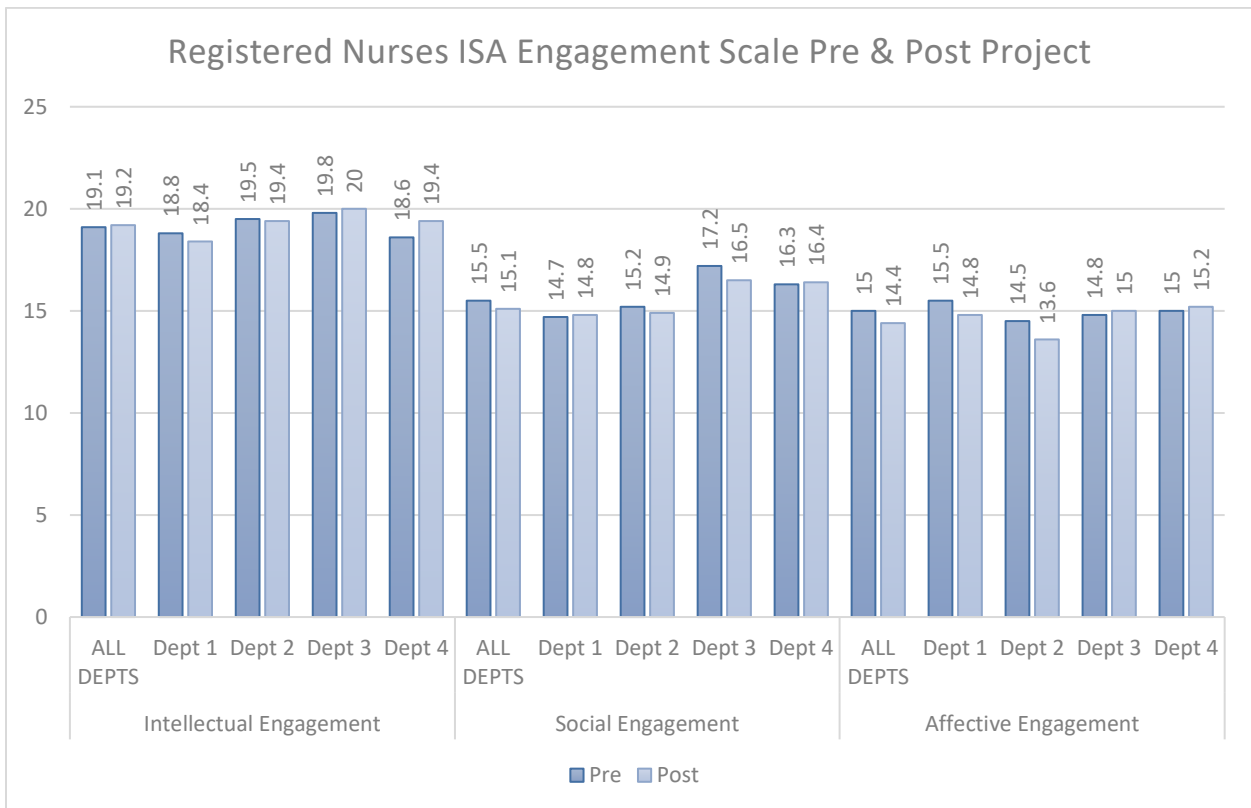
		<i>Mean Scores</i>		
Domain	Specific Questions	Pre-Project	Post-Project	% Change
Leader Intellectual Engagement	Focus hard on their work	5.25	5.23	-0.38%
	Concentrate on their work	5.5	5.75	4.55%
	Pay a lot of attention to their work	6.5	6.5	0.00%
Subtotal		17.25	17.7	2.61%
Leader Social Engagement	Share the same work values as their colleagues	5	5.25	5.00%
	Share the same work goals as their colleagues	5.25	5.75	9.52%
	Share the same work attitudes as their colleagues	5.5	5.75	4.55%
Subtotal		15.75	16.75	6.35%
Leader Affective Engagement	Feel positive about their work	6.75	7	3.70%
	Feel energetic in their work	6.5	6	-7.69%
	Be enthusiastic in their work	6.75	6.5	-3.70%
Subtotal		20	19.5	-2.50%
Total		53	53.75	1.42%
Mean		5.89	5.97	1.38%



Appendix V Registered Nurse ISA Engagement Scale Pre & Post Project

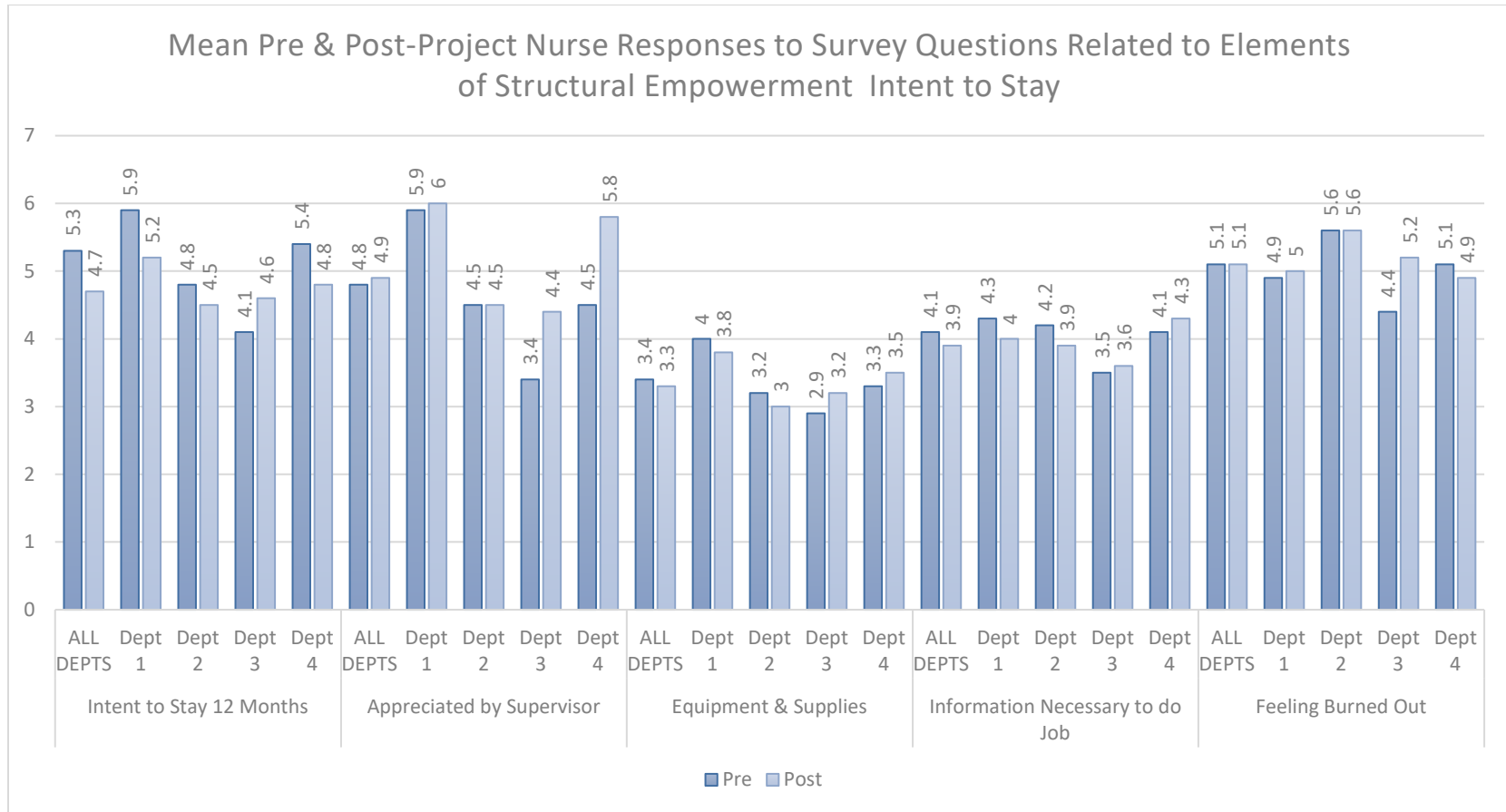
Registered Nurse Intellectual, Social, and Affective Engagement Scale Scores: Post-project implementation

Domain	Question	All Depts		Dept 1		Dept 2		Dept 3		Dept 4		Dept 5			
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post		
		n		71	67	24	23	22	20	8	6	15	15	2	3
Intellectual Engagement	I focus hard on my work.	6.4	6.4	6.3	6.1	6.5	6.5	6.5	6.7	6.2	6.5	7	6.7		
	I concentrate on my work.	6.3	6.3	6.2	6.1	6.5	6.4	6.8	6.8	6.1	6.4	6	6		
	I pay a lot of attention to my work.	6.4	6.5	6.3	6.2	6.5	6.5	6.5	6.5	6.3	6.5	6.5	6.3		
	Total	19.1	19.2	18.8	18.4	19.5	19.4	19.8	20	18.6	19.4	19.5	19		
	Mean	6.4	6.4	6.3	6.1	6.5	6.5	6.6	6.667	6.2	6.5	6.5	6.3		
	St. Dev	0.83	0.83	0.99	1.18	0.66	0.68	0.48	0.47	0.80	0.72	N/A	N/A		
Social Engagement	I share the same values as my colleagues.	5.2	5	4.8	4.6	5.2	5	5.8	5.5	5.5	5.5	5.5	5		
	I share the same work goal as my colleagues.	5.4	5.3	5.3	5.9	5.3	5.1	5.8	5.7	5.6	5.6	6	5.7		
	I share the same work attitudes as my colleagues.	4.9	4.8	4.6	4.3	4.7	4.8	5.6	5.3	5.2	5.3	6	5.3		
	Total	15.5	15.1	14.7	14.8	15.2	14.9	17.2	16.5	16.3	16.4	17.5	16		
	Mean	5.2	5.0	4.9	4.9	5.1	5.0	5.7	5.5	5.4	5.5	5.8	5.3		
	St. Dev	1.20	1.17	1.20	1.19	1.24	1.26	2.08	0.76	0.98	0.96	N/A	N/A		
Affective Engagement	I feel positive about my work.	5.1	4.9	5.3	5.1	4.8	4.5	5	5.0	5.1	5.1	5	4.7		
	I feel energetic in my work.	4.9	4.8	5	4.7	4.9	4.6	4.8	5.0	4.9	5.1	5	4.7		
	I am enthusiastic in my work.	5	4.9	5.2	5	4.8	4.5	5	5.0	5.0	5.0	6.50	6		
	Total	15	14.6	15.5	14.8	14.5	13.6	14.8	15	15	15.2	16.5	15.4		
	Mean	5	4.9	5.2	4.9	4.8	4.5	4.9	5	5	5.1	5.5	5.133		
	St. Dev	1.50	1.66	1.60	1.84	1.50	1.53	1.65	1.86	1.38	1.49	N/A	N/A		
	Sum of Domains	49.6	48.9	49	48	49.2	47.9	51.8	51.5	49.9	51	53.5	50.4		
	Average of Domains	16.5	16.3	16.3	16.0	16.4	16.0	17.3	17.2	16.6	17.0	17.8	16.8		



Department 5 excluded due to small response rate

Appendix W
Registered Nurse ISA Engagement Scale Pre & Post Project Detailed Comparison Data



Appendix X Detailed Comparison Data of Pre & Post Project Nurse responses to survey questions

Registered Nurses Responses to Focused Questions related to elements of Structural Empowerment on a 1-7 Likert Scale.

1 = Strongly Disagree and 7 = Strongly Agree.

Focused Questions		All Depts		Dept 1		Dept 2		Dept 3		Dept 4		Dept 5 ^a	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
I intend to stay with this organization for the next 12 months	n	71	67	24	23	22	20	8	6	15	15	2	3
	Mean	5.3	4.7	5.9	5.2	4.8	4.5	4.1	4.6	5.4	4.8	6	4.3
	Standard Deviation	2.11	2.05	1.58	1.9	2.35	2.35	2.51	2.51	1.81	1.9	N/A	N/A
	% Strongly Disagree (1 or 2)	16.9%	19.4%	4.2%	8.60%	22.7%	25.0%	37.5%	33.0%	2.0%	33.0%	N/A	N/A
	% Strongly Agree (6 or 7)	62.0%	53.5%	66.7%	59.1%	54.5%	50.0%	50.0%	33.0%	6.7%	13.0%	N/A	N/A
I feel appreciated by my supervisor	Mean	4.8	4.9	5.9	6.0	4.5	4.5	3.4	4.4	4.5	0.58	7	6.67
	Standard Deviation	2.04	1.95	1.39	1.1	1.99	2.06	2.36	2.41	1.87	1.75	N/A	N/A
	% Strongly Disagree (1 or 2)	18.3%	17.9%	4.2%	0.0%	2.7%	25.0%	37.5%	59.0%	26.7%	40.0%	N/A	N/A
	% Strongly Agree (6 or 7)	43.6%	43.3%	62.5%	60.8%	36.3%	40.0%	25.0%	0.0%	26.7%	13.0%	N/A	N/A
	Mean	3.4	3.3	4	3.8	3.2	3	2.9	3.2	3.3	3.5		1.67
I have access to the equipment and supplies I need to do my work	Standard Deviation	1.65	1.61	1.4	1.3	1.5	1.47	1.95	1.76	1.82	1.96	N/A	N/A
	% Strongly Disagree (1 or 2)	32.4%	35.8%	20.8%	17.4%	31.8%	40.0%	50.0%	50.0%	33.3%	40.0%	N/A	N/A
	% Strongly Agree (6 or 7)	11.3%	16.2%	12.5%	8.7%	9.1%	10.0%	12.5%	25.0%	13.3%	13.3%	N/A	N/A
	Mean	4	3.9	4.3	4.0	4.2	3.9	3.5	3.6	4.1	4.3		2.33
	I receive the information I need to do my job effectively	Standard Deviation	1.73	1.73	1.66	1.8	1.59	1.59	2.68	1.67	1.6	1.75	N/A
% Strongly Disagree (1 or 2)		22.9%	25.3%	20.8%	26.1%	14.3%	15.7%	50.0%	50.0%	2.0%	20.0%	N/A	N/A
% Strongly Agree (6 or 7)		25.7%	4.5%	29.2%	30.4%	28.6%	21.1%	25.0%	16.7%	2.0%	26.7%	N/A	N/A
Mean		5.1	5.1	4.9	5.0	5.6	5.6	4.4	5.2	5.1	4.9		5
I feel burned out from my work		Standard Deviation	1.74	1.84	1.75	2.0	1.5	1.54	1.57	1.09	1.65	2.08	N/A
	% Strongly Disagree (1 or 2)	10.0%	10.4%	12.5%	13.0%	4.8%	5.0%	25.0%	16.7%	6.7%	13.0%	N/A	N/A
	% Strongly Agree (6 or 7)	47.1%	52.2%	37.5%	43.5%	66.7%	75.0%	50.0%	50.0%	33.0%	40.0%	N/A	N/A

Note. *Strongly Disagree* denoted by a score of 1 or 2 on a 7-point Likert Scale. *Strongly Agree* denoted by a 6 or 7.

^a Number of survey respondents too small for meaningful analysis.