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# A Practice-Based Inquiry Into the Correlation Between Nursing Retention Rates and Resiliency

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**Doctor of Nursing Practice**

Nannette W. Glenn, Ph.D.

Dr. Nannette Glenn, Dean of the College of Graduate and Professional Studies

Date: June 30, 2023

Doctoral Project Committee:

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Dr. Linda Gibson, Chair

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Abilene Christian University

School of Nursing

# A Practice-Based Inquiry Into the Correlation Between Nursing Retention Rates and Resiliency

A doctoral project submitted in partial satisfaction

of the requirements for the degree of

Doctor of Nursing Practice

by

Kelly J. Watson

August 2023

## Dedication

This project is dedicated to my brother BG, Jeff McCarter, and the soldiers, veterans, and nurses of the U.S. Army Nurse Corps, who have selflessly served our nation as the frontline. I value you, and I am grateful for your sacrifice and service.

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I would like to thank Dr. Linda Gibson for her continued support throughout this program. It's been a joy to learn from her. I would also like to thank Dr. Sandra Cleveland, who took the time to guide and finetune the direction of my project. I would also like to thank Dr. Colleen Marzilli for being on my committee. I would also like to thank Dr. Julie Lane for her support during this last stretch of the program. I would like to thank Dr. Mary McCarthy for her mentorship and kindness. I would like to thank BG Kate Simonson for her support and leadership for this project. I would also like to thank my husband Barry, my mother, and my girls for cheering me on and being patient with me. I would like to thank Emma Simon for her friendship, encouragement, and support. I would finally like to acknowledge that this entire project was not done with my own strength or natural capabilities. I am thankful and content depending on Jesus for wisdom, strength, and the tenacity to do the hard things that matter.

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## Abstract

Nurses are the frontline in the security of the United States. Their wellbeing and retention in the workforce is of the utmost of importance. Nurses are leaving at increasing levels with just over 27% turnover rates across the nation in 2021. Organizations are experiencing increasing fiscal losses and the average loss for a nurse leaving is just over $46,000. The prioritization of nurses' wellbeing and taking steps to address policy that promotes the sustainability of this very valuable workforce has the potential to pay high dividends for nurses individually, the security of the nation, and the good of the organization. The researcher utilized a survey to examine the correlation between nursing retention rates and resiliency to provide evidence to guide best practices in nursing retention initiatives and interventions for increasing nursing resilience. The researcher used two tools, the Casey-Fink Nurse Retention Survey and the Connor-Davidson Resilience Scale, along with a demographic section designed to collect quantitative and qualitative data to hear the nurse, gain insight, and discover interventions to meet those needs. This survey through SurveyMonkey was disseminated to members of the Army Nurse Corps and 96 returned the survey. The participants were tenured nurses with a mean years of nursing of 18.26 years. Projected outcomes include interventions for a more prepared, healthier, more resilient workforce that can meet the current and future demands or threats against our nation. Outcomes also included improved value-based care, increased nursing retention, and decreased fiscal loss at the organization-level. From evidence gained through surveying nurses, the data were analyzed using Kendall rank correlations to examine the strength of the correlation between resilience and retention variables. The findings displayed high levels of stress in this workforce, with 67.25% of nurses stating high levels of stress and only half of them having a mentor. The findings indicate the need for work conditions conducive to a healthier work-life balance, such as

the positive correlation between the availability of shorter shifts and increased retention. The current healthcare environment calls for an immediate and drastic change to care for and retain the nursing workforce and has the potential to lower costs for organizations and provide quality, value-based care, holistic health and wellness for nurses, and better patient outcomes because of their wellness.

*Keywords:* nursing retention, resiliency, nursing welfare, attrition, nurse advocacy, work-life balance

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# Chapter 1: Introduction

Nurses are the front line of healthcare, and a strong front line is necessary to the welfare of a community. Recently categorized as invaluable in the fight against COVID-19, local communities have made efforts to show support for healthcare workers. In addition, major companies, such as Budweiser (2020), Dove (2020), and Google (2020), centered marketing campaigns around healthcare appreciation, portraying nurses as "healthcare heroes." While nurses are invaluable, behind the corporate exploitation exist complexities of human beings struggling to stay resilient, both mentally and physically. The commercials and public recognition are just a glimpse of the reality many nurses are facing, and these efforts are in vain if the nurse is not truly supported through practical intervention (Billings, 2021).

U.S. healthcare executives and nursing administration are aware of the precarious conditions that healthcare workers are facing, with a nationwide hospital nursing turnover rate of 25.9% in 2021 (Nursing Solutions Incorporated [NSI], 2022). This percentage shows an increase in attrition from 2020's rate by 5.5% (NSI, 2021). While most hospitals have retention initiatives of some sort, few of the organizations can connect those initiatives to measurable success (NSI, 2021). In fact, 95.5% of separations were attributed to voluntary termination (NSI, 2022). Some healthcare corporations have responded to the crisis by hiring nurse retentionists, whose primary goals are to establish relationships with nurses and create innovative and creative processes that advocate for their holistic wellness (Sattler et al., 2021). This approach has displayed some improvement in retaining nurses; however, the financial and logistical burden of nurse attrition is still felt by healthcare organizations.

The U.S. Army has also struggled with retaining nursing staff. In an attempt to raise retention rates and help with the efficiency of care, the Army Nurse Corps launched the Patient

CaringTouch System in 2011 (Miller, 2020). A distinct parallel exists between civilian nurses and nurses who have served in the United States Nurse Corps, both in education and retention levels (Miller, 2020). Just as in civilian nursing, the Army Nurse Corps mission is to offer creative, research-backed care that prioritizes the protection of human dignity and advocacy for each individual patient (Army Medicine, 2020).

The challenging healthcare environment of increasing nursing attrition calls for a dramatic, immediate culture shift in the organizational and operational support of frontline providers. In order to identify the potential correlation between the two variables of nursing retention and resilience, stay surveys—a questionnaire or tool that examines factors of motivation and contentment within the organization, including reasons for continued tenure (Isley et al., 2022)—were conducted with United States Army Reserve nurses. I hoped that data would show a correlation between a nurse's levels of resilience and retention, resulting in potential program suggestions and interventions to increase both variables. These results will hopefully be translated into interventions to benefit civilian healthcare organizations and nurses with the end goal of healthier organizations with better profit margins, as well as a more resilient workforce.

**Overview of Problem Statement**

Healthcare organizations and the Army are both experiencing the financial and logistical burden of increased attrition rates (Miller, 2020). The average fiscal loss for a registered nurse is around $46,100, but can range from $33,900 to $58,300, depending on the geographical area and level of training. The result has been that a standard hospital lost around $7.1 million in 2021 as a result of nursing turnover (NSI, 2022).

While the presence of fiscal loss is evident, there is limited research on the connection between nursing resilience interventions and retention initiatives. In 2021, hospitals set a goal to "reduce turnover by 4.8%," however in an ironic turn of events, "turnover increased by 6.4%" (NSI, 2022, p. 3). Nurses are leaving their profession at a higher volume than ever, with an overwhelming 27.1% average turnover rate for hospitals across the nation in 2021 (NSI, 2022). Nursing Solutions concluded their 2022 National Health Care Retention & RN Staffing Report emphasizing the dire need for hospitals to care for their nurses, describing the impact that the organization has on the overall culture (NSI, 2022). This research emphasized the impact of valuing relationships with their employees to create a trusting environment that would equal better staying power (NSI, 2022).

**Background**

Nurses are taught to make educated, wise, ethical, and moral decisions for their patients. They are experts at creating innovative plans of care that promote the well-being of their patients; however, when it comes to their own self-care, issues like secondary traumatic stress, moral injury, and intense physical, ethical, and emotional demands run rampant (Jinkerson, 2016). Due to the COVID-19 pandemic, as well as the already burgeoning workplace and culture crises in modern healthcare, nurses can find themselves in an array of trauma-like mental states. This trauma can actually reorganize and alter how a nurse's mind functions and manages perceptions, altering how they think, what they think, and even their capacity to hold and retain thoughts (van der Kolk, 2014).

The COVID-19 pandemic has, in an even harsher light, brought nurses' resiliency to the forefront. The mental health impact of caring for patients with COVID-19 has been attributed to a higher likelihood of displaying indicators of PTSD, as well as other mental illnesses (Kreh et

al., 2021) in nurses. This phenomenon demonstrates the necessity of developing resiliency in order to work through traumatic events (Kocjan, 2021). Research was necessary to operationalize interventions and organizational processes focused on increasing resiliency levels in nurses (Kocjan, 2021).

Nurses may take on one of many approaches to deal with the intensity of their positions, often displaying apathy, escapist behaviors, or excessive loyalty. One nurse described their feelings while working as the following: "I am just numb, pretty much running on automatic pilot, which is how I get through the shift and I do not remember half the patients that I care for or what I do for them" (Wicks et al, 2021, p. 2). Due to their exposure to high-stress situations, nurses have been faced with a direct attack on their capacity for resilience (Afshari et al., 2021).

It is imperative that healthcare providers like nurses are healthy emotionally, mentally, and physically. A nurse's ability to advocate for their own wellness has a direct correlation to their capacity to provide high-quality, safe patient care. Therefore, in order to be properly equipped to face the next threat to human health or even just the next shift, it was imperative to investigate the connection between resilience and retention.

Nurses have traditionally been the ones to "pull themselves up by their bootstraps," which is, ironically, more damaging. Regardless, it seems they abide by an unwritten contract that they are the first to serve and the last to be served, often damaging their own health before risking the health of others (Kreh et al., 2021). There are some striking resemblances between nurses and military service men and women, even in the exchange of terms like *moral injury*, which originated within the military (Hofmeyer et al., 2020). Just as nurses pull themselves up by the bootstraps, servicemen and women constantly put their needs on hold while serving the nation. There is also common suffering in families of military servicemembers and families of

nurses. Nurses strive to be all-encompassing, but tend to have unrealistic expectations that they should be strong enough to work long hours and be able to accomplish all of the demands from their homelife as well. This phenomenon has been described as *superwoman syndrome* (Crane, 2016).

It is not just the frontline workers who suffer, but rather the entire family unit. The exhaustion nurses feel is not a normal fatigue, but rather a draining of wellness and energy from the demands of work, which ends up translating to the atmosphere in the home (Ogińska-Bulik, 2021). There is a struggle to maintain a healthy work-life balance when there are limited resources, time, and energy to maintain all elements of work and home life.

**Purpose**

This evidenced-based project sought to examine the correlation between the variables of retention and resilience in order to create buy-in for the aid, support, and retention of the nursing workforce. By surveying Army Reserve nurses, I wanted to find that common themes pertaining to retention and resilience levels of nurses would arise, allowing for the development of resilience and retention initiatives that produced measurable outcomes. The resilience support measures and processes translated into wellness promotion for the nurse. Examples of potential outcomes included accessible mental health resources, interventions to increase resiliency of nurses, adequate time for meals during shifts, or the reorganization of staff resources to equalize better working conditions. On a macro scale, the results of this research could serve to provide recommendations for future advocacy programs and management processes that potentially yield a more profitable healthcare organization with decreased nursing attrition.

**Significance**

The potential long-term effects of lowered nursing attrition rates includes the continued security of the nation by means of adequately staffed organizations, prepared to meet the demands of future threats to the health of the nation. Resilience is highly significant in developing a workforce that is ready and equipped for whatever comes, as well as the creation of a healthy workplace that has cared for itself first and now is ready to care for its patients. Nurses have a higher potential for retention when their needs are met and when they have an advocate and support system in place. In repairing the nursing shortage, organizations would have a higher capacity to resolve staffing issues, directly impacting a nurse's workload. When prompted to share their greatest workplace concerns in a study, a group of 69 healthcare workers narrowed it down to eight, which they organized into foundational topics of resilience, including listening, guiding, training, and advocating (Hofmeyer et al., 2020).

As this is the type of care nurses desire, it must be prioritized, cultivated, and supported. Just as military service men and women train vigorously to prepare for battle, nurses train and prepare for life and death situations. When developing intervention practices for a community, it is pivotal that they are established with a focus on the people of interest. This practice is evidenced in Army Medicine's five key values, which center around the soldier. This includes support from their circle of influence, including their leaders, so that every member is esteemed and respected (Army Medicine, 2020).

For these reasons, nursing retention initiatives are up-front investments that have the potential to yield immediate positive effects, not just limited to saving healthcare organization funds and retaining mentally and physically healthier nurses. The demand for nurses nationwide

is estimated to increase 33% by 2025, and while the Army has displayed attrition percentage concerns, they are noticeably lower than in the clinical setting (Oblea, 2019).

**Nature of the Project**

I developed this project to provide evidence to guide best practices for nursing resiliency and retention. The approach also included data collection by a survey, analysis of data specific to the correlation of the variables, and the dissemination of information for practical implementation (Moran et al., 2020). A step-by-step approach to thematic analysis and trustworthiness was utilized for this project, detailed at length in Nowell's "Thematic Analysis: Striving to Meet the Trustworthiness Criteria" (2017). The study emphasized transparency and logical steps for generating initial findings as well as categorizing them, and finally, operationalizing and disseminating them.

For this project, I utilized qualitative corroboration by thematic analysis to analyze, organize, provide description of, and report common themes and phrases found within the survey and data set (Nowell, 2017). The project also targeted buzz words that indicated negative or positive experiences through the open-ended questions presented in sections 2 through 4 of the Casey-Fink Nurse Retention Survey.

To encourage trustworthiness in this project and mitigate potential for human error, credibility was established by installing a review process modeled after the flawless execution model. The model involved a cyclical process of planning, briefing, execution, and debriefing. I completed this process was completed with the assistance of subject matter experts and professional mentors.

The intention of this project was to focus on the advancement of organizational and operational support of valuable frontline workers through policy recommendations for retention

of nurses and interventions that promote resilience in nurses. Research yielded possible correlations between the variables of retention and resilience, and I analyzed qualitative phenomenological data to uncover common themes for future processes. This approach best suited quantitative data with qualitative data to corroborate, as it relied not only on statistics but on the experiences of the nurse. Due to organizations' dire need to increase nursing retention rates, the goal of this project was to clarify the specific factors affecting nursing attrition rates and to explore the connection between resilience and retention.

**Practice-Guided Question**

The question guiding the inquiry of this study was the following: Is there a correlation between the variables of resiliency and retention in the Army Reserve nursing workforce? To further understand the complexities of this nationwide issue, I investigated a secondary question: What elements of the collected data can be translated into civilian health care processes for nursing retention?

**PICO**

Population: The population was Army Reserve nurses in various locations across the nation. In order to translate the survey findings into the wider nursing population, participation in the survey was targeted toward Army Reserve nurses who also work in civilian healthcare organizations.

Intervention: The intervention was the utilization of surveys (demographic, Casey-Fink, and CD-RISC) to gather quantitative research data in order to examine the relationship and possible correlation between nursing retention and resilience. To corroborate, a qualitative element was employed to yield common themes that I analyzed to create recommendations to increase retention and resiliency.

Comparison: Not applicable.

Outcome: Recommendations for increasing nursing retention and overall resilience.

## Definitions of Key Terms

**Resilience.** The presence of positive adaptation in face of significant adversity (Velickovic et al., 2020, p. 1).

**Post-traumatic stress disorder (PTSD).** As defined by Schuster and Dwyer (2020, p. 1), PTSD "is a psychiatric disorder that can occur from direct or indirect exposure to traumatic events and nurses are at risk due to their indirect and/or direct exposure to traumatic situations while providing care to vulnerable populations."

**Psychological Resilience.** The ability to maintain healthy psychological functioning despite experiencing stressors or trauma and the ability to "bounce back" from or adapt to stressful physical or emotional experiences (Bezdijian et al., 2017, p. 2).

## Scope and Limitations

With over 11,000 Army Reserve nurses nationwide, the scope of this project had the potential to be wide due to its availability as an online survey (Army Nurse Corps, 2011). Potential biases were due to the inclusion of Army Reserve nurses only. Additionally, the eligibility requirements of the Army Nurse Corps had potential to create bias in the study. Requirements included being a U.S. citizen or permanent resident between 21 and 42 years of age with a bachelor's degree, associate's degree, or diploma in nursing from an accredited institution, as well as a valid practicing license (Army Nurse Corps, 2011).

Constraints in the conduction of this research included the time range for participants to complete the survey, as well as the range of time allotted to the candidate for completion of the project. There was also the potential that the long-lasting effects of the COVID-19 pandemic

influenced participants' perception of their overall experience in the workforce. While insight into their experience during the pandemic may have proved valuable, it would not have fully encapsulated their careers. Financial constraints existed for the candidate due to time taken to do the research without pay and the demand that research took away from hours available for paid work. Exclusion criteria included striking any participant that was not an Army Reserve nurse working in a civilian healthcare organization.

**Summary**

Discovering tactics to promote nursing retention is vital to the success and overall health of the profession, and in doing so, healthcare organizations have the opportunity to create healthier environments that incorporate resilience interventions for their employees, while achieving a greater return on investments. In the following chapter, I discuss relevant literature that supports the necessity of the project.

# Chapter 2: Literature Review

The intent of this extensive review of literature is to strengthen and validate the need for advocacy and support of the nurse and to show evidence of their increased attrition due to the health conditions and stressors.

## Theoretical Framework

The chosen theoretical framework and conceptual model was that of the Army Medicine Strategic Vision (Army Medicine, 2020). This framework includes a posture of readiness and is in alignment with the POI and vision. This theoretical framework provided direct interoperability action steps and the buy-in for collaborative teamwork in the future.

Army Medicine's (2020) strategic vision report states that

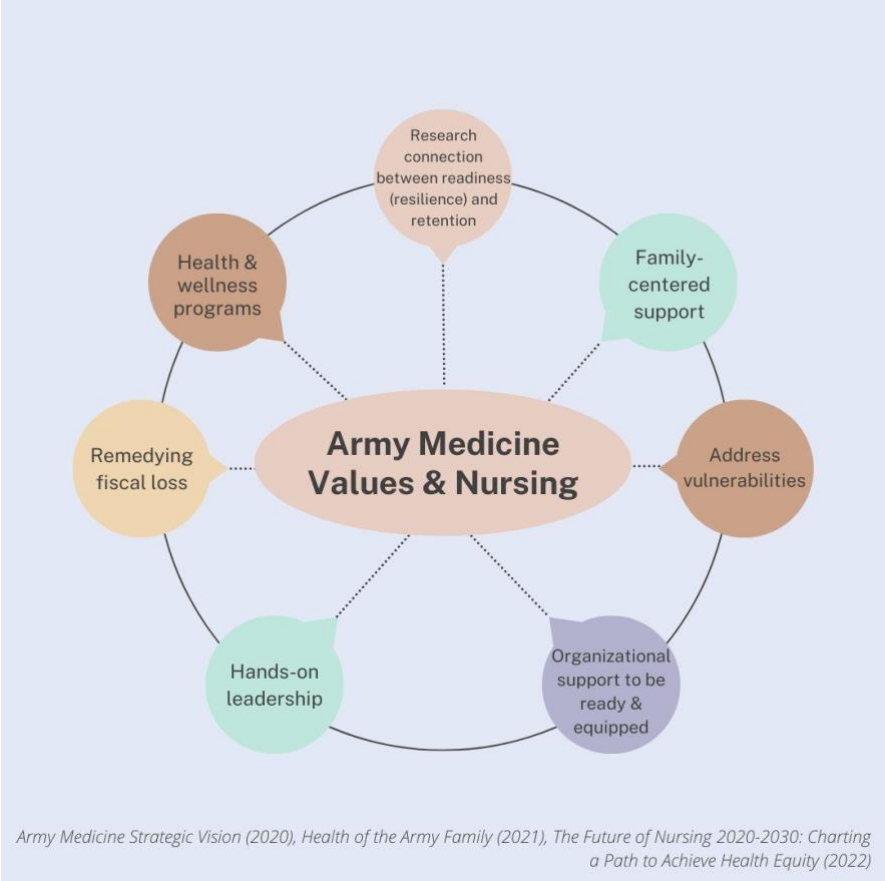
> Army Medicine of 2028 is ready, reformed, reorganized, responsive, and relevant, providing expeditionary, tailored, medically ready and ready medical forces to support the Army mission to deploy, fight and win decisively against any adversary, anytime and anywhere in a joint, multidomain, high-intensity conflict, while simultaneously deterring others and maintaining its readiness posture ( p. 2).

The abundance of similarities between the values of Army Medicine and the nursing population necessitated the use of the model stated above. This similarity is echoed in the Army Medicine's vision statement and mission, which focus on selfless and innovative care that is, at its core, sustainable (Army Medicine, 2020). Their report titled "Health of the Army Family: What We Know, What We Don't Know, and What's Next" (2021) detailed the actionable and critical priorities of Army Medicine leadership, which included the promotion of a culture of health and wellness by the implementation of programs and resources, and the promotion of

communication, transparency, and research that made the connection between “readiness” or resilience and retention (see Figure 1; U.S. Army, 2021).

**Figure 1**

*Army Medicine and Nursing Values*




## Literature Search Methods

A broad search of multiple databases was utilized, including Abilene Christian University’s digital library and educational database and Google Scholar. In order to gather further research from the most relevant search articles, I employed the snowballing technique. Key inquiries explored in the databases listed above included *resilience, primary health prevention,* nurses and self-care, *nurses and health, nurses and holistic health*, *nurses and well-being*, *nurses and COVID-19,* and *nurses and retention*. The raw number of research findings

totaled 32 pieces of literature. After narrowing and reading the aforementioned literature, I discovered that 26 research articles and four books focused on the POI and were therefore deemed relevant to the project. The reviews included both research that was conducted internationally and in the United States.

Key themes found in research that describe the current conditions of the nursing population's health were as follows: exhaustion, anxiety, insomnia, burnout, depression, traumatic stress, moral injury, powerlessness, suffering, tension, intensity, obesity, lack of access to nutrient foods and irregular meal patterns, disengagement, and PTSD.

## Relevance of Theoretical Framework

The Army Medicine theoretical framework was of great relevance to this POI due to the similarities in vision to that of the nursing community. Both entities have the vision of using organization, training, and preparation for quality improvement in care.

### *Well-Being and Consideration of a Holistic Approach to Health*

The concept of well-being is complex because it encompasses a person's psychological, physical, and social obstacles (National Academies of Sciences, Engineering, and Medicine [NASEM], 2021). The acknowledgment and emphasis on holistic health is apparent in this complexity. For nurses, there are other factors that come into play, including their work environment, workplace structure and policies, and the daily pressure of caring for multiple patients (NASEM, 2021). While these factors are extreme, their effects can be mitigated by a nurse's personality, resilience, and social network (NASEM, 2021). Leadership within healthcare organizations is encouraged to promote interventional resources that provide support and greater resilience for nurses and encouragement for more multidimensional wellness (McElligott et al., 2010).

A holistic expression of health was demonstrated by health responsibility, physical activity, spiritual growth, proper nutrition, satisfying interpersonal relations, and stress management (McElligott et al., 2010). However, limited focus has been attributed to addressing wellness of nurses in relationship to the factors that the work environment affects (Bingham & Main, 2010).

### *Self-Care in Relationship to Nursing Retention*

Numerous themes surrounding self-care were found in the research including the following: mindfulness, boundaries, self-reflection, mindful eating, awareness, self-talk, and relaxation training. A 2020 study conducted by Cohen-Serrins (2020) determined that the three main areas of self-care can be categorized as self-awareness, maintaining boundaries, and participating in recreational activities versus nonwork-related activities (Cohen-Serrins, 2020). Slatyer et al. (2018) demonstrated the negative impact that workplace stressors can have on nurses, infringing on their ability to maintain resilience and care for their own personal health (Slatyer et al., 2018). Slatyer et al. went on to state that this results in a condition called "compassion fatigue, which consists of secondary traumatic stress and burnout" (2018, p. 1). This study also trialed the effectiveness of a brief mindful self-care intervention that yielded good results at six months initially related to burnout reduction (Slatyer et al., 2018). The qualitative analysis conducted by Slatyer et al. (2018) used a convenience sampling and demonstrated a practicality of protocol that yielded positive results from the intervention. Further research described how nurses must understand that self-care is necessary rather than optional and that the effects of distress are not sustainable for their health or profession (Hossain & Clatty, 2020). A separate study conducted by Mills et al. (2018) validated the importance of a proactive, holistic approach to promoting personal health and well-being, personalizing self-care

strategies, and identifying barriers to self-care practice. Their research design used thematic coding to provide ranges for self-care, such as reflective practice, boundaries, and meditation. A direct correlation between positive relationships with others and self-care was established in the study (Mills et al., 2018).

Educational intervention is another method implemented to potentially aid in nurses' self-care. Kravits et al. (2010) implemented a psychoeducational intervention that consisted of a self-care program with components of relaxation training, social support, cognitive techniques, exercise, and music. This educational intervention utilized techniques to reduce stress that were personalized to participants, ranging from classroom teaching to wellness plans (Kravits et al., 2010). There were options for nurses to improve their resilience and emotional control that encourage their resilience, while not exposing them to emotional fatigue or trauma (Hofmeyer et al., 2020). Hofmeyer et al. (2020) also noted a connection between decreased mental health stressors and a nurse that has self-awareness and a willingness to take care of oneself and attend to their mental health while doing so with a support person.

***Synthesis, Problems, Variables, Concerns, and Stressors***

Themes that emerged from research of stressors and concerns of nurses included the following: concern for their physical health, the health of their families and the health of their coworkers, safety, security, others' well-being, increased workload, lack of protection, long work hours, ethical and moral dilemmas, lack of support, and lack of communication (NASEM, 2021). All of these factors can result in job dissatisfaction and health concerns. Research showed that in the United States, nurses tend to have worse health metrics than the civilian population in the areas of diet, sleep routine, and adequate cardiovascular exercise (NASEM, 2021). To add context, the NASEM (2021) noted that the average body mass index for nurses is just under 28.

Within the study, the percentage of nurses that reported an acceptable dietary serving of fruits and vegetables was just over 10%, while under 50% reported adequate participation in cardiovascular exercise (NASEM, 2021). Other notable statistics included nurses' assessment of their own health, with only 5% describing their own health as excellent (NASEM, 2021).

### *Resilience, Moral Well-Being, and Post-Traumatic Stress Disorder*

Now more than ever, nurses are placed in situations where they have to adjust away from patient-centered ethics to a wider population view. This phenomenon was summed up in the term *moral injury*, which Jinkerson (2016) defined as "a particular type of psychological trauma characterized by intense guilt, shame, and spiritual crisis, which can develop when one violates his or her moral beliefs, is betrayed, or witnesses trusted individuals committing atrocities" (Jinkerson, 2016, p. 1). A study by Green (2014) showed the role and the importance of resilience and utilized the Connor-Davidson Resilience Scale (CD-RISC) tool to study the impact of PTSD, depression, and the level of adjustment of one's health in relation to resilience. A longitudinal study by Chiang (2021) utilized instruments with strong validity and reliability, convenience sampling, and a small sample size of 195 nursing students over a span of two years to examine their mental health status and self-care behaviors and the effect these had on resilience. Research by Lin (2018) utilized a cross-sectional design study and convenience sampling to collect data from 390 nurses in two different local hospitals, looking at the correlation between sociodemographic data, resilience, work frustration, and the intent to stay within the organization. A study by Kocjan (2021) investigated the relationships between personality and resilience and the vital protective nature of resilience.

Jinkerson's (2016) research connected and gave meaning to the relationship between moral injury and PTSD. An example of workplace moral injury is apparent when a nurse is

forced to deal with ethical challenges that contradict their convictions of right and wrong in regard to their patients or themselves (NASEM, 2021). Moral injury is exacerbated when leadership exploits nurses' ethical boundaries by contradicting their sense of right and wrong, resulting in a lack of trust and injury (Kreh et al., 2021). Another study conducted by Wharton et al. (2020) surveyed the exposure of ICU nurses to moral distress during the COVID-19 pandemic and found that, overall, exposure was increased.

Repeated exposure to moral injury and distress can have long-term negative effects on a nurse's mental health and lead to conditions like post-traumatic stress disorder (PTSD). There has been a recent connection and relationship found between PTSD and nurses, connecting both military veterans and nurses with a common ailment (Schuster & Dwyer, 2020). In regards to PTSD research, studies have shown that there is a correlation between a nurses' mental well-being, their work environment, and their relationships, both familial and professional (Schuster & Dwyer, 2020). Research has also shown that traumatic events leave a lasting impression on the mind, brain, and even body (van der Kolk, 2014). Trauma makes it difficult to engage in intimate relationships, involves a loss in mental flexibility, and affects the imagination, which in turn provides the opportunity to envision new possibilities (van der Kolk, 2014). A study by Labrague & De Los Santos (2021) examined the turnover intent of the nursing population in the Central Philippines working on the frontlines of the COVID-19 pandemic, looking at resilience and its protective role. In the past two years, Labrague et al. (2021) examined the role of resilience, job satisfaction, and intent to stay by utilizing a brief resiliency coping skills tool found to have excellent criteria and predictability.

### *Gaps in Research, Future Needs*

Future needs for research and study of nurses' long-term workplace satisfaction involves empathic conversations with frontline nurses to develop a cumulative understanding of their values and goals (Hofmeyer & Taylor, 2021). This research gap can be summed up in Hofmeyer & Taylor's (2021) moving statement: "There is a clear message from the research from the nurse and that is: hear me, protect me, prepare me, support me, and care for me" (Hofmeyer & Taylor, 2021, p. 301). Resilience has been shown to have a conditioning effect that can protect the nurse from conditions that are out of their control and provide a more manageable work atmosphere (Alameddine et al., 2021). Research by Sellers et al. (2019) looked at the separate characteristics of workplace satisfaction, resiliency, and rural fit for 436 nurses and how those characteristics affected their intention on staying in their existing organization.

In responding to future needs within the nursing community, leadership should be positioned to define what creative operational support measures would truly influence how nurses are supported (Hofmeyer & Taylor, 2021). There is a future need for research that addresses the relationship between resilience and the needs of the organization through decreasing attrition rates of the nurse. Research by Garcia-Dia et al. (2009) sought to look at relationships of resilience and a nurses work environment but had a small sample size, 150 participants, and addressed sociodemographic variables. Research by Koprowski et al. (2021) examined the resilience of a small sample of 118 nurses utilizing the CD-RISC scale and the effects of a practice playbook. There is a need for future research addressing more resilience interventional tools and research that uses larger sample sizes and participants that are geographically diverse.

### *Barriers, Feasibility of Solutions*

The goal of this study was to acknowledge factors that affect nursing attrition percentages, and ideally, the solution was the implementation of new programs that raise retention rates. Sustainable solutions need to include support from all levels of leadership within the organization, as well as concentrated efforts for operational support for the needs of staff members (Kreh et al., 2021).

The barriers and feasibility of interventions have been reported at different levels, from personal to organizational. Rubio-Valeria et al. (2014) outlined some variants: "intrapersonal, interpersonal, institutional, community, and public policy" (Rubio-Valera et al., 2014, p. 8). One personal element that nurses had to address is their attention to values, such as boundaries and their relationship with self-care (Cohen-Serrins, 2020). In order to develop a sustainable workforce, all levels of leadership within the organization must have buy-in. The strategic improvement initiatives of the Institute for Healthcare Improvement highlighted this in its values, which included the willingness to improve and present alternative solutions with the goal to execute (White, 2006).

## Summary

When it comes to improving nursing retention rates through organizational readiness, the weight falls on the nurse themselves and the organizational leadership structure (NASEM, 2021). The National Institute of Nursing Research Objective 3.3 states, "Promote strategies to enhance health and well-being, and a subcategory states, "Identify the factors that contribute to nurse wellness and develop, rigorously test, and implement interventions that support nurse well-being" (White, 2006, p. 8). The *Future of Nursing 2020-2030* desired outcome states that "nurses attend to their own self-care and help to ensure that nurse well-being is addressed in educational

and employment settings through the implementation of evidence-based strategies" (NASEM, 2021, p. 2).

# Chapter 3: Research Method

In order to examine the relationship between nursing retention and resiliency, the methods implemented in this project were primarily quantitative in nature, with some qualitative data to corroborate the findings. In this chapter, I outline the project design, methods of data collection and analysis, and the correlation test I used.

## Project Design

This is a cross-sectional study that applied the Kendall rank correlation due to its ability to assess the relationship between the two principal variables in this study: resilience and retention. For the survey portion of the project, I utilized three instruments: the Casey-Fink Nurse Retention Survey, the Connor-Davidson Resilience Scale (CD-RISC), and a demographic data questionnaire. The quantitative sampling design chosen was nonrandom (convenience), and the survey was available to all Army Reserve nurses. All of the surveys were combined and entered into SurveyMonkey, which is an online survey tool that had the capacity to securely hold and disseminate the data during the collection period. These surveys, along with the informed consent document and the demographic questionnaire are found in Appendix A and B.

## Timeline

After the IRB approval in February 2023, there was a preliminary email blast to raise awareness of the upcoming survey (see Appendix E). The email was disseminated via proxy (an administrative assistant) two weeks in advance of the survey commencement (see Appendix C). This email served as an introduction to the survey that included the approximate time it would take to complete it. The proxy also sent weekly emails reminding the potential participants of the upcoming date.

Two weeks from the initial email, another email was sent out via proxy that the survey had officially opened. This email contained instructions for accessing the survey (a link to the SurveyMonkey survey was included in the email), the survey length, and necessary privacy information. The SurveyMonkey link provided in the email first directed participants to an informed consent page where they chose to either move forward with the study or decline. If they chose to move forward, they were directed to the first section of the survey.

The sequential order of the survey was the following:

Section 1: Demographics. For the demographics section, the participants' baseline characteristics were gathered including age, sex, years of nursing experience, years in the Army, rank, current residence, education experience, marital status, and civilian job status (part-time, full-time, PRN, etc.). To maintain anonymity of participants, names were not requested in this section or any section of the survey.

Section 2: Connor-Davidson Resilience Scale (CD-RISC). Created by physicians who treat PTSD patients, this survey has 25 questions.

Section 3: Casey-Fink Nurse Retention Survey. This is a retention survey that identified an individual's perception of their working environment as well as their intent to stay, stress related to work, and job satisfaction (Isley et al., 2022). It contains 35 questions primarily in the Likert format, with some open-ended questions incorporated throughout.

The survey remained open for 3 weeks from the date of commencement. During this period, the proxy sent out weekly reminders of the survey's existence and availability to participants. Ideally, these reminders encouraged a higher percentage of participation.

Once the survey closed, I transferred the collected data from SurveyMonkey to an Excel File code book. From Excel, I input the data into SPSSv.23 to develop a correlation matrix where

I tested multiple variables and their relationships. Using SPSS, quantitative data was translated and ready for further analysis. I then applied the Kendall rank correlation test to measure the strength of dependence between nurse retention and resiliency.

**Interprofessional Collaboration**

Interprofessional collaboration was necessary for the overall success of this endeavor and was established through the formation of mentors to advise, direct, and oversee the transparency of this process. The intervention for this project came after surveying Army Reserve nurses, analyzing common themes and data, and then providing recommendations for policy at the organizational level. These surveys have the potential to explain what drives nurses to leave their positions, but more importantly, why they are content to stay (Flint, 2014).

The desired outcomes for the intervention were that the organization would utilize recommendations for policy change to increase nursing retention and in turn benefit the nurse. The factors involved in the intervention choice were health for the nurse and the organization. In order for an intervention of this nature to be sustainable, it needs to include the best interest of both the nurse and organization. This creates a win-win culture where the financial needs of the organization could be addressed along with nursing resiliency, health, and wellness.

**Practice Setting**

The practice setting for this project was not geographical, but depended on wherever the U.S. Army Reserve nurse was located. With over 11,000 reserve nurses nationwide, the practice setting truly relied on a nurse's willingness to participate (Army Nurse Corps, 2011).

**Target Populations**

The target population included U.S. Army Reserve nurses in various locations across the country. In order to translate the survey findings into the wider nursing population, participation

in the survey was geared toward Army Reserve nurses who also work in civilian healthcare organizations. Eligibility criteria for the study included but was not necessarily limited to the following:

- A current and unencumbered nursing license;
- Serving a current duty as an Army Reserve nurse;
- Working in a civilian nurse capacity with at least a PRN status; and
- Voluntary completion of the survey.

The criterion that excluded an individual from participating in the survey was the provision of incomplete data. Other factors were determined by Army Nurse Corp's eligibility requirements, such as age, degree, citizenship status, and abiding by the Army's physical and moral conducts (Army Nurse Corps, 2011).

I utilized the G*Power calculator to determine the sample size needed from the population. Using the following parameters, it was determined that a sample size of 314 participants would be sufficient (see Appendix C). An image of the calculation can be found in Appendix E. The following variables were entered into the G*Power software, producing the integer above (see Appendix D):

- Family: *t* test
- Statistical test: Correlation—Point biserial model
- Type of power analysis: A priori—Compute required sample size. Give α, power, and effect size
- Tails: 2
- Effect size: 0.2

- α probability: 0.05
- Power: 0.95

**Identification of Instrument**

The tools chosen for this research project, the Casey-Fink Nurse Retention survey and the CD-RISC are simple in nature, user-friendly, and created for personal evaluations of resiliency and retention (Connor & Davidson, 2003). Both surveys primarily employ Likert scale methods for quantitative evaluation, with additional demographic data for use in qualitative analysis. Both tests are also quite brief, with a combined 60 questions.

The CD-RISC 25 has been analyzed and demonstrated to be a tool that has high internal consistency and the ability to be utilized at the clinical level (Velickovic et al., 2020). This unidimensional tool has been shown to be reliable to measure resilience and correlates with HRQoL (health-related quality of life factors). The CD-RISC demonstrated predictability in relationship to physical and mental HRQoL, as well as predictability particularly concerning mental health indicators (Velickovic et al., 2020). The survey contains 25 questions, the majority of which are formatted on the Likert scale. The totals were then tallied, with higher numerical scores equaling a greater level of resilience. All questions are neutrally-positive in nature. The reliability of the CD-RISC has a value of $\alpha = .96$ (Green, 2014).

The Casey-Fink Registered Nurse Retention Survey was developed to analyze nursing retention at the organizational level and consists of seven types of questions, listed as follows: job conditions, advocacy, support, pressures, workplace satisfaction, continuing education, and baseline data (Isley et al., 2022). The survey has four sections in total. The first section of the survey has 35 questions, majority positively-worded, and uses a Likert scale with answers ranging from *strongly disagree* to *strongly agree* (Casey & Fink, 2009). The second section

addresses areas of job satisfaction, with subcategories such as salary, shifts, and mentorship. The third section contains open-ended questions concerning professional development and continuing education. The fourth and final section focuses on demographic data, including education and tenure. The reliability measure for the Casey-Fink Nurse Retention Survey has been measured at Cronbach's α = .69, and the reliability for clinical problem-solving subscale: α = .80 (Oblea, 2019).

**Evidenced-Based Studies That Have Used the Instrument**

A number of evidenced-based studies have utilized the CD-RISC. Wang (2022) examined the validity and reliability of the CD-RISC with a purpose of making the connection between nurse attrition, resilience, and workplace stress and confirmed significant discriminative ability. The study by Afshari et al. (2021) aimed to look at resilience scores and predictive data with nurses serving during the COVID-19 pandemic and showed low levels of resilience, with females having lower levels than men. To reiterate the connection between resilience and health and wellness, resilience has been shown to be a major player in a nurse's health, wellness, and job satisfaction (Mohammadi et al., 2022). A study by Guo et al. (2021) researched the effects of disaster exposure and resilience with findings that indicated a great need for interventions and the promotion of resilience training. Furthermore, a study by Alarcon (2020) analyzed the validity for the CD-RISC-10 by using McDonald's omega coefficient, and found the tool, which yielded a reliability value of α = .83, to be practical, easy to use, and a suitable tool for the population. The study by Bezdjian et al. (2017) looked at resilience and noted the connection between resilience and leadership within the Air Force and utilized it for a tool to further investigate mental health diagnoses. This study by Bezdjian also looked into the connection to

attrition, based on the assumption that lower resilience directly correlated to higher attrition among servicemembers (2017).

Last, the descriptive design study by Isley et al. (2022) utilized the Casey-Fink Nurse Retention Survey to evaluate public health nurses and their areas of job contentment and their desire to stay or leave their employer. Isley et al. (2022) added secondary questions into the survey with permission from the owner to look at areas, such as mentoring and stress factors in relationship to job contentment.

**Data Collection & Analysis Plan**

The intent of this project was to survey Army Reserve nurses to collect data about the reasons why they were content with their current positions and their levels of resilience. Regarding the practical significance of the outcome of this project, the quantitative data or effect size had the potential to be large. Due to its value for examining the two variables of resilience and retention, I chose to conduct a quantitative study corroborated by qualitative data (Nassaji, 2021).

Advantages of using an online survey tool included wider population exposure and its accessibility from mobile and desktop devices. Participants may have been more inclined to answer honestly when filling out a survey anonymously on their own device. Disadvantages might have included the lack of personal interaction and external distractions that could interfere with concentration. Another possible disadvantage might have been that the survey required open-ended answers, which could dissuade people who wanted to complete the survey quickly.

When determining which statistical test to employ, the first area of focus I considered was the question type. In asking the question, “Is there a correlation between nursing resilience and retention?” I determined that it addressed a relationship among variables and deemed it to be

correlational/predictive. I then formulated the general null hypothesis: $H_0$: There is no association between a nurse's resilience level and their likelihood for retention. The alternative hypothesis was formulated: "$H_1$: There is an association between nurse's resilience level and their likelihood for retention.

Next, I addressed the nature of the variables and the level of measurement for each variable for the chosen instruments. The CD-RISC included all ordinal data that was rank-ordered using the following frequency scale: *not true*, *rarely true*, *sometimes true*, *often true*, *true nearly all of the time*. The Casey-Fink Nurse Retention Survey utilizes ordinal and nominal levels of measurement. The nominal ranking system used was the following: *strongly disagree*, *disagree*, *agree*, and *strongly agree*. The ordinal job satisfaction employed the following scale: *very dissatisfied*, *moderately dissatisfied*, *neither satisfied nor dissatisfied*, *moderately satisfied*, *very satisfied*. The additional demographic section of the survey was made up of nominal data, such as employment status with the response options: full-time, part-time, PRN, unemployed. In addition, it was determined that I use a nonparametric test if the sample size was less than desired and did not meet Pearson's assumptions for normality of distribution, such as Spearman's correlation.

**Risks/Benefits**

Benefits of focusing on nursing retention and job satisfaction included cost reduction for the organization and better outcomes for nurses and patients (Saver, n.d.). By prioritizing the well-being of nurses and addressing policies that encourage sustainability, organizations would naturally benefit by addressing stressors and hazards (NASEM, 2021). Regarding the benefit of nursing retention in healthcare organizations, the investment in supportive care of the nurse reaps the high dividends of nursing attrition. To guarantee a higher possibility for success and quality

of care, it is imperative that there is a focus on retaining and not only recruiting (Wharton et al., 2021). The risk associated with this research/practice-based inquiry was found in the participation aspect, as data were only available from individuals choosing to participate. The potential motivating factors for participating in the study were unknown outside of the association with the subject matter.

**IRB Approval and Process**

In January 2023, I applied for IRB approval after completing a successful proposal defense. This DNP project fell under the IRB Exempt Review. Applicability was addressed in Category 2a, that identifies research survey and program evaluation. The IRB approval process was not completed until after a successful proposal defense and approval by my chair and committee.

**Feasibility and Appropriateness**

Evidence was necessary to address retention and resilience and the connection between the two. Surveys have the potential to formulate this very necessary quantitative data between these two variables. Because of the complexity of individualized perception of resilience, wellness, and the necessity of autonomy over one's own healthcare, there was also a need for qualitative data that focused on the needs of the individualized population of nurses, and open-ended questions and demographic data gave the potential to hear the voice of the nurse. Evidence was needed to determine themes and areas that could be focused on for the greatest impact to retention rates and the overall resilience and well-being of the nurse.

Well-being is vital and individualized with holistic parts of health, such as physical, social, and psychological resources needed to meet psychological, physical, or social experiences (NASEM, 2021). Here lies the importance of developing, through quantitative and qualitative

data from a survey, creative and custom solutions for the individual nurse in areas of resilience. Although an exit interview is commonly used at healthcare organizations, the practicality and usefulness was debatable with incongruencies in the real feelings of the participants coming through with transparency (Flint, 2014). Another consideration concerning validity was that of the accuracy of the data. Employees leaving an organization might desire to leave positive impressions for future considerations of employment (Flint, 2014).

Administration and leadership support is crucial to develop a creative change process and policy that is sustainable (Squires et al., 2015). Nurses, like other employees, can be hesitant to share the truth, but having supportive managers can be relatable and be examples within the organization of being willing to help themselves and promote a culture of wellness (Wharton et al., 2020). To encourage an organizational culture that includes a healthy staff, healthcare organizations must have a team mindset to unite nurses, as well as a personalized framework to encourage personal well-being (Wharton et al., 2020). Healthcare organizations can logistically make room and space for the nurse to practice self-care strategies, provide educational opportunities for mental health, and for follow-up care for mental health services. The administrative culture and nursing leadership can be key for the sustainability of such practices.

Health and wellness for nurses are mandatory for a healthy workforce and this policy should be prioritized. The American Nursing Associations's (ANA's) vision includes a culture that encourages a safe and ethical work environment, making sure that nurse to patient staffing is optimal, quality care is provided, and a culture of health promotion and wellness is evident for nurses (ANA, 2017). This POI was validated by taking steps to meet these ANA goals with the intent to create a vision for nurses to be content in their work environment and have resiliency tools for managing the ever-changing healthcare environment.

## Summary

The challenging healthcare environment calls for drastic, immediate change in order to retain nurses and lower costs for organizations. In gathering first hand data directly from nurses, the data to create processes that were efficient and helpful was available, resulting in suggestions for an organization with better profit margins and a healthier nurse.

## Chapter 4: Findings

Throughout this chapter I detail the findings of my study on the correlation between retention and resiliency in Army nurses. The chapter outlines the data analysis, any deviations, and the PICO in relation to the completed study and reliability/validity of the study. The goal of this quality improvement DNP project was to determine if there was any correlation between resilience traits and retention levels in the nursing workforce. This survey data explored possible correlations between a nurse's level of resilience and retention with the desired outcome of providing program suggestions and interventions that promote both of these necessities. The goal of these suggestions does not solely benefit the nurse; their existence also benefits healthcare organizations. Detailed outcome goals of this project include the following:

1. A healthier, more resilient, and better-prepared nursing workforce that is able to meet the current and future demands or threats against our nation. These traits will be developed in nurses through support measures and interventions derived from survey data.
2. Quality measurement through reliable tools to improve nationwide healthcare. These measures should be defined by value-based, safe, and efficient care, and derived from correlations between nursing resilience and retention.
3. The utilization of inclusive nurse leadership and the use of qualitative data to amplify their voices, providing a healthier workplace that supports their specific needs and has the potential to increase nursing retention and decrease fiscal loss at the organizational level.
4. Better patient outcomes derived from a healthier workforce.

5. Nationwide safety for patients from a resilient and reliable workforce ready to meet the demands of the population.

Through this project, it was my intention to amplify the voice of the nurse and gain insight into their experiences. It was hoped that data would show a possible correlation between a nurse's levels of resilience and retention, resulting in potential program suggestions and interventions to increase both variables. Further, the candidate desired to use these programs to benefit healthcare organizations to promote better profit margins, along with a more resilient, fulfilled workforce.

**PICO**

Population: Army Reserve nurses in various locations across the nation. In order to translate the survey findings into the wider nursing population, participation in the survey was targeted to Army active and reserve nurses and resulted in 96 participants.

Intervention: The utilization of surveys (demographic, Casey-Fink, and CD-RISC) to gather quantitative research data in order to examine the relationship and possible correlation between nursing retention and resilience. To corroborate, a qualitative element was employed to yield common themes that were analyzed to create recommendations to increase retention and resiliency. For quality improvement, I recommend resiliency training programs and beta testing for effectiveness to decrease nursing attrition rates. I also recommend policy that supports and mandates resiliency training.

Comparison: Not applicable.

Outcome: Recommendations for increasing nursing retention and overall resilience.

Data analysis attempted to look at the relationship between retention and resilience by utilizing the Casey-Fink survey and Connor-Davidson Resilience scale, as well as a demographic section. Interventions that promote resilience such as resiliency training programs and policy that supports and sustains it (see Figure 2).

**Figure 2**

*The Mutual Benefits of Retention and Resiliency*


**Data Collection**

The tools used for this survey were the Casey-Fink Retention survey and the CD-RISC. These tools were previously validated tools of measurement, with the CD-RISC known for "good reliability (α = .88 and α = .89), test-retest reliability (α = .87), and convergent and divergent validity," as noted by Gonzalez et al. (2016, p. 9). The Casey-Fink Retention survey consists of five sections: support, patient safety, stress, communication/leadership, and professional satisfaction. Its internal consistency estimate by sum of all section items has been

measured as $\alpha = .89$ (Casey et al., 2021). The overall reliability and consistency of this study was increased due to the implementation of a survey approach, while also maintaining validity through using the same questions, format, and distribution process.

Data collection was achieved by means of a survey link through the third-party platform, SurveyMonkey. This link was sent out to 11,000 Army Nurse Corps members via proxy emails and no identifiable data were collected in order to maintain the confidentiality of participants. The proxy distributed the survey link to a ranking Colonel in the Army Nurse Reserve component and a ranking Colonel in the Army Nurse Active component, who then forwarded it to their subordinates. At the outset of this project, the DNP candidate was paired with a PhD researcher and senior nurse scientist at the Army Medical Center for Nursing Science and Clinical Inquiry, who provided her with professional oversight and assistance of subject matter expertise and mentorship.

The target populations for this project were active component and reserve component Army nurses. The survey link was disseminated via email to a population of 11,000 members. Of the 11,000, 96 members participated in the survey, resulting in approximately 0.87% of the total population available. Of the participants, their average range of nursing experience ranged from two to 38 years. The participants' ages ranged from 25–62 years of age. In the survey, 73.7% of participants were female and 26.3% were male. The participants' years of experience within their specialty of nursing ranged from one year to 32 years. The number of years at the participants' current organization ranged from six months to 29 years, with a mean of 9.5 years.

**Data Analysis**

The statistical technique used was a correlation matrix that evaluated the relationship between two variables: *resilience* and *retention* of nurses. I utilized thematic analyses as a

method for identifying, analyzing, and reporting themes within the qualitative data. I deviated from the original plan by not sending out reminder emails by proxy two weeks before the survey opened. As stated above, the collection method used to gather data was a survey developed using SurveyMonkey, a third-party platform. This link was sent via proxy email.

The research question guiding the inquiry was the following: Is there a correlation between the variables of resiliency and retention in the Army Reserve nursing workforce? To further understand the complexity of this nationwide issue, I developed a secondary question: What elements of the collected data can be translated into civilian health care processes for nursing retention? SPSS was utilized for analysis.

The strength of this intervention through using a survey included cost effectiveness, reliability, and versatility. These factors are paramount for the future possibility of replicating the intervention.

Out-of-pocket costs are detailed as follows: $100 fee for legal use of the CD-RISC; and $39 per month or a $468 annual fee for SurveyMonkey's Advantage membership. This premium was necessary due to the length of the survey—SurveyMonkey limits the survey length and number of participants with its free plan.

Another strength of this intervention included the use of both quantitative and qualitative data, which added a personal element to the predominantly objective data pool. Weaknesses of the intervention include the survey's origin. Although I used a proxy, the survey still came from an external source, which likely contributed to the low percentage of participation. Another weakness of the chosen intervention approach included the lack of interpersonal communication. If participants did not understand a question within the survey, there was no way for them to voice their confusion outside of emailing me. The final weakness of this approach to the

intervention was the answer limitations. In order to keep the study quantitative, most questions had closed answer options that did not allow for participants to expound on the reasoning for their choices, resulting in a regrettable lack of depth.

In healthcare administration, leadership can benefit from knowing what causes nurses to stay in their positions and what areas of concern they have. This intervention approach provides insight into the needs of a nursing professional in the Army and in civilian organizations. Through quantitative and qualitative data that are transferable to the civilian sector, the project findings can benefit both the public and private sectors. These data, when paired with a true motivation to change healthcare culture, has the ability to influence a new approach to nurses' health and wellbeing and create new best practices for nursing retention initiatives.

Table 1 details the relationship between a participant's mentorship relationship (if any) and their intent to leave their current role/organization. Fifty-five participants answered this question, and the correlation coefficient was .060, indicating that there is a moderate correlation between these two variables. The first item, "Is there someone assisting (mentoring) you to achieve these goals?" was pulled from the CD-RISC. The second item, "I have been in my position about as long as I want to be," was pulled from the Casey Fink Nurse Retention Survey. This correlation implies that these two variables may have some relationship, indicating that either the presence of a mentor encouraged employee tenure, or that participants were unwilling to seek out a mentor relationship due to their desire to part ways with an organization.

**Table 1**

*Mentorship vs. Intent to Leave*

| Method | Variable | Is there someone assisting (mentoring) you to achieve these goals? | I have been in my position about as long as I want to be. |
|---|---|---|---|
| Kendall's tau_b | Correlation Coefficient | 1.000 | .060 |
| | Sig. (2-tailed) | . | .637 |
| | *n* | 55 | 55 |

*Note.* There is some significance ($n$ = 55) between mentoring and leaving position { $\tau b$ = .060}

Table 2 shows the relationship between the participants' tenure and intent to separate from an organization. The table shows that 54 and 58 participants answered, and there is slight correlation between the two variables. The correlation coefficient of .071 could possibly be interpreted to mean that a nurse's longevity and intent to leave have some correlation. The correlation could be a result of a variety of participant factors, including a tenured nurse ready to retire, or a nurse satisfied in their working environment. Conversely, it could also infer that the nurse is not satisfied in their working environment.

**Table 2**

*Organization Tenure vs. Intent to Leave*

| Method | Variable | Number of years at your current organization | I have been in my position about as long as I want to be. |
|---|---|---|---|
| Kendall's tau_b | Correlation Coefficient | 1.000 | .071 |
| | Sig. (2-tailed) | . | .516 |
| | *n* | 54 | 58 |

*Note.* There is significance ($n$ = 54, $n$ = 58) between tenure and intent to leave {$\pi b$ = .071}

Table 3 shows the variable satisfaction or dissatisfaction of salary (Casey-Fink Nurse Retention Survey) versus intent to leave the organization (Casey-Fink Nurse Retention Survey) with 58 participants answering both questions. There is some inverse correlation between the two variables. This could infer that a nurse's salary satisfaction has a positive or negative correlation on their desire to stay with the organization for the foreseeable future.

**Table 3**

*Salary vs. Intent to Leave*

| Method | Variable | Salary | I would like to be working here five years from now. |
|---|---|---|---|
| Kendall's tau_b | Correlation Coefficient | 1.000 | -.203 |
| | Sig. (2-tailed) | . | .070 |
| | *n* | 58 | 58 |

*Note.* There is an inverse correlation ($n$ = 58) between salary and five-year retention {$\pi b$ = -.203}

Table 4 shows a significant correlation between two variables derived from the CD-RISC: "I would consider staying here if offered the option of working shorter shifts" and "I

would like the option of working some shorter shifts" with 58 participants answering both questions. This correlation could infer that providing nurses with options for shorter working shifts could increase nursing retention.

**Table 4**

*Intent to Stay vs. Shift-Length Variety*

| Method | Variable | I would consider staying here if offered the option of working shorter shifts. | I would like the option of working some shorter shifts (i.e., 4, 6, 8, 10 hours). |
|---|---|---|---|
| Kendall's tau_b | Correlation Coefficient | 1.000 | .607 |
| | Sig. (2-tailed) | . | < .001 |
| | *n* | 58 | 58 |

*Note.* There is a significant correlation *(n = 58)* between retention and working shorter shifts {*τb = .607*}.

Table 5 displays a slight correlation between the two variables: "I would like to be working here five years from now" (a Casey Fink Nurse Retention Survey query) and "during times of stress/crisis, I know where to turn for help" (a CD-RISC query). These queries were answered by 58 and 55 participants, respectively. The correlation was .393, which may infer that having a support system, whether family, friends or coworkers, during periods of stress may improve five-year nursing retention rates.

**Table 5**

*Intent to Stay vs. Support System*

| Method | Variable | I would like to be working here 5 years from now. | During times of stress/crisis, I know where to turn for help. |
|---|---|---|---|
| Kendall's tau_b | Correlation Coefficient | 1.000 | .393 |
| | Sig. (2-tailed) | . | .001 |
| | *n* | 58 | 55 |

*Note.* There is a slight correlation between five-year retention and support during crisis {$\pi b$ = .393}

Table 6 shows the significant correlation between the following three variables: management encouragement and feedback, mentorship, and five-year retention. Of the 58 participants who answered all three variable questions, the correlation was somewhat to moderately significant at .328 and .584. This correlation could infer that management, mentoring and leadership have the power to increase nursing retention at five years.

**Table 6**

*Organizational Support vs. Mentorship vs. Intent to Leave*

| Method | Variable | My manager provides encouragement and feedback about my work. | I have a mentor I look to for continued guidance and mentoring. | I would like to be working here five years from now. |
|---|---|---|---|---|
| Kendall's tau_b | Correlation Coefficient | 1.000 | .328 | .584 |
| | Sig. (2-tailed) | . | .005 | < .001 |
| | *n* | 58 | 58 | 58 |

*Note.* There is a significant correlation between five-year retention and mentorship/management {$\pi b$ = .328, .584}

Table 7 shows a descriptive analysis of the participants' experience in the nursing field. The statement was labeled "Number of years as a Registered Nurse," and participants were able to type in the exact number of years they had been practicing. Through this data, it was obvious that the majority of participants were tenured nurses, with a mean of 18.26 years experience and *SD* = 9.169.

**Table 7**

*Nursing Experience in Years*

| Variable | *n* | Min | Max | *M* | *SD* |
|---|---|---|---|---|---|
| Number of years as a Registered Nurse: | 55 | 2 | 37 | 18.26 | 9.169 |
| Valid *N* (listwise) | 55 | | | | |

*Note.* The average nursing experience in years of the respondents was 18.26 with *SD* = 9.169

## Limitations of Project

The limitations of this intervention through using a survey includes the small sample size of military nurses, non-civilian. These factors are paramount for the future possibility of replicating the intervention and if the project is replicated it could be replicated with a population of civilian nurses. A strength of this intervention approach includes its use of both quantitative and qualitative data, which added a personal element to the predominantly objective data pool. Weaknesses of the intervention include the survey's origin. Although I used a proxy, the survey still came from an external source, which likely contributed to the low percentage of participation. Another weakness of the chosen intervention approach includes the lack of interpersonal communication. If participants did not understand a question within the survey, there was no way for them to voice their confusion outside of emailing the candidate. The final weakness of this approach to the intervention is the answer limitations. In order to keep the study quantitative, most questions had closed answer options that did not allow for participants to expound on the reasoning for their choices, resulting in a regrettable lack of depth.

## Chapter Summary

In conclusion, the intervention chosen for this study had many strengths and weaknesses that could be fine-tuned in future iterations. I was satisfied with the quality of data received from survey participants ($N = 96$), however, the volume of participation would be a central point of revision for any future research. The survey yielded evidence from 96 tenured nurses in the Army Nurse Corp. that yielded recommendations for best practices in the areas of nursing retention and resilience.

# Chapter 5: Discussion of Findings

In this final chapter, I discuss major findings from the project and their implications on the future of nursing culture. In addition, I discuss the implications for nursing leaders and recommendations for programs and initiatives that promote retention and resiliency rates.

## Discussion of Findings

In reviewing and interpreting the major points and findings of this project, the qualitative and quantitative data together paint a dim picture of the nursing profession. The chosen population for this intervention was Army Reserve nurses in various locations across the nation. In total, 96 individuals participated in the survey, which combined the CD-RISC and Casey Fink surveys. To interpret the data, the candidate compared questions pertaining to retention with questions pertaining to resiliency using Kendall rank correlations. This formula for similarity and correlation uses the scale ±1 to +1 to determine the correlation between two variables, in this case, responses to survey questions, with 0 being no correlation, and 1 being a high correlation. Occasionally the formula employs negative numbers. This is indicative of an inverse correlation between two variables.

Major points and findings of the research include 67.25% of responders experiencing stress, 40% getting less than six hours of sleep on a typical workday, and a high prevalence of obesity, depression, and anxiety. When participants were asked if they had 30 minutes to eat a meal while on duty, only 27.59% selected “nearly all the time.” When asked what they think their current organization could do to improve nursing retention, the following responses were prevalent: better work-life balance, offering shorter shifts, eliminating mandatory overtime, offering part-time options and flexible work schedules, positions for straight days or nights, job share positions, and allowing time off.

## EBP Findings

There are opportunities for mental health interventions and for follow-up care for mental health services. The administrative culture and nursing leadership can be key for the sustainability of such practices.

Health and wellness for nurses are mandatory for a healthy workforce and this policy should be prioritized. According to the ANA (2017), "Among the ANA's top goals are promoting a safe and ethical work environment, ensuring optimal nurse staffing for safe and high-quality care, and improving the health and wellness of nurses" (p. 2).

## DNP Essentials

The candidate seeks to share and translate the voice of the nurse with the hopes of implementing interventions that are research-backed and result in a healthier nursing workforce with increased retention rates. This goal aligns with the following principles, which are derived from *Essentials of Doctoral Education for Advanced Nursing Practice* published by the AACN.

### *Essential I: Nurse Well-Being*

This project's main investigation concerned nurse well-being by inverstigating factors that could create a healthier, more resilient, and better prepared nursing workforce through curated resources for holistic health. This aligns with Oklahoma Nurses' Association's (ONA's) strategic goals for 2020-2022, which include nurse well-being, a healthy work environment and support for nurses that focuses on areas such as nurse stress, self-care, resiliency and PTSD issues (ONA, 2021).

### *Essential II: Organizational and Systems Leadership for Quality Improvement and Systems Thinking*

This project addressed Essential II by collecting qualitative and quantitative data to define value-based models of care that address factors of retention and resilience, such as depression, anxiety, and obesity, with the goal of increased retention rates. In turn, these initiatives have the potential to lower the cost of healthcare overall by means of offering direct support to nurses for their holistic health.

Another example of Essential II's significance to this study is using the data to define new ways of practice that promote nursing retention. An example of this would be offering shorter shift options to nurses, as many stated in the survey that they were more likely to stay with an organization that had shorter shifts as an option. Another example would be implementing resiliency training that begins in nursing school and continues throughout a nurse's career.

### *Essential V: Health Care Policy for Advocacy in Health Care*

This Essential was met in collecting and interpreting data that have the potential to define what the nursing workforce values and advocate for interventions related to their needs: Educate others, including policy makers at all levels, regarding nursing, health policy, and patient care outcomes; advocate for the nursing profession within the policy and healthcare communities; and develop, evaluate and provide leadership for health care policy that shapes healthcare financing, regulation, and delivery (AACN, 2006). Data show that nurses value time and desire to have work-life balance. Advocating for this balance includes leadership who set an example of healthy work-life balance.

### *Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health*

Essential VII is addressed in the project through the desired goal of better patient outcomes. The NASEM addressed this by stating, "Nurses' health and well-being are affected by the demands of their workplace, and in turn, their well-being affects their work and the people they care for" (2021). This project seeks to utilize primary prevention interventions that result in healthier nurses with better patient outcomes. In specifically applying the data from this survey, such as the high propensity for obesity, anxiety, and depression, and formulating interventions to treat conditions and prevent co-morbidities, the future of nursing could be healthier, more resilient, and better equipped to provide care. With this population, for instance, creating resources and instruction for meal prepping or grocery delivery services and nutritional consultants and time for cardiovascular exercise would provide intervention for obesity. In addition, "The consequences of burnout can include poor patient outcomes, high turnover rates, increased costs, and clinician illness and suicide" (NASEM, 2021). Mental health resources that are accessible, readily available, user-friendly, and at no cost to the nurse are crucial for nursing wellness.

## Recommendations for Policy Change

The purpose of this policy recommendation is to create buy-in for the aid, support, and retention of the nursing workforce through the implementation of primary prevention support measures. These support measures would potentially, in turn, promote wellness for the nurse. There is a dire need to "overcome current and future barriers affecting workforce capacity, and anticipate long-term impacts of the COVID-19 pandemic on the nursing workforce" (NASEM, 2021, p. 6).

The proposed recommendations for policy demand a personalized and autonomous plan for each nurse that is tailored to meet their individual health and wellness needs. The proposed recommendations also include a plan that is tailored to the needs of each organization that is supportive and advocates for the nurse. Moreover, the proposal for policy involves the necessity for a multidisciplinary team that works together for the good of the nurse and that promotes a culture of wellness in the workplace. This team should also be equipped for and follow through with interventions as well as sustainable and realistic support for the nurse that is supported and continually developed by the administration.

- Nurses are the nation's largest health profession, "numbering close to 4 million nurses in 2018" (NASEM, 2021, p. 18). Nurses, "as the largest health provider, play a significant role in the quality of the country's health system, both in preventative and health promotion actions and in treating disease and illness" (Squires et al., 2015, p. 5).
- Nurses are less healthy than the general population, "especially regarding nutrition, sleep, and physical activity" (NASEM, 2021, p. 306). Additionally, "some job-related characteristics of nursing, such as irregular meal schedules, long work hours, and high stress levels, are known risk factors for obesity" (Nahm et al., 2012, p. 2)
- Nurses are working in stressful work environments that put them at risk for moral injury, burnout, and leaving their profession, with "87% of nurses… afraid to go to work, 36% had cared for an infectious patient without having adequate PPE, and only 11% felt well-prepared to care for a patient with COVID-19" (NASEM, 2021, p. 253). Furthermore, "nursing has been identified as an occupation with a high level of

stress and the stress by nurses involves providing professional assistance and care of patients with various physical and emotional needs and their families" (Ogińska-Bulik & Michalska, 2021, p. 398).

- Nurses are at risk of experiencing mental health illness, having "experienced significant psychological and moral distress during the pandemic" (NASEM, 2021, p. 252). Specifically, "the mental health burden of the pandemic on nurses has been profound" (NASEM, 2021, p. 253) resulting in "effects on multiple levels and adversely impact[ing] individual nurses' quality of life and enjoyment of work and increase absenteeism and staff turnover" (NASEM, 2021, p. 308).
- The health of the nurse affects their patients and the organization that they work for, "and in turn affect the quality and safety of the care they provide" (NASEM, 2021, p. 12).

Regarding the benefit of nursing retention in healthcare organizations, the investment in supportive care of the nurse reaps high dividends of reducing nursing attrition. In the end, "to assure achievement and sustainability of affordable care for all, i.e., universal healthcare coverage, a supportive and enabling environment focused on quality of care, is needed to maximize the return on investment made in training, recruitment, and retention of the nurse in the healthcare workforce" (Wharton et al., 2020, p. 4).

Including administrative and management support is crucial "for retaining nurses in healthcare organizations and reducing cost associated with turnover, along with providing career advancement opportunities" (Squires et al., 2015, p. 6). As noted above, "nurses may be reluctant to speak openly with managers, a well-being champion provides approachable peer-to-peer

support, encourages individual well-being, and signposts nurses towards professional help within the organization" (Wharton et al., 2020, p. 2). As noted by Wharton (2020), "Staff well-being requires an organizational 'us,' a team/unit 'we,' and an individual 'me' approach for supportive workplace well-being," (Wharton et al., 2020, p. 2) which is why it is necessary to implement policy of this nature.

The implementation of and encouragement of self-care strategies for nurses, "such as emotion regulation and self-compassion to lessen their vulnerability to caregiving fatigue and to improve their well-being and resilience" (Hofmeyer et al., 2020). These skills are vital to their wellbeing. Healthcare organizations can logistically make room and space for the nurse to practice self-care strategies, provide educational opportunities.

The first implication of the data collected from this intervention is that nurses are suffering mentally and physically. The three most popular answers to the medical conditions portion of the survey were anxiety (20 responses), depression (19 responses) and obesity (19 responses). With the knowledge and data to support the necessity of programs or interventions that support the nursing workforce in these areas, it is imperative that leadership begins taking active steps to advocate for their employees. Harvard University's School of Public Health has an Obesity Prevention Source website with a variety of recommendations for instituting healthy eating across worksites, stating that "effective [obesity prevention] programs take a multidisciplinary approach that focuses on providing workers with the knowledge, skills, and support to eat a healthier diet and be more active" (Harvard U. School of Public Health, 2016). A primary action point that could be transferred into the nursing workforce is providing healthier food options hospital-wide, and instituting an imperative 30-minute meal break each shift. An interesting note from the Obesity Prevention Source states the following:

> Less apparent policy changes can also be helpful. While most workplace obesity prevention programs focus on helping to create and sustain behavior change in individuals, growing evidence points to some characteristics of the workplace itself as initiators of weight gain and obesity. (Harvard U. School of Public Health, 2016)

The irony of conditions like depression, anxiety, and obesity is that they are often interconnected. According to Blasco et al. (2020), "The most current data demonstrates that there is a relationship between both entities [depression and obesity], although there is no unanimity." While conditions like depression, anxiety, and obesity are not codependent, their evidence-backed relationship could affect how healthcare organizations and nursing leaders respond and prioritize these issues. Figure 3 highlights the predominant findings of depression, anxiety, and obesity. There is also a relationship between poor sleep and obesity where poor sleep has the tendency to add to belly fat, a decrease in quality of diet, and decrease in insulin sensitivity that is a major drive of metabolism. Findings in this study showed that 40% of the respondents were getting less than six hours of sleep on a normal workday and thus are experiencing poor sleep.

**Figure 3**

*Word Cloud of Phrases From Medical Condition Responses*


*Note.* A word cloud generated using the medical conditions that participants noted. The larger the word, the more often the condition was stated.

To address the lack of resiliency of nurses, I recommend the implementation of resiliency training programs. These training programs should be available at all stages of the nursing profession, starting in nursing school through continual training for tenured nurses. Beta testing should be utilized to validate for functionality, reliability, and compatibility for the organization and should be tailored for the needs of the organization as well as the speciality of the nurse. Nursing resiliency training programs and resources should be mandated and policy written to ensure its sustainability. Quality project measures should be operationally defined in clear and specific terms, a plan for data collection made, and a plan for the outcome measurement (Institute for Health Improvement, 2023).

For calculating net returns (ROI numerator), the Agency for Healthcare Research and Quality (AHRQ, n.d.) provides free customizable templates. For assessing readiness to change

for the quality improvement project, the stakeholders and change leadership team should be introduced to the QI toolkit, a presentation of quality indicators should be implemented, and an organizational change self-assessment done. A change leadership team should be formed as well as buy-in from key leadership and stakeholders. The cost of resiliency training programs should be evaluated in detail and the real financial effects of improvement action should be evaluated against nursing attrition rates and financial profits from retention. The cost of resiliency training for one nurse should be evaluated as well as the cost of attrition in equal increments. For example, healthcare administration could examine the cost of resiliency training programs for a new hire for six months and the revenue versus loss of retention of that same nurse for six months. To evaluate the ROI for the quality improvement intervention, items should be identified for which the improvement actions will have financial effects and listed in the first column. The top of column lists effects on revenues and the bottom set lists effects on costs. The costs for each item should be estimated for the comparison group, both before and after the implementation of the resiliency training program. Next, the net change should be calculated in revenues, B minus A = increase in revenue. The net change in costs should be calculated as A minus B = decrease in cost. The sum of the line-item net changes to obtain the total net change equals the numerator for the ROI calculation. The (real) financial effects of improvement actions are equal to B minus A. The measurement of the effectiveness of an intervention wouls compare the initial attrition rates prior to resiliency training to the postintervention in increments determined for evaluation. Changes in revenues and operating cost should be evaluated in detail in relationship to the improvement action of resiliency training (AHRQ, n.d.).

Another implication of the survey findings is the lack of support that some nurses feel they receive from leadership and the strength of trusting relationships that a high percentage of

the nurses have with their charge nurses. The charts found in Appendix G detail the spread of responses from participants stating they disagreed with the following statements. “My manager provides encouragement and feedback about my work,” with 42% agreeing, 24% strongly agreeing, but 32% disagreeing. “My educator provides encouragement and feedback about my work,” with 40% agreeing, 20% strongly agreeing, and 25% strongly disagreeing. “My charge nurse provides encouragement and feedback about my work,” showing 75% of nurses agree (see Appendix F). A large percentage of the participants noted a strong and trusting working relationship with their charge nurse and “My manager is helping me develop confidence in my practice,” to which 60% of participants agreed.

These responses show the necessity to continue to support nursing leadership and management, who are struggling just as much as the nurses on their floors. Just like their employees, nursing management needs to be equipped with leadership training , resiliency training, and support measures that combat conditions like depression, anxiety, and obesity. In referring back to Harvard’s Obesity Prevention Source website, I was again drawn to the idea that growing evidence points to some characteristics of the workplace itself as initiators of weight gain and obesity (Harvard U. School of Public Health, 2016).

The primary goal for this intervention was to provide insight into the best practices for the care of Army Nurse Corps as they defend our nation and provide a ready medical force, as well as provide resiliency training and resources for their overall well-being. In taking action steps that provide impactful interventions to care for them, they will in turn be ready to care for our nation. This goal aligns with the Defense Health Agency’s (DHA’s) Campaign Plan FY22-FY26, which states that “the critical priorities [are] . . . great outcomes, ready medical force, satisfied patients, and fulfilled staff” (DHA, 2021). Through the data collected in this survey and

its implications for government and civilian healthcare leaders, organizations now have insight into the factors that affect a nurses' willingness to stay or leave a position. Through the implementation of resources like resiliency training programs, and nursing case managers that implement interventions like Harvard University's Obesity Prevention Source and a multitude of other resources, nursing leadership can enact real-world interventions to support the nurse in resilience and wellness.

The findings highlight the severity of the conditions of the nursing workforce with 67.25% of nurses experiencing stress and only half of participants having a mentor. In relation to intent to stay and resilience factors and the healthcare system as a whole, the results of this study have the tendency to promote the good of the nurse as well as the good of the organization through operationalizing recommendations. Nurses are vital to individuals, communities, populations, and healthcare organizations. In turn, organizations need to provide them with the care they need to do their job well.

**Recommendations for Future Research and Clinical Practice**

The first recommendation for future research is a deep dive into the best resiliency training and mental health support programs for nurses and soldiers that are user-friendly, accessible, and supported by fellow nurses themselves possibly through nursing case management. Beta testing is recommended and pilot programs to validate the effectiveness of the training.

The next recommendation for future research is continuing investigation into varied shift lengths. This would include working with a larger sample size of nurses to give input on variable shift lengths (four-, six-, and eight-hour options). Continued research is recommended to

determine if varied shift length equaled decreased attrition rates within an organization and could be piloted on a smaller level, for example, one unit, in an organization.

A third area for future research would be the implementation of nurse case managers. Nurses need an advocate, as well as support from someone who is familiar with the current healthcare climate. The survey showed that 49.09% of nurses did not have an advocate or mentor. Nursing case management has the potential to provide curated, custom resources, and interventions for nurses to succeed in holistic health management. Case managers have the potential to provide the role of advocacy, coaching, encouragement, direction, counseling, debriefing, and mental health services. They can also help the working nurse in education or promotion resources, and resources for wellness initiatives that include the custom care plan that is tailored for the holistic health needs of the nurse and implementation of the interventions as well as follow-up on care, and assistance with position and unit or shift changes within the organization.

The final area of value for future research would be investigating the sustainability of resiliency training in nursing school to determine if there is a correlation between resiliency training in nursing school and graduation rates, or longevity and retention at five or 10 years.

## Conclusion

In conclusion, the data collected from 96 tenured nurses using the Casey-Fink Nursing Retention Survey and the CD-RISC yielded some correlation between the traits of resiliency and retention. Because of the small sample size ($N$ = 55 to 96, depending on the variables under study), I analyzed the data in SPSS utilizing the Kendall Tau method to look at correlations between the ordinal variables, with correlated results ranging from -.203 to .607. This quality improvement project yielded data that showed the need for increased resiliency of nurses and the

great need for resiliency training programs and policy that supports such programs and sustains them.

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# Appendix A: Casey-Fink Nurse Retention Survey

1

## Revised Casey-Fink Nurse Retention Survey

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**I. Please answer each of the following questions by placing a mark inside the circles:**

| | STRONGLY DISAGREE | DISAGREE | AGREE | STRONGLY AGREE |
|---|---|---|---|---|
| 1. My work challenges me. | O | O | O | O |
| 2. I feel that my talents are appreciated. | O | O | O | O |
| 3. I feel that I make a difference with patient care. | O | O | O | O |
| 4. I feel that I am a respected member of the healthcare team. | O | O | O | O |
| 5. I feel supported by my team on my unit. | O | O | O | O |
| 6. I feel supported by my charge nurse. | O | O | O | O |
| 7. Other nurses are available to assist me during new situations and procedures. | O | O | O | O |
| 8. My charge nurse provides encouragement and feedback about my work. | O | O | O | O |
| 9. My educator provides encouragement and feedback about my work. | O | O | O | O |
| 10. My manager provides encouragement and feedback about my work. | O | O | O | O |
| 11. I enjoy socializing with other team members outside of working hours. | O | O | O | O |
| 12. I feel comfortable communicating with patients and families. | O | O | O | O |
| 13. I feel overwhelmed by my patient care responsibilities and workload. | O | O | O | O |
| 14. I feel the expectations of me in this job are realistic. | O | O | O | O |
| 15. I feel supported by the physicians I work with. | O | O | O | O |
| 16. I have been in my position about as long as I want to be. | O | O | O | O |
| 17. If the economy was better, I would think about finding another job. | O | O | O | O |

| | STRONGLY DISAGREE | DISAGREE | AGREE | STRONGLY AGREE |
|---|---|---|---|---|
| 18. I feel that my contributions to this organization are acknowledged. | O | O | O | O |
| 19. I feel that my charge nurse is approachable. | O | O | O | O |
| 20. I feel that my educator is approachable. | O | O | O | O |
| 21. I feel that my manager is approachable. | O | O | O | O |
| 22. I feel that my manager follows through with my concerns. | O | O | O | O |
| 23. There are positive role models for me to observe on my unit. | O | O | O | O |
| 24. My manager is helping me to develop confidence in my practice. | O | O | O | O |
| 25. My manager places a high value on the work I do. | O | O | O | O |
| 26. My preceptor(s) provided me with a sound foundation to begin my practice. | O | O | O | O |
| 27. I have a mentor I look to for continued guidance and mentoring. | O | O | O | O |
| 28. I am satisfied with my chosen nursing specialty. | O | O | O | O |
| 29. I would encourage other nurses to work at UCH. | O | O | O | O |
| 30. I believe nurses should be rewarded based on seniority rather than clinical performance. | O | O | O | O |
| 31. I would like to be working here 5 years from now. | O | O | O | O |
| 32. I would consider staying here if offered the option of working shorter shifts. | O | O | O | O |
| 33. I would like the option of working some shorter shifts (i.e. 4, 6, 8, 10 hours). | O | O | O | O |
| 34. If you agree to question 33, what is your preference of shift length<br>a. 4 hour<br>b. 6 hour<br>c. 8 hour<br>d. 10 hour | | | | |
| 35. I am experiencing stress in my personal life. | O | O | O | O |

36. If you chose agree or strongly agree, to #35, please indicate what is causing your stress. (You may circle more than once choice).

a. Finances
b. Child care
c. Student loans
d. Graduate school
e. Living situation
f. Personal relationships
g. Job performance
h. Other: _____

**II. How *satisfied* are you with the following aspects of your job:**

| | VERY DISSATISFIED | MODERATELY DISSATISFIED | NEITHER SATISFIED NOR DISSATISFIED | MODERATELY SATISFIED | VERY SATISFIED |
|---|---|---|---|---|---|
| Salary | O | O | O | O | O |
| Benefits | O | O | O | O | O |
| Getting out of work on time | O | O | O | O | O |
| Nurse to patient ratios | O | O | O | O | O |
| # Weekends off per month | O | O | O | O | O |
| Rotating day/night shifts | O | O | O | O | O |
| Opportunity to work straight shifts (straight days **or** nights) | O | O | O | O | O |
| Timeliness of the schedule being available | O | O | O | O | O |
| Schedule is flexible to my needs | O | O | O | O | O |
| Opportunities for career advancement | O | O | O | O | O |
| Amount of encouragement and feedback from manager | O | O | O | O | O |
| Orientation was adequate for my needs. | O | O | O | O | O |
| Quality of care that I am able to provide | O | O | O | O | O |

**1. Please list or describe ways in which you have received praise or recognition for a job well done:**

**2. How would you like to receive recognition for a job well done?**

**III. Professional Development**

**1. What are your professional goals for the next:**
One year? _____
Five years?_____

**2. Is there someone assisting (mentoring) you to achieve these goals?**
a. yes
b. no

**3. What activities have you participated in during the past two years to enhance your professional development and/or support achievement of your career goals? Please check all that apply.**
**a**. unit/hospital committee(s)
b. certification in your specialty area
c. member of a professional organization
d. subscribe to a nursing journal
e. enrolled in an advanced degree program
f. other _____

---

**IV. *Demographics:* Circle the response that represents the most accurate description of your individual professional profile.**

**1. Age: _____ years**

**2. Gender:**
a. female
b. male

**3. Number of years as a Registered Nurse: _____**

**4. Number of years in your area of specialty: _____**

**5. Number of years at UCH: _____**

**6. I am currently employed:**
a. full time
b. part time
c. flex

**7. I work in the following setting:**
a. inpatient
b. ambulatory

**8. The unit I work: _____**

**9. UXCEL Level: I II III IV**

**10. Highest Degree Recd:** AD: ____ Diploma: ____ BSN: ____ ND: ____ Master's:____DNP:____

**11. Have you functioned as a charge nurse?**
a. yes
b. no

**12. Have you functioned as a preceptor?**

a. yes
b. no

**13. What is your scheduled work pattern?**

a. Straight days
b. Straight nights
c. Rotating days/nights
d. Weekends

**14. What keeps you working in your current job? (choose the one most important reason)**

a. nurses you work with
b. patient care or making a difference
c. autonomy
d. manager
e. educator
f. charge nurses
g. other nurses
h. salary
i. time off
j. benefits
k. opportunities for career advancement
l. types of patients in my care area
m. continuing education opportunities
n other, please specify _____

**15. What might cause you to leave UCH?**_____

**16. What do you think UCH can do to improve registered nurse retention?** _____

# Appendix B: Permission to Use Connor-Davidson Resilience Scale (CD-RISC-25)

Dear Kelly:

Thank you for your interest in the Connor-Davidson Resilience Scale (CD-RISC). We are pleased to grant permission for 5000 uses of the English and Spanish CD-RISC-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 fee of $ 100 US is payable to Jonathan Davidson at 2434 Racquet Club Drive, Seabrook Island, SC 29455, USA either by PayPal (www.paypal.com, account mail@cd-risc.com), cheque or bank wire transfer (in US $$). Money orders are not accepted.

6. Complete and return this form via email to mail@cd-risc.com.

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 payment and the signed agreement, we will email a copy of the scale.

For questions regarding use of the CD-RISC, please contact Jonathan Davidson at mail@cd-risc.com. We wish you well in pursuing your goals.

Sincerely yours,

Jonathan R. T. Davidson, M.D.

Agreed to by:

Kelly J Watson_____ _____7-29-22_____
Signature (printed) Date

RN, MSN
_____
Title

_____Student - ACU_____

# Appendix C: Letter of Support

**DEFENSE HEALTH AGENCY**
[redacted]

19 July, 2022

MEMORANDUM FOR ABILENE CHRISTIAN UNIVERSITY, ATTN: DOCTORATE OF NURSING PROGRAM

SUBJECT: Letter of Support for the Research Proposal titled, "IMPROVING NURSING RETENTION PERCENTAGES THROUGH ORGANIZATIONAL SUPPORT AND PRIMARY PREVENTION PROGRAMS," Principal Investigator: Kelly Watson, BSN, MSN

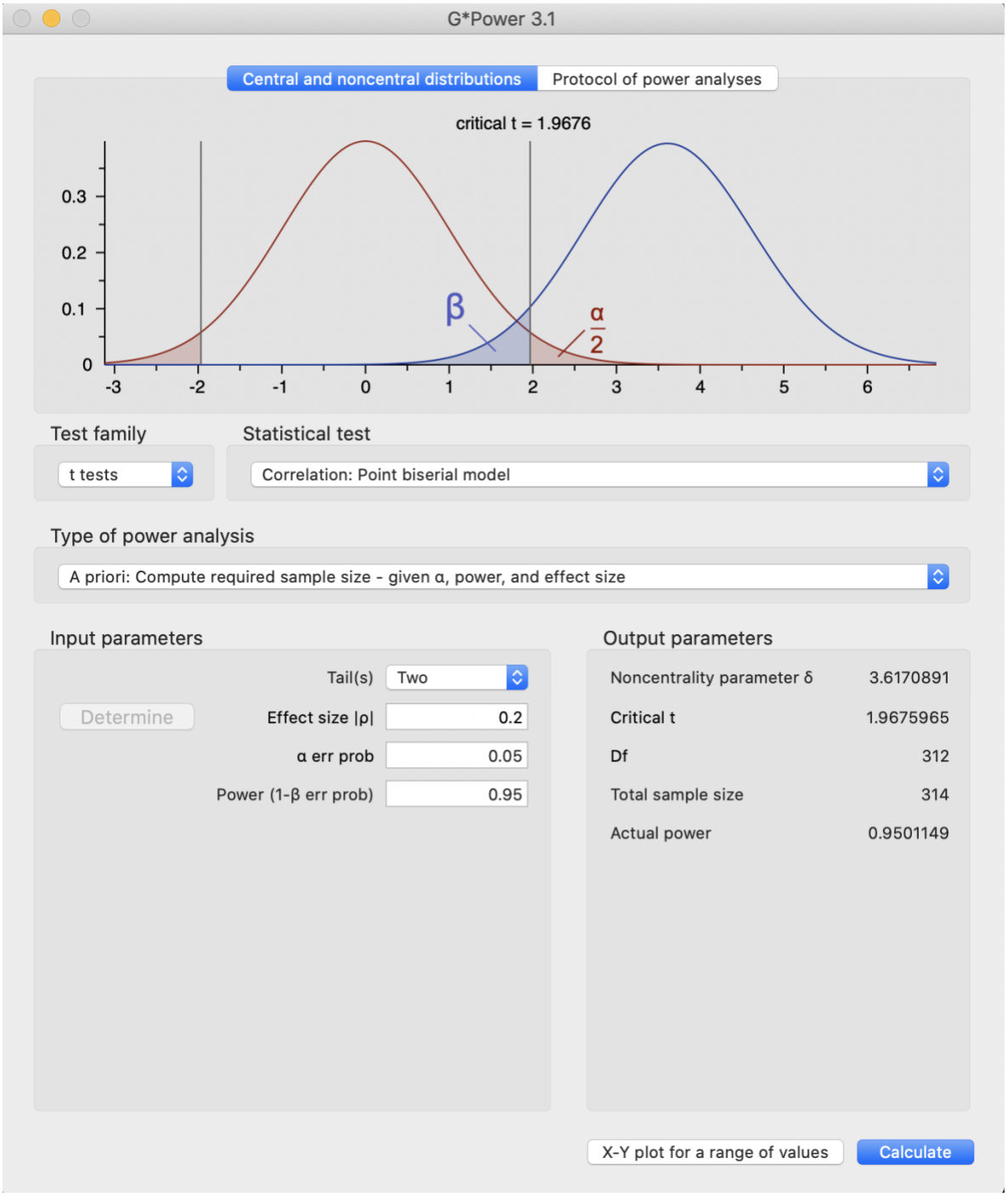
1. As the Deputy Assistant Director, Research & Engineering, for Defense Health Agency, please let this memorandum communicate my complete support for the project, "IMPROVING NURSING RETENTION PERCENTAGES THROUGH ORGANIZATIONAL SUPPORT AND PRIMARY PREVENTION PROGRAMS". This important project has the potential to provide organizational support recommendations to decrease nursing attrition and support for nurses.

2. I understand the research will be conducted by surveying nurses in the Army Nurse Corps, beginning in September 2022. I am aware that the PI intends to collect data via surveys. I wish Kelly much success with this undertaking. Point of contact for this memorandum is the undersigned. I can be reached at [redacted] or phone: [redacted]

SIMONSON.KATHERINE.ANNE.1027298563 Digitally signed by SIMONSON.KATHERINE.ANNE.1027298563 Date: 2022.07.20 20:24:40 -05'00'

Katherine A Simonson
BG
Deputy Assistant Director, R&D

# Appendix D: G*Power Calculation



# Appendix E: IRB Approval Letter

**Date:** February 23, 2023

**PI:** Kelly Watson

**Department:** ONL-Online Student, 17260-Doctor of Nursing

**Re:** Initial - IRB-2022-146

*Kelly Watson's DNP project*

The Abilene Christian University Institutional Review Board has rendered the decision below for *Kelly Watson's DNP project*. The administrative check-in date is --.

**Decision:** Exempt

**Category:** Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).
Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

**Research Notes:**

**Additional Approvals/Instructions:**

- The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot be readily ascertained, directly or through identifiers linked to the subjects.
- Participants are not children
- This application does not use focus groups.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable. All approval letters and study documents are located within the Study Details in Cayuse IRB.

The following are all responsibilities of the Primary Investigator (PI). Violation of these responsibilities may result in suspension or termination of research by the Institutional Review Board. If the Primary Investigator is a student and fails to fulfil any of these responsibilities, the Faculty Advisor then becomes responsible for completing or upholding any and all of the following:

• When the research is completed, inform the Office of Research and Sponsored Programs. If your study is Exempt, Non-Research, or Non-Human Research, email orsp@acu.edu to indicate that the research has finished.
• According to ACU policy, research data must be stored on ACU campus (or electronically) for 3 years from inactivation of the study, in a manner that is secure but accessible should the IRB request access.
• It is the Investigator's responsibility to maintain a general environment of safety for all research participants and all members of the research team. All risks to physical, mental, and emotional well-being as well as any risks to confidentiality should be minimized.

For additional information on the policies and procedures above, please visit the IRB website http://www.acu.edu/community/offices/academic/orsp...
or email orsp@acu.edu with your questions.

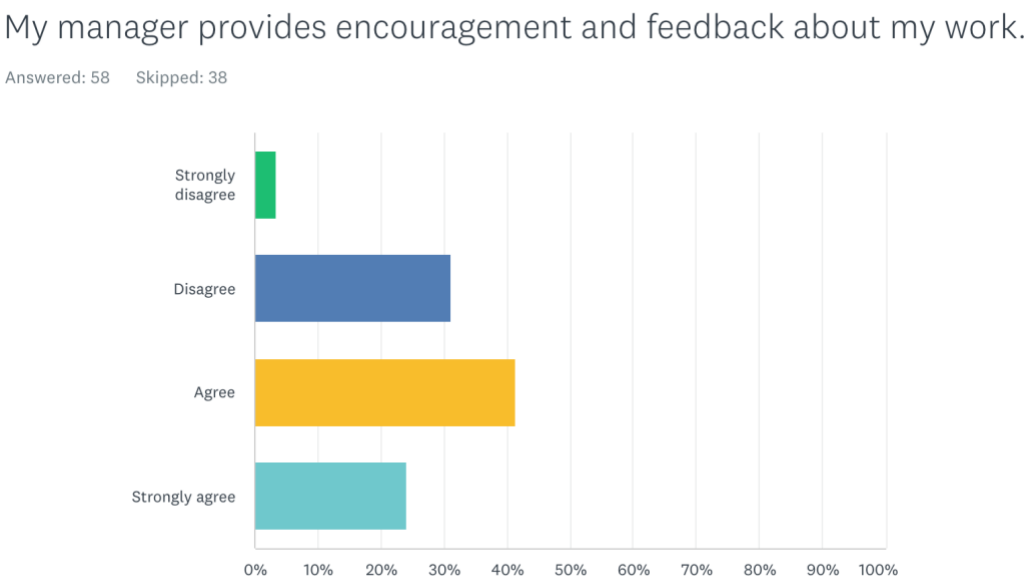
Sincerely,

Abilene Christian University Institutional Review Board

## Appendix F: Figure Representations of Survey Results

### Figure G1

*Management Encouragement and Feedback Answers*




### Figure F2

*Educator Encouragement and Feedback Answers*

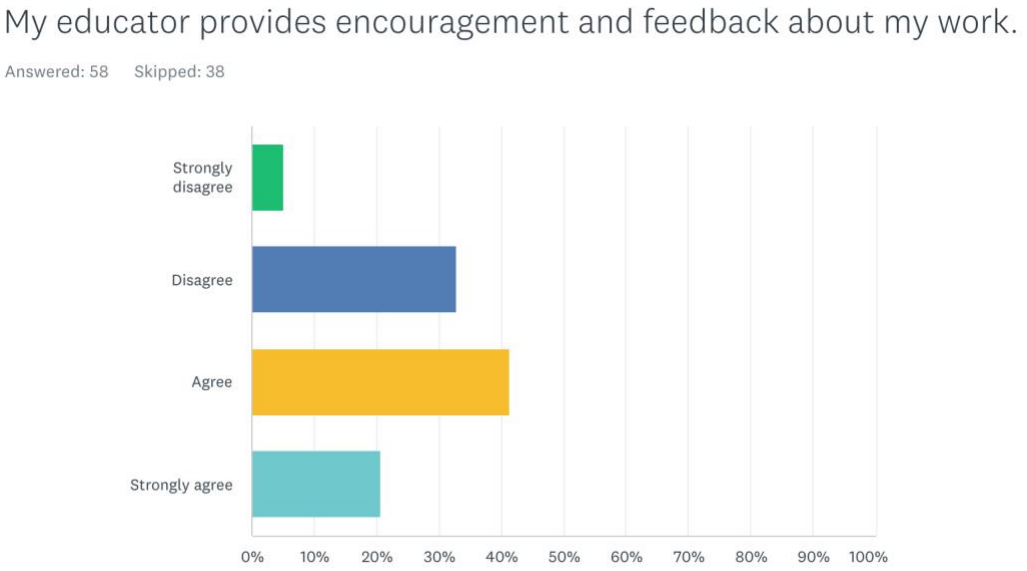


**Figure F3**

*Charge Nurse Encouragement and Feedback Responses*

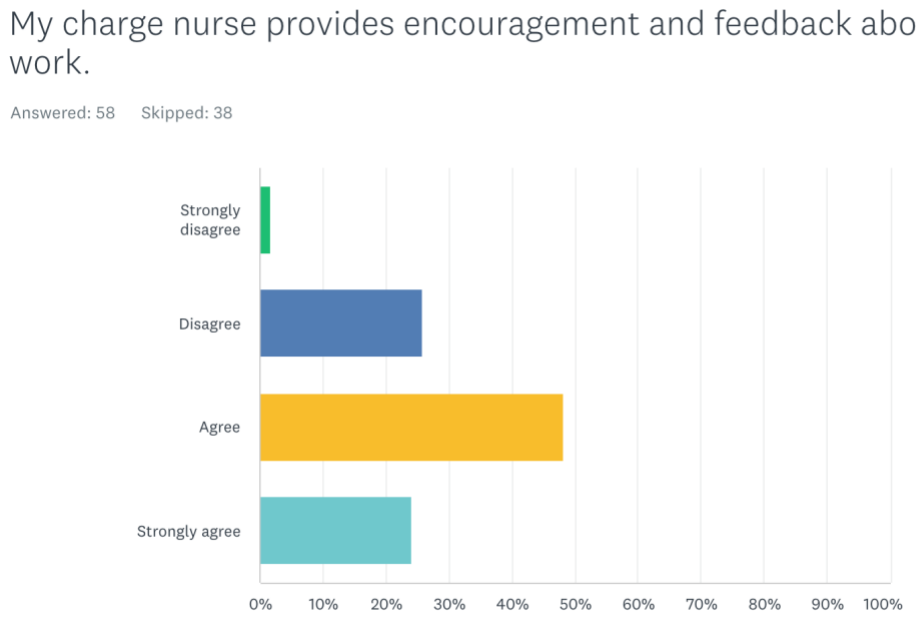



**Figure F4**

*Management Investment in Nurses' Responses*