

**Faculty Mentoring Effects on Retention Rates and Job Satisfaction**

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### **Abstract**

As the predicted nursing shortage emerges, an immediate intervention to expand the nursing faculty workforce within the undergraduate Bachelor of Science in Nursing programs is essential. This evidence-based quality improvement project intended to improve nursing faculty retention rates and job satisfaction by implementing a faculty mentoring program. The project was conducted at a Midwestern university's school of nursing with a sample size of ten participants. New faculty participants were paired with one faculty mentor for the 16-week project. The mentor and mentee were provided with mentoring guidelines and essential checklists. The outcomes measured following the implementation of the mentoring program were the effectiveness of the mentoring experience and perceptions of job satisfaction. Two measurement instruments were utilized for data collection: The Mentorship Effectiveness Scale and the Conditions for Work Effectiveness Questionnaire. Following the implementation of the project and analysis of the data, it was discovered that a faculty peer mentoring process supports the retention of new nursing faculty and directly impacts feelings of enhanced job satisfaction.

*Keywords:* nursing faculty retention, nursing faculty mentoring program, nurse educator shortage, nurse faculty job satisfaction, nursing faculty mentor.

### **Faculty Mentoring and Effects on Retention Rates**

The National League for Nursing (NLN) acknowledges the critical need for adequate faculty mentoring to be implemented to increase the retention of highly competent nursing faculty (Harris, 2019). Retention of competent nursing faculty is required to address the growing need for adequately educated and prepared new registered nurses to add to the workforce (Nardi & Gyurko, 2013). The literature provides significant evidence that the integration and utilization of a faculty peer mentoring process promote the success and retention of new nursing faculty. Implementing measures to address the reasons for faculty job satisfaction and dissatisfaction and intent to remain or leave academia was apparent in the evidence.

### **Significance**

The lack of experienced nursing faculty has failed to receive the same degree of attention as the impending nationwide nursing shortage. However, the issue is substantial due to the direct impact on the United States health care system (Navarra et al., 2018). According to the Nursing Shortage Fact Sheet published by the American Association of Colleges of Nursing (AACN) in 2017, the United States will be in dire need of 203,700 additional registered nurses annually through 2026 to support the demand for increasing the nursing workforce. In 2018, nursing programs across the United States turned away over 75,000 prospective nursing students due to the lack of qualified faculty, finances, teaching space, and clinical placement sites (AACN, 2017). The continued development of the shortage of registered nurses will unquestionably endanger the United States health care system's ability to ensure that patients are provided with safe and quality patient care. The nursing faculty workforce requires immediate attention in to meet the challenge of increasing enrollment within the undergraduate Bachelor of Science in Nursing (BSN) programs. One solution to address this challenge is peer mentoring of novice

faculty by experienced nursing faculty mentors. The NLN strongly advocates and encourages the incorporation and utilization of faculty peer mentoring to support the success and retention of new nursing faculty (Harris, 2019). A position paper published by the NLN identified the need for adequate faculty mentoring as a critical factor to be implemented to increase the retention of highly competent nursing faculty (National League for Nursing, 2006). Nursing faculty are essential to provide valuable educational experiences to the nursing students, which is needed to address the overall national nursing shortage (Cullen et al., 2017). The implementation of peer faculty mentoring will promote retention, improve colleague working relationships, and provide workplace stability (Daw, Mills, & Ibarra, 2018).

### **Local Issue**

The AACN conducted a survey and concluded a national nursing faculty vacancy rate of approximately 7.9% (AACN, 2017). A recent research study of five Midwestern schools of nursing identified that nursing programs have an increased need to identify methods for retaining quality nursing faculty who are essential components in addressing the current nursing shortages (Byrne & Martin, 2014). Implementation of improvement measures is essential to decrease the loss of quality faculty and to support the local need for increased numbers of nursing faculty to prepare the additional nursing students required to address the nursing shortage.

### **Diversity Considerations**

Participants were obtained by convenience sampling, but all who met the criteria were invited to participate. As expected, the participants had similar demographic characteristics as the majority of faculty resided within the same metropolitan geographic area. The setting for the project was a Midwestern university's school of nursing (SON). Since 2015, most of the SON's faculty have been female between 30 and 63 years of age and with a wide range of years of

service. From 2015 to 2019, only three males have been faculty members (Midwestern University, 2019). The protocols for hiring new nursing faculty into the school included valuing applicant's differing cultures, beliefs, and life experiences.

### **Problem and Purpose**

#### **Problem**

Retention of competent nursing faculty is required to address the growing need for adequately educated and prepared new registered nurses to add to the workforce (Snelson et al., 2002). Without adequate numbers of competent nursing faculty to educate new nurses entering the national nursing workforce, the United States health care system will have limited options except for restricting health care resources and services to ensure a high quality of patient care (Harris, 2019). The American Association of Colleges of Nursing (AACN; 2017) surveyed nursing programs in 2016 and concluded a national nursing faculty vacancy rate of approximately 7.9%. Harris (2019) indicates that without identifying methods for improving nursing faculty retention, there will be inadequate numbers of qualified nursing faculty available to provide education to the increasing numbers of nursing students needed to address the national shortage. Qualified nursing faculty is a crucial component to providing valuable educational experiences to the nursing students needed to address the overall national nursing shortage (Cullen et al., 2017). The lack of nursing faculty retention is attributed to several factors, including dissatisfaction with new faculty orientation when transitioning to the teaching realm (AACN, 2017). Implementation of methods to improve nursing faculty retention rates must be initiated to prepare for the imminent nationwide nursing shortage.

#### **Problem Statement**

The decrease in faculty retention rates is associated with dissatisfaction or lack of new faculty mentoring processes when transitioning to the role of nursing faculty.

### **Purpose Statement**

Nursing programs are increasingly turning away prospective nursing students due, in part, to the inability to retain qualified nursing faculty (AACN, 2019). One solution to the looming critical nursing shortage is increasing the retention of qualified nursing faculty workforce. The decrease in faculty retention rates is associated with job dissatisfaction or lack of new faculty mentoring processes when transitioning to the role of nursing faculty. The purpose of this evidence-based quality improvement (EBQI) project was to determine if the implementation of an evidence-based faculty mentoring intervention improves new faculty retention rates and job satisfaction at the SON.

### **Barriers, Facilitators, and Sustainability**

Barriers identified revolve around the projected sample size and faculty workloads. Three additional full-time faculty were newly hired for the Fall 2020 semester. New faculty members, who began teaching in the 2019-2020 academic year, were invited to participate to allow for a larger number of faculty to participate in the improvement opportunity. The other notable barrier was faculty workload. A discussion with the SON Chair determined that faculty mentors would receive a workload reduction as compensation for the additional time commitment for participation as a new faculty mentor.

Facilitators of this project included the identified readiness for faculty to become mentors. Following discussions with experienced faculty members regarding the implementation of a faculty mentoring program, the responses were positive and accepting of the need for this change in the SON faculty orientation process. The Chair of the SON was another

identified facilitator of this project. The necessity to retain quality nursing faculty has been recognized as vital to the continued success of the SON.

Following the implementation of the new faculty mentoring program, the project will be sustainable with minimal extenuating effort. It will be necessary to monitor and review feedback from mentors, mentees, and leadership to ensure that the program continues to provide beneficial results.

### **Review of the Evidence**

#### **Inquiry**

In newly hired nursing faculty, does a faculty mentoring process improve retention rates and job satisfaction during the first semester of employment in a baccalaureate nursing program?

#### **Literature Search Strategies**

Several major databases and search engines were utilized for the literature search, including EBSCOHost, Ovid, PubMed, ProQuest, Google Scholar, and Science Direct. Priority search words and phrases included nursing faculty retention, nursing faculty mentoring, nurse educator shortage, nurse faculty job satisfaction, nursing faculty job dissatisfaction, intent to remain, intent to leave, and faculty orientation (See Appendix A, Definition of Terms). A broad search was conducted by reviewing 210 records for specific inclusion and exclusion criteria (See Appendix B, PRISMA Diagram). Research studies were excluded if an intervention for retention or mentoring processes were not involved, if the abstract was not relevant to the inquiry, and if not written in English. A few studies were also excluded if published more than ten years ago unless containing guidelines or historical evidence pertinent to the inquiry. Inclusion criteria encompassed searching for keywords in peer-reviewed articles that focused on identifying studies relevant to increasing faculty retention through the implementation of mentoring

processes. The search criteria also included articles that provided evidence of the benefits of mentoring. The search strategy resulted in the inclusion of 30 articles, 19 quantitative and 11 qualitative studies, for the synthesis of evidence for the inquiry (See Appendix C, Synthesis of Evidence Table). The studies were appraised, and a level of evidence was assigned for each research study (Melnik & Fineout-Overholt, 2019). Two studies were Level I and included one meta-analysis study and one evidence-based practice guideline (EBPG) study. Three of the reviewed studies were identified as Level III quantitative systematic reviews. Ten studies were Level IV and included quantitative cross-sectional, prospective, retrospective, or cohort design studies. Ten studies were Level V, consisting of qualitative and quantitative descriptive systematic reviews. The remaining five studies were identified as Level VI qualitative studies. Most studies used researcher-developed questionnaires to collect the required data.

### **Evidence by Themes**

The primary goal of the review of the literature was to demonstrate a clear relationship between faculty mentoring processes and the effect on retention rates. The literature search found numerous articles, and after determining eligibility, a final total of 30 articles was utilized to investigate the impact of mentoring programs on the retention rates of new faculty. This extensive literature review discovered three major themes that impact faculty retention rates: reasons for job satisfaction and dissatisfaction, reasons to stay or intent to remain (ITR), and reasons to leave or intent to leave (ITL; See Appendix D, Evidence Grid). A comprehensive synthesis of the evidence encompassing these themes provided support for the inquiry. After identifying the major themes present in the literature evidence, several sub-topics emerged that were relevant to the inquiry problem.

### ***Reasons for Job Satisfaction and Dissatisfaction***

Twenty-eight studies revealed evidence that influence individual perceptions of job satisfaction or dissatisfaction. The theme of job satisfaction and dissatisfaction was the most frequently identified factor related to the retention of nursing faculty (Carlson, 2015; Hurley & Snowden, 2008; Jeffers & Mariani, 2017; Weidman, 2013). The articles provided a discussion of evidence related to specific factors impacting perceived feelings of job satisfaction and dissatisfaction within the role of nurse faculty. Positive mentoring experiences, supportive work environment, building collegial relationships, ability to maintain a functioning work/home life balance, finding overall enjoyment in the workplace were identified as crucial components leading to the theme of reasons for job satisfaction and dissatisfaction (Ambrose et al., 2005; Evans, 2013; Hubbard et al., 2010; Jeffers & Mariani, 2017; Salvucci & Lawless, 2016).

Positive mentoring experiences were commonly identified as significantly affecting participants' feelings of overall job satisfaction. One meta-analysis identified positive self-concept and emotional stability as measures that positively impact workplace relationships that affect job satisfaction and job performance. (Judge & Bono, 2001). Several studies uncovered categories that were found to improve facilitation of faculty mentoring: open communication, supportive environment, collegiality, accessibility, professional commitment, positive experience, and a formal mentoring plan (Hubbard et al., 2010; Hulton et al., 2016; Morin & Ashton, 2004; Ries et al., 2012; Salvucci & Lawless, 2016). Analysis of survey responses, from the majority of the studies, found that mentoring was beneficial for developing mentees' personal and professional development, directly impacting job satisfaction and faculty retention (Chung & Kowlaski, 2012; Jeffers & Mariani, 2017; Navarra et al., 2018; Petosa & Smith, 2014; Watkins-Bruner et al., 2016).

Chung and Kowalski (2012) implemented a nationwide survey with a large sample size of over 900 nursing faculty. The online survey focused on five key questions representing aspects of nursing faculty retention (Chung & Kowalski, 2012). Another research group conducted a study with a large sample size that analyzed faculty retention focusing on the longevity of service following the implementation of a faculty development program. This study created a database to analyze statistically individual faculty member's academic progression over eight years. The conclusion drawn by the researchers indicates that faculty development programs improve overall faculty retention (Ries et al., 2012).

The evidence in many of the studies also revealed concepts beneficial to implementing successful mentoring programs that address the participants' desire to expect a supportive work environment and maintain the potential to build collegial relationships. The prevalent concepts identified were the need to develop meaningful and communicative relationships; the need to ensure adequate support has been offered to the novice educator; and the need to establish a formal and organized mentoring program (Cullen et al., 2017; Sawatzky & Enns, 2009; Watkins-Brunner et al., 2016; White et al., 2010). A summary of narrative responses from several studies indicated that the ideal mentor was a positive role model who was able to provide unknown information, help to reduce social isolation, and was perceived as being supportive (Cullen et al., 2017; Nardi & Gyurko, 2013; Petosa & Smith, 2014).

Maintaining a functioning work and home life balance and finding overall enjoyment in the workplace were also indicated as components beneficial to retention and job satisfaction factors. Many studies found that respondents felt that variable work hours and adaptable job expectations were expected to provide a healthy workplace environment (Carlson, 2015; Evans, 2013). A majority of respondents reported that they felt the mentoring process had improved

their perceptions of job satisfaction. Similar findings from multiple Likert scale surveys overwhelmingly revealed benefits of faculty mentorship identified as increased job satisfaction, improved teaching skills, trusting relationships, and a positive work environment (Hubbard et al., 2010; Navarra et al., 2018; Sawatzky & Enns, 2009; Weidman, 2013).

Hubbard, Halcomb, Foley, and Roberts (2010) conducted a research study to gather data regarding rationales supporting the inclusion of mentoring and for identifying barriers to effective mentorship programs. Survey data concluded that nursing faculty involved in an acutely interactive mentoring and orientation process were more inclined to continue teaching and expressed an increase in overall job satisfaction (Hubbard et al., 2010). It is vital to ensure that the mentoring needs are met for new nursing faculty and the mentors are prepared for the expectations and rigor involved in the mentoring and orientation (Hurley & Snowden, 2008; Sawatzky & Enns, 2009).

The ability to comprehend documented concerns that promote feelings of job dissatisfaction is essential to planning of appropriate measures for improvement. Several studies identified reasons for job dissatisfaction such as lack of competitive or comparable salary compensation, inability to develop collegial relationships, disorganized mentoring program, insufficient administrative or leadership support, and unavailability of job promotion or tenure (Ambrose et al., 2005; Chung & Kowalski, 2012; Nardi et al., 2013; Navarra et al., 2018). Reported feelings of dissatisfaction were centered around the level of difficulty associated with challenges presented while transitioning from clinician to educator (Jeffers & Mariani, 2017). Three quantitative studies found that faculty participating in mentoring reported feeling supported and experienced job satisfaction during the transition phase, and faculty who lacked a

mentoring relationship reported feeling abandoned and overwhelmingly dissatisfied. (Jeffers & Mariani, 2017; Petosa & Smith, 2014; Weidman, 2013).

### ***Reasons To Stay Or Intent To Remain***

Supportive work environment, overall job satisfaction, decreased levels of work stress, age-retirement, and collegiality amongst peers were the concepts discovered in the evidence that led to the identification of the second major theme, reasons to stay or intent to remain (ITR). Nine studies were categorized under the theme of reasons to stay or intent to remain.

Results from multiple studies provided evidence of a positive correlation between job satisfaction and the intent to stay when leadership was actively involved in the orientation of newer faculty and when the work environment was supportive (Carlson, 2015; Lee et al., 2017; Tourangeau et al., 2012). Six cross-sectional, quantitative studies indicated that positive work environments, increased salaries, ability to maintain work and life balance, collegiality, and mentoring would positively impact recruitment and retention. (Chung & Kowalski, 2012; Frisbee et al., 2019; Hulton et al., 2016; Navarra et al., 2018; Roughton, 2013; Sawatzky & Enns, 2009). The supportive work environment was described as nursing programs that had developed organized mentoring programs, provided appropriate leadership support, enabled collegial relationships, provided equal faculty workloads, and granted opportunities for adequate financial benefits (Nardi et al., 2013; Tourangeau et al., 2012).

Most researchers collaboratively agree that orienting and retaining quality nursing faculty is a costly endeavor, increasing the desire to develop methods to help secure and retain the nursing faculty necessary to address the impending nursing shortage. Ambrose, Huston, and Norman (2005) identified a small sample of faculty participants and conducted in-depth phone interviews to determine individual perspectives on job satisfaction. This research recognized

that the nursing faculty believed that a faculty mentoring process directly impacted retention and the intent to stay (Ambrose et al., 2005). Another group of researchers designed a study utilizing focused group discussion with facilitated interviews to identify satisfaction and requirements for retention. The results determined that faculty mentoring programs were instrumental in developing collegiality and job satisfaction among members of the various nursing faculty and improving ITR (Tourangeau et al., 2012).

Each instrument included in the studies contained additional questions requesting demographic information. Personal characteristics such as age, retirement, area of residence, and family situations were identified and analyzed for possible effect on ITR (Fang & Keston, 2017; Fang & Bednash, 2014; Nardi et al., 2013; Tourangeau et al., 2012). Likert scale and open-ended questions were incorporated into the survey tools to seek rationales for intent to remain by asking for examples of what actions led to enjoyment in the workplace environment or what signified positive mentoring experiences (Evans, 2013; Lane et al., 2010; Lee et al., 2017).

### ***Reasons to Leave or Intent to Leave***

The factors that affected participants' reasons to leave or intent to leave (ITL) were identified as lack of work environment support, increased levels of work stress, overall feelings of job dissatisfaction, nearing retirement age, salary compensation, and heavier than expected faculty workload (Fang & Kesten, 2017; Frisbee et al., 2019; Hulton et al., 2016; Roughton, 2013). Six studies of evidence unfolded several subthemes that were vital components in the development of the third theme, reasons to leave or ITL.

Survey results from numerous studies found that reasons to leave academia were the inability to maintain a proportionate work to social life ratio, overall lack of support, and program disorganization (Carlson, 2015; Frisbee et al., 2019; Hulton et al., 2016; Roughton,

2013). The most consistently prominent factors identified affecting intent to leave were retirement age, heavy faculty workloads, inability to advance career development, and inadequate support (Carlson, 2015; Frisbee et al., 2019; Hulton et al., 2016; Roughton, 2013).

A review of a global study identified that there is a multitude of financial, social, and educational aspects that have a direct impact on the worldwide shortage of nursing faculty. This particular study determined that resolutions must be swiftly identified and implemented to address this prevalent issue to avoid the inability to retain quality nursing faculty (Nardi & Gyurko, 2013). Another study provided evidence that leadership support and a positive work environment directly correlate to faculty's perception of job satisfaction and intent to leave (Frisbee et al., 2019). Many studies provided evidence of potential barriers to retaining newer nursing faculty. Insufficient financial support, lack of mentors, and inadequate administrative support were barriers frequently identified during result analysis (Salvucci & Lawless, 2016). Likert scale surveys found in multiple studies included specific questions that sought to uncover rationales for intent to leave such as asking for descriptions of what actions led to the absence of enjoyment in the workplace environment or what constituted a negative mentoring experience (Carlson, 2015; Frisbee et al., 2019; Hulton et al., 2016; Roughton, 2013).

Several qualitative studies provided an analysis of responses from narrative questions regarding perceived barriers to the mentoring process that led to feelings of dissatisfaction and intent to leave. The results identified issues in role confusion between mentor and mentee, scheduling difficulties leading to feelings of being unsupported, lack of solidified program guidelines, and program disorganization. (Ambrose et al., 2005; Hubbard et al., 2010; Hulton et al., 2016).

Findings indicate that a growing number of retirement age faculty had delayed retirement, and the results suggest that their imminent retirement is soon approaching, thus potentially further impacting the shortage of nursing faculty. (Fang & Kesten, 2017; Fang & Bednash, 2014). Heavy faculty workload was mentioned in numerous studies as directly affecting nurse faculty intent to leave (Bittner & O'Connor, 2012; Roughton, 2013).

### **Evidence Summary, Strengths, Gaps and Limitations**

#### **Summary**

The literature is replete with evidence that implementing a faculty mentoring process could improve nursing faculty retention. This review of the literature supports that there is a considerable need for the implementation of faculty mentoring to retain quality nursing faculty. The research studies provided evidence of several themes and factors that directly and indirectly impact nursing programs' potential to improve retention rates. Themes frequently identified in the findings of the studies included reasons to stay or ITR, reasons to leave or ITL, and reasons for job satisfaction and dissatisfaction (Carlson, 2015; Efstathiou et al., 2018; Hulton et al., 2016; Roughton, 2013; Tourangeau et al., 2012).

To address the need for change in best practice, the initiation of evidence-based mentorship programs has been shown to benefit the efforts to increase nursing faculty retention rates (Harris, 2019; Morin & Ashton, 2004). Faculty mentoring enables novice nursing faculty to receive individualized professional and emotional support from an experienced colleague, thus providing an enriched, structured work environment (Sawatzky & Enns, 2009; Weidman, 2013).

Factors influencing overall job satisfaction were found to directly correlate with predicting intent to stay employed in the academic setting (Evans, 2013; Frisbee et al., 2019; Lane et al., 2010; Salvucci & Lawless, 2016; Weidman, 2013). The evidence corroborated that

several factors have the potential to impact reports of job satisfaction and the reasons for faculty ITR. These factors include a supportive work environment, decreased level of stress related to the work environment, work relationships that support collegiality, developing a work/home-life balance, and being an active participant in positive mentoring experiences (Ambrose et al., 2005; Bittner & O'Connor, 2012; Chung & Kowalski, 2012; Roughton, 2013; Sawatzky & Enns, 2009; Tourangeau et al., 2012). In contrast, the evidence also found that job dissatisfaction was impacted when nurse faculty felt unsupported by leadership, lacked evidence of collegiality among peers, or perceived overall program disorganization (Bittner & O'Connor, 2012; Frisbee et al., 2019; Lane et al., 2010; Lee et al., 2017; Lunsford et al., 2018). Faculty with ITR reported experiencing higher levels of stress from lack of mentoring and felt significant frustration due to expectation of heavy workloads (Bittner & O'Connor, 2012; Carlson, 2015; Lane et al., 2010). Retirement age and other demographics were other notable reasons for faculty not remaining in the academic setting (Chung & Kowalski, 2012; Fang & Kesten, 2017; Fang & Bednash, 2014).

### **Evidence Strength**

A vast collection of reliable and validated studies was reviewed to strengthen the evidence. The literature review provided high levels of evidence from five of the quantitative research studies and discovered significant statistical data indicating that faculty mentoring is beneficial to faculty retention rates (Melnik and Fineout-Overholt, 2019). The additional twenty-five of the thirty studies included in the review provided supportive evidence demonstrating that the inclusion of mentoring programs revealed increased reports of ITR and that perceived job satisfaction was increased when involved in a mentoring relationship (Chung & Kowalski, 2012; Efstathiou et al., 2018). Many of the studies indicated reports of an increased desire, from

nursing faculty, to have an opportunity to participate in a formal mentoring program (Cullen et al., 2017; Navarra et al., 2018; Watkins-Bruner et al., 2016).

### **Gaps and Limitations**

Suggestions have been published, but no established specific guidelines for establishing mentoring programs. It would be beneficial to identify best practices for developing mentoring guidelines specific to nurse faculty in the academic setting (Chung & Kowalski, 2012; Watkins-Bruner et al., 2016). Without specified guidelines, it will continue to be challenging to determine what individual nursing programs are including in their established or planned mentoring programs. The identification and utilization of consistent instruments and survey tools can allow for more accurate comparisons of completed studies, potentially enhancing a comprehensive understanding of the actual effectiveness of mentoring processes. Remarkably, few of the reviewed studies analyzed the mentor-mentee relationship. A key component of mentoring is building positive mentor-mentee relationships that ultimately could improve job satisfaction.

Various limitations were identified in the review of the literature evidence. Techniques utilized to perform focused interviews were not described in detail; thus, specified methods for conducting interviews were not stated. It will be necessary to ensure clarity of the interviews or survey questions being asked. Several studies reported difficulty in interpreting results for the items that were not clearly worded, causing unexpected or biased responses. The evidence repeatedly mentioned that many of the survey question responses were based upon individual and personal perceptions and that it could be beneficial to provide more Likert-scale questionnaires to increase result consistency (Ambrose et al., 2005; Lunsford et al., 2018; Navarra et al., 2018; Ries et al., 2012). It will be necessary to consider studies with inconsistent

sample sizes and widely varying geographical locations, which can directly affect responses and analysis of results (Tourangeau et al., 2012).

### **Theory**

The theory that directly correlates with determining if the implementation of a faculty mentoring process impacts new faculty retention rates was the Social Support Theory (SST). Social Support Theory was originally derived from John Cassel, a forerunner into the study of social support, who implemented studies on methods to improve the understanding and significance of obtaining support from society (Cassel, 1974). This theory is utilized to provide measurements to assist in determining an individual's perception or perceived experiences of feeling cared for and supported by the people, determined to exist within their social group or social network (Hajli et al., 2015). The SST posits that individuals have an innate desire to feel cared for, work within a fostering support system, and be a supportive environment component (Fleury et al., 2009; Peterson & Bredow, 2017). Social Support Theory emphasizes the importance of developing supportive environments that provide intact and effective support systems (Fleury et al., 2009). Social support has been conceptualized in various ways but is best described as the supportive measures received from others within a perceived or actual social network and is further defined based upon the four identified concepts (Feeney & Collins, 2015; Fleury et al., 2009; Gigliotti, 2002). These support concepts are categorized as emotional, informational, instrumental, and appraisal (Fleury et al., 2009; Hajli et al., 2015).

### **Theoretical Application**

Social Support Theory was applicable to determine if implementing a faculty mentoring process impacts the improvement of new faculty retention rates. Empirical evidence demonstrated that individuals who have been granted the opportunity to develop close, personal

relationships are more likely to experience higher levels of overall satisfaction and are offered the affordability to develop feelings of social well-being (Feeney & Collins, 2015). As a theoretical framework, SST emphasizes a focused examination of the social phenomena and interactions that are included in the concepts of emotional, instrumental, informational, and appraisal supports (Feeney & Collins, 2015; Gigliotti, 2002). Faculty mentoring programs are instrumental in developing collegiality and job satisfaction among members of nursing faculty social networks (Tourangeau et al., 2012). Implementation of a faculty mentoring process has a positive impact on the retention of quality and dedicated nurse faculty, who often feel overwhelmed and lacking guidance when SST's conceptual interactions are provided and supported (Feeney & Collins, 2015; Fleury et al., 2009; Gigliotti, 2002; See Appendix E, Diagram of the Social Support Theory).

## **Methods**

### **IRB Approval**

The project site Institutional Review Board (IRB) served as the IRB for the project. The IRB approved the evidence-based quality improvement project (EBQI) as Exempt Human Subject Research.

### **Project Site**

The site for the project was a SON located in Midwest Missouri. The Undergraduate Pre-Licensure Baccalaureate Nursing Program employs 12 full-time, six Adjunct Clinical Instructors, and four online Instructional Adjunct faculty members. Of the 12 full-time faculty, four were considered newer faculty members who began teaching in the 2019-2020 academic year. The SON hired three new faculty members who began a teaching assignment in Fall 2020.

### **Ethical Considerations**

The ethical considerations imperative to the inquiry included utilizing approaches that promote mutual respect and build trusting and long-lasting collegial relationships. When conducting an evidence-based improvement project, it is essential to ensure that the personal rights of each participant have been considered. The project leader has an obligation to assure that the participants' privacy will be protected and their involvement in the project will remain confidential. For this project, participation was entirely voluntary. Mentor and mentee participants had the option to withdraw at any time without the threat of negative repercussions. Mentors and mentees were provided with full disclosure information detailing the expectations and commitments involved in the project.

Identifying ethical considerations regarding the impact of diversity and cultural aspects were addressed during the project. The questionnaire and survey tools utilized for the collection of data were devoid of discriminating and offensive language. The instruments planned for this project were written and spoken in English, which excluded any participant who were unable to speak or read in English. The participant's responses were collected anonymously and remained confidential, ensuring that individual privacy rights were continuously protected. The mentor and mentee participants were informed that the project leader had no conflict of interest or involvement with any organization of financial interest or non-financial interest in the subject matter in this project.

### **Funding**

The anticipated costs for the implementation of this EBQI were minimal. All printed materials were included in the Faculty Orientation Manual, which the SON provided without additional costs. The expense factored into the amount for the project leader's time was self-funded. Faculty mentor participation was voluntary, and any actual compensation would have

been calculated according to individual salaries and faculty workload (See Appendix F, Project Cost Table)

### **Participants**

For this project, the predicted sample size was expected to be about ten. The availability of faculty willing to become mentors and qualified new faculty to be mentored directly impacted the sample size. The inclusion criteria for both mentors and mentees included having an active registered nursing license, and actively earning or completed a master's degree in nursing. Exclusion criteria included lack of the required educational degree or lack of signed informed consent to participate. A voluntary, convenience sampling method was utilized based upon the availability of both faculty mentors and new faculty to be mentored. Any new faculty who met the criteria or transitioning into the role of nurse educator was invited to participate. Experienced faculty were invited to participate as mentors if they had a minimum of two years of teaching experience and hold a master's degree.

### **EBP Intervention**

The project was led and facilitated by the project leader. Additionally, the project leader's mentor for the Doctor of Nursing Practice (DNP) program, the Chair of the SON, actively assisted with providing recommendations as the project progressed. The intervention for this EBQI project was the implementation of new faculty mentoring to improve faculty retention rates. Experienced nursing faculty participated as mentors of the new faculty mentees. Specified guidelines were established for the paired mentors/mentees and included achievable goals, scheduled meetings, and measures to identify progression.

### ***Recruitment***

Recruitment for the faculty mentoring EBQI project took place within the SON. Recruitment of new faculty and faculty mentors was completed through convenience sampling, and any new

faculty who met the criteria were invited to participate. Faculty mentors and mentees were assigned based upon work schedules and years of nursing and teaching experiences.

### ***Intervention Protocol.***

Evidence-based intervention instruments consisting of surveys and questionnaires were utilized for this project. After IRB approval, experienced faculty mentors were paired with new faculty mentees. Once assignments of mentors and mentees had been individually approved and accepted, a New Faculty Orientation Manual was distributed to each faculty mentor and mentee pair. The existing manual was explicitly created for the SON and was provided with specific instructions, expectations, and guidelines for the mentorship project.

The mentoring project was initiated once all participants indicated an understanding of the project and expectations. The implementation of the project occurred the week prior to the start of the Fall 2020 academic semester. Throughout the fall semester, the faculty mentor conducted regularly scheduled meetings with the mentee to discuss any identified issues or questions. A detailed SON calendar was added to the Faculty Orientation Manual to ensure that adequate introduction to required academic events and timelines were available. A faculty mentorship checklist was included so that both mentors and mentees could identify content that had not been discussed or demonstrated in their interactions. After completing the mentoring intervention, in December 2020, the project leader delivered the instructions to complete the post-intervention surveys and questionnaires to each participating mentee. (see Appendix G, Logic Model; Appendix H, Timeline Flow Diagram; and Appendix I, Intervention Flow Diagram).

### **EBP Framework and Change Theory**

The evidence-based practice (EBP) model essential for this research project was the Clinical Scholar Model (CSM). The CSM guided implementing evidence-based practice promoting the utilization of faculty mentors to support new faculty mentees, consequently

improving new faculty retention rates (English, 2016). Additionally, this EBP model provides supportive assistance in identifying challenges and concerns identified as in need of change in current practices (Honest et al., 2009). The CSM framework provides methods to enhance the facilitation of engaging, supporting and mentoring new nursing faculty.

The CSM framework is constructed around five ideal phases including observation, analyzation, synthetization, application and evaluation, and dissemination. The observation phase begins with identifying the potential for intervention improvement. For this project, the observed improvement revolved around the need to retain quality nursing faculty (English, 2016; Honest et al., 2009). The analysis phase is completed by seeking data supporting the necessity for the impending change. The project leader conducted a thorough search of the evidence to determine current best practices to increase nursing faculty retention. The third phase of synthesizing is accomplished by conducting an extensive review of literature (English, 2016; Honest et al., 2009). The project leader's literature review identified the imminent need to implement a faculty mentoring program to improve faculty job satisfaction and retention rates. Application and evaluation is completed following the implementation of the identified EBP intervention (English, 2016; Honest et al., 2009). This phase determined whether the inclusion of a faculty mentoring program successfully achieved the outcome of improving faculty retention rates. The final phase of the CSM model is dissemination. This included sharing the results and providing research data to promote the inclusion of faculty mentoring programs.

The model for organizational change for this project was Kotter and Cohen's Model of Change. Kotter and Cohen present eight steps or phases to utilize for successful implementation of change in an organization. Small et al. (2016) recommend that establishing a sense of necessity for change is the first phase. The second step recognizes the need for identifying

enthusiastic faculty mentees and leadership. The next step emphasizes the need to have concrete development of the concept and tactics to be implemented. The fourth phase promotes presenting the concept and tactics to be implemented in an emotionally appealing method, which applied to the project in ensuring that faculty mentors and new faculty mentees are willing participants in this change process. The next sequential step describes the need to eliminate obstacles that can increase feelings of dissatisfaction or annoyance. The sixth phase involves maintaining team momentum by sharing the positive successes that have been established during the implementation process. Steps seven and eight stress the importance of continuing the perseverance of the change until it becomes a permanent and accepted change (Small et al., 2016). Each step in Kotter and Cohen's Model of Change was directly applicable to implementing a faculty mentoring process to improve nursing faculty retention rates during the first semester of employment in a baccalaureate nursing program.

### **Project Design**

The design of this project was quasi-experimental incorporating a one-group, post-test approach. The quasi-experimental design method was beneficial while analyzing the data results due to the actual smaller sample size for this project (Harris et al., 2006). Data collection involved the completion of post-intervention questionnaires and surveys that were obtained from the mentee participants.

### **Validity**

Internal validity for the project considered the accuracy of the evidence-based intervention of implementing a faculty mentoring program and improving faculty retention rates. The project leader factored in possible threats to internal validity during the implementation and review of data processes to ensure post-survey validity and reliability. Internal threats could have

included mismatch or miscommunication between mentor and mentee, or the potential for a change to online courses if regulations require social isolating due to the COVID-19 pandemic. External validity for the intervention considered the diversity and demographic characteristics of the participants involved in the mentoring program. The generalization of the project results can be applicable to other academic and health care populations and settings. This EBQI project can be effortlessly transferred to the hospital setting by employing experienced staff nurses as mentors for student nurses or newly graduated nurses that require mentoring as they transition into their new role (Nowell et al, 2015; Sibiya et al., 2018).

### **Outcomes**

The primary outcome measured was improving faculty retention rates. The secondary outcome measured was increasing job satisfaction. Following the implementation of the project and subsequent analysis of the data, integration and utilization of a faculty peer mentoring process was evaluated for the retention of new nursing faculty, which includes job satisfaction.

### **Measurement**

#### ***Retention Rates***

Comparisons of the current study to published literature were utilized to analyze the effect of faculty mentoring program on improved faculty retention rates. Ries et al. (2012), analyzed faculty retention rates following completion of a faculty mentoring process using the Kaplan–Meier survival curve. Further analysis of the project’s descriptive statistics was based on comparison to other research study findings (Baker, 2010; Carlson, 2015; Lee et al., 2017).

#### ***Mentoring***

The mentoring measurement instrument utilized for the project was the Mentorship Effectiveness Scale (MES). The MES was developed by a Faculty Mentoring Committee from

Johns Hopkins University School of Nursing. The MES utilizes a Likert-scale rating format and provides information to determine the effectiveness of the mentor relationship and the overall mentoring experience. The developers of this instrument note that there is a possibility of response bias, which could negatively affect the validity (Berk et al., 2005). This potential of bias was considered during the analysis of the data gathered during the project. Results from previous studies conducted utilizing the MES have demonstrated the reliability and validity of the tool (McBride et al., 2017). Berk et al. (2005), utilized a group of five faculty reviewers to conduct an in-depth analysis of these instruments and the reviewers were able to provide evidence of content validity (See Appendix M, Mentorship Effectiveness Scale).

The MES tool is copyrighted. Permission for the use of this tool was obtained from Johns Hopkins School of Nursing (See Appendix N, Copyright Permission Email).

### *Satisfaction*

The job satisfaction measurement instrument is the Conditions for Work Effectiveness Questionnaire-I (CWEQ-I). The CWEQ-I instrument utilizes a Likert-scale rating format to gather data regarding participants' perception of being provided with adequate workplace opportunity, information, support, and resources and how these opportunities have impacted their perceptions of job satisfaction (Baker et al., 2011). The CWEQ-I has been used in nursing research studies for over two decades and has recently undergone revision by the University of Western Ontario Workplace Empowerment Research Program. This tool has been utilized in several nursing research studies and has shown consistent reliability Cronbach's alpha ranging from .60 to .82 and validity (Baker et al., 2011; Laschinger & Shamian, 1994; Manojlovich & Spence-Laschinger, 2002; Western University, 2020). The CWEQ-I is found within the public

domain, therefore permission to utilize the tool was not required (see Appendix O, CWEQ-I Tool).

After completing the EBQI mentoring program, participants were provided with the Likert-scale surveys for completion. The instruments were provided to the participants in unmarked envelopes along with specific instructions and the date for submission of the completed survey and questionnaire. Participants' anonymity was maintained.

### **Quality of Data**

The quality of data from previous mentoring and job satisfaction studies and instruments has been primarily based upon the assumption of the data results (Berk et al., 2005). To identify the meaning of the findings, results from this project were compared to previously published benchmark studies that utilized the MES and CWEQ-I (Baker et al., 2011; Laschinger & Shamian, 1994; McBride et al., 2017). Potential threats to the quality of the data collection included inaccuracies with collecting data and the possibility of response bias. Due to a small sample size, power analysis was not calculated for the sample. The project leader was the only individual to collect data, which decreased inaccuracies (See Appendix P, Data Collection Table).

### **Analysis Plan**

Statistical analysis was conducted by using IBM Statistical Package for Social Sciences (SPSS) software version 26. Data collected was analyzed using descriptive statistics. This method of analysis was chosen due to the small sample size of participants. Post-survey data was collected and analyzed to determine the presence of mentoring, job satisfaction, and retention (See Appendix Q, R, & S, Statistical Analysis Tables).

## **Results**

### **Settings and Participants**

The mentoring project setting was a Midwestern University's SON. The SON was on an off-site secondary campus in an urban community, approximately 40 miles from the main campus. The undergraduate baccalaureate nursing program employs 12 full-time faculty, six Adjunct Clinical Instructors, and four online Instructional Adjunct faculty members. Of the 12 full-time faculty, four were considered newer faculty members who began teaching in the 2019-2020 academic year. The SON hired three new faculty members who started a teaching assignment in Fall 2020.

The sample size for this mentoring project was ten. The ten participants included three full-time faculty mentees who began the mentoring process in Fall 2019, four full-time faculty who began the mentoring process in Fall 2020, and three part-time adjunct faculty who started the mentoring process in Spring and Fall 2020. Seven of the 12 full-time faculty served as mentors during Fall 2019, Spring 2020, and Fall 2020. The inclusion criteria for both mentors and mentees included an active registered nursing license and actively earning or completed a master's degree in nursing. A voluntary, convenience sampling method was utilized to recruit participants.

### **Intervention Course**

The faculty mentoring intervention was implemented at the start of the Fall 2020 semester. An IRB-approved recruitment script was utilized to obtain consent from the ten project participants. An informational meeting was conducted, and a slide presentation was provided to mentors and mentees. After consent documents were received and instructions provided, the three full-time faculty, who completed the mentoring process in Fall 2019, and the two part-time adjunct faculty, who completed the mentoring process in Spring 2020, received the survey

instruments in an unmarked envelope. The remaining mentee participants were introduced to their mentors, and faculty orientation manuals were distributed. The mentoring pairs met weekly, either in person or via text or email. Individual monthly meetings were scheduled with each pair and the project leader to discuss the mentoring intervention's progress. After completing the 16 weeks of the mentoring intervention, the remaining five mentees received the envelope with the questionnaire instruments. All ten participant envelopes were gathered by an outside faculty member, which ensured no personal identifiers were inadvertently included in the study.

## **Outcome Data**

### ***Retention***

The primary outcome was to determine if a faculty mentoring program would improve faculty retention rates. Data analysis supported that many items in the two surveys were cohesively correlated ( $r$  value = .693,  $p$  value = .026) indicating a linear relationship representing a statistically significant, positive correlation between the MES and the CWEQ-I tools. The higher-level scores obtained from the MES indicated perception of the mentoring experience as extremely effective. The higher-level scores obtained from the CWEQ-I were indicative of feeling exceptionally satisfied and empowered within these four subscales. The higher-level scores in the MES tool correlated with the higher-level scores in the CWEQ-I tool. Previous authors have established validity and reliability for the tools, and the current project results further demonstrate evidence of validity and reliability for both the MES and CWEQ-I tools in this study with 10 participants. These results strongly suggest that mentorship effectiveness directly correlates with job satisfaction and improved faculty retention rates (See Appendix S, Statistical Analysis of Correlation of Outcomes from MES and CWEQ-I Table).

### ***Effectiveness of Faculty Mentoring***

Another outcome was to determine the effectiveness of faculty mentoring. The data collected from the MES were analyzed to determine statistical significance following the project. The MES is a Likert-type scale that consists of 12 items that rate a mentor's characteristics. The six-point rating scale ranges from 0 to 5, strongly disagree to strongly agree. Some items were impacted by missing data which affected the mean scores. The total mean rating score for the MES was 48.3 out of 60, which indicates a high level of mentoring effectiveness (Berk et al., 2005; See Appendix Q, Statistical Analysis MES Table).

### ***Job Satisfaction***

The secondary outcome was to improve job satisfaction. The data collected from the CWEQ-I tool was utilized to analyze this outcome. The CWEQ-I divides into four subscales: Access to Opportunity, Access to Information, Access to Support, and Access to Resources. The five-point rating scale ranges from 1 to 5, none to a lot. The mean score for the eight-item Opportunity Subscale was 3.90. The mean score for the eight-item Information Subscale was 3.3755. The mean score for the nine-item Support Subscale was 3.6444. Lastly, the mean score for the Resources Subscale was 3.2778. Higher subscale mean scores indicate that the mentee had greater access to opportunity, information, support, or resources. The total mean for the four combined subscales was 14.1977. A mean score of all four subscales ranging from 10 to 14 indicates a moderate job satisfaction level (Laschinger & Shamian, 1994). Some areas were impacted by missing data which affected the mean scores. (See Appendix R, Statistical Analysis CWEQ-I Table)

## **Discussion**

### **Successes**

The faculty mentoring project successfully promoted an enhanced collegial, positive, and collaborative working environment for new faculty mentees. After reviewing the results of the data analysis, it is evident that the project successfully measured the primary outcome by identifying that most of the participants' responses acknowledged that faculty mentoring improved their intent to remain. According to previous studies, improving intentions to remain employed positively affect improving retention rates (Chung & Kowlaski, 2012; Jeffers & Mariani, 2017). Another success was that the project's data analysis and participant responses suggest that mentoring increased overall individual job satisfaction.

### **Study Strengths**

All participants eagerly accepted the invitation to engage in the mentoring process. Each of the ten pairs of mentors and mentees actively participated and completed all faculty mentoring intervention aspects. The SON leadership and the remaining full-time faculty, who were not participants in the project, provided support and encouragement during the project's entirety.

### **Results Compared to Evidence in the Literature**

The project results and published study findings are similar. Recently conducted studies provide direct correlations revealing faculty mentoring programs, similar to this mentoring project, improved overall faculty retention rates (Chung & Kowalski, 2012; Ries et al., 2012). Additionally, this mentoring project and the previous studies determined that mentoring was beneficial for developing mentees' personal and collegial work relationships, directly impacting perceptions of job satisfaction and faculty's intent to remain (Chung & Kowlaski, 2012; Jeffers & Mariani, 2017; Navarra et al., 2018; Petosa & Smith, 2014; Watkins-Bruner et al., 2016).

### **Limitations**

#### **Internal Validity Effects**

Factors that could influence the internal validity of this EBQI include that only the project leader was responsible for collecting and analyzing the data obtained from the measurement tools. This factor could be identified as a mode for potential bias. The risk of selection bias was present based upon the use of convenience sampling to recruit participants. Internal validity was fostered by the positive support provided by the faculty and Leadership.

### **External Validity Effects**

Factors affecting external validity could weaken the generalizability or transferability of this mentoring project. The small sample size of 10 participants could negatively impact external validity. The participants were selected from a convenience sample which could affect selection bias. All participants were actively involved in the project. Another confounding factor of external validity could be each mentor and mentee's personality traits.

### **Sustainability of Effects and Plans to Maintain Effects**

The faculty mentoring project was widely accepted by the SON leadership and the faculty and staff members. Follow-up conversations have suggested that the new and the experienced faculty concur that new faculty mentoring initiatives must continue to increase and improve faculty retention. The SON leadership has verbalized plans to continue supporting and assisting in upcoming improvements to new faculty orientation and mentoring. These positive reactions and plans for continuing the mentoring program indicate sustainability and maintenance of the project intervention.

### **Efforts to Minimize the Study Limitations**

An expected limitation to this project was the small sample size. Following the project's successful completion, the data analysis determined that the smaller number of participants size did not adversely impact the outcomes based on comparison to published studies. Another

limitation was the inability to decrease faculty mentor's workloads secondarily to a deficit of full-time faculty in the SON. Also, COVID-19 affected the SON's ability to hire new faculty for vacant positions. The university placed a hiring freeze on all vacated positions, which directly impacted the number of participants involved in the mentoring project. As of late spring 2021, the hold on hiring new faculty for the SON has been lifted, allowing for new faculty.

### **Interpretation**

#### **Expected and Actual Outcomes**

The expected outcomes were to improve faculty retention rates and increase job satisfaction through the implementation of a faculty mentoring program. Despite the smaller participant sample size, the data analysis produced evidence that effective mentoring can improve retention rates and increase individual perceptions of job satisfaction. Full-time faculty members provided the project leader with positive support and verbal feedback about the optimistic effects provided to new faculty during the mentoring project.

#### **Intervention Effectiveness**

Faculty mentoring programs have quickly been gaining notoriety as an effective method for retaining high-quality nursing faculty. This project's effectiveness was impacted by the readiness for the full-time faculty to step in and become experienced mentors for the new faculty mentees. Mentoring programs cannot flourish without the availability of willing mentor participants. The implementation of this EBQI mentoring project has provided statistical evidence that effective mentorships directly correlate to retention rates and improved feelings of job satisfaction. Further studies may benefit from increased efforts to build a larger sample size.

#### **Intervention Revision**

The most notable modification to this intervention is the inclusion of a more extensive and more diverse participant pool. Despite the significant findings from this smaller sample size project, a larger participant sample size would allow for enhanced validity of results demonstrating the importance of mentoring and the impact on job satisfaction and retention rates. Another identified intervention revision includes providing a specified plan and a checklist within the initial new faculty orientation manual. This plan and checklist could ensure that all mentors receive adequate historical data and essential criteria of program policies and procedures.

### **Expected and Actual Impact to Health System, Costs, and Policy**

As the growing nationwide nursing shortage continues to emerge, the need for an increased number of qualified nursing educators continues to soar. The implementation of faculty mentoring is easily sustainable with minimal correlated expenditures for nursing programs. Identification of payment stipend or workload reduction incentives could benefit the long-term success of a mentoring program. The inclusion of mentoring programs in nursing schools and acute care settings has demonstrated a positive effect as new nursing faculty transition from the bedside to teaching and when newly graduating nurses begin to provide bedside patient care (Gentry & Johnson, 2019; Harris, 2019).

### **Conclusion**

The recruitment of new nursing faculty to an academic environment is fraught with heavy workloads, absence of collegial work environment, lack of supportive mentorship and a salary reduction. Compared to clinical nursing positions, these concerns have become exceedingly challenging in schools of nursing. Additionally, new faculty report job frustration and dissatisfaction resulting from feeling inadequately prepared for the faculty teaching position

(Harris, 2019). A comprehensive review of research provided an abundance of evidence identifying three major themes that impact faculty retention rates: reasons for job satisfaction and dissatisfaction, reasons to stay or ITR, and reasons to leave or ITL.

Empirical evidence supports that given the opportunity to develop close, personal relationships, nursing faculty will increase perceived feelings of job satisfaction and social well-being. The implications found in research strongly suggest that changes in best practices, workplace environment, and leadership support will intentionally improve nursing faculty retention outcomes and will directly affect individual perceptions of job satisfaction, role transitioning, and faculty mentoring. The opportunity to continue the processes implemented during this EBQI could provide enhanced evidence of improvements related to faculty retention rates and perceptions of job satisfaction. Optimally, further studies could be expanded to include multiple sites with larger sample sizes to increase the validity of findings

This project's conceptual foundation could effortlessly be transferable and adapted to the clinical setting with staff nurses engaged in the role of peer mentors to nursing students or newly graduated nurses. Peer mentoring allows student nurses or inexperienced staff nurses to develop enhanced self-confidence and critical thinking skills (Sibiya et al., 2018). Further studies would have the opportunity to provide additional evidence that the implementation of peer mentoring programs improves job satisfaction and the retention of qualified nurses to provide patient care in the hospital setting (Nowell et al., 2015).

Results from this EBQI project have been disseminated to the SON leadership and faculty. The project leader intends to publish this project and the subsequent evidentiary results. A poster presentation and results were presented during a virtual nursing conference in August 2020.

The evidence discovered during the analysis of this project and identified in multiple studies provided methods that have the potential to improve nursing faculty's intent to stay in academia, including the development of mentoring programs, equalize the workload and improve salary and benefit compensation (Carlson, 2015; Hulton et al., 2016; Roughton, 2013). The published evidence identified that factors such as improving faculty workload, promoting collegiality amongst faculty, and organizational support from leadership directly correlated to job satisfaction (Bittner & O'Connor, 2012; Lane et al., 2010; Salvucci & Lawless, 2016). The findings of this project and the literature review further support that organized mentoring programs promote faculty progression, growth, and retention (Cullen et al., 2017; Lunsford et al., 2018; Sawatzky & Enns, 2009). The implementation of mentoring programs can provide evidence that effective mentorships have the potential to improve retention rates and perceptions of enhanced job satisfaction. Direct and indirect evidence supports utilizing faculty mentoring to improve new nursing faculty's retention rates in a baccalaureate nursing program.

## References

- American Association of Colleges of Nursing. (2017). Nursing faculty shortage fact sheet. Retrieved from <http://www.aacnnursing.org/portals/42/news/factsheets/faculty-shortage-factsheet-2017.pdf>
- Ambrose, S., Huston, T., & Norman, M. (2005). A Qualitative method for assessing faculty satisfaction. *Research in Higher Education*, 46(7), 803–830. <https://doi.org/10.1007/s11162-004-6226-6>
- Baker, S. L., Fitzpatrick, J. J., & Griffin, M. Q. (2011). Empowerment and job satisfaction in associate degree nurse educators. *Nursing Education Perspectives*, 32(4), 234-239. DOI: <https://doi.org/10.5480/1536-5026-32.4.234>
- Berk, R. A., Berg, J., Mortimer, R., Walton-Moss, B., & Yeo, T. P. (2005). Measuring the effectiveness of faculty mentoring relationships: *Academic Medicine*, 80(1), 66–71. <https://doi.org/10.1097/00001888-200501000-00017>
- Bittner, N. & O'Connor, M. (2012). Focus on retention: Identifying barriers to nurse faculty satisfaction. *Nursing Education Perspective*, 33(4), 251–254.
- Byrne, D. M., & Martin, B. N. (2014). A solution to the shortage of nursing faculty: Awareness and understanding of the leadership style of the nursing department head. *Nurse Educator*, 39(3), 107–112. <https://doi.org/10.1097/NNE.0000000000000031>
- Carlson, J. S. (2015). Factors influencing retention among part-time clinical nursing faculty. *Nursing Education Perspectives (National League for Nursing)*, 36(1), 42–45. <https://doi.org/10.5480/13-1231>

- Cassel, J. (1974). Psychosocial processes and “stress”: Theoretical formulation. *International Journal of Health Services*, 4(3), 471–482. <https://doi.org/10.2190/WF7X-Y1L0-BFKH-9QU2>
- Chung, C. & Kowalski, S. (2012). Job stress, mentoring, psychological empowerment, and job satisfaction among nursing faculty. *Journal of Nursing Education*, 51(7), 381-388.  
<http://dx.doi.org.proxy.library.umkc.edu/10.3928/01484834-20120509-03>
- Cullen, D., Shieh, C., McLennon, S. M., Pike, C., Hartman, T., & Shah, H. (2017, November/December). Mentoring nontenured track nursing faculty: a systematic review. *Nurse Educator*, 42(6), 290-294.
- Daw, P., Mills, M. E., & Ibarra, O. (2018, March-April). Investing in the future of nurse faculty: a state-level program evaluation. *Nursing Economic\$, 36(2)*, 59-82.
- Efstathiou, J. A., Drumm, M. R., Paly, J. P., Lawton, D. M., O’Neill, R. M., Niemierko, A., Leffert, L. R., Loeffler, J. S., & Shih, H. A. (2018). Long-term impact of a faculty mentoring program in academic medicine. *PLoS ONE*, 13(11), 1–12.  
<https://doi.org/10.1371/journal.pone.0207634>
- English, R. (2016). Evidence-based teaching tactics for frontline staff using the clinical nurse scholar model. *The Journal for Nurse Practitioners*, 12(1), e1–e5.  
<https://doi.org/10.1016/j.nurpra.2015.08.033>
- Evans, J. D. (2013). Factors influencing recruitment and retention of nurse educators reported by current nurse faculty. *Journal of Professional Nursing*, 29(1), 11–20.  
<https://doi.org/10.1016/j.profnurs.2012.04.012>
- Fang, D., & Kesten, K. (2017). Retirements and succession of nursing faculty in 2016–2025. *Nursing Outlook*, 65(5), 633–642. <https://doi.org/10.1016/j.outlook.2017.03.003>

- Fang, D., & Bednash, G. D. (2014). Attrition of full-time faculty from schools of nursing with baccalaureate and graduate programs, 2010 to 2011. *Nursing Outlook*, 62(3), 164–173.  
<https://doi.org/10.1016/j.outlook.2013.12.002>
- Feeney, B. C., & Collins, N. L. (2015). New look at social support: A theoretical perspective on thriving through relationships. *Personality and Social Psychology Review: An Official Journal of the Society for Personality and Social Psychology, Inc*, 19(2), 113–147.  
<https://doi.org/10.1177/1088868314544222>
- Fleury, J., Keller, C., & Perez, A. (2009). Social support theoretical perspective. *Geriatric Nursing (New York, N.Y.)*, 30(2 0), 11–14.  
<https://doi.org/10.1016/j.gerinurse.2009.02.004>
- Frisbee, K., Griffin, M. Q., & Luparell, S. (2019). Nurse educators: Incivility, job satisfaction, and intent to leave. (2019). *Midwest Quarterly*, 60(3), 270–289.
- Gentry, J., & Johnson, K. V. (2019). Importance of and satisfaction with characteristics of mentoring among nursing faculty. *Journal of Nursing Education*, 58(10), 595–598.  
<http://dx.doi.org.cyrano.ucmo.edu:2048/10.3928/01484834-20190923-07>
- Gigliotti, E. (2002). A confirmation of the factor structure of the Norbeck social support questionnaire. *Nursing Research*, 51(5):276-284.
- Hajli, M. N., Shanmugam, M., Hajli, A., Khani, A. H., & Wang, Y. (2015). Health care development: Integrating transaction cost theory with social support theory. *Informatics for Health & Social Care*, 40(4), 334–344.  
<https://doi.org/10.3109/17538157.2014.924950>
- Harris, A. D., McGregor, J. C., Perencevich, E. N., Furuno, J. P., Zhu, J., Peterson, D. E., & Finkelstein, J. (2006). The use and interpretation of quasi-experimental studies in medical

- informatics. *Journal of the American Medical Informatics Association : JAMIA*, 13(1), 16–23. <https://doi.org/10.1197/jamia.M1749>
- Harris, J. (2019). Challenges of nursing faculty retention. *Midwest Quarterly*, 60(3), 251-269.
- Honess, C., Gallant, P., & Keane K. (2009). The clinical scholar model: Evidence-based practice at the bedside. *Nursing Clinics of North America*, 44(1):117-30.  
<https://doi.org/10.1016/j.cnur.2008.10.004>
- Hubbard, C., Halcomb, K., Foley, B., & Roberts, B. (2010). Mentoring: A nurse educator survey. *Teaching and Learning in Nursing*, 5(4), 139–142.  
<https://doi.org/10.1016/j.teln.2010.02.006>
- Hulton, L. J., Sawin, E. M., Trimm, D., Graham, A., & Powell, N. (2016). An evidence-based nursing faculty mentoring program. *International Journal of Nursing Education*, 8(1), 41.  
<https://doi.org/10.5958/0974-9357.2016.00008.8>
- Hurley, C., & Snowden, S. (2008). Mentoring in times of change. *Nursing in Critical Care*, 13(5), 269–275. <https://doi.org/10.1111/j.1478-5153.2008.00293.x>
- Jeffers, S., & Mariani, B. (2017). The effect of a formal mentoring program on career satisfaction and intent to stay in the faculty role for novice nurse faculty: *Nursing Education Perspectives*, 38(1), 18–22.  
<https://doi.org/10.1097/01.NEP.0000000000000104>
- Lane, K. A., Esser, J., Holte, B., & McCusker, M. A. (2010). A study of nurse faculty job satisfaction in community colleges in Florida. *Teaching and Learning in Nursing*, 5(1), 16–26. <https://doi.org/10.1016/j.teln.2009.05.001>
- Laschinger, H.K.S., & Shamian, J. (1994). Staff nurses' and nurse managers' perceptions of job-related empowerment and managerial self-efficacy. *Journal of Nursing Administration*,

24(10), 38-47.

- Lee, P., Miller, M. T., Kippenbrock, T. A., Rosen, C., & Emory, J. (2017). College nursing faculty job satisfaction and retention: A national perspective. *Journal of Professional Nursing, 33*(4), 261–266. <https://doi.org/10.1016/j.profnurs.2017.01.001>
- Lunsford, L., Baker, V., & Pifer, M. (2018). Faculty mentoring faculty: Career stages, relationship quality, and job satisfaction. *International Journal of Mentoring and Coaching in Education, 7*(2), 139–154. <https://doi.org/10.1108/IJMCE-08-2017-0055>
- McBride, A. B., Campbell, J., Woods, N. F., & Manson, S. M. (2017). Building a mentoring network. *Nursing Outlook, 65*(3), 305–314. <https://doi.org/10.1016/j.outlook.2016.12.001>
- Manojlovich, M., & Spence Laschinger, H. K. (2002). The Relationship of Empowerment and Selected Personality Characteristics to Nursing Job Satisfaction. *The Journal of Nursing Administration | JONA, 32*(11), 586–595.
- Melnik, B. M., & Fineout-Overholt, E. (2019). *Evidence-based practice in nursing & healthcare: A guide to best practice*. (4<sup>th</sup> ed.) Wolters Kluwer/Lippincott Williams & Wilkins.
- Midwestern University. (2019). Fact book. Retrieved from <https://www.ucmo.edu/offices/university-analytics-and-institutional-research/factbook.pdf>
- Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med* 6(7): e1000097. doi:10.1371/journal.pmed1000097

- Morin, K. H., & Ashton, K. C. (2004). Research on faculty orientation programs: Guidelines and directions for nurse educators. *Journal of Professional Nursing, 20*(4), 239–250.  
<https://doi.org/10.1016/j.profnurs.2004.05.005>
- Nardi, D. A., & Gyurko, C. C. (2013). The global nursing faculty shortage: Status and solutions for change. *Journal of Nursing Scholarship, 45*(3), 317–326.  
<https://doi.org/10.1111/jnu.12030>
- National League for Nursing. (2006, January). Position statement: Mentoring of nurse faculty. *Nursing Education Perspectives, 27*(2), 110-113.
- Navarra, A. M., Witkoski-Stimpfel, A., Rodriguez, K., Lim, F., Nelson, N., & Slater, L. Z. (2018). Beliefs and perceptions of mentorship among nursing faculty and traditional and accelerated undergraduate nursing students. *Nurse Education Today, 61*(), 20-24.  
<https://doi-org.proxy.library.umkc.edu/10.1016/j.nedt.2017.10.009>
- Nowell, L., White, D. E., Mrklas, K., & Norris, J. M. (2015). Mentorship in nursing academia: A systematic review protocol. *Systematic Reviews, 4*. <https://doi.org/10.1186/s13643-015-0007-5>
- Peterson, S. J., & Bredow, T. S. (2017). *Middle range theories: Applications to nursing research and practice* (4th ed.). Philadelphia, PA: Wolters Kluwer Health | Lippincott Williams & Wilkins.
- Petosa, R. L., & Smith, L. H. (2014). Peer mentoring for health behavior change: A systematic review. *American Journal of Health Education; Reston, 45*(6), 351–357.
- Ries, A., Wingard, D., Gamst, A., Larsen, C., Farrell, E., & Reznik, V. (2012). Measuring faculty retention and success in academic medicine. *Academic Medicine, 87*(8), 1046–1051. <https://doi.org/10.1097/ACM.0b013e31825d0d31>

- Roughton, S. E. (2013). Nursing faculty characteristics and perceptions predicting intent to leave. *Nursing Education Perspectives (National League for Nursing)*, 34(4), 217–225. <https://doi.org/10.5480/1536-5026-34.4.217>
- Salvucci, C. & Lawless, C. A. (2016). Nursing faculty diversity: Barriers and perceptions on recruitment, hiring and retention. *Journal of Cultural Diversity*, 23(2), 65–75.
- Sawatzky, J.-A. V., & Enns, C. L. (2009). A Mentoring Needs Assessment: Validating Mentorship in Nursing Education. *Journal of Professional Nursing*, 25(3), 145–150. <https://doi.org/10.1016/j.profnurs.2009.01.003>
- Sibiya, M. N., Ngxongo, T. S. P., & Beepat, S. Y. (2018). The influence of peer mentoring on critical care nursing students' learning outcomes. *International Journal of Workplace Health Management*, 11(3), 130–142. <https://doi.org/10.1108/IJWHM-01-2018-0003>
- Small, A., Gist, D., Souza, D., Dalton, J., Magny-Normilus, C., & David, D. (2016). Using Kotter's change model for implementing bedside handoff: A quality improvement project. *Journal of Nursing Care Quality*, 31(4), 304-309.
- Snelson, C. M., Martsof, D. S., Dieckman, B. C., Anaya, E. R., Cartechine, K. A., Miller, B., ... Shaffer, J. (2002). Caring as a theoretical perspective for a nursing faculty mentoring program. *Nurse Education Today*, 22(8), 654-660. [https://doi-org.proxy.library.umkc.edu/10.1016/S0260-6917\(02\)00140-5](https://doi-org.proxy.library.umkc.edu/10.1016/S0260-6917(02)00140-5)
- Tourangeau, A. E., Thomson, H., Saari, M., Widger, K., Ferron, E. M., & MacMillan, K. (2012). Determinants of nurse faculty intention to remain employed. *Open Journal of Nursing*, 02(03), 254–261. <https://doi.org/10.4236/ojn.2012.23039>
- Watkins-Bruner, D., Dunbar, S., Higgins, M., & Martyn, K. (2016). Benchmarking and gap analysis of faculty mentorship priorities and how well they are met. *Nursing Outlook*,

64(4), 321–331. <https://doi.org/10.1016/j.outlook.2016.02.008>

Weidman, N. A. (2013). The lived experience of the transition of the clinical nurse expert to the novice nurse educator. *Teaching and Learning in Nursing, 8*(3), 102–109.

<https://doi.org/10.1016/j.teln.2013.04.006>

Western University (2020). *CWEQ: Conditions for work effectiveness—Heather K. Laschinger research measurement tools*. Retrieved from <https://www.uwo.ca/fhs/hkl/cweq.html>

White, A., Wilson, C. B., & Brannan, J. (2010). A mentor-protégé program for new faculty, part I: Stories of protégés. *Journal of Nursing Education, 49*(11), 601–606.

<https://doi.org/10.3928/01484834-20100630-04>

## Appendix A

### Definition of Terms

**Job Satisfaction:** Subjective feelings of enjoyment and happiness elicited by being supported by leadership, experiencing collegiality from fellow faculty members, and the ability to have open communication forums (Bittner & O'Connor, 2012; Hubbard et al., 2010).

**Mentee:** The mentee is a novice nursing educator who enters into a formal mentoring relationship with a mentor (NLN, 2006).

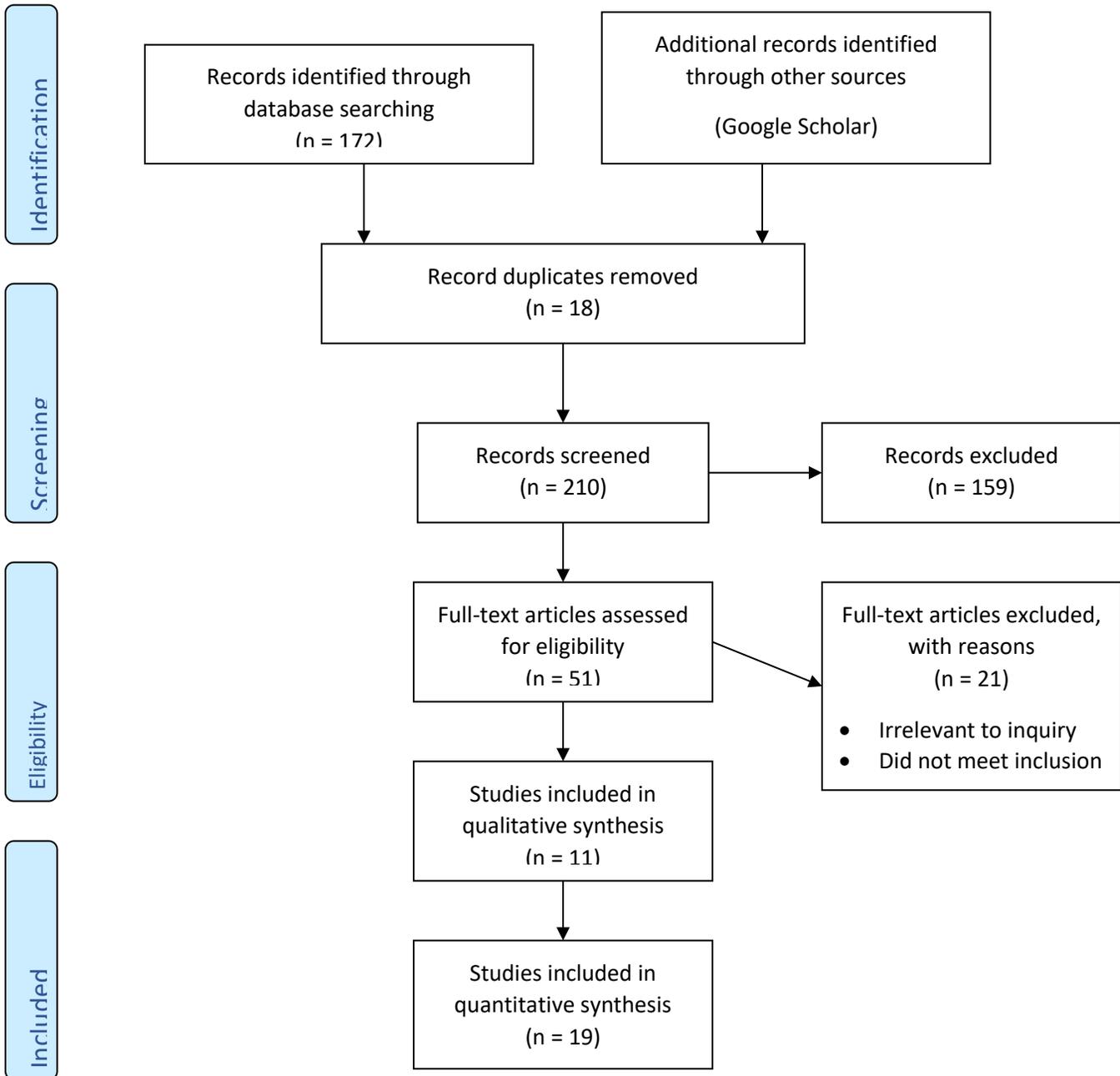
**Mentor:** The mentor is recognized as an experienced nurse educator with the ability, desire, and expertise to guide and support a mentee or novice nurse faculty toward teaching excellence (NLN, 2006).

**Mentoring:** Building of personal and professional rapport in which one individual is considered knowledgeable and experienced to provide guidance and advice to enhance the success of the other (Sawatzky & Enns, 2009).

**Social Support:** Providing individuals with adequate assistance desired to be successful, to feel cared for, and a work environment that is collegial and supportive (Peterson & Bredow, 2017).

**Transitioning:** Providing new faculty with the knowledge and skill acquisition essential to successfully evolve from expert clinical practitioner to novice nursing faculty (Cangelosi, 2014; Gilbert & Womack, 2012).

**Appendix B**  
**PRISMA Diagram**



**Appendix C**  
**Review of Evidence Table**

First author, Year, Title, Journal	Purpose	Research Design <sup>1</sup> , Evidence Level <sup>2</sup> & Variables	Sample & Sampling, Setting	Measures & Reliability (if reported)	Results & Analysis Used	Limitations & Usefulness
<b>Theme: Reasons for job satisfaction and/or dissatisfaction</b> <b>Sub-topics of Evidence: Job Satisfaction; Retention Rates; Faculty Mentoring; Leadership Support</b>						
Efsthathiou (2018). Long-term impact of a faculty mentoring program in academic medicine. PLOS One	To assess the impact of mentoring program on job satisfaction and productivity,	Quantitative, non-experimental prospective, longitudinal, Level 4. Variables: Short term and long term Independent variable: Demographic data	124 faculty members from 4 departments in one health care facility.	Total of 3 questionnaires using 5-point Likert scale. P value <0.05	Tangible short and long term faculty benefits of mentoring program noted and stats showed intent to remain Analyzed using Fisher’s exact test and Wilcoxon rank-sum test	Small sample from single institution. Realistic use.
Lunsford (2018). Faculty mentoring faculty: Career stages, relationship quality, and job satisfaction. International Journal of Mentoring and	To understand effect of faculty mentoring and mentoring relationships on job satisfaction.	Quantitative, non-experimental descriptive, Level 5 Independent variable: Demographic data Dependent variable: job	415 faculty member responses from 12 Liberal Arts Colleges	Online survey with 3 items. Likert scale from 1-7 No reliability reported.	Most faculty had participated in mentoring and had developed positive mentoring relationships. Majority of respondents felt that mentoring process	Individual perceptions of positive relationships may cause errors in validating information reported in surveys. The small scale survey may have been appropriate to further

coaching in education.		satisfaction; institution			improved perceptions of job satisfaction.	define the effects of mentoring. Realistic Use.
Navarra (2018). Beliefs and perceptions of mentorship among nursing faculty and traditional and accelerated undergraduate nursing students. Nurse Education Today.	To describe nursing student and faculty perceptions and benefits of mentoring.	Quantitative, non-experimental cross-sectional, Level 4, descriptive. Independent variable: Demographic data	142 nursing students and 24 faculty. One Northeastern University.	2 surveys, Likert and narrative formats. Reliability was performed by expert research team members.	Findings support the perceived need for one to one faculty and student mentoring program and the need to provide increased financial support. Aim 2 and Fisher's Exact tests were used for analysis.	One academic setting. Lower than expected response rate. Realistic use.
Cullen (2017). Mentoring nontenured track nursing faculty: A systemic review. Nurse Educator.	To evaluate the effectiveness of mentoring on faculty productivity and progression.	Quantitative, non-experimental, Systematic Review, Level 3	60 articles reviewed.	Included a review of quantitative, qualitative, descriptive, and expert opinion articles. 2 independent reviewers.	Findings support that mentoring improves faculty progression and growth. Identified the importance of constructive interactions (collegiality, communication, and scholarly outcomes) and organizational support (mentoring, retention efforts, and non-competitive environment).	Realistic review.

<p>Jeffers (2017). The effect of a formal mentoring program on career satisfaction and intent to stay in the faculty role for novice nurse faculty.</p>	<p>To explore the influence of mentoring on job satisfaction of novice nursing faculty.</p>	<p>Quantitative, non-experimental, Level 5, descriptive Variables: Mentored vs not mentored Independent variable: Demographic data</p>	<p>124 respondents (39 mentored/85 not mentored) from multiple SON.</p>	<p>Electronic survey with open-ended questions and MNCSS semantic differential scale to measure attitudes and beliefs using a Likert 1-7. Cronbach alpha 0.96</p>	<p>Findings identified that transitioning from clinician to educator was challenging. Those who were mentored reported feeling supported and experienced job satisfaction during the transition period. Those unmentored reported feeling abandoned and dissatisfied.</p>	<p>Smaller number of mentored respondents. Realistic use.</p>
<p>Salvucci (2016). Nursing Faculty Diversity: Barriers and perceptions on recruitment, hiring, and retention. Journal of Cultural Diversity.</p>	<p>To identify perceived barriers to recruiting, hiring, and retaining minority nursing faculty.</p>	<p>Quantitative, comparative, Level 5, descriptive Independent variable: Demographic data</p>	<p>103 nursing faculty participants, Randomized sampling, nationwide Universities and Colleges</p>	<p>Online survey via Survey Monkey Cronbach alpha 0.70</p>	<p>Barriers to retention, lack of financial support and lack of mentors or supportive environment, were identified. . Analyzed with Mann-Whitney, Chi-square, Wilcoxon W, and Krushkal-Wallis.</p>	<p>Small sample compared to number of sites. Sample was diverse</p>
<p>Watkins-Bruner (2016). Benchmarking and gap analysis of faculty mentorship priorities and how well they are met. Nursing Outlook.</p>	<p>To develop a tool to benchmark mentoring priorities and progression of use.</p>	<p>Quantitative, non-experimental, Level 5 descriptive. Variables: scholarship, teaching, service Independent variable: Demographic data</p>	<p>38 nurse faculty respondents; SON setting</p>	<p>37 item survey given during a seminar. Likert scale 0-5. No reliability reported.</p>	<p>Strong desired noted for formal mentoring program. Most surveyed did not experience formal mentoring process. Analysis with Paired t-tests</p>	<p>Small sample size. Realistic use.</p>

<p>Petosa (2014). Peer mentoring for health behavior change: A systematic review.</p>	<p>To review the use of peer mentoring to promote health practices among adolescents.</p>	<p>Quantitative, non-experimental, Systematic review, Level 3</p>	<p>31 articles reviewed. 21 on adult mentoring and 10 on peer school aged mentoring.</p>	<p>No reliability reported.</p>	<p>Results indicate that mentoring is beneficial for a large number of health practices. Mentoring improves involvement and interactions when the mentee is unfamiliar with environment.</p>	<p>Non-nursing focus. Less formal environment.</p>
<p>Nardi (2013). The global nursing faculty shortage: Status and solutions for change. Journal of Nursing Scholarship.</p>	<p>To identify possible solutions for the global shortage of nursing faculty.</p>	<p>Quantitative, non-experimental Systematic review, Level 3</p>	<p>62 articles reviewed.</p>	<p>Included review of and reanalysis of articles, white papers and position statements.</p>	<p>Eight solution themes were identified. Urgent need for nursing organizations to unite and collaborate on initiatives to combat faculty shortage.</p>	<p>Realistic use for addressing faculty shortage.</p>
<p>Weidman (2013). The lived experience of the transition of the clinical nurse expert to the novice nurse educator.</p>	<p>To describe the experience of expert clinical nurses who are transitioning to novice nurse educator role.</p>	<p>Qualitative, phenomenological, Level 6 Variable: Demographic Data; Length of teaching experience</p>	<p>8 nursing faculty participants with less than 2 years teaching experience, from several different SON, Convenience sampling</p>	<p>Questionnaire tool with 7 interview style questions. Reliability not reported.</p>	<p>Three common themes were identified regarding the feelings and experiences following the process of transitioning: desire to teach, additional stress, and mentoring. The study revealed that transitioning novice nurse educators have the need to be provided support to ensure success.</p>	<p>Small sample size. Limited to only novice educators.</p>

<p>Bittner (2012). Focus on retention: Identifying barriers to nurse faculty satisfaction. Nursing Education Perspectives.</p>	<p>To determine barriers to nurse faculty job satisfaction.</p>	<p>Quantitative, non-experimental descriptive, Level 5. Independent variables: demographic data</p>	<p>226 nurse faculty participants from New England area SON that are NLN members</p>	<p>32-item survey sent via Survey Monkey with 5-point Likert scale. Reliability and validity tested by panel of 4 experts.</p>	<p>Faculty workload and work environment (collegiality and being support by leadership) directly correlated to job satisfaction.</p>	<p>Respondents predominantly female. Realistic use.</p>
<p>Chung (2012). Job stress, mentoring, psychological empowerment, and job satisfaction among nursing faculty. Journal of Nursing Education</p>	<p>To determine relationship between faculty mentoring and the influence on job stress and perception of job satisfaction</p>	<p>Quantitative, convenience cross-sectional, Level 4 descriptive. Dependent variables: job satisfaction, job stress, and work environment Independent variables: faculty mentoring vs. no mentoring</p>	<p>990 faculty members, Convenience, 660 CCNE accredited programs</p>	<p>Four instruments and demographic questions compiled into a SurveyMonkey using Likert scales: Gmelch's faculty stress index 5 point scale with Cronbach's alpha of 0.83; Dreher and Ash's mentoring 5 point scale with Cronbach's alpha of 0.95; Spreitzer's psychological empowerment 7 point scale with Cronbach's alpha of 0.90; NSOPF's job satisfaction instrument 4 point scale with Cronbach's alpha of 0.85</p>	<p>Study highly generalizable for focus population of full-time nursing faculty. High stress from lack of mentoring lead to feelings of job dissatisfaction. Job satisfaction was increased when involved in a mentoring relationship.</p>	<p>Only 40% of respondents indicated have been assigned a mentor. Realistic use.</p>
<p>Ries (2012). Measuring faculty retention and success in academic medicine. Academic Medicine.</p>	<p>To develop and demonstrate the usefulness of identifying measurable methods for evaluating</p>	<p>Quantitative, non-randomized, non-experimental, Level 6. Independent variable: Demographic data</p>	<p>113 assistant professor participants, one U.S. university Reliability not reported.</p>	<p>Formal academic review with modifications to determine 5 categories of success: Leadership and professional activities, honors and</p>	<p>Methods developed and utilized provide relevant and measurable methods for documenting and improving faculty retention.</p>	<p>Potential selection bias without randomization. Realistic use.</p>

	faculty retention.			awards, contracts and grants, teaching and mentoring, and publications.		
Hubbard (2010). Mentoring: A nurse educator survey.	To identify facilitators and barriers to mentoring relationships.	Qualitative, Level 5 Independent variable: Demographic data	163 nurse educator participants from 47 states, Convenience sample	Survey with open ended questions. No reliability reported.	Findings identified 7 categories that facilitate mentoring: open communication, supportive environment, collegiality, accessibility, professional commitment, positive past experience, and formal mentoring plan. 7 identified barriers to mentoring: lack of time and availability, horizontal violence, nonsupportive environment, incompatibility, fear or insecurity, disinterest, and lack of mentoring plan.	Not generalizable.
White (2010). A mentor-protégé program for new faculty, part 1: Stories of proteges.	To explore the experience of protégé participating in a novice nurse mentoring program.	Qualitative, interpretive phenomenological, Level 5 Variables: mentoring vs no mentoring	23 novice faculty informants, one university, convenience sampling.	Focus groups, Research team reviewed data for reliability.	Findings identified 3 conclusions beneficial to successful mentoring program: need to develop meaningful and communicative relationships; need to ensure adequate support has been offered to the novice educator; and need to develop a formal and organized mentoring program .	Small sample size from one site. Realistic use.

<p>Sawatzky (2009). A mentoring needs assessment: Validating mentorship in nursing education.</p>	<p>To validate the need for mentoring through a needs assessment process.</p>	<p>Quantitative, non-experimental cross-sectional, Level 4, descriptive Variable: Tenured or non- tenured Independent variable: Demographic data</p>	<p>49 full-time faculty, One large SON in Canada, Convenience sampling</p>	<p>Questionnaire with 6 items, Likert 0-4, and some open ended and then option for comments. Reliability not reported.</p>	<p>Faculty responses indicated that mentoring should include a positive role model mentor, provide unknown information, help reduce social isolation, and be supportive. Benefits of mentorships were identified as increased job satisfaction, improved teaching skills, collegial relationships, and a positive work environment. Basic univariate, descriptive analysis performed.</p>	<p>Smaller sample size and one location. Realistic use.</p>
<p>Hurley (2008). Mentoring in times of change.</p>	<p>To establish barriers to nurses performing the mentor role in the critical care setting.</p>	<p>Quantitative, non-experimental, prospective, Level 5, descriptive Independent variable: Demographic data</p>	<p>43 critical care nurse respondents, one medical facility, Saturation sampling.</p>	<p>Questionnaire with Likert scale 0-10 and tick-list responses</p>	<p>Findings identified key barriers of in the hospital setting include: lack of adequate time to perform the mentor role along with other workload duties, lack of knowledge regarding expectations for being a mentor, and lack of knowledge on how to evaluate mentees. Simple descriptive statistical analysis.</p>	<p>Based upon clinical setting but is transferrable to the academic setting. Partially realistic use.</p>

<p>Ambrose (2005). A qualitative method for assessing faculty satisfaction. Research in Higher Education.</p>	<p>To investigate why faculty stay or leave.</p>	<p>Qualitative. non-experimental, Level 6 Variables: Satisfaction and dissatisfaction Tenured/non-tenured Independent variable: Demographic data</p>	<p>Total of 123 tenured and nontenured faculty members (77 former/43 current)</p>	<p>Narrative data via semi-structured phone interviews. Coding was used to ensure reliability.</p>	<p>Reasons for being satisfied and/or dissatisfied: salary, collegiality, mentoring, administrative support, and tenure.</p>	<p>Responses were personal perceptions. Interviews were not recorded. Realistic use.</p>
<p>Morin (2004). Research of faculty orientation programs: Guidelines and directions for nurse educators.</p>	<p>To identify practice and research implications regarding faculty orientation programs.</p>	<p>Non-experimental, Systemic Review and Evidence-based Guidelines, Level 1</p>	<p>Reviewed Quantitative and Qualitative studies. Identified guidelines.</p>	<p>Independent review by 2 authors. Interrater reliability coefficient of 0.84.</p>	<p>Quality of evidence for faculty orientation programs was placed at a Level 3. Findings imply that mentoring programs need to last long enough to provide sufficient support during the transition period.</p>	<p>Older study. Need to find more up to date data</p>
<p>Judge (2001). Relationship of core self-evaluations traits-- self-esteem, generalized self-efficacy, locus of control, and emotional stability- with job satisfaction and job performance: A meta-analysis. American Psychological Association.</p>	<p>To determine the relationship between self-esteem, generalized self-efficacy, locus of control and emotional stability with job satisfaction and job performance.</p>	<p>Meta-analysis Level 1 Variables: job satisfaction and job performance</p>	<p>135 studies were analyzed. including qualitative and quantitative studies.</p>	<p>Research study review and analysis. Reliability information was taken from each of the studies analyzed.</p>	<p>All 4 measured traits had a positive impact on the relationship with job satisfaction and job performance.</p>	<p>Realistic Use.</p>

<p><b>Theme: Reasons to stay or intent to remain (ITR)</b></p> <p><b>Sub-topics of Evidence: Work Environment Support; Mentoring; Collegiality, Salary</b></p>						
<p>Lee (2017). College nursing faculty job satisfaction and retention: A national perspective. Journal of Professional Nursing.</p>	<p>To analyze nursing faculty relationship between job satisfaction and intent to stay</p>	<p>Quantitative, non-experimental retrospective, Level 4. Dependent variables: job satisfaction and intent to stay Independent variables: demographic data</p>	<p>1352 nurse faculty subjects from 200 colleges and universities.</p>	<p>Online survey tool with Likert 1-5 scale and open-ended question responses. Job satisfaction assessed with COACHE survey. No reliability reported.</p>	<p>Positive correlation between satisfaction and intent to stay was leadership and supportive environment. ANOVA and Fisher's LSD tests used for analysis</p>	<p>Sample was diverse.</p>
<p>Carlson (2015). Factors influencing retention among part-time clinical nursing faculty. Nursing Education Perspectives.</p>	<p>To determine job characteristics that influence nursing faculty retention.</p>	<p>Quantitative, non-experimental, Level 6 Independent variable: Demographic data</p>	<p>535 BSN program clinical faculty participants, Convenience sampling, SON setting</p>	<p>Narrative survey asking only two questions sent via Survey Monkey; 3 expert nurse educators evaluated survey for reliability and validity.</p>	<p>Reasons to stay (finding enjoyment; positive mentoring experience) Reasons to leave (work/life ratio; lack of support; program disorganization)</p>	<p>Only part-time faculty included as participants. Relevant to inquiry</p>

<p>Evans. (2013). Factors influencing recruitment and retention of nurse educators reported by current nurse faculty.</p>	<p>To identify factors in effective recruitment and retention of qualified nursing faculty.</p>	<p>Quantitative, non-experimental descriptive, Level 4. Independent variable: Demographic data</p>	<p>2,083 nurse faculty respondents from 290 programs and from all 4 levels of nursing education (ADN, BSN, Masters, and Doctoral), randomized sampling</p>	<p>Online questionnaire addressing 6 categories: compensation and benefits, work environment, recognition, opportunity to influence, professional development, and resources/support. Likert . Cronbach alpha 0.80 for recruitment and 0.89 for retention</p>	<p>Majority of respondents data indicated that positive work environments, increased salaries, ability to maintain work/life balance, collegiality and mentoring would positively impact recruitment and retention.</p>	<p>Large sample size. Realistic use.</p>
<p>Tourangeau (2012). Determinants of nurse faculty intention to remain employed. Open Journal of Nursing</p>	<p>To examine factors that influence nursing faculty's intention to remain (ITR) employed</p>	<p>Qualitative, convenience exploratory, Level 6, descriptive. Independent variable: Demographic data</p>	<p>37 participants divided into 6 focus groups and gathered from 35 universities and colleges</p>	<p>An interview tool was used to lead discussions during focus group sessions. Sessions were recorded to be used for analysis and verification. Verification strategies (including: concurrent data collection and analysis, methodology coherence, and appropriate sampling) were utilized to ensure reliability.</p>	<p>Factors identified that affect ITR: age, retirement, family situations, work environment support (mentoring programs, leadership support, collegiality, workload, benefits), job content (autonomy, role variety, student attitudes), and environmental characteristics (Unions, pay scale in urban vs rural, cost of living). Results analyzed by researchers who reviewed recordings of focus group discussions and identifying themes identified that affect ITR.</p>	<p>Factors influencing faculty's ITR could be different dependent upon location (State or Country). Realistic use.</p>

<p>Lane (2010). A study of nurse faculty job satisfaction in community colleges in Florida. Teach and Learning in Nursing.</p>	<p>To explore concepts of job satisfaction and intent to stay.</p>	<p>Qualitative, non-experimental mixed-method Level 5 Independent variable: Demographic data</p>	<p>72 participants, Convenience, 23 community colleges</p>	<p>10 open-ended questions using SurveyMonkey</p>	<p>Overall job satisfaction is correlated as a predictor for intent to stay. Results analyzed by researchers who reviewed responses and identified themes</p>	<p>Small sample size, confined to one state</p>
<p><b>Theme: Reasons to leave or intent to leave (ITL)</b></p> <p><b>Sub-topics of Evidence: Nonsupportive Environment; Retirement; Incivility;</b></p>						
<p>Frisbee (2019). Nurse educators: Incivility, job satisfaction, and intent to leave. The Midwest Quarterly.</p>	<p>To determine if perceived incivility impacts faculty job satisfaction and intent to leave.</p>	<p>Quantitative, non-experimental, cross-sectional, Level 4, descriptive Independent variable: Demographic data</p>	<p>530 full-time nurse faculty respondents, Randomized sampling, email list from AACN</p>	<p>Workplace incivility scale and also a Likert 0-4 single item or open-ended questions, developed by authors, for job satisfaction and for intent to leave. Cronbach alpha 0.92</p>	<p>Leadership support and positive work environment are directly correlated to perception of job satisfaction and intent to leave. Pearson’s correlation coefficient analysis.</p>	<p>Responses could have been from memories long ago and could have impacted the responses. Realistic use.</p>
<p>Fang (2017). Retirements and succession of nursing faculty in 2016-2025. Nursing Outlook.</p>	<p>To predict and assess impact of faculty retirement in 2016-2025 on faculty shortage.</p>	<p>Quantitative, non-experimental Cohort, Level 4, Convenience. Independent variable: Demographic data</p>	<p>Data obtained from AACN Annual Survey</p>	<p>Least-squares Regression and Cohort Component methods were used to determine retirements.</p>	<p>Findings indicate that a growing number of retirement age faculty delayed retirement and the analysis suggests that their imminent retirement is now approaching. The results indicate a dire</p>	<p>Realistic use.</p>

					need for interventions to be put in place to address the growing need for additional nursing faculty.	
Hulton (2016). An evidence-based nursing faculty mentoring program. International Journal of Nursing Education	To describe a model for developing an evidence-based nursing-specific faculty mentoring program.	Quantitative and Qualitative, non-experimental, cross-sectional, Level 4, Independent variable: Demographic data	Total of 36 full time nursing faculty (mentor and mentee) participants, one SON, Convenience	Focus group discussions and online survey with Likert 1-6. Reliability not reported.	Results indicate several factors that promote positive reactions from the implementation of the mentoring program: collegiality and feeling supported. Barriers identified included role confusion, scheduling difficulties, and lack of solidified guidelines. Basic univariate descriptive analysis performed.	Small sample size. One mentoring program—no comparison
Fang (2014). Attrition of full-time faculty from schools of nursing with baccalaureate and graduate programs, 2010 to 2011. Nursing Outlook	To analyze reasons for full-time faculty attrition rates during 2010-2011	Quantitative, non-experimental Level 5, Dependent variables: Loss of faculty Independent variables: Demographic data:	665 SON respondents to the AACN Annual Survey, Convenience sampling	AACN Annual survey. Chi-square used for analysis.	Findings identified 3 major categories of attrition reasons: retirement, left academia entirely, and remained in academia. Nursing faculty attrition rates are higher than most other health professions. Significant effort to enhance or implement mentoring processes will be necessary to support replacement hires.	Faculty may leave position to move to a higher-level position. Data not obtained with individual responses but actually based on SON survey responses. Realistic use.

<p>Roughton (2013). Nursing faculty characteristics and perceptions predicting intent to leave. Nursing Education Perspectives</p>	<p>To identify predictions for faculty intent to leave</p>	<p>Quantitative, Convenience cross-sectional, Level 4 descriptive. Dependent variable: intent to leave Independent variables: workload, satisfaction, reasons to leave</p>	<p>4,118 nurse faculty; numerous nursing programs nationwide-list provided by NLN</p>	<p>Survey questionnaire using 1-5 likert and yes/no responses. Six domains model created. No reliability reported.</p>	<p>Factors identified affecting intent to leave: Retirement, Heavy workload, Career development and support. Identified methods for improving intent to stay: mentoring programs, equalize workload, improve salary compensation. Chi-square analysis and ANOVA</p>	<p>Limitation: large sample size, generalizable. Realistic use.</p>
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## Appendix D

## Evidence Grid

	<b>Theme</b>	<b>Theme</b>	<b>Theme</b>
	Reasons for job satisfaction and/or dissatisfaction and impact on faculty retention rates	Reasons to stay or intent to remain and impact on faculty retention rates	Reasons to leave or intent to leave and impact on faculty retention rates
<b>Articles</b>			
Chung (2012)	<b>X</b>		
Tourangeau (2012)	<b>X</b>	<b>X</b>	
Roughton (2013)		<b>X</b>	<b>X</b>
Lane (2010)	<b>X</b>	<b>X</b>	
Fang (2014)		<b>X</b>	<b>X</b>
Watkins-Bruner (2016)	<b>X</b>		
Carlson (2015)	<b>X</b>	<b>X</b>	<b>X</b>
Lee (2017)	<b>X</b>	<b>X</b>	
Bittner (2012)	<b>X</b>		
Efstathiou (2018)	<b>X</b>		
Fang (2017)		<b>X</b>	<b>X</b>
Lunsford (2018)	<b>X</b>		
Judge (2001)	<b>X</b>		
Ries (2012)	<b>X</b>		
Navarra (2018)	<b>X</b>		
Cullen (2017)	<b>X</b>		
Frisbee (2019)	<b>X</b>		<b>X</b>
Salvucci (2016)	<b>X</b>		
Nardi (2013)	<b>X</b>		
Ambrose (2005)	<b>X</b>		
Hulton (2016)	<b>X</b>	<b>X</b>	<b>X</b>
Evans (2013)	<b>X</b>	<b>X</b>	
Hubbard (2010)	<b>X</b>		<b>X</b>
Hurley (2008)	<b>X</b>		
Jeffers (2017)	<b>X</b>		
Morin (2004)	<b>X</b>		
Petosa (2014)	<b>X</b>		
Sawatzky (2009)	<b>X</b>		
Weidman (2013)	<b>X</b>		
White (2010)	<b>X</b>		

**Appendix E**

**Theory to Application Diagram**

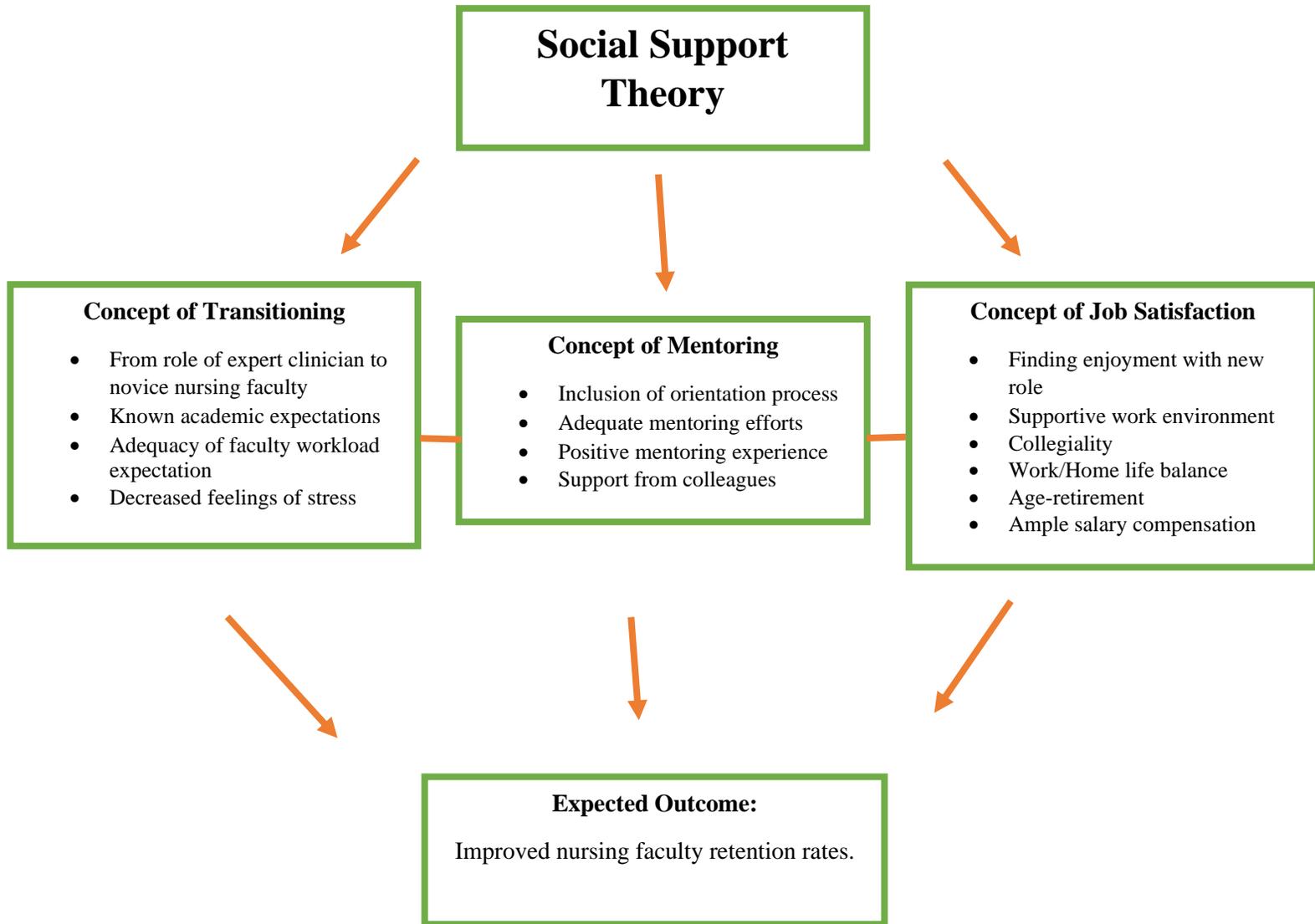
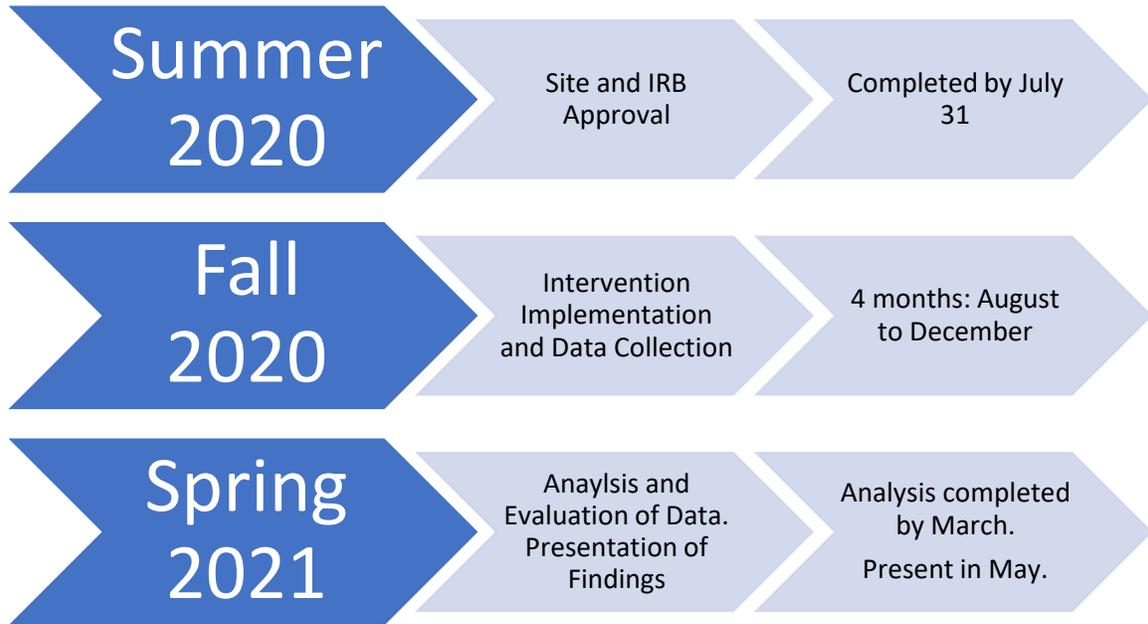


Figure 1: Diagram of the social support theory including the concepts of transitioning, mentoring, and job satisfaction related to the inquiry (Peterson & Bredow, 2017; Kowalski et al., 2006).

**Appendix F**  
**Project Cost Table**

<b>Item</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Anticipated Cost</b>
Print materials	Faculty Orientation Manual	10	Provided without charge by the SON	\$0.00
Equipment	DNP student's personal laptop and faculty assigned laptop	2	1) Purchased independently of the EBQI project 2) Provided without charge by the SON	\$0.00
DNP Student Time	Hours spent preparing, implementing, and analyzing data	Approximately 20 hours over the 16 week timeframe  (Total hours will be variable)	DNP Student will not be compensated for data collection and analysis	\$0.00
Faculty Mentor Time	Hours Spent Mentoring new faculty mentees	Approximately one hour per week for 16 weeks  Number of faculty mentors is dependent upon number of new faculty mentees	\$35 per hour  (Will be included in faculty workload calculation)	\$560.00
<b>Total</b>				\$1280.00

**Appendix G**  
**Project Timeline**

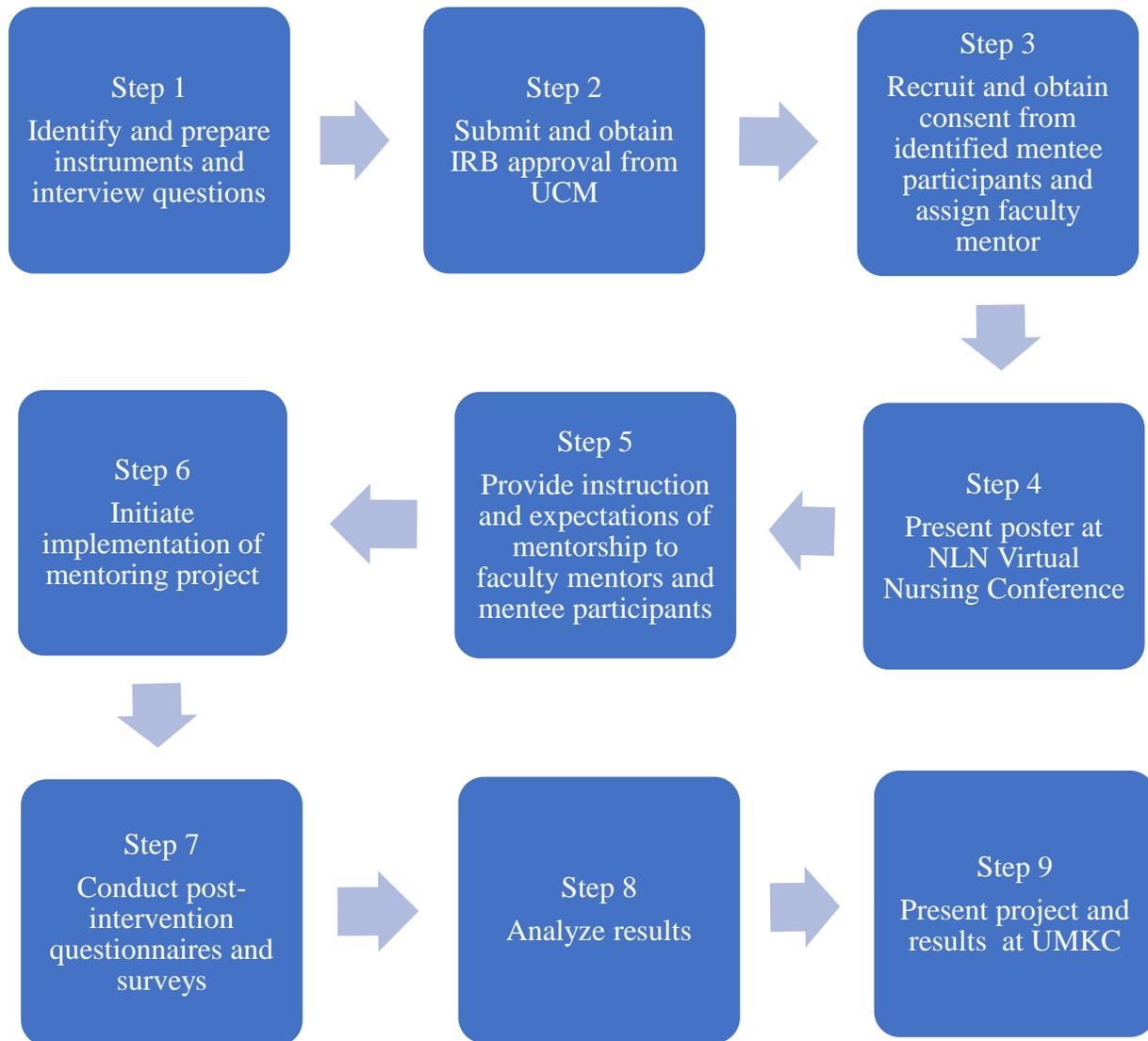


### Appendix H Logic Model

**PICOT Question:** In newly hired nursing faculty, does the implementation of a faculty mentoring process improve retention rates during the first semester of employment in a baccalaureate nursing program?

Inputs	Intervention(s)	Outputs	Outcomes -- Impact		
	<i>Activities</i>	<i>Participation</i>	<i>Short</i>	<i>Medium</i>	<i>Long</i>
<p><b>Evidence, sub-topics</b></p> <ul style="list-style-type: none"> <li>• Reasons for job satisfaction and/or dissatisfaction</li> <li>• Reasons to stay or intent to remain</li> <li>• Reasons to leave or intent to leave</li> </ul> <p><b>Major Facilitators or Contributors</b></p> <ul style="list-style-type: none"> <li>• Faculty readiness</li> <li>• Leadership support</li> </ul> <p><b>Major Barriers or Challenges</b></p> <ul style="list-style-type: none"> <li>• Smaller sample size</li> <li>• Faculty Mentor's Workload</li> </ul>	<p><b>The EBP intervention which is supported by the evidence in the Input column</b></p> <ul style="list-style-type: none"> <li>• Initiate faculty mentoring program to monitor job satisfaction and faculty retention.</li> </ul> <p><b>Major steps of the intervention</b></p> <ul style="list-style-type: none"> <li>• Develop mentoring guidelines for mentor and mentee</li> <li>• Develop questionnaire and survey instruments</li> <li>• Obtain IRB approval-if applicable</li> <li>• Obtain participant consent</li> <li>• Conduct pre-intervention survey</li> <li>• Implement intervention</li> <li>• Conduct post-intervention interviews</li> <li>• Analyze data</li> </ul>	<p><b>The participants (subjects)</b></p> <ul style="list-style-type: none"> <li>• Newly hired undergraduate nursing faculty</li> <li>• UCM's SON</li> </ul> <p><b>Site</b></p> <p><b>Time Frame</b></p> <ul style="list-style-type: none"> <li>• August-December 2020</li> </ul> <p><b>Consent Needed or other</b></p> <ul style="list-style-type: none"> <li>• YES</li> </ul> <p><b>Person(s) collecting data</b></p> <ul style="list-style-type: none"> <li>• Project leader</li> </ul> <p><b>Others directly involved.</b></p> <ul style="list-style-type: none"> <li>• Project Preceptor</li> </ul>	<p><b>Outcome(s) to be measured with reliable measurement tool(s)</b></p> <p><b>Primary Outcome: Improving faculty retention rates</b></p> <p>Tools:</p> <ul style="list-style-type: none"> <li>• Mentorship Effectiveness Scale</li> </ul> <p><b>Secondary Outcome: Improving job satisfaction</b></p> <p>Tool:</p> <ul style="list-style-type: none"> <li>• CWEQ-I</li> </ul> <p><b>Statistical analysis to be used:</b></p> <ul style="list-style-type: none"> <li>• Descriptive Statistics</li> <li>• Mean/Mode</li> </ul>	<p><b>Outcomes to be measured (past DNP student time).</b></p> <p>Improving faculty retention and job satisfaction through the implementation of faculty mentoring.</p> <p style="text-align: right;">Rev. 7/09, 1/2015 <a href="http://www.uwex.edu/ces/lmcourse/interface/coop_M1_Overview.htm">http://www.uwex.edu/ces/lmcourse/interface/coop_M1_Overview.htm</a></p> <p>Logic-Model Worksheet content revisions by Lyla Lindholm, Applied to DNP EBP Project. Not to be placed on web for public used. For UMKC DNP</p>	<p><b>Outcomes that are potentials (past DNP student)</b></p> <p>Increasing actual quantity of quality nursing faculty</p>

**Appendix I**  
**Intervention Flow Diagram**



**Appendix J**

**Project Approval Letter**



June 26, 2020

UMKC DNP Student, Sara Hoffmann

Congratulations. The UMKC Doctor of Nursing Practice (DNP) faculty has approved your DNP project proposal, *Faculty Mentoring and Effects on Retention Rates*.

You may proceed with IRB application.

Sincerely,

A handwritten signature in purple ink that reads "Lyla Lindholm".

Lyla Lindholm, DNP, RN, ACNS-BC

Clinical Assistant Professor, DNP Faculty

MSN-DNP Program Coordinator

UMKC School of Nursing and Health Studies [lindholm1@umkc.edu](mailto:lindholm1@umkc.edu)

A handwritten signature in black ink that reads "Cheri Barber".

Cheri Barber, DNP, RN, PPCNP-BC, FAANP

Clinical Assistant Professor

DNP Program Director

UMKC School of Nursing and Health Studies [barberch@umkc.edu](mailto:barberch@umkc.edu)

**UNIVERSITY OF MISSOURI-KANSAS CITY**

2464 Charlotte • Kansas City, MO 64108-2718 • p 816 235-1700 • f 816 235-1701 [www.umkc.edu/nursing](http://www.umkc.edu/nursing) • [nurses@umkc.edu](mailto:nurses@umkc.edu)  
an equal opportunity/affirmative action institution

## Appendix K

### UMKC IRB Acknowledgement

IRB Acknowledgement Letter Project #2039282 Review #287384 - Message - Mail

← Reply   ← Reply all   → Forward   📁 Archive   🗑 Delete   🚩 Set flag   ⋮

**IRB Acknowledgement Letter Project #2039282 Review #287384**

**UE** UMKC eCompliance <ecompliance-do-not-reply@umkc.edu>  
12/23/2020 11:42 AM

To: Hoffmann, Sara (UMKC-Student)

**UMKC eCompliance**

**IRB Acknowledgement Letter Project #2039282 Review #287384**

Project #2039282  
Review #287384  
Form: Collaborative Exempt Notification Form  
Project Title: Faculty Mentoring and Effects on Retention Rates  
Principal Investigator: Nicole Webb  
Primary Contact: Sara Hoffmann (UMKC-Student)

The review above has been acknowledged. No further action is required of you.

Thank you,  
UMKC Institutional Review Board

UMKC eCompliance © 2020 Curators of the University of Missouri. All rights reserved.

Windows taskbar: Type here to search, taskbar icons (Clock, Mail, File Explorer, Edge, Word, Zed, Chrome), system tray (Network, Volume, Bluetooth, Date/Time: 4:29 PM 3/11/2021, Notification: 6)

**Appendix L****UCM IRB Approval Letter**

UCM Research Compliance Committees  
Administration 102  
Warrensburg, MO 64093  
Office: 660-543-8562  
researchreview@ucmo.edu

Exempt Review

7/21/2020

Protocol Number: 1738

Dear Sara Hoffmann:

Your research project, 'Faculty Mentoring and Effects on Retention Rates', was approved by the University of Central Missouri Human Subjects Committee (IRB) on 7/14/2020.

**If an adverse event (such as harm to a research participant) occurs during your project, you must IMMEDIATELY stop the research unless stopping the research would cause more harm to the participant.** If an adverse event occurs during your project, notify the committee IMMEDIATELY at [researchreview@ucmo.edu](mailto:researchreview@ucmo.edu).

The following will help to guide you. Please refer to this letter often during your project.

- If you wish to make changes to your study, submit an “Amendment” to the IRB committee. You may not implement changes to your study without prior approval of the IRB committee.
- If the nature or status of the risks of participating in this research project change, submit an “Amendment” to the IRB committee. You may not implement changes to your study without prior approval of the IRB committee.
- When you have completed your collection of data, please submit the “Final Report” to the IRB committee.

If your protocol contained a consent form and the consent form was approved, you will receive an additional email. The email will contain a copy of your consent form with an approval stamp in the top right corner. Do not begin data collection until you receive a copy of your consent form with an approval stamp. Note: One year after your protocol's approval date, a request for renewal OR a final project report is required.

Resources: <https://www.ucmo.edu/offices/sponsored-programs-and-research-integrity/forms-and-resources/index.php>

If you have any questions, please feel free to contact the IRB committee at [researchreview@ucmo.edu](mailto:researchreview@ucmo.edu).

Sincerely,

Institutional Review Board  
University of Central Missouri

**Appendix M**

**Mentorship Effectiveness Scale (MES)**

*Removed tool due to Copyrighted content*

**Appendix N**  
**Copyright Permission**

Dear Sara

Thank you very much for your request.

You can use the material as long as you state "(c) Johns Hopkins, 2020, use with permission only" and cite the publication.

Please let me know if you have any other questions.

*(Please note that I am working remotely, but I am available to speak via phone, zoom or skype)*

**Sandra Panchalingam, PhD**

**Research Program Manager**

Office for Science & Innovation

Johns Hopkins School of Nursing

<http://nursing.jhu.edu>

**#1 Master's & DNP Programs / #3 Online Master's Program - U.S. News & World Report**

**Appendix O**

**Conditions for Work Effectiveness Questionnaire-I (CWEQ-I)**

**How much of each kind of opportunity do you have in your present job?**

	1 = None	2	3 = Some	4	5 = A Lot
1. Challenging work	1	2	3	4	5
2. The chance to gain new skills and knowledge on the job	1	2	3	4	5
3. Access to training programs for learning new things	1	2	3	4	5
4. The chance to learn how the School of Nursing works	1	2	3	4	5
5. Tasks that use all of your own skills and knowledge	1	2	3	4	5
6. The chance to advance to better jobs	1	2	3	4	5
7. The chances to assume different roles not related to current job	1	2	3	4	5

**How much access to information do you have in your present job?**

	1 = No Knowledge	2	3 = Some Knowledge	4	5 = Know A Lot
1. The current state of the University	1	2	3	4	5
2. The relationship of the work of your department	1	2	3	4	5
3. How other people in positions like yours do their work	1	2	3	4	5
4. The values of top management	1	2	3	4	5
5. The goals of top management	1	2	3	4	5
6. This year's plan for your department	1	2	3	4	5
7. How salary decisions are made for people in positions like yours	1	2	3	4	5
8. What other departments think of your department	1	2	3	4	5

**How much access to support do you have in your present job?**

	1 = None	2	3 = Some	4	5 = A Lot
1. Specific information about things you do well	1	2	3	4	5
2. Specific comments about things you could improve	1	2	3	4	5

3. Helpful hints or problem-solving advice	1	2	3	4	5
4. Information or suggestions about job possibilities	1	2	3	4	5
5. Discussion of further training or education	1	2	3	4	5
6. Help when there is a work crisis	1	2	3	4	5
7. Help in gaining access to people who can get the job done	1	2	3	4	5
8. Help in getting materials and supplies needed to get the job done	1	2	3	4	5
9. Rewards and recognition for a job well done	1	2	3	4	5

**How much access to resources do you have in your present job?**

	1 = None	2	3 = Some	4	5 = A Lot
1. Having supplies necessary for the job	1	2	3	4	5
2. Time available to do necessary paperwork	1	2	3	4	5
3. Time available to accomplish job requirements	1	2	3	4	5
4. Acquiring temporary help when needed	1	2	3	4	5
5. Influencing decisions about obtaining human resources (permanent) for your department.	1	2	3	4	5
6. Influencing decisions about obtaining supplies for your department	1	2	3	4	5
7. Influencing decisions about obtaining equipment for your department	1	2	3	4	5

**In my work setting/job:**

**(JAS)**

	1 = None	2	3 = Some	4	5 = A Lot
1. the amount of variety in tasks associated with my job is	1	2	3	4	5
2. the rewards for unusual performance on the job are	1	2	3	4	5
3. the rewards for innovation on the job are	1	2	3	4	5
4. the amount of flexibility in my job is	1	2	3	4	5
5. the number of approvals needed for nonroutine decisions are	1	2	3	4	5
6. the relation of tasks in my job to current problem areas of the organization is	1	2	3	4	5
7. my amount of participation in educational programs is	1	2	3	4	5

8. my amount of participation in problem solving task forces is	1	2	3	4	5
9. the amount of visibility of my work-related activities within the institution is	1	2	3	4	5

**How much opportunity do you have for these activities in your present job: (ORS)**

	1 = None	2	3 = Some	4	5 = A Lot
1. Collaborating on student learning with peers	1	2	3	4	5
2. Receiving helpful feedback from peers	1	2	3	4	5
3. Being sought out by peers for student information	1	2	3	4	5
4. Receiving recognition by peers	1	2	3	4	5
5. Having peers ask for your opinion	1	2	3	4	5
6. Being sought out by supervisor for ideas about department management issues	1	2	3	4	5
7. Having immediate supervisor ask for your opinion	1	2	3	4	5
8. Receiving early information of upcoming changes in department from your immediate supervisor	1	2	3	4	5
9. Chances to increase your influence outside your department e.g., nomination to influential committees by supervisor	1	2	3	4	5
10. Seeking out ideas from auxiliary workers from the department, e.g., staff, academic advisors, IT support.	1	2	3	4	5
11. Getting to know auxiliary workers as people	1	2	3	4	5
12. Seeking out ideas from auxiliary workers outside of the department, e.g., staff, academic advisors, IT support	1	2	3	4	5
13. Being sought out by peers for information	1	2	3	4	5
14. Receiving helpful feedback from peers	1	2	3	4	5
15. Having peers ask your opinion on student issues	1	2	3	4	5
16. Being sought out by peers for help with problems	1	2	3	4	5
17. Exchanging favours with peers	1	2	3	4	5
18. Seeking out ideas from other professionals outside of the department, e.g., faculty from sciences, mathematics, health studies	1	2	3	4	5

Laschinger, H.K.S., & Shamian, J. (1994). Staff nurses' and nurse managers' perceptions of job-related empowerment and managerial self-efficacy. *Journal of Nursing Administration*, 24(10), 38-47. *Job satisfaction questions adapted from the Conditions for Work Effectiveness Questionnaire-I, modification by SH 2020 for course N5613*

## Appendix P

### Data Collection Table

Participant ID	Consent	Mentor Assigned	Mentorship Effectiveness Scale	CWEQ-I
A	Received	Yes	Completed	Completed
B	Received	Yes	Completed	Completed
C	Received	Yes	Completed	Completed
D	Received	Yes	Completed	Completed
E	Received	Yes	Completed	Completed
F	Received	Yes	Completed	Completed
G	Received	Yes	Completed	Completed
H	Received	Yes	Completed	Completed
I	Received	Yes	Completed	Completed
	Received	Yes	Completed	Completed



## Appendix R

### Statistical Analysis Table

#### Conditions for Work Effectiveness I (CWEQ-I)

	N	Mean	Std. Deviation
Challenging work	10	4.3000	.67495
Chance to gain new skills and knowledge on job	10	4.3000	.82327
access to training programs for learning	10	3.7000	.82327
chance to learn how SON works	10	3.8000	.63246
Tasks that use all your own skills and knowledge	10	4.3000	.94868
The chance to advance to better jobs	10	3.4000	.69921
The chances to assume different roles not related to current job	10	3.5000	.52705
Current state of University	10	3.7000	.67495
Relationship of the work of your department	8	3.6250	.74402
How other people in positions like yours do their work	10	3.4000	.69921
The values of top management	10	3.8000	.91894
Goals of top management	10	3.8000	.91894
Year's plan for department	10	3.8000	.42164
How salary decisions are made for people in positions like yours	10	2.8000	.63246
What other departments think of your department	10	2.8000	.63246

Specific info about things you do well	10	3.6000	.84327
Specific comments about the things you could improve	10	3.6000	.84327
Helpful hints or problem-solving advice	10	3.8000	.42164
Information or suggestions about job possibilities	10	2.9000	.87560
Discussion of further training or education	10	2.8000	.91894
Help when there is a work crisis	10	4.2000	.63246
Help in gaining access to people who can get job done	10	4.1000	.73786
Help in getting materials and supplies needed to get the job done	10	4.4000	.51640
Rewards and recognition for a job well done	10	3.4000	.69921
Having supplies necessary for the job	10	4.2000	.42164
Time available to do necessary paperwork	10	3.7000	.94868
Time available to accomplish job requirements	10	3.9000	.73786
Acquiring temporary help when needed	10	3.9000	.56765
Influencing decisions about obtaining human resources for your department	10	2.9000	1.10050
Influencing decisions about obtaining supplies for your department	10	3.6000	1.17379
Influencing decisions about obtaining equipment for your department	10	3.6000	1.17379
Amount of variety in tasks associated with my job is	10	3.7000	.82327

Rewards for unusual performance on the job are	10	2.8000	.91894
Rewards for innovation on the job are	10	3.0000	.66667
Amount of flexibility in my job is	10	4.1000	.73786
Number of approvals needed for nonroutine decisions are	10	2.7000	.82327
Relations of tasks in my job to current problem areas of the organization is	10	3.3000	.67495
Amount of participation in educational programs is	10	3.5000	.70711
Amount of participation in problem solving task forces is	10	3.3000	.67495
Amount of visibility of my work-related activities within the institution is	10	3.1000	.56765
Collaborating on student learning with peers	10	4.2000	.63246
Receiving helpful feedback from peers	10	3.6000	.84327
Being sought out by peers for student information	10	3.9000	.73786
Receiving recognition by peers	10	3.4000	.84327
Having peers ask for your opinion	10	3.6000	.84327
Being sought out by supervisor for ideas about department mgmt issues	10	2.7000	1.25167
Having immediate supervisor ask for your opinion	10	3.1000	1.10050
Receiving early information of upcoming changes in dept from immediate supervisor	10	3.2000	1.03280

Chances to increase influence outside your department (nominations to committees)	10	3.1000	1.19722
Seeking out ideas from auxiliary workers from department	10	3.2000	1.22927
Getting to know auxiliary workers as people	10	3.7000	1.33749
Seeking out ideas from auxiliary workers outside department	10	3.1000	.87560
Being sought out by peers for information	10	3.5000	.70711
Receiving helpful feedback from peers	10	3.6000	.84327
Having peers ask your opinion on student issues	10	3.7000	.67495
Being sought out by peers for help with problems	10	3.5000	.84984
Exchanging favors with peers	10	3.5000	1.17851
Seeking out ideas from other professionals outside department	10	2.8000	1.13529
Valid N (listwise)	8		

## Appendix S

### Statistical Analysis Table

#### Outcomes from MES and CWEQ-I

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Variance</b>
<b>MES Total out of 60 (Participants 1, 4 6 had missing values)</b>	<b>10</b>	<b>38.00</b>	<b>60.00</b>	<b>48.3000</b>	<b>6.91295</b>	<b>47.789</b>
<b>Opportunity Subscale Score</b>	<b>10</b>	<b>2.71</b>	<b>4.71</b>	<b>3.9000</b>	<b>.52619</b>	<b>.277</b>
<b>Information Subscale Score</b>	<b>10</b>	<b>2.75</b>	<b>4.38</b>	<b>3.3755</b>	<b>.47111</b>	<b>.222</b>
<b>Support Subscale Score</b>	<b>10</b>	<b>3.11</b>	<b>4.67</b>	<b>3.6444</b>	<b>.46200</b>	<b>.213</b>
<b>Resource Subscale Score</b>	<b>10</b>	<b>2.71</b>	<b>4.86</b>	<b>3.6857</b>	<b>.63817</b>	<b>.407</b>
<b>Valid N (listwise)</b>	<b>10</b>					