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Enhancing Nurse Manager Resilience with a Resilience-Enhancing Toolkit

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Section I: Abstract

Background: Nurse managers have one of the most stressful jobs in nursing leadership. They experience more burnout and are more likely to leave the job or leave the nursing profession altogether, leading to vacancies or burned-out leaders.

Local Problem: The organization experienced high nurse manager turnover. Of 12 positions, four have more than two years of experience, three have less than two years, and five are filled with interims.

Context: Strategies to address burnout are decreasing stressors or arming leaders with skills to withstand stressors. The organization offers programs that address burnout but are designed to be used outside of work.

Intervention: An evidence-based, resilience-enhancing toolkit for nurse leaders was designed to be easy to use at work. The toolkit contained techniques on mindfulness, cognitive reframing, and gratitude, which are strategies demonstrated to enhance resilience.

Methods: The program took place between August and December 2022. Pre- and post-surveys were created to evaluate the effectiveness of the toolkit.

Results: There was no difference in the Connor-Davidson Resilience mean pre- and post-intervention score. Mindfulness (50.0% to 87.5%), cognitive reframing (40.0% to 75.0%), and gratitude practices (90.0% to 100.0%) increased.

Conclusions: Although mean resilience scores did not change, resilience-enhancing practices increased. More time may be needed to develop resilience. Post-intervention surveys were administered at a relatively more stressful time than pre-intervention surveys. Using the toolkit, post-intervention scores may have been positively affected.

Keywords: resilience, burnout, stress, mindfulness, turnover

Section II: Introduction

Nurse managers are crucial in operationalizing organizational strategic goals into practice at the department level. The triple aim focuses on promoting the health of patient populations and improving the patient's experience while being cost-effective (Berwick et al., 2008). Bodenheimer and Sinsky (2014) introduced the fourth aim of improving the work life of those who provide care to patients, so healthcare providers can be more effective at meeting the other three aims. Managers have 24/7 responsibility for staffing; managing productivity and budgets; building and fostering collaborative relationships with other disciplines and departments; implementing and supporting regulatory requirements; designing, creating, and executing new initiatives; and performing administrative and bureaucratic tasks required to maintain daily operations (American Organization of Nurse Leaders [AONL], 2015). To add to the complexity, the work environment is constantly shifting and chaotic, and nurse managers must adapt and respond to these shifts.

Although this work can be rewarding, it is stressful and can lead to burnout and job resignation, or even worse, leaving the nursing profession altogether (Cline, 2015; Warshawsky & Havens, 2014). In a study of 1,880 nurse leaders from 47 states of the nursing leadership roles (nurse manager, director, and chief nursing officer [CNO]), the nurse manager is most likely to leave their job (Warden et al., 2021). Nurse managers, directors, and CNOs planning to leave the job in 0 to 5 years are 64.1%, 64.1%, and 66.5%, respectively; of those planning to leave, burnout was a factor for 31.4%, 23.9%, and 14.1%, respectively. The only higher reason to leave the job was advancement within the organization. Warden et al. (2021) reported data based on years in the role. The percentage of nurse managers who plan to leave with 0 to 2 years of experience, three to five years' experience, and greater than five years' experience was 27.5%,

25.8%, and 10.8%, respectively. This implies that more experience in the nurse manager role is most stressful during the first two years, as measured by time. A focus on enhancing resilience for nurse managers is critical to retaining these leaders.

In a systematic review of 20 studies examining the relationship between nursing leadership practices and patient outcomes, Wong et al. (2015) found that positive relational leaders improve patient outcomes, including patient satisfaction, lower patient mortality, medication errors, restraint use, and hospital-acquired infections. Specifically, leaders who have transformational leadership styles are associated with better outcomes. Nurse leaders suffering from burnout may need help to motivate themselves to maintain their commitment to their staff and organization, impacting their ability to perform their job and negatively impacting outcomes.

Background

According to Maslach (1993), individuals who suffer from burnout do the bare minimum instead of doing their best at work. They are dissatisfied with the job, less committed, prone to error, uncivil, and have more absences than those not burned out. This can spread negativity to other employees, leading to their burnout. In addition, individuals who are burned out experience more work-related health problems, which further affects employees' productivity through absences. Burned-out employees may quit their jobs or leave nursing altogether, creating shortages. Absences and vacancies increase overtime for the remaining employees and increase the use of travel agencies, both of which add to the costs of replacing a nurse and further contribute to staff-employee burnout.

Suffering due to burnout can be significant and long-lasting. In a systematic review, Salvagioni et al. (2017) found that burnout predicted several conditions. Psychological consequences of burnout include insomnia, depression, psychotropic and antidepressant

medicines, and hospitalization due to mental disorders. Physical effects of burnout include hypercholesterolemia, type 2 diabetes, heart disease, headaches, fatigue, and hospitalization due to heart disease. Occupational consequences of burnout include job dissatisfaction, absenteeism, and disability (Salvagioni et al., 2017). These factors lead to an increased risk of omission of care, medical errors, and malpractice, which may financially impact organizations and individual patients who suffer from substandard patient care (National Academy of Medicine [NAM], 2019).

A devastating blow for nurses already suffering from burnout could be the loss of their professional licenses and their ability to support themselves and their families. Feelings of exhaustion, cynicism, and inadequacy do not automatically stop when leaving work (Maslach, 1993). As a result, burnout can carry over into a nurse's home life. These individuals can become frustrated and irritable over minor issues, and family and friends suffer from this negative spillover effect (Maslach, 1993).

In a survey of 291 nurse managers throughout the United States, 70% were satisfied or very satisfied with their jobs (Warshawsky & Havens, 2014). Despite this, 72% of the nurse managers surveyed indicated they had plans to leave their current position in the next five years, with burnout as the top reason (30%) for leaving. Interestingly, a career change was the second most cited reason (27%) for leaving, suggesting they may leave the profession altogether (Warshawsky & Havens, 2014). Burned-out nurse managers may adversely affect employee well-being, patient quality, and patient satisfaction (Jeffs, 2018). Staff may feel unsupported by an apathetic leader and unsatisfied with their job, which leads to employee burnout, resulting in these staff leaving their jobs and their profession.

Replacing a nurse is costly and challenging (Nursing Solutions, Inc. [NSI], 2021). The national average cost to replace a nurse is between \$28,400 and \$51,700. The average time to fill a vacancy is 89 days (NSI, 2021). Unlike frontline staff, when a nurse manager position is vacant, the duties of the vacated role are distributed among other leaders or not done at all, which can further increase the burnout of nurse managers who remain on the job (Loveridge, 2017)

Nurse managers are integral to meeting the quadruple aim (Bowles et al., 2019; McKay et al., 2018; Raso & Fitzpatrick, 2021). Burned-out nurse managers need to be more effective or may resign, depriving nursing staff of transformational leaders needed to create and support an environment that promotes employee well-being, patient satisfaction and safety, and cost-efficient care (Jeffs, 2018). To meet the quadruple aim, hospitals must implement programs promoting resilience in their staff and leaders (Jeffs, 2018; Tang & Hudson, 2019).

There is a worldwide call to action to address burnout and well-being in healthcare. The World Health Organization (WHO, 2019) recognizes burnout as an occupational phenomenon and adds it to doctors' and health insurers' International Classification of Diseases. The Institute for Healthcare Improvement (IHI) published its white paper, *IHI Framework for Improving Joy in Work*, to address healthcare burnout and to promote individual wellness in healthcare professionals (Perlo et al., 2017). In response to additional stressors brought about by the reaction to the COVID-19 pandemic, the IHI issued a guide to help leaders support their staff (Balik et al., 2020). The Joint Commission (2019) stated that organizations are responsible for supporting their staff and addressing workplace causes contributing to burnout. These organizations support implementing strategies to reduce organizational causes of workplace stress and burnout and implement programs to promote wellness and resilience to provide individuals with the tools to address workplace stress (Balik et al., 2020; Joint Commission,

2019; NAM, 2019; Perlo et al., 2017; WHO, 2019). The NAM (2019) appointed a committee to support clinical well-being to address the alarming rise in stress, burnout, and suicide rates. The focus of this Doctor of Nursing Practice (DNP) project was to promote resilience in nurse managers.

Problem Description

Setting

The setting for this DNP project was a 266-bed Catholic, not-for-profit, acute care hospital in Santa Monica, California. Recruiting and retaining nurse managers has been challenging over the last two years. In July 2020, during the COVID-19 pandemic, of the 13 nurse manager positions in the organization, only five were already in the nurse manager role. At the time of this writing (March 2022), one of the roles has been vacant since before the restructuring, and these duties were assigned to a manager who is already responsible for another department. Over the last two years, three interim managers appointed to their roles converted to permanent positions and remained in them. The remaining six positions have had eight interim nurse managers.

Specific Aim

The project aimed to develop, implement, and evaluate an evidence-based resiliency-enhancing toolkit for nurse managers over three months to increase resilience and move them into a higher Connor-Davidson Resilience Score quartile.

Available Knowledge

PICOT Question

In nurse managers working in an acute care hospital (P), does a resilience-enhancing toolkit (I), compared to no resilience training (C), increase resilience (O) within three months (T)?

Search Methodology

In March 2022, a literature search was conducted using the Cumulative Index of Nursing and Allied Health (CINAHL) database to serve as the evidence for this project. This literature search aimed to identify evidence-based interventions to enhance resilience. Keywords used included *resilience*, *burnout*, and *nurse*. Articles were limited to the English language. The Boolean operator “and” was used to combine keywords in the following way: resilience and burnout, and stress. A separate search was conducted using the term *mindfulness*.

All searches were limited to articles published in English between 2016 and 2022. The searches yielded a combined total of 529 articles. Twelve duplicate publications were removed. A screen of the titles narrowed the number to 74 studies. Screening the abstracts based on the project aim narrowed the list to 24 studies. A hand search of the references from several articles yielded one additional source. After reviewing the articles for usefulness for the project, 11 articles provided the best possible evidence for the DNP project. Refer to Appendix A for a literature search and screening process flow diagram.

Using the Johns Hopkins Nursing Evidence Appraisal Tools (Dang & Dearholt, 2018) to appraise the sources, one study was a Level I-B (Seidel et al., 2021); three studies were Level II-A (Andersen et al., 2021; Cunningham & Çayir, 2021; Koprowski et al., 2021); five studies were a Level II-B (Davis & Batcheller, 2020; Dossett et al., 2021; Magtibay et al., 2017; Mintz-Binder et al., 2021; Rosa-Besa et al., 2021); and one study was a Level III-C (Muir & Keim-Malpass, 2020; see Appendix B).

Integrated Review of the Literature

The ten articles from the systematic review included a strategy to enhance resilience or well-being to counter stress or decrease burnout. However, the resiliency-enhancing programs varied in content, delivery modes, and timeframes; common elements of the different programs incorporated mindfulness, cognitive reframing, and gratitude.

Toolkit Design

Kabat-Zinn (1982) is an early pioneer of mindful meditation as an effective strategy to decrease pain and anxiety. Kabat-Zinn describes mindfulness as being in the present, focusing attention on what is happening in the current moment, without assigning judgment to what is happening. Since his original study, many studies have validated that mindfulness effectively treats stress-related disorders (Kriakous et al., 2021). Initially designed as a 10-week program, Kabat-Zinn's first program was condensed to 8 weeks. He also included several methods to practice mindfulness, so users were not required to practice all but could choose the one that best suited them. Although effective, this highly structured 8-week program may be impractical for nurse leaders to incorporate into their busy work schedules and private lives. In a systematic review of 30 mindfulness-based stress reduction (MBSR) studies, Kriakous et al. (2021) found that shortened versions of the MBSR program effectively decreased stress, anxiety, and depression.

All ten articles from the systematic literature review incorporated mindfulness to enhance resilience or well-being. Programs by Cunningham and Çayir (2021) and Rosa-Besa et al. (2021) were one day and six hours long. Cunningham and Cavar's study demonstrated a statistically significant decrease in mean anxiety scores, with 79% of healthcare professionals indicating they intended to engage in mindfulness practices at the end of the program. Rosa-Besa et al. used the

challenge-hindrance model as a framework for the study, where stressors are categorized as challenges or hindrances. Challenge stressors are considered positive opportunities for someone to grow, whereas hindrance stressors, such as red tape and organizational politics, prevent getting the job. The Resilience at Work program intervention resulted in a statistically significant increase in resilience and a statistically significant increase in challenge scores from pre-intervention to post-intervention. Interestingly, although higher post-intervention, the change in the hindrance scores was not statistically significant (Rosa-Besa et al., 2021).

Two studies incorporated weekly classes in their programs. In a pilot study, Dossett et al. (2021) used the Stress Management and Resiliency Training (SMART) multi-modal program to achieve a statistically significant decrease in perceived stress and improve global mental and physical health and job satisfaction in 45 healthcare professionals studied. Their intervention consisted of eight 1.5-hour sessions scheduled two to three weeks apart to accommodate the clinicians' schedules (Dossett et al., 2021).

Seidel et al. (2021) developed a brief mindfulness practice course that consisted of four 1-hour sessions. In addition, Seidel et al. provided a digital resource to incorporate a daily practice of 15 minutes of mindfulness. They offered the results of two studies in one paper. The first study was a convenience sample of 28 nurses and measured several variables, including the Mindfulness Attention Awareness Scale (MAAS); the World Health Organization Quality of Life (WHOQOL) scale, which has five subscales of general, physical, psychological health, social relationship, and environmental quality; and the Maslach Burnout Inventory, Human Services Survey (MBI-HSS), which has three subscales of emotional exhaustion, depersonalization, and personal accomplishment. Surveys were administered pre-intervention, at the end of the fourth session, six months post-intervention, and 18 months post-intervention. Immediately post-

intervention, all scores moved in the desired direction. However, only the WHOQOL score changes were significant. At six months, there was a substantial improvement in mindfulness scores. At 18 months, average mindfulness scores remained statistically significantly higher than baseline and immediate post-intervention scores. In addition, WHOQOL scores remained statistically higher at 6 and 18 months, except for social relationships.

In the same paper, Siedel et al. (2021) included the results of the second study of 83 healthcare professionals, where 53% ($n = 44$) were nurses. Participants enrolled in the study were randomly assigned to the intervention or waitlist group, which served as the control group. After six months, the waitlist group was offered the intervention. Seidel et al. used the same outcome measures as the first study. Mindfulness scores increased significantly from baseline to immediately after post-intervention and again at six months. The control group's scores did not statistically change from baseline post-intervention nor at six months. The MBI-depersonalization score was the only burnout measure significantly improved or decreased over time. All three studies showed that using weekly, 1-hour sessions for the 4- or 5-week programs significantly reduced stress and aspects of burnout (Dossett et al., 2021; Siedel et al., 2021).

Muir and Keim-Melpass (2020) assessed the feasibility of a mindfulness emergency program in the emergency department based on Kabat-Zinn's MBSR program. The program design included three didactic sessions that were 90 minutes long over three months. The sessions were recorded to provide those who could not attend the sessions with access to the material. The authors requested that participants meditate for at least 5 minutes twice a week. The personal accomplishment subscale score significantly improved using the MBI tool to measure burnout. The emotional exhaustion scores significantly decreased after the intervention in 26 nurses and nine patient care technicians who completed the pre- and post-survey tools.

In two studies, the same authors created a toolkit to enhance resilience in nurses from four urban hospitals in a southern United States health system (Andersen et al., 2021; Mintz-Binder et al., 2021). One was a pilot study, and the second was to replicate the pilot study and identify the preferred and most effective interventions (Anderson et al., 2021; Mintz-Binder et al., 2021). Nurses were shown a video on the study protocol, which included how stress and resiliency relate and how to use the tools in the toolkit. The toolkit items selected had literature to support their beneficial effects on stress, health, self-control, and ability to focus. Items included lavender aromatherapy, adult coloring books, a mind activity book, gaming, and instructions for deep breathing and relaxation through guided meditation. For the last three items, resources were given on access to free apps to support these activities. Although 148 subjects enrolled in the study, only 77 subjects completed the study. The CD-RISC-10 scale was used to measure resilience, and a Likert-type scale measured stress levels, with a range of 1 (low) to 5 (high). The stress scale was to be recorded before and after an intervention. The CD-RISC-10 scale was to be completed as a pre-survey and post-survey. The CD-RISC-10 scores significantly increased ($df_{77} = 12.141, P < .02$). The most frequent interventions were breathing exercises, lavender aromatherapy, and coloring books (Mintz-Binder et al., 2021).

The replication study measured the CD-RISC-10 and stress levels pre-intervention, 4 to 6 weeks later, and three months post-intervention (Andersen et al., 2021). The stress level was measured with a 10-point Likert-type scale of 1 (low) to 10 (high). One hundred fourteen nurses completed the pre-intervention surveys, 95 completed the survey at 4 to 6 weeks, and 72 completed the survey at three months. CD-RISC-10 scores significantly increased at the 4- to 6-week timeframe and were even higher at three months. Stress levels also significantly decreased

over time. Like the pilot study, the interventions most used were breathing exercises, lavender aromatherapy, and coloring books.

Web-based learning uses the teaching modality Davis and Batcheller (2020) and Magtibay et al. (2017). Magtibay et al. used the SMART program content, offered as a web-based format, book, or facilitated discussions by the program's author. Participants were given the option of any combination of the web-based format, independent reading, or facilitated discussions. There was no timeframe to complete the web-based learning or independent reading; however, the suggested timeframe was eight weeks. Facilitated discussions occurred every four weeks, at Weeks 8, 12, 16, and 20. Week 8 and Week 12 were facilitated in person, and Week 16 and Week 20 were facilitated by phone. Data were collected at baseline and in Weeks 8, 12, and 24 after baseline. Fifty nurses enrolled in the study, with participation decreasing to 45, 40, and 33 participants at 8, 12, and 24 weeks, respectively. Several variables were measured: happiness, mindfulness, anxiety, perceived stress, work-related and client-related burnout, work-related burnout, and client-related burnout. Interestingly, at the 8-week assessment, only anxiety, personal burnout, and work-related burnout significantly improved in the desired direction. All other measures showed statistically significant improvements at the 12- and 24-week marks.

Davis and Batcheller (2020) implemented a resiliency bundle to address moral distress in the workplace. Specific elements of the bundle included approaches to meet the specific needs of the authors' workplace. They included an ethical issue resolution process, patient death process outline, leadership notification, case conference discussions, structured debriefings with pastoral care, discussions with colleagues, discussions with supportive staff, social events, educational courses aimed at improving clinician well-being, employee assistance program, and mindfulness reminders via cell phone applications. Education was provided electronically to 47 pediatric

critical care staff, including nurses (64%). Pre-intervention, there were 47 participants. The top three preferred methods used for enhancing resilience were exercise (34%), discussions with peers (32%), and prayer and mindfulness activities (21%). Post-implementation, there were 46 participants, and the top preferred methods used were informal discussions with colleagues (92%), social events (89%), and mindfulness activities (52%). The CD-RISC mean scores significantly improved from the baseline within six months of implementing the bundle (Davis & Batcheller, 2020).

Koprowski et al. (2021) created a resilience practice playbook to determine if this playbook, which nurse leaders implemented with their teams, enhanced resilience for the leaders and team members. The authors specifically wondered if leader-led activities resulted in higher resilience scores than those not. The playbook was made available through a website and included self-initiated activities, which included artistic expression (coloring activities); physical activities (instructions and resources on yoga, acupuncture, and massage); and reflective practices, such as expressive writing, meditation, and three good things. Leader-led activities included several options for in-person activities. Attrition was high among leaders, and the authors acknowledged that this could have been due to the timing of the project coinciding with the pandemic, or it could have been that the leader-led activities were in person. In-person activities were limited during the pandemic.

Additionally, the leader-led activities, such as nursing salons outlined by Koprowski et al., may be labor-intensive and time-consuming. One hundred leaders and clinical nurses completed self-initiated activities, and the mean resilience score, as measured by the CD-RISC, significantly improved. Interestingly, participation in leader-led activities did not result in any significant difference in CD-RISC scores compared to those who did not participate in leader-led

activities. Additionally, 19 of 26 leaders-initiated leader-led activities, and these leaders' CD-RISC scores did not improve from the baseline.

Program Content

All studies had strategies that resulted in a decrease in stress, enhanced resilience, or both (Anderson et al., 2021; Cunningham & Çayir, 2021; Davis & Batcheller, 2020; Dossett et al., 2021; Koprowski et al., 2021; Magtibay et al., 2017; Mintz-Binder, 2021; Muir & Keim-Malpass, 2020; Rosa-Besa et al., 2021; Seidel et al., 2021). Methodologies included in-person classes given over one day or spread out over several weeks; blended learning with in-person or web-based learning and access to toolkits or instructions for available resources; and independent learning activities, such as a toolkit or playbook. These studies helped inform the DNP project interventions. Since no strategy was used in the studies, the most common ones were included in the DNP project intervention: mindfulness, cognitive reframing, and gratitude or compassion.

Mindfulness. Eight studies specifically included mindfulness as a strategy to enhance resilience or well-being (Anderson et al., 2021; Cunningham & Çayir, 2021; Davis & Batcheller, 2020; Dossett et al., 2021; Mintz-Binder et al., 2021; Muir & Keim-Malpass, 2020; Seidel et al., 2021). Although not explicitly called mindfulness, mindful practices were incorporated into the strategies in two studies (Koprowski et al., 2021; Rosa-Besas et al., 2021). Koprowski et al. (2021) explicitly included yoga, coloring, and meditation, and Rosa-Besas et al. (2021) included activities to include self-awareness.

Cognitive Reframing. Cognitive reframing is reassessing a situation to focus on the positive aspects of a situation versus irrelevant negative information (Robson & Troutman-Jordan, 2014). This is not to say that relevant negative information does not exist. For example, a nurse may focus on the potential of harming a patient. With cognitive reframing, the nurse

should focus on safely performing the task. Five studies included some form of cognitive reframing to decrease stress or enhance resilience (Dossett et al., 2021; Magtibay et al., 2017; Muir & Keim-Malpass, 2020; Rosa-Besas et al., 2021; Seidel et al., 2021). In the remaining five studies, some form of cognitive reframing was not explicitly mentioned; however, it may have been implied, as cognitive reframing is sometimes built into mindfulness practices.

Gratitude. Gratitude is a strategy to enhance resilience and well-being (Kini et al., 2016). Three studies used gratitude as a strategy. Magtibay et al. (2017) included *waking up with gratitude* in their educational curriculum. Dossett et al. (2021) had *appreciation* as a topic in their project. Koprowski et al. (2021) had *three good things* as a specific activity in the practice playbook. Other studies identified positivity and optimism strategies (Andersen et al., 2021; Mintz-Binder et al., 2021; Rosa-Besa et al., 2021). These authors did not specifically include gratitude in their programs, but gratitude is a way to promote positivity and optimism. Although not included in more of the research studies from the systematic literature review, the three good things activity was included in the DNP project toolkit because it is simple to use and has been shown to enhance resilience.

The integrative review of the literature shows that abbreviated versions of traditional resilience-enhancing programs using activities to educate on mindfulness, cognitive reframing, and gratitude enhance resilience in nurses and healthcare workers. This project hoped to duplicate those results in nurse leaders. A goal of the intervention was to enhance nurse leader resiliency in that it is accessible, convenient, personalized, and easy to use by nurse leaders.

Summary/Synthesis of the Evidence

Nurse managers are prone to stress and burnout, leading to nurse manager turnover or nurse managers leaving the nursing profession completely. If they remain on the job, they are

less effective in their roles, negatively impacting patient safety, satisfaction, and costs to deliver patient care. While organizations must address decreasing the stressors at work, programs to enhance resilience in nurse managers are the other strategy to counter stress and burnout.

The literature demonstrates that resilience can be enhanced to prevent stress and burnout in nurses, thereby promoting well-being. Programs described in the studies varied. Programs were delivered through in-person classes, web-based learning, in-services, written instructions, and hybrid models that combined a variety of modalities. Content also varied, but the strategies to enhance resilience that were common to most programs reviewed on resilience included mindfulness, cognitive reframing, and gratitude. Challenges with more traditional programs are that they are time-consuming, costly, and difficult to incorporate into a nurse manager's busy work schedule. Despite the varied designs, all programs demonstrated an improvement in resilience or well-being.

Informed to the evidence review, a resilience-enhancing toolkit can effectively improve the resilience and well-being of nurse managers while at work.

Rationale

The conceptual framework for the project is based on the NAM's (2019) framework for a system's approach to clinician burnout and professional well-being, which are underpinned by burnout, well-being, and resilience.

Burnout

NAM (2019) incorporates several concepts in their description of burnout; however, Maslach's is the most widely used. Maslach's (1993) multidimensional model of burnout attributed to the psychological syndrome due to chronic stressors at work. The three features of the syndrome are overwhelming exhaustion, cynicism, and inefficacy (Maslach, 1993).

Exhaustion refers to feeling overextended and drained of emotional and physical resources. Cynicism refers to being detached from the situation and can result in dehumanization. Inefficacy relates to feelings of incompetence, inadequacy, and a sense of failure at work (Maslach, 1993). The strategies to address burnout are to eliminate the sources of stress at work and to enhance the ability to withstand the stress. The focus of this project is to enhance resilience.

Well-Being

NAM incorporated several definitions to inform their concept of well-being, which focuses on positive perceptions and constructive conditions at work to allow workers to “thrive and achieve their full potential” (Chari et al., 2018, p. 590). Job satisfaction, meaningful work, engagement, high-quality work life, and work-related professional fulfillment are additional concepts NAM (2019) used to describe well-being.

Resilience

NAM (2019) states that there is no generally agreed-upon definition of resilience. The American Psychological Association (APA, 2014) defines resilience as the process of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress. Fortunately, it is not a trait that one is born with but a skill that can be taught and developed (APA, 2014; Southwick et al., 2014). NAM’s framework to approach burnout and well-being is broadly two-fold: decrease stressors at work and enhance individual and organizational well-being and resilience. This DNP project aims to enhance resilience.

For this project, resilience-enhancing skills were based on regulating cognitive-based emotions. Cognitive-based emotions are triggered by what individuals perceive, and the emotional response varies from person to person (Averill et al., 2018; Ochsner & Gross, 2005).

For example, a caged or uncaged tiger usually affects one's perception of threat, where the uncaged tiger poses a severe danger and a caged tiger poses a minimal threat. However, some may consider both situations equally threatening because of a genuine fear of tigers, even though the threat of physical harm is minimal with a caged tiger. The perceived threat triggers the stress response, including increased heart rate, breathing, dilated pupils, and other physiological adaptations needed for *flight or fight* (O'Connor et al., 2021). Usually, after the encounter with a threat passes and there is a return to safety, the stress response subsides, and the body tries to return to a pre-stress state.

However, in the workplace, nurse leaders are constantly barraged with stressors and cannot return to a pre-stress baseline, therefore in a continuous state of stress, which places them at risk for burnout (Nelson, 2017; Warshawsky & Havens, 2014). Some stress can be managed through cognitive emotion regulation, including attention control and cognitive reappraisal (Averill et al., 2018). These concepts are the foundation for this DNP project.

Section III: Methods

Context

The setting for the project was a nonprofit, Catholic-based, 266 licensed bed, acute care hospital in Southern California, which is part of a larger system with 51 hospitals, post-acute hospitals, outpatient clinics, and physician practices located in Alaska, Washington, Oregon, California, Texas, and Montana. California has mandatory nurse-to-patient ratios of 1:2, 1:4, and 1:5 for the intensive care unit (ICU), telemetry, and medical/surgical patients, respectively. The ICU nurses provide total patient care, whereas the other units work with clinical nursing assistants. A bargaining agency represents the employees. The project was implemented in the

fall of 2021 as the COVID-19 pandemic seemed to be subsiding and ended as another surge of COVID-19, respiratory syncytial virus, and the flu was on the rise.

While the project focused on nurse managers, other key stakeholders included the executives, additional nursing and ancillary leaders, employees, patients, and their families. The nurse manager's ability to lead impacts the quality of patient care, including safety and patient and employee satisfaction. Those who are burned out can negatively influence the quality of care. Burnout, and its negative impact, can spread to other connected parts of the organization. Resilience is a strategy to counter burnout,

During the pandemic, nurse managers responded to changes brought on by the local, state, and national regulatory mandates to keep patients and employees safe. These changes were not always well-received by staff, manifested by increased bargaining agency activity, which created even more work for the leaders—managers self-reported frustration and being overwhelmed with these challenges. Nurse managers were responsible for implementing activities to boost employees' well-being but may have ignored their well-being. This project aimed to counter burnout by creating an easy-to-use resilience-enhancing toolkit that nurse managers can use while at work.

Interventions

The intervention was a toolkit designed to enhance resilience in nurse managers, which would be easy to use in the work setting. An introduction and overview of the importance of resilience and how the strategies of mindfulness, cognitive reframing, and gratitude develop resilience were presented at a nurse manager meeting. The toolkit included written instructions on several techniques for mindfulness, cognitive reframing, and gratitude. The toolkit included

an adult coloring book with coloring pencils, a gratitude journal, and a cognitive reframing worksheet (see Appendix C).

The goal was to extend the project to future nurse managers and clinical nursing supervisors as part of their onboarding process. A plan-do-study-act cycle was used during the program's implementation and will be used to plan future programs. An opportunity for improvement identified was verifying understanding how to use the toolkit. The student met with the managers individually to validate their understanding of using the toolkit. The student also informally checked in with the managers to answer any questions they had. No questions or concerns regarding the use of the toolkit were identified.

Gap Analysis

The organization has been challenged with recruiting and retaining nurse managers. Role-related stress and burnout contribute to the inability to retain and recruit managers. One of the strategies to address stress and prevent burnout is to enhance nurse manager resilience. A gap analysis was conducted to identify resources available to hospital employees (see Appendix D). Currently, resources are available through the system's employee assistance program through third-party vendors, which includes 12 phone visits with a qualified person and online self-help sources. These resources are not easy to find or use based on informal conversations with nurse managers. Through a literature review, the author learned of simple programs to design and implement and then developed the resilience-enhancing toolkit that includes evidence-based practices based on the review.

Gantt Chart

A Gantt chart is a project management tool that lists significant milestones and projected timeframes to meet those milestones to help the project manager track and communicate the

project's goals and progress. All tasks and activities needed to complete the project were outlined, organized into manageable tasks, and scheduled. The Gantt chart provides a simple listing of all the functions for the DNP project (see Appendix E). The project was launched in August 2022 and completed in December 2022. Program evaluation and statistical analysis of the data were completed in December 2022. The first draft of the final paper was submitted in January 2023.

Work Breakdown Structure

A work breakdown structure (WBS) was used to deconstruct large projects into smaller manageable tasks (see Appendix F). The WBS was created during the planning phase of project implementation and was used to communicate the project to all involved with the project, including sponsors of the project; track the progress of a project; hold stakeholders accountable for their assigned tasks; and manage *scope creep* (Biafore, 2016). The categories for the DNP project included the creation of the toolkit, the resilience variable measurement tool, and the implementation and evaluation of the project (see Appendix G).

Responsibility/Communication Matrix

The success of the project relied on the support of key stakeholders, the CNO, who sponsors the project, and the nurse managers, who are the project participants (see Appendix H). The student apprised the CNO of the project status during prescheduled face-to-face meetings to garner support and allow the CNO to assess the project's impact on hospital operations. The student introduced the program to the nurse managers and scheduled individual meetings to distribute the toolkit and garner participation in completing the survey. Additionally, the student followed up with the managers to encourage using the toolkit and answer any questions (see toolkit in Appendix C).

SWOT Analysis

A strengths, weakness, opportunities, and threats (SWOT) analysis was conducted to determine the feasibility of implementing the project in the organization (see Appendix I). Strengths of the project included leadership support of a program to enhance resilience in nurse managers as a strategy to retain and recruit effective nurse leaders. In addition, the CNO approved a budget to purchase supplies for the toolkit needed for the project. Weaknesses of the project mainly centered on nurse managers' availability and attitude towards using the toolkit. Their presence and commitment to using the toolkit were keys to the success of the project and the potential benefits of enhanced resilience. Ironically, because the project is a strategy to avoid burnout to retain nurse managers, nurse manager turnover before project completion threatened the project. If successful, the project's opportunities are to retain resilient nurse managers who can effectively lead their teams and achieve the quadruple aim.

Comprehensive Financial Analysis

The budget included the cost of the resilience-enhancing toolkit. Nurse managers are salaried; therefore, there are no added costs for their participation in the program. The DNP student, the project facilitator, provided the orientation to the toolkit. The cost was \$73 per toolkit. The goal was to recruit all 13 nurse managers in the organization. The budgeted cost for the toolkits was \$957. The cost to use the CD-RISC tool was a one-time fee of \$33. Recruiting and orienting nurse managers to the program was approximately two hours. With an average salary of \$75/hour, the cost for nurse manager time was \$1,950. The total program cost was \$2,958 (see Appendix J). Other than the initial time for training the nurse managers, they could use the toolkit at their discretion and did not require being away from their primary duties.

The average cost to replace a nurse manager is \$113,084 (Lyle-Edrosolo, 2023). The cost to replace a nurse manager ranges from 75% to 125% of the manager's salary, translating from \$84,813 to \$141,355. A projected nurse manager is estimated to be 20% of positions, with 46% leaving due to burnout. The organization has 14 nurse managers, and a 20% turnover rate translates into 2.8 nurse managers (see Appendix K: Nurse Manager Turnover Worksheet). The turnover rate should decrease to 1.5 nurse managers per year by decreasing burnout. Factoring in the costs of the program, the projected cost savings over the next two years is estimated to be \$139,590 and \$155,961, respectively (see Appendix L: Cost Analysis). If effective, the return on investment is expected to be 3,923% and 4,383% over Year 2 and Year 3, which is high due to the program's low cost (see Appendix M). This cost analysis did not incorporate indirect savings by avoiding nurse manager replacement or the costs incurred from poor patient outcomes associated with ineffective or absent nurse managers (Warden, 2021; Wong, 2015).

Study of the Interventions

Resilience scores using the CDRS in nurse managers were measured before and three months after implementing the toolkit. REDCap was the platform required by the student organization for surveying hospital employees. The CDRS survey questions were entered into a survey, and a link to the survey was created. The link was emailed to the nurse managers, including interim nurse managers, at the beginning of the program. An interim nurse manager who started two weeks after program implementation was invited to participate in the program and given a toolkit. All participants were informed that the survey was voluntary and that their responses would be anonymous. Individual and mean CDRS scores were calculated.

Outcome Measures

The CDRS was created during research on identifying and treating post-traumatic stress disorder in men and women (Connor & Davidson, 2003; see Appendix N). The instrument comprises 25 Likert scale questions, with responses ranging from 0 (never) to 4 (always). The scores range from 0 to 100, the minimum and maximum scores, respectively. The responses to each score are totaled. The higher the score, the higher resilience. The project aimed to increase the CDRS mean score by seven or more points.

The median score in the U.S. general population was 82, with quartile one being 0-73, quartile two 74-82, quartile three 83-90, and quartile four 91-100 (Connor & Davidson, 2003). The instrument is written at a Grade 5 education level and used in clinical and non-clinical populations. The CDRC showed acceptable test-retest reliability and construct validity. Written permission to use the CDRC was obtained before its use (see Appendix O).

Analysis

CQI Method and Data Collection Tools

The CDRC was selected as the data collection tool for resilience based on support from the literature. It was transcribed onto REDCap, an electronic platform, the mandatory platform required by the institution, and submitted to participants to complete at times outlined by the project. CDRS scores were not analyzed until after the program was completed to minimize bias. The CDRS has demonstrated reliability and validity (Toma et al., 2017). The Cronbach alpha value has been calculated at 0.890 and 0.923, indicating a sound effect (Alameddine et al., 2021).

Ethical Considerations

Ethical considerations for the project primarily aimed to protect the confidentiality of the participant's survey responses. A standard to ensure that a project meets these criteria is submission to the Internal Review Board (IRB), which assesses the project to protect the rights

and safety of subjects. Participation in the project was voluntary. If the nurse manager did participate, the survey was completed voluntarily. Surveys were completed electronically on a platform without disclosing participants' identities. The student organization requires all student-related projects involving employee participation to be submitted for IRB approval. The resiliency enhancement project was submitted to and approved by the IRB as a quality improvement project (see Appendix P).

Nurse managers may be experiencing stress and burnout, leading to poor mental health where professional psychological or psychiatric help is needed. A disclaimer advising that anyone suffering from severe signs of poor mental health (e.g., depression) should seek professional help. The resilience-enhancing toolkit is not indicated to replace professional help.

Jesuit Values

Ignatius Loyola, the founder of the Jesuit order, is said to have instructed Father Francis Xavier to “Go, set the world on fire!” (Jesuits, n.d., para. 6). The Jesuit’s mission is to do good. The DNP degree integrates evidence to improve nursing practice and patient outcomes (Zaccagnini & White, 2015). In this way, the DNP program prepares nurses to do good for the organizations and communities they serve, which includes the patients, employees, all members of the healthcare team, and other people in the community. The DNP project’s goal was to enhance resilience in nurse managers as a strategy to decrease the negative effects of stress and prevent burnout.

Cura Personalis

The DNP project aligns with the University of San Francisco’s (USF, n.d.) Jesuit values of *cura personalis*, *people for others*, and *contemplative in action*. *Cura personalis* is the care of the whole person, which includes the individual’s intellectual, physical, and spiritual health and

autonomy. As described earlier, stress contributes to poor mental and physical health outcomes. The DNP project aimed to promote nurse managers' well-being by arming them with the tools to combat stress and enhance resilience. The resilience-enhancing toolkit is designed to include various options to practice mindfulness to allow the nurse managers to have autonomy and is an individualized approach to enhance resilience.

People for Others

The Jesuit value of people for others is about caring about others, considering the least among us (USF, n.d.). Nurse managers are responsible for addressing their staff's well-being. Burned-out leaders are less effective in addressing this responsibility. In addition, nurse managers need nurturing. The DNP project focused on caring for the nurse manager to better care for their employees, who will then care for their patients and coworkers.

Contemplative in Action

The strategies involved in the DNP project were mindfulness, cognitive reframing, and gratitude. Each of these is a different way of actively contemplating. According to the Jesuits, contemplating is a way of looking beyond the superficial, seeing, and being thankful for what is good. The three DNP strategies guide one to contemplate in action. Mindfulness prepares one to be in the present and aware of one's responses to a given situation. Cognitive reframing is examining the situation to determine what is real or imagined. It helps to ferret out unnecessary worrying about things that have not yet happened or regrets over things from the past that you no longer have control over. Gratitude is appreciating what is good in one's life. The DNP project was a formula on how to contemplate actively.

The nurse manager is in an integral role in meeting a healthcare organization's strategic goals, which include quality patient care, patient satisfaction, employee satisfaction, and cost-

effective care. These goals are in alignment with the Jesuit goals. Because nurse manager roles are stressful, they are susceptible to burnout, which places these strategic goals at risk. Caring for nurse managers by enhancing their resilience benefits the individual nurse managers and all the lives they touch, both at the workplace and at home.

American Nurses Association Code of Ethics

The DNP project meets the ethical principles of beneficence, autonomy, veracity, and justice and the American Nurses Association (ANA, 2015) Code of Ethics.

Beneficence is the principle of doing good (Grace, 2017). Enhancing nurse managers' resilience promotes their ability to withstand stress, thereby avoiding burnout. Indirect positive benefits of resilient nurse leaders are satisfied and engaged employees, which results in improved patient satisfaction and healthcare outcomes.

Autonomy has two definitions with regard to biomedical ethics. The first definition is an attitude of respect for an individual regardless of who they are or their past (Grace 2017). The DNP project was conducted with respect for the patient's autonomy. The pre-and post-surveys were conducted anonymously to prevent the identification of those participating and their responses. As a result, even if the doctoral candidate was to judge someone based on their responses to the surveys, the responses by those surveyed cannot be linked to any specific individual. The second definition of autonomy is the right to make personal decisions (Grace, 2017). Participants in the project were informed that participation was voluntary. If a participant felt coercion, it was not intentional. In any case, the candidate could not determine who completed or did not complete the survey.

Veracity is the duty to be truthful (Grace, 2017). The project was conducted with veracity. The participants were made aware of the goal of the project. In addition, the

participant's responses were not manipulated in any way that might alter the reported results to mislead those who read the report.

Justice can be viewed from two main perspectives. One is based on merit, and the other is on equal distribution regardless of merit or justice as fairness (Grace, 2017). Because of the known stressful nature of their jobs and their importance in optimizing outcomes, nurse managers deserve to participate in programs designed to counter work-related stressors. Effective nurse managers attend to their employee's well-being. It is only fair to attend to the nurse managers' well-being.

Psychological safety is a measure of an organization's ability to create a work environment that encourages or discourages social risk-taking behaviors, such as speaking up or asking for help (Edmonson & Lei, 2014). This project ensured psychological safety in two ways. Nurse managers were encouraged to participate in the survey, which was anonymous, to minimize the risk of potential judgment based on participating in the survey or not. Also, since it was anonymous, participants could not be judged based on their survey responses. Another way this project promotes psychological safety is in the work setting. Those who are burned out are less committed, uncivil, and less likely to be engaged or cared for (Maslach, 1993). Resilience is a strategy to prevent nurse manager burnout from creating an environment psychologically safe for their employees and themselves.

The DNP project aligned with several of the ANA (2015) Code of Ethics. Provision 1 discusses compassion and respect for every person's inherent dignity, worth, and unique attributes. Provision 5 outlines nurses' duties to themselves and others. Provision 6 discusses the importance of a work environment conducive to safe healthcare and quality. The project meets Provisions 1, 5, and 6, as the project aimed to prevent suffering from stress and burnout, promote

the well-being of nurse managers, and indirectly improve the quality of patient care, the patient experience, and employee well-being. The author must promote the health of the nurse leaders the author supervises as a nurse leader. The author followed the IRB processes created to protect the project participants' rights to privacy. Attaining a DNP is a strategy to grow professionally and personally.

Provision 7 outlines the ethical duty of nurses to advance the nursing profession through research and scholarly inquiry. The DNP program and project meet this duty, as the goal was to translate best practices based on nursing research and shorten the time it takes to translate research into practice.

Section IV: Results

Of the 13 nurse managers present at the beginning of the program, 10 completed the surveys. At the end of the program, only eight surveys were collected. In December, one of the managers resigned and was replaced by an interim manager. The interim manager was included in the email requesting participation in the survey. Of note, this manager was in school to become a nurse practitioner and resigned to practice as a nurse practitioner when he completed his program, and the ideal job setting became available. Of those completing the pre-intervention survey, three were interim nurse managers in the role for less than one year, three were in the nurse manager role for less than a year, three were in the role for two to five years, and one was in the role for more than ten years (see Appendix Q: Nurse Managers by Category and Years of Experience in Role). Of those completing the post-intervention survey, one was an interim nurse manager in the role for less than one year, two were in the nurse manager role for one to two years, three were in the nurse manager role for two to five years, and two were in the nurse manager role for five to ten years.

Connor-Davidson Resilience Scale

The mean pre-intervention and post-intervention CDRS scores were 73. Given the small sample size, the reliability of the scores cannot be considered valid. Compared to the pre-intervention CDRS quartiles, there was an increase in nurse managers placing in the first quartile (from 40% to 63%; see Appendix R: Connor-Davidson Resilience Score by Quartile). There was a decrease in nurse managers placing in the second quartile (from 40% to 25%) and third quartile (from 20% to 12.5%). No nurse manager CDRS scores were in the fourth quartile.

Intervention Practices

There was an increase in the use of resilience-enhancing practices post-intervention compared to pre-intervention (see Appendix S). Mindfulness increased from 50.0% to 87.5%, cognitive reframing increased from 40.0% to 75.0%, and gratitude increased from 90.0% to 100.0%. Of the five who practiced mindfulness pre-intervention, all of them practiced deep breathing. Of the seven who practiced mindfulness post-intervention, six practiced deep breathing. In general, the use of the three strategies increased in terms of the use by nurse managers and the frequency of practice (see Appendix T). The coloring book was not used pre-intervention; three participants used the coloring book post-intervention.

Section V: Discussion

Summary

This DNP project aimed to enhance resilience in nurse managers to improve the quality of patient care, patient satisfaction, and employee satisfaction in the hospital by enhancing resilience in nurse managers to prevent or minimize burnout. The project was implemented. Based on the evidence in the literature, resilience-enhancing strategies were identified, which included mindfulness, cognitive reframing, and gratitude. These were incorporated into a toolkit

designed to be easy to use in the work setting and distributed to nurse managers. The CDRS was identified as the tool to measure resilience, as it was tested to be valid and reliable.

Additionally, the tool was inexpensive to use and implement compared to other tools. The pre- and post-intervention surveys were distributed to the 13 managers present during the survey. The pre-intervention survey was emailed in September 2023, and the post-intervention surveys were emailed in December 2022. Ten pre-intervention and eight post-intervention surveys were collected and collated. When the pre-intervention surveys were distributed, the COVID-19 pandemic was easing up. Two stressors occurred at the same time the post-intervention surveys were distributed. One was the emergence of the tridemic, which led to increased hospitalizations and decreased staffing. The second was a change in the CNO. The results will not be generalizable because of the low number of participants in the project.

There was no difference between the mean CDRS pre- and post-intervention scores. This may be due to post-intervention survey timing occurring simultaneously with the CNO departure and tridemic. The resilience scores may have increased if these additional stressors had not occurred. More time and practice may be needed to become skilled in the resilience-enhancing skills of mindfulness, cognitive reframing, and gratitude. Interestingly, six nurse managers who completed the pre-intervention and three who completed the post-intervention survey had less than two years of experience, which seems to be the most stressful time for nurse managers (Warden et al., 2021).

Moving forward, the program will continue. The survey will be modified to include a question on the intention to leave to see if the toolkit impacts that measure. Another resilience survey which may be more sensitive, will be added. The nurse managers will be resurveyed in

March and June. A program for clinical nursing supervisors will be launched in June, including the modified survey.

Two insights emerged after the prospectus was submitted. First, the strategy thought to be most important was mindfulness. However, mindfulness and cognitive reframing should not be thought of as two separate strategies but as two techniques that should be done together. Mindfulness is the ability to be in the present and sense when something is *not right*. While focusing on the present, it is difficult to regret what has happened in the past and worry about what can go wrong in the future. Cognitive reframing is a technique to assess one's thoughts to remove unnecessary worry and regret. The second insight was the realization that the first two years as a nurse manager seem to be the most stressful, and resilience skills must be included in new leader orientation to retain them.

Interpretation

The anticipated outcome for the project was that using the interventions would increase resilience scores. The results from this project and several other projects showed no difference in resilience scores, indicating that the intervention did not affect resilience. The pre-and post-intervention scores were both 73, showing no difference. However, utilization of the strategies did increase. Mindfulness, cognitive reframing, and gratitude practice increased from 50% to 87.5%, 40% to 75%, and 90% to 100%, respectively, from pre- to post-intervention, demonstrating managers' willingness to adopt these strategies.

Limitations

Due to the COVID-19 pandemic, the organization has been promoting the use of resilience-enhancing strategies available to the hospital's employees, including accessing the employee assistance program and Headspace, an application that promotes mindfulness. The

employee assistance program may employ strategies similar to those included in the DNP project toolkit, which might have already enhanced the nurse managers' resilience scores, affecting the toolkit's ability to enhance resilience. Limitations to the DNP project included participants' previous experience with resilience-enhancing strategies, group size, and potential competing priorities around the time of project implementation.

Several challenges with the project included the small sample size of 13 managers and the even smaller return of completed surveys, limiting the generalizability of the results to other settings. Nurse managers have limited time to carry out their workloads in the work setting. Nurse managers' failure to adopt the toolkit also limits the toolkit's effectiveness. Mindfulness, cognitive reframing, and gratitude must be developed, and failure to practice the skills negatively impacts one's ability to become competent. In addition, the 3-month timeframe for project completion may not have been long enough to allow the nurse manager to become competent in these skills.

One nurse manager started several weeks after the program began, and one manager left the manager role and was replaced by an interim manager. The manager who left was asked to complete the pre-intervention survey but not the post-intervention survey. The interim manager was asked to complete the post-intervention survey but not the pre-intervention survey. In addition, because the survey was anonymous and voluntary, different people completed the pre- and post-intervention survey, so it is difficult to compare the impact of the intervention on resilience in nurse managers. A shorter version of the CDRS could have been used but would have limited the score's reliability. Also, the CDRS may not have been the best tool to assess resilience, as it may not have been sensitive enough to detect changes in resilience over a short timeframe.

Due to the number of questions in the CDRS, the author chose to exclude specific questions that might have benefitted the evaluation of the program. For example, the anticipated turnover scale could have been used to see if there was a relationship between resilience scores and nurse manager turnover. A question on the ease of use, specifically in the work setting, which is what the intervention was designed for, would have validated if the intervention was easy to use while at work. Another question on attitudes toward mindfulness, cognitive reframing, and gratitude might have identified resistance to adopting the intervention and informed the author that more work needed to be done to convince the nurse managers of the project benefits.

Finally, it is difficult to control the level of stress so that it is constant. When the post-intervention survey was administered, the organization encountered two sources of stress besides regular everyday stressors. The triple flu season, which included respiratory syncytial virus and influenza, in addition to COVID-19, was underway, resulting in increased hospitalizations and emergency department visits, which contributed to the busyness of the workplace. In addition, employees got the flu, which resulted in call-offs. Coupled with an increased end-of-year surgical volume, the nursing managers dealt with staffing and throughput issues. At the same time, the hospital was transitioning from one CNO to someone new to the organization. A change in a central nurse leadership role is significant. It can trigger stress due to uncertainty related to job security and other anticipated future changes, which directly impact the nurse manager. These added stressors could have negatively impacted resilience scores.

Conclusions

The nurse manager's role is key to meeting the organization's strategic goals; however, their effectiveness can suffer from burnout. Nurse managers suffer from burnout more than other

nurse leader roles. Preventing burnout in nurse managers is an organizational responsibility. While efforts should be made to decrease the stressors, the organization should also develop programs to enhance well-being. The project aimed to strengthen nurse manager resilience to promote well-being at work.

While the resilience scores did not demonstrate a change, there was an increase in the nurse managers' use of mindfulness, cognitive reframing, and gratitude practices. More time may be needed to develop resilience skills fully. In addition, the amount of stress and burnout at the time pre-intervention surveys were administered may have been less than the post-intervention survey timing. The tri demic was on the rise, which led to increased hospitalizations and staffing challenges as patients, employees, and their families became sick. In addition, there was a change in the CNO, who left before a replacement was found. This change left many leaders wondering what changes the new leader would bring. Resilience scores may have been worse without the use of the toolkit.

The toolkit will continue to be given to new nurse managers during their orientation to the organization. A 6-month post-intervention survey will be administered to obtain resilience scores to ascertain if there is a possible improvement in resilience with continued practice, to see if nurse managers continue using the toolkit, and to request feedback itself. Some nurse managers may need more structure, reminders, or coaching on using the toolkit. In addition, the student plans to expand the project to clinical nurse supervisors in the hospital to enhance resilience in future nurse managers. The student will work on obtaining funding for the program from the hospital or the hospital's foundation. At the time of this writing, the hospital's previous CNO was permitted to implement the toolkit at an 800-bed healthcare system in Chicago.

Resilience in nurse managers, especially new nurse managers, is not an option. Suppose leaders need to come to the job with resilience. In that case, it must be developed to retain them and to have nurse managers who effectively lead their employees to reach the hospital's strategic goals, which are satisfied employees providing quality patient care.

Section VI: Funding

The CNO funded the project and supported the student's time needed to implement the project. No other funding was acquired for this project.

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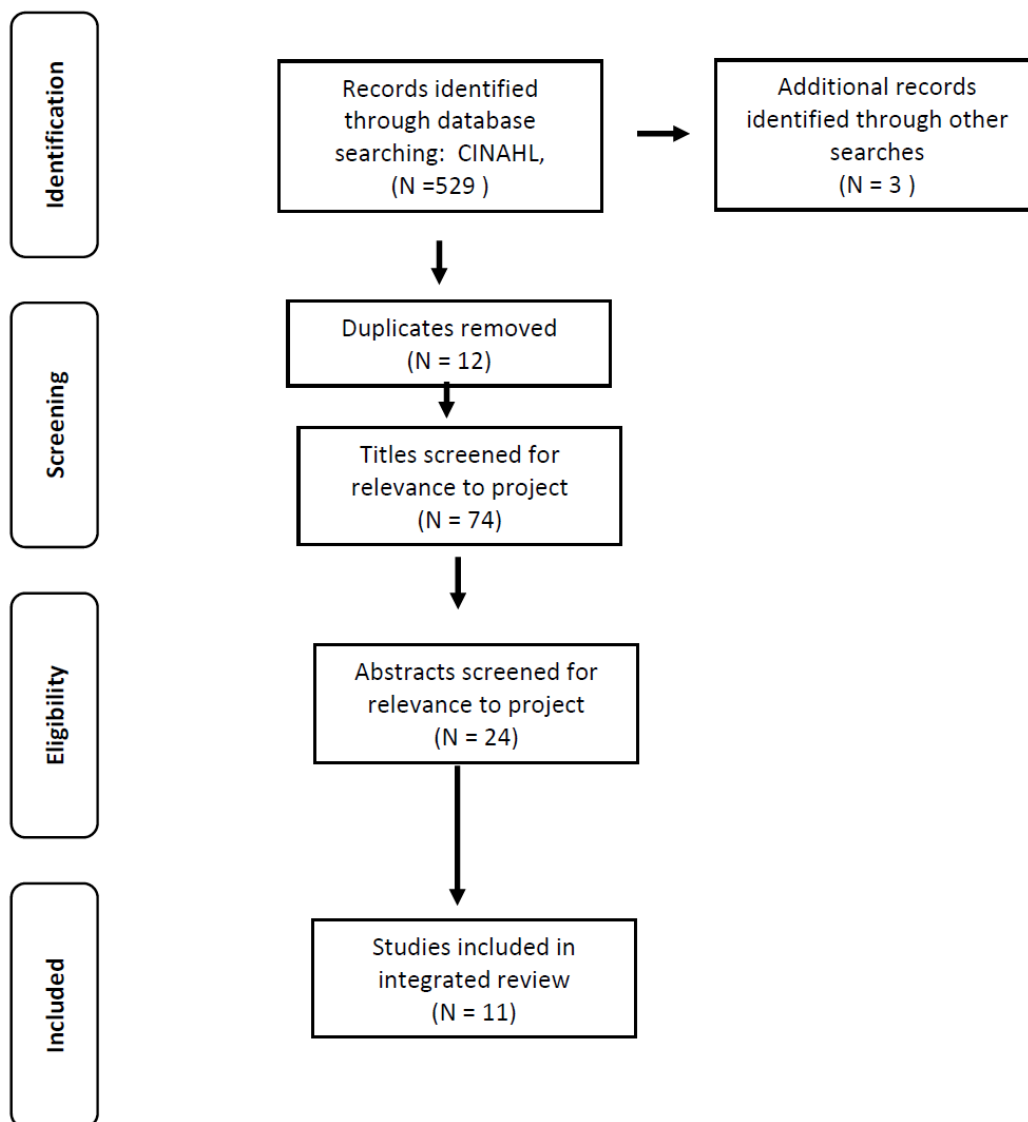
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Appendix A. Literature Search Flow Diagram

Appendix B. Evaluation Table

Article	Level/ Quality of Evidence	Intervention	Measurements	Results
Andersen et al. (2021)	II-A 142 nurses	Toolkits with written instructions, with six activities. Surveyed at baseline (pre-) and 10 other times (during shift) over 4 to 6 weeks, and at study conclusion. Surveys and demographic data collected via pencil/paper.	Resilience: Connor-Davidson 10 Stress via 10-point Likert scale	CD-RISC-10 score increased at time 2 ($df\ 166 = t-4.87, p < .001$). Further decrease at time 3 ($df\ 71 = t-5.88, p < .001$). Average stress score improved 1.75 points post-intervention ($p < .001$).
Cunningham & Çayir (2021)	II-A 106 healthcare professionals	10 sessions of daylong retreats	Anxiety measured via State-Trait Anxiety Inventory (Cronbach's alpha = .84) Intent to engage in mindfulness practices and self-efficacy measured via questionnaire (Cronbach's alpha = .90).	Mean anxiety scores pre-test: 33 (SD, 10.5). post-test 22 (SD, 5.9). $t_{105} = 15.08, P < .001$. Intent to engage in mindfulness practices and self-efficacy mean scores = 22 (out of 25). 79% of participants obtained scores ≥ 20 .
Davis & Batcheller (2020)	II-B	Education on resilience bundle, which includes ethical issue resolution, mindfulness reminders through cell phone applications, patient death process outline, case conference discussions, structured debriefings, discussions with colleagues and supportive staff,	Resilience measured via Connor-Davidson Resilience Scale (CD-RISC-25). - Training on personal resilience increased from 53% to 83%. - Awareness of available resources increased from 62% to 92%.	CD-RISC-25 scores: Pre 79.9 Post 83.4 ($p < .0001$) Pre-implementation preference of personal resilience-enhancing techniques – Top 3: 1. Exercise, social events with friends, and time with

Article	Level/ Quality of Evidence	Intervention	Measurements	Results
		leadership, social events, host site educational courses, employee assistance programs.		<p>family (47%) 2. Discussions with peers at work (32%) 3. Prayer and mindfulness (21%)</p> <p>Post-implementation preference of personal resilience-enhancing techniques: 1. Informal discussions with colleagues 2. Social events (89%) 3. mindfulness activities (52%) 4. case conference discussions (36%) 5. Organization provided educational activities (4%)</p>
Dossett et al. (2021)	II-B	SMART program – multi-modal program that teaches variety of skills to reduce physical, cognitive, emotional & behavioral effects of stress. 4 components to build resistance: mind-body skills, traditional meditation techniques, mini relaxations, yoga; traditional stress management techniques; healthy lifestyle behaviors (sleep, exercise, nutrition, social support); cognitive reappraisal and adaptive	Stress measured via Perceived Stress Scale 10 (PSS-10). Mental and physical health measured via PROMIS Global-10 scale. Job satisfaction measured via Physician Work Life Survey. Emotional exhaustion and depersonalization measured via Maslach Burnout Inventory.	Average number of sessions attended = 5.4. 41 completed demographic questionnaires. Significant decrease in perceived stress ($p < 0.001$, Cohen's $d = .78$); Significant improvement in global mental health ($p < 0.001$, Cohen's $d = 0.61$), physical health ($P = 0.045$, Cohen's $d = 0.35$), and global job satisfaction ($P = 0.047$, Cohen's $d = 0.34$).

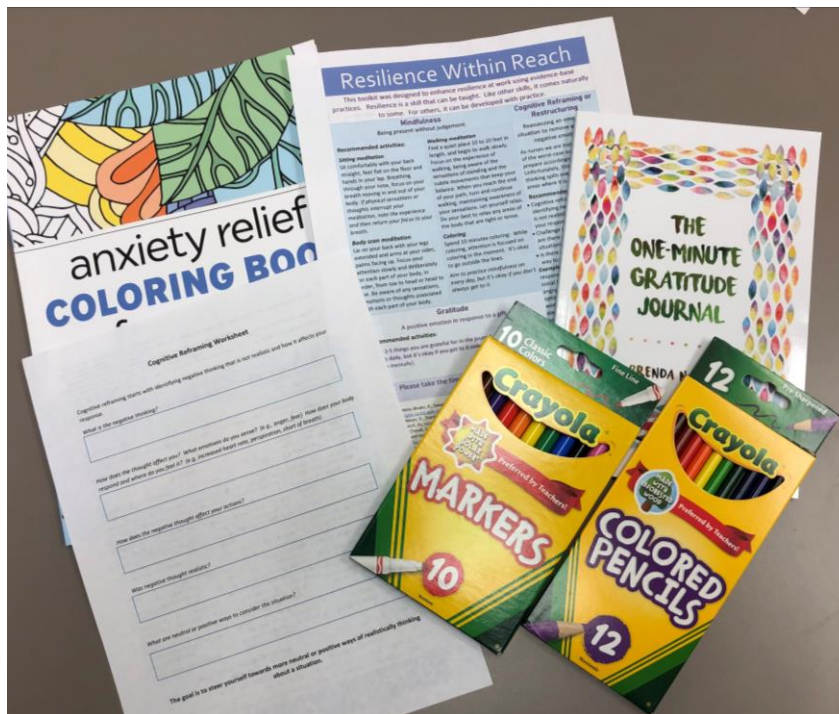
Article	Level/ Quality of Evidence	Intervention	Measurements	Results
		coping skills. 1.5 hours/week over 8 weeks.		No statistically significant improvement in emotional exhaustion or depersonalization.
Koprowski et al. (2021)	II-A	Resilience playbook	Resiliency: Connor-Davidson Resilience Scale – 25 (CDRS-25)	<ol style="list-style-type: none"> 1. CDRS score not significantly difference between RNs who did and did not participate in NL-led activities. 2. No significant difference in CDRS between NLs who implemented or did not implement NL activities. 3. No significant difference between CDRS scores between NL who implemented or did not implement playbook. 4. Significant improvement in CDRS by NL and RNs after implementation of self-initiated activities. 5. Significant improvement in CDRS scores if 3 or more activities implemented.
Magtibay et al. (2017)	II-IB	Stress Management and Resiliency Training (SMART) program – blended learning program includes any combination of web-based, independent reading, facilitated discussions over 20 weeks.	<p>Anxiety: Generalized Anxiety Scale</p> <p>Stress: Perceived Stress Scale</p> <p>Burnout: Copenhagen Burn Inventory</p> <p>Resilience: Connor-Davidson</p>	<p>Week 8 data showed improvement in all categories. Statistical significance in anxiety, personal burnout, and work-related burnout.</p> <p>At week 24, statistically significant improvement in all</p>

Article	Level/ Quality of Evidence	Intervention	Measurements	Results
			<p>Resilience Scale</p> <p>Happiness: Subjective Happiness Scale</p> <p>Mindfulness: Mindful Attention Awareness Scale</p>	<p>categories: anxiety decreased 45.2% ($P < .001$); stress reduced 29.8% ($P < .001$); personal burnout decreased 33.6% ($P < .001$); work-related burnout decreased 32.6% ($P < .001$); happiness and mindful attention increased ($P < .001$)</p>
Mintz-Binder et al. (2021)	II-B	Toolkits with written instructions at work	<p>Connor-Davidson Resilience Scale – 10 (Cronbach’s alpha > 0.80) measured pre- and post-study (2 times)</p> <p>Stress measured through research team created shift surveys for stress levels using 5-point Likert-type scale (1- low to 5-high)</p>	<p>Most used intervention in order:</p> <ol style="list-style-type: none"> 1. breathing exercises (570) 2. lavender inhaler (500) 3. coloring book (345) <p>No significant differences between effectiveness of interventions.</p> <p>More than 50% indicated intervention used was either very or extremely effective.</p> <p>Self-reported stress relief post-intervention increased. Level of stress relief increased over time. Frequency and length of time of intervention use increased over time.</p> <p>97.1% indicated desire to continue use of interventions after study</p>

Article	Level/ Quality of Evidence	Intervention	Measurements	Results
				Resiliency scores significantly increased ($df_{77} = -2.141, P < 0.02$)
Rosa-Besa et al. (2021)	II-B	Education program (1 day, 6-hour resilience promoting program)	Stress was measured via CHM scale (Cronbach's alpha of 0.90 to 0.91 for challenge items and 0.88 to 0.93 for hindrance items). Resilience measured via Connor-Davidson Resilience Scale (CD-RISC-25).	CD-RISC-25 score statistically significant increase post-intervention ($P < .005$). Challenge score statistically significant increase post-intervention ($P < .005$). No statistically significant increase in Hindrance score ($P > .05$). Significant positive correlation between resiliency and challenge stressors ($P < .05$). Significant positive correlation between challenge and hindrance stressors ($P < .005$)
Seidel et al. (2021)	I-B	Abbreviated mindfulness practice course (1-hour sessions offered 3 different days/times over 5 weeks)	Mindfulness measured via Mindfulness Attention Awareness Scale (MAAS) with 5 subscales of general, physical health psychological health, social relationship, environmental quality QOL measured via WHO Quality of Life-BREF Scale; Burnout measured via Maslach Burnout Inventory-Human Services Survey (MBI-HSS) with 3 subscales of emotional exhaustion,	Study 1: All scores improved immediately after training. Only QOL changed significantly. At 6 months, change in mindfulness was significant ($P = 0.009$). All measures sustained improved scores except WHO social relationships. Study 2: Mindfulness changed little over time for control group.

Article	Level/ Quality of Evidence	Intervention	Measurements	Results
			depersonalization, personal accomplishment.	Intervention group- mindfulness increased steadily over time, each score was significantly higher than preceding score. Burnout: emotional exhaustion score decreased over time, but not significant. Control group score remained steady. QOL: increased but not significant

Appendix C. Toolkit



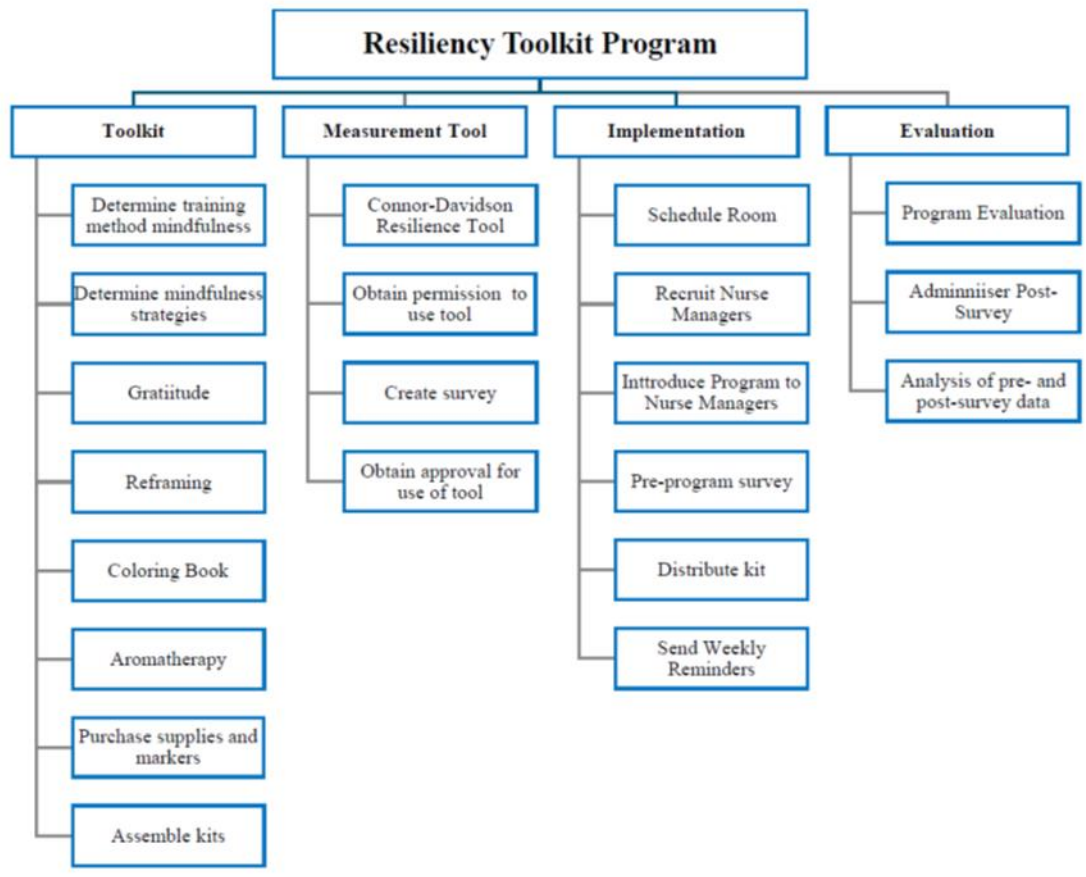
Appendix D. Gap Analysis

Future State	Current State	Gap	Action Item
Coordinated program to enhance resilience	Resources exist, but not well communicated or easy to access	One-stop source to locate resources and education on how to access.	Design and implement program that is easy to use by nurse managers.
Resilience-enhancing toolkit contents	None currently	Identify components of resilience-enhancing toolkit.	Conduct literature search to identify evidence-based components for toolkit. Obtain and create the toolkit. Implement/distribute toolkit.

Appendix E. Gantt Chart

DNP Project: Resilience-Enhancing Toolkit	2022											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Letter of support from agency			█									
IRB / non-research approval document			█									
Literature search			█									
Evidence evaluation table			█									
Gap analysis				█								
Gantt chart				█								
Work breakdown structure				█								
Responsibility/communication structure				█								
SWOT analysis				█								
Proposed budget					█							
IRB approval					█							
Create survey					█							
Create toolkit					█							
Recruit participants						█						
Pre-survey						█						
Educate on program						█						
Distribute toolkit						█						
Survey immediately post education						█						
Survey 6 weeks post-implementation								█				
Program evaluation								█				
Statistical analysis									█			
Program evaluation									█			

Appendix F. Work Breakdown Structure



Appendix G. Program Evaluation

On a scale of 1-5, where 1 is most difficult to use and 5 is easiest to use, answer the questions regarding the program.

	1 Very difficult to use	2	3	4	5 Very easy to use
1. The instructions were easy to understand.	1	2	3	4	5
2. I have used the following in the past:					
• Body scan	No	Yes			
• Coloring book	No	Yes			
• Lavender aromatherapy	No	Yes			
• Cognitive reframing	No	Yes			
• Gratitude journal	No	Yes			
• Mindfulness app	No	Yes			
• Other	No	Yes			
3. I used the following:					
• Body scan	No	Yes			
• Coloring book	No	Yes			
• Lavender aromatherapy	No	Yes			
• Cognitive reframing	No	Yes			
• Gratitude journal	No	Yes			
• Mindfulness app	No	Yes			
• Other	No	Yes			
4. If used, how frequently?	Once a week	Twice a week	Once a day	Twice a day	3 or more times/day
• Body scan	Once a week	Twice a week	Once a day	Twice a day	3 or more times/day
• Coloring book	Once a week	Twice a week	Once a day	Twice a day	3 or more times/day
• Cognitive reframing	Once a week	Twice a week	Once a day	Twice a day	3 or more times/day
• Gratitude journal	Once a week	Twice a week	Once a day	Twice a day	3 or more times/day
• Mindfulness app	Once a week	Twice a week	Once a day	Twice a day	3 or more times/day
• Other	Once a week	Twice a week	Once a day	Twice a day	3 or more times/day
5. Feedback/Recommendations for future programs					

Appendix H. Responsibility/Communication Matrix

Communication	Who (by/to whom)	Frequency	Goal	Route
Academic Advisors				
Rose Pelikan	Peggi Winter	Biweekly	Review project status, discuss barriers and updates, share progress	Email, zoom, phone calls
Rose Pelikan	Juli Maxworthy	As needed	To receive feedback from draft prospectus	Email, zoom if necessary
Project Sponsors (Corporate/System Nursing Leadership)				
Rose Pelikan	Giancarlo Lyle-Edrosolo (CNO)	Twice a week	Review project from a systems perspective, strategize about barriers and facilitators, provide updates	Email and in-person meetings
Site (Name Providence Saint John's Health Center) Leadership				
Rose Pelikan	Giancarlo Lyle-Edrosolo (CNO)	Once	Introduce the project plan and request site participation	Phone conference
Rose Pelikan	Giancarlo Lyle-Edrosolo (CNO)	Once	Introduce the project plan and request participation	Face-to-face
Rose Pelikan	Giancarlo Lyle-Edrosolo (CNO)	Once	Introduce the project plan and request letter of support	Face-to-face
Rose Pelikan	Nurse Managers	As needed	Discuss project, request participants, co-ordinate pre- and post-implementation site visits	In-person meetings

Appendix I. SWOT Analysis

	Helpful to Achieve the Objective	Harmful to Achieving the Objective
Internal	<p>Strengths</p> <ul style="list-style-type: none"> - Leadership Support - Improve nurse manager resilience, thereby decreasing burnout and turnover - Budget for supplies 	<p>Weaknesses</p> <ul style="list-style-type: none"> - Lack of available trainer for resilience - Time constraints (conflicting schedules, competing priorities) - Resistance by nurse managers to try resilience-enhancing strategies in earnest
External	<p>Opportunities</p> <ul style="list-style-type: none"> - Extend project to other leaders and employees - Optimize use of available resources - Resilient nurse managers more effective to meet organizational goals (e.g., quality patient care, staff retention, cost savings; various awards) 	<p>Threats</p> <ul style="list-style-type: none"> - Nurse manager turnover before project is completed - Lack of funding

Appendix J. Budget

Expenditure	Expense	Total
Resiliency enhancing toolkit	\$75/kit x 13 nurse managers = \$975	\$975
Permission to use CD-RISC	\$33 (one-time charge for unlimited use)	\$33
Toolkit orientation	2 hours/participant; average nurse manager salary \$75/hour x 13 nurse managers	\$1,950
Program facilitator	Professional Facilitator salary = \$100/hour <ul style="list-style-type: none"> • 2 hours for orientation • 4 hours to prepare content Total 6 hours	\$600
Total Costs		\$3,558

Appendix K. Nurse Manager Turnover Worksheet

Number of Managers	Percentage of Intent to Leave	Projected Total Turnover (FTE)	Turnover due to Burnout (46%)	Turnover Not due to Burnout (54%)
14	20%	2.8	1.28	1.5

Appendix L. Cost Analysis

	Current State	Year 1	Year 2
Cost to replace nurse manager (3% yearly increase)	\$113,084	\$116,477	\$119,970
Number of nurse manager positions	14	14	14
Nurse manager turnover rate	2.8	1.5 (new turnover)	1.5
Projected net loss	\$316,635	\$177,045	\$182,354
Cost of program	\$3558	\$3558	\$3558
Total cost	\$320,193	\$180,603	\$182,954
Cost savings from decreased turnover	0	\$139,590	\$155,961
Return on investment	0	3,923%	4,383%

Appendix M. Return on Investment

	Current State	Year 1	Year 2
Cost to replace nurse manager (3% yearly increase)	\$113,084	\$116,477	\$119,970
Number of nurse manager positions	14	14	14
Nurse manager turnover rate	2.8	1.5 (new turnover)	1.5
Projected net loss	\$316,635	\$177,045	\$182,354
Cost of program	\$3,558	\$3,558	\$3,558
Total cost	\$320,193	\$180,603	\$182,954
Cost savings from decreased turnover	0	\$139,590	\$155,961
Return on investment	0	3,923%	4,383%

Appendix N. Connor-Davidson Resilience Scale

Connor-Davidson Resilience Scale 25 (CD-RISC-25) ©

For each item, please mark an "x" in the box below that best indicates how much you agree with the following statements as they apply to you over the last month. If a particular situation has not occurred recently, answer according to how you think you would have felt.

	not true at all (0)	rarely true (1)	sometimes true (2)	often true (3)	true nearly all the time (4)
1. I am able to adapt when changes occur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I have at least one close and secure relationship that helps me when I am stressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. When there are no clear solutions to my problems, sometimes fate or God can help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I can deal with whatever comes my way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Past successes give me confidence in dealing with new challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I try to see the humorous side of things when I am faced with problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Having to cope with stress can make me stronger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I tend to bounce back after illness, injury, or other hardships.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Good or bad, I believe that most things happen for a reason.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I give my best effort no matter what the outcome may be.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I believe I can achieve my goals, even if there are obstacles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Even when things look hopeless, I don't give up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. During times of stress/crisis, I know where to turn for help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Under pressure, I stay focused and think clearly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I prefer to take the lead in solving problems rather than letting others make all the decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I am not easily discouraged by failure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I think of myself as a strong person when dealing with life's challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I can make unpopular or difficult decisions that affect other people, if it is necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. In dealing with life's problems, sometimes you have to act on a hunch without knowing why.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I have a strong sense of purpose in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I feel in control of my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I like challenges.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I work to attain my goals no matter what roadblocks I encounter along the way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I take pride in my achievements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Add up your score for each column 0 + _____ + _____ + _____ + _____

Add each of the column totals to obtain CD-RISC score = _____

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Appendix O. Permission to Use Connor-Davidson Resilience Scale



Becky Williams, LCSW

to me ▾

May 8, 2022, 10:37 AM (6 days ago)



Hello Rose,

Your check arrived yesterday, thank you. Attached are the English CD-RISC-10 and 25 scales, the manual, and scoring details.

Best of luck in your work,

Becky



On Fri, May 6, 2022 at 5:09 PM Becky Williams, LCSW <risc.beckywilliams@gmail.com> wrote: Text

Great, thank you for letting me know, Rosarina. I will keep an eye out for the check and contact you with the scales when I receive it.

Take care,

Becky

On Fri, May 6, 2022 at 3:13 PM Rosarina Pelikan <rpelikan2@dons.usfca.edu> wrote:

Hi Becky, Just want to give you a heads up that I sent the attached request with a check via snail mail since i don't have paypal. Looking forward to being able to use the tool. Thank you. rose

On Tue, Feb 22, 2022 at 4:31 PM Becky Williams, LCSW <risc.beckywilliams@gmail.com> wrote:

Thanks, Rose. Yes, that is what I was asking.

Attached is the user agreement for the English CD-RISC-10 & 25. Please review, sign, and return with payment. Then we will send you the scales via email. Please let me know if you have any questions.

Best,

Becky

Dear Rose,

Thank you for your interest in the Connor-Davidson Resilience Scale (CD-RISC). We are pleased to grant permission for use of the English CD-RISC-10 & 25 in the project you have described under the following terms of agreement:

1. You agree (i) not to use the CD-RISC for any commercial purpose unless permission has been granted, or (ii) in research or other work performed for a third party, or (iii) provide the scale to a third party without permission. If other colleagues or off-site collaborators are involved with your project, their use of the scale is restricted to the project described, and the signatory of this agreement is responsible for ensuring that all other parties adhere to the terms of this agreement.
2. You may use the CD-RISC in written form, by telephone, or in **secure electronic format whereby the scale is protected from copying, downloading, alteration, repeated use, unauthorized distribution or search engine indexing**. In all use of the CD-RISC, including electronic versions, the full copyright and terms of use statement must appear with the scale. The scale should neither be distributed as an email attachment, nor appear on social media, nor in any form where it is accessible to the public and should be removed from electronic and other sites once the activity or project has been completed. The RISC can only be made accessible in electronic form after subjects have logged in through a link, password or unique personal identifier.
3. Further information on the CD-RISC can be found at the www.cd-risc.com website. The scale's content may not be modified, although in some circumstances the formatting may be adapted with permission of either Dr. Connor or Dr. Davidson. If you wish to create a non-English language translation or culturally modified version of the CD-RISC, please let us know and we will provide details of the standard procedures.
4. Three forms of the scale exist: the original 25 item version and two shorter versions of 10 and 2 items respectively. When using the CD-RISC 25, CD-RISC 10 or CD-RISC 2, whether in English or other language, please include the full copyright statement and use restrictions as it appears on the scale.
5. A student-rate fee of \$ 33 US is payable to Becky Williams at 936 Ridgeway Avenue, Signal Mountain, TN 37377, USA either by PayPal (www.paypal.com, account risc.beckywilliams@gmail.com) or cheque. Money orders are not accepted.
6. Complete and return this form via email to risc.beckywilliams@gmail.com. **The scale will only be sent after the signed agreement has been returned.**
7. In any publication or report resulting from use of the CD-RISC, you do not publish or partially reproduce items from the CD-RISC without first securing permission from the authors.

If you agree to the terms of this agreement, please email a signed copy to the above email address. Upon receipt of the signed agreement, we will email a copy of the scale. For questions regarding use of the CD-RISC, please contact Becky Williams at risc.beckywilliams@gmail.com. We wish you well in pursuing your goals.

Sincerely yours,

Becky Williams.

Agreed to by:

	<u>3/1/2022</u>
Signature (printed)	Date

Executive Director, Critical Care Services / DNP Student
Title

Saint John's Health Center / University of San Francisco
Organization

Appendix P. Statement of Determination

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: <http://answers.hhs.gov/ohrp/categories/1569>



UNIVERSITY OF | School of Nursing and
SAN FRANCISCO | Health Professions

DNP Statement of Determination

Evidence-Based Change of Practice Project Checklist Outcome

The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

Project Title:

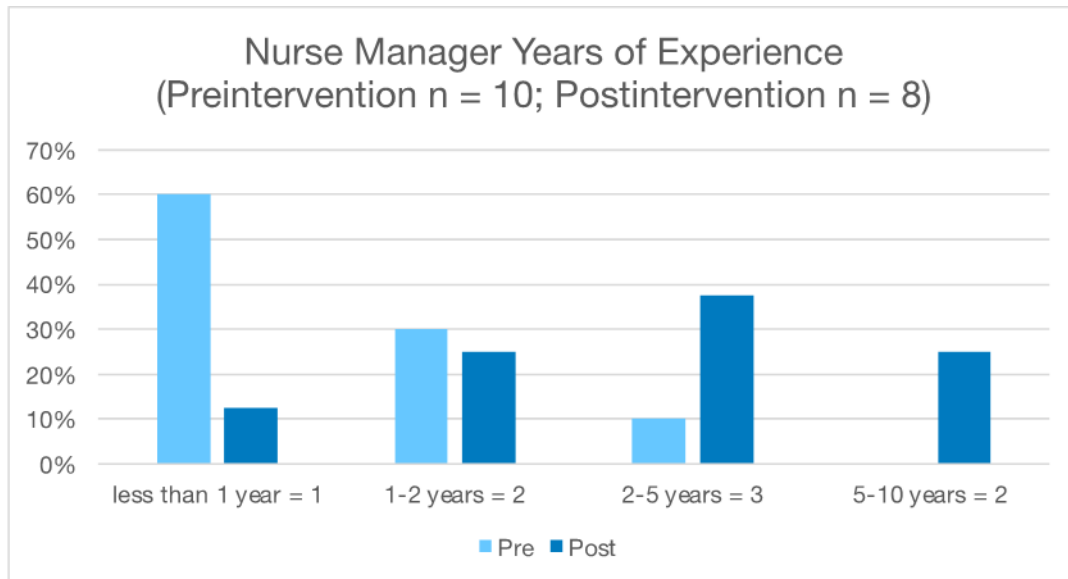
Enhancing Nurse Manager Resilience Through a Resiliency Enhancing Bundle.

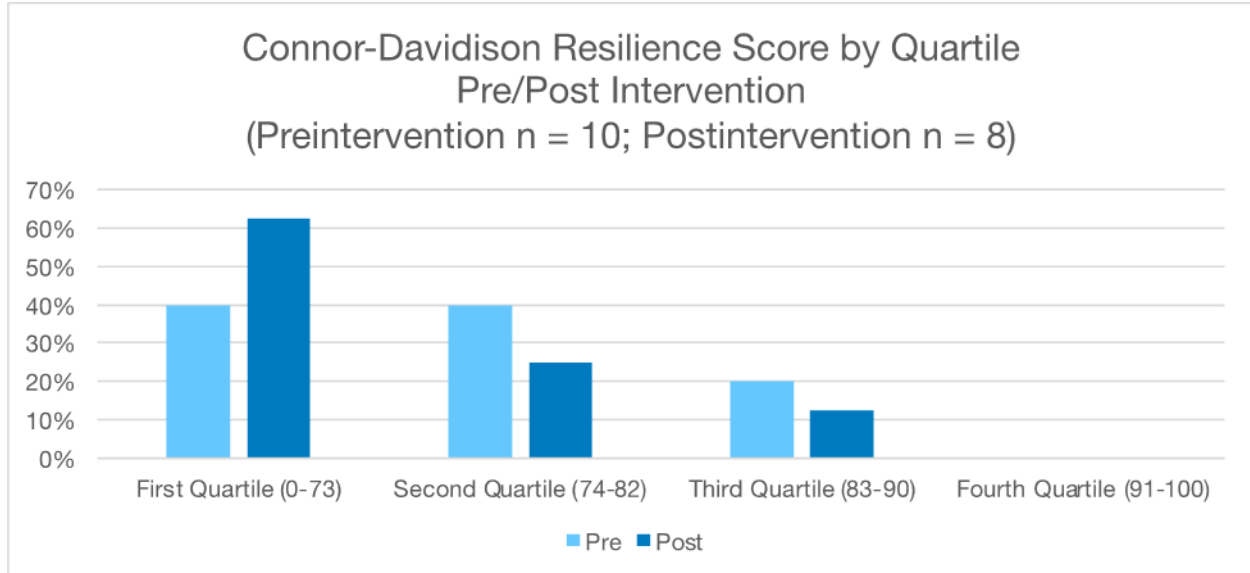
- This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). **Student may proceed with implementation.**
- This project involves research with human subjects and **must be submitted for IRB approval before project activity can commence.**

Comments:

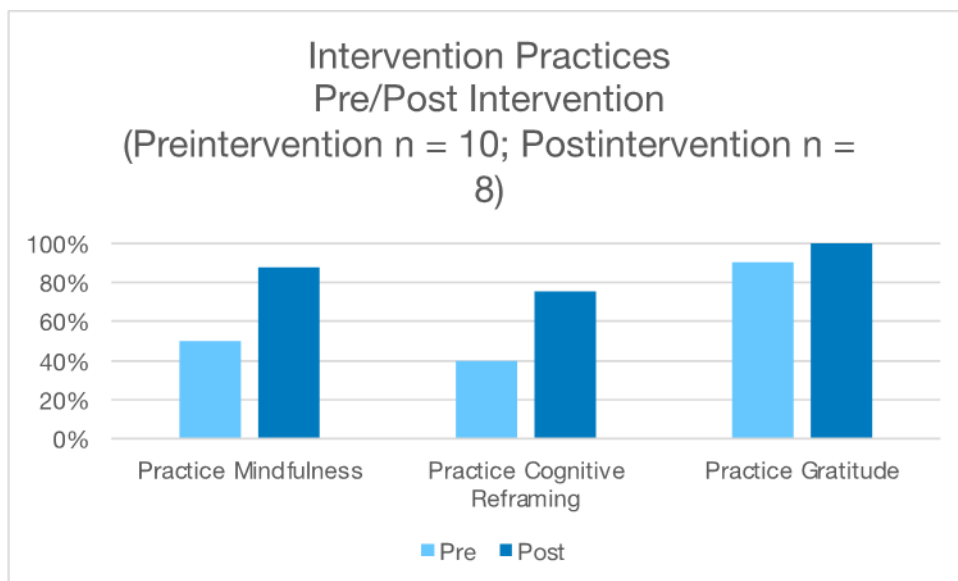
Student Last Name:	Pelikan	Student First Name:	Rosarina
CWID Number:	██████████	Semester/ Year:	Spring 2022
Student Signature:		Date:	2/18/2022

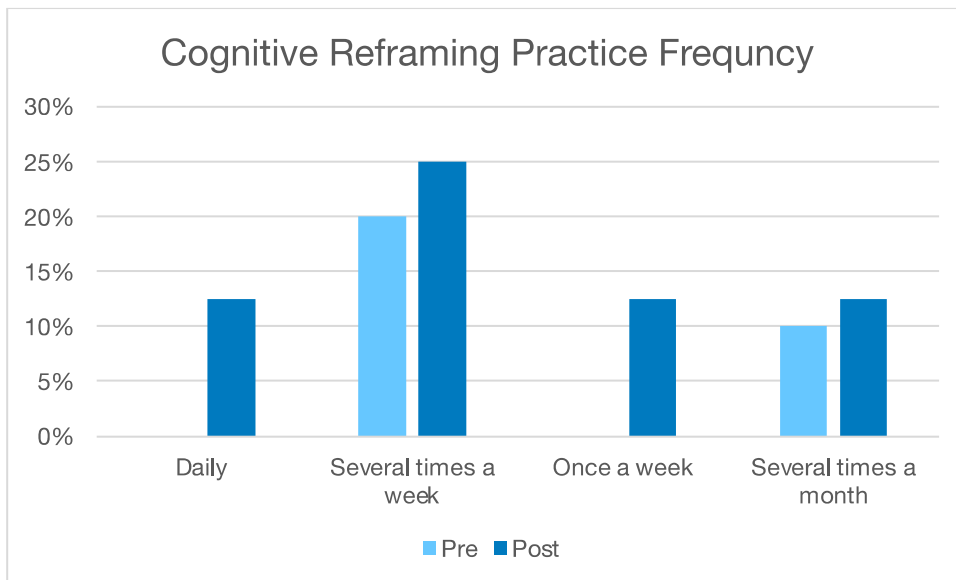
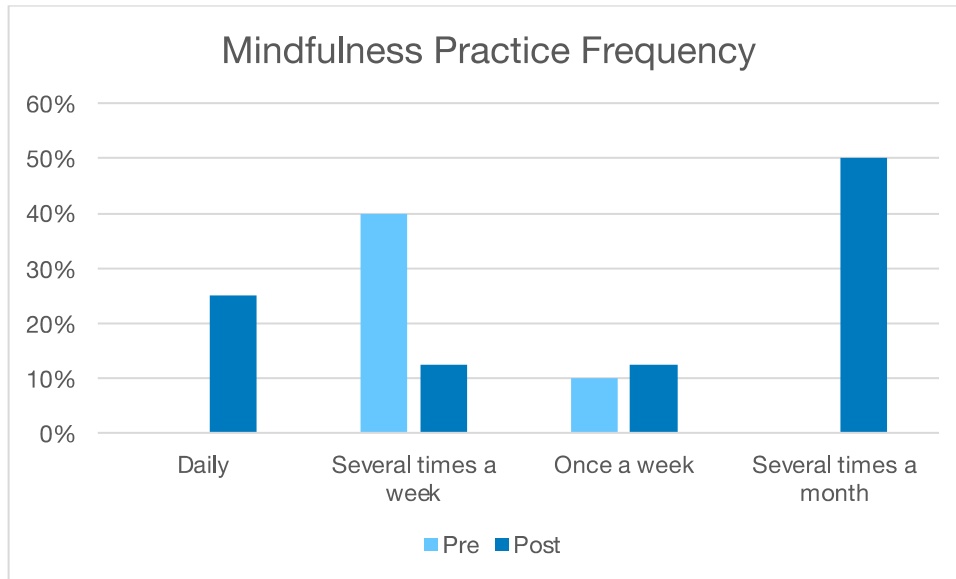
DNP Department Approval 5/8/14

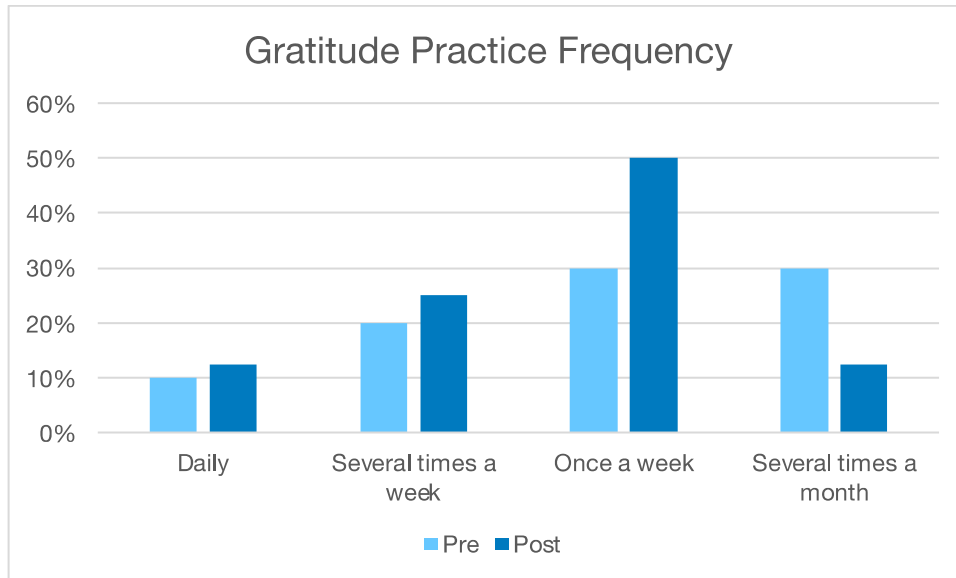
Appendix Q. Nurse Managers by Category and Years of Experience in Role

Appendix R. Connor-Davidson Resilience Score by Quartile

Appendix S. Intervention Practices



Appendix T. Resilience-Enhancing Strategies Practices Frequencies of Use



Appendix U. Agency Letter of Support

February 21, 2022

Dear Dr. Winter, and USF Executive Leadership Faculty,

I am writing to confirm that Rosarina Pelikan has my authorization and support to evaluate and implement her DNP practice change project related to enhancing resilience in nurse managers at Providence Saint John's Health Center. She will need to obtain approval from the Providence research committee and obtain all required approvals as determined by the Providence Health System's IRB.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Lyle-Edrosolo', written over a horizontal line.

Giancarlo Lyle-Edrosolo, DNP, RN, CENP, FAONL

Chief Nursing Officer

Providence Saint John's Health Center

2121 Santa Monica Boulevard

Santa Monica, CA 90404

Giancarlo.Lyle-Edrosolo@providence.org

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