



Implementation of a Stress Reduction and Enhanced Resiliency Program Among Nurse Faculty

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Abstract

Almost half of nursing faculty nationwide are dissatisfied with their current employment and a quarter of them express an intent to leave the profession [1]. Strategies focused on improvement of workplace mental health through the education of various coping skills is a key element in helping nursing faculty decrease levels of perceived stress, enhance resiliency, and reduce burnout. The purpose of this evidence-based improvement project was to train nurse faculty in an academic setting in stress reduction and resiliency techniques. Adding components of resiliency such as gratitude, mindfulness, kindness, and a resilient mindset, can aide in stress relief and an enhanced ability to face life's daily challenges with less vulnerability. Attaining a resilient skill set can help nurse faculty work through unforeseen circumstances that are linked with change, test, and hardships [2].

Keywords: Resiliency; Stress; Burnout; Nurse faculty; Modified SMART program; Perceived stress scale; Brief resilience scale; Professional quality of life scale; Gratitude; Mindful presence; Kindness; Resilient mindset

Abbreviations: SMART: Stress Management and Resiliency Training; WHO: World Health Organization; ICD: International Classification of Disease; U.S: United States; ANA: American Nurses Association; NLN: National League for Nursing AACN: American Association of Colleges of Nursing; TN: Tennessee; RN: Registered nurse; APN: Advanced practice nurse; EBP: evidence-based practice; JHNEBP: Johns Hopkins Nursing Evidence-Based Practice Model; DNP: Doctorate of Nursing Practice; PET: practice, evidence, translation; PICO: population, intervention, comparison, outcome; CINAHL: Cumulative Index to Nursing and Allied Health Literature; CDSR: Cochrane Database of Systematic Reviews; RCT: Randomized controlled trials; CBT: Cognitive behavioral therapy; AIT: Attention and Interpretation Therapy; RAW: Resilience@Work; ACT: Acceptance and Commitment Therapy; MBCT: Mindfulness-Based Cognitive Therapy; MBSR: Mindfulness-Based Stress Reduction; CFT: Compassion Focused Therapy; SWOT: Strength, Weakness, Opportunity, and Threats; BRS: Brief Resilience Scale; ProQOL: Professional Quality of Life Scale; CF: compassion fatigue; CS: compassion satisfaction; PSS: Perceived Stress Scale

Introduction

Resilience is an individual's ability to cope effectively despite experiencing difficult circumstances that could result in negative outcomes. While there are various ways in which to define resilience, the term is most often ascribed to individuals who can successfully overcome stress or hardships and recover [3]. Essentially, resilience is the process of positive acclimation in

the face of misfortune or significant sources of stress—such as workplace stressors [4]. A recent study conducted across stressful work environments determined that individuals working in “high demand, low influence, and low support” jobs who had higher levels of resilience experienced better outcomes with up to 10-20 percent lower rates in depression, absence from work, and productivity loss [5].

Stress is considered a normal physiological response to change and while it is often thought of in a negative light, positive life events can also cause stress. In 1992, a United Nations report described work related stress as the “20th century disease” and the World Health Organization (WHO) deemed job stress as a worldwide epidemic. Occupational stress encompasses the mental, physical, and environmental conditions that adversely impact an employee’s “productivity, effectiveness, psychophysical health, work ability, satisfaction, and quality of work” in the workplace setting [6]. When an individual faces prolonged and repeated exposure to occupational stress without a break in between stressors they can experience burnout.

Burnout is comprised of several responses to long-term job-related stress: emotional fatigue, disengagement from work, and professional inefficacy or decreased personal accomplishment [6]. In more recent reports the WHO has expanded its definition of burnout in the 11th Revision of the International Classification of Diseases (ICD-11); burnout has now been identified as an occupational syndrome versus a life management issue, as it was previously classified by the WHO in ICD-10 [7]. Maslach & Leiter [8], defined burnout as a psychological state that occurs after a protracted period of exposure to persistent interpersonal stressors in the workplace featuring emotional and physical debilitation, pessimism, disengagement, and a paucity of work effectiveness and accomplishment.

Since the 1990’s occupations in nursing have been among the fastest growing in the United States (U.S.) with a reported total of 3.7 million nurses in 2014, a 24 percent increase from 2003 [9]. In a 2011 survey conducted by the American Nurses Association (ANA) nearly 75 percent of nurses reported that the impact of acute or chronic stress and exhaustion was the leading concern in the profession which remained unchanged from the 2001 ANA survey [10]. A more recent study focused on nurses in America, 74 to 86 percent reported acute to chronic stress [11].

While nurses work in a myriad of roles in the healthcare sector, an area of importance that has remained poorly addressed and often overlooked is the stress and burnout that nursing faculty experience in the academic setting: workplace stress was found to be most pervasive in the education and health fields with reports of nearly 13 percent of them experiencing anxiety and stress at work daily [12]. A search of the literature reveals that the demands placed on nurse faculty makes them prime candidates for experiencing burnout [13]. With an anticipated retirement of one-third of current nursing faculty by 2025 strategies focused on reversing the increasing faculty shortage issues are imperative [14].

Significance of the Problem

Faculty Burnout and Retention

Both the National League for Nursing (NLN) and the American Association of Colleges of Nursing (AACN) have identified that job dissatisfaction and work/life balance are both factors that have compounded the nurse faculty shortage problem [15,16]. Traditional levels of workload are being increasingly compounded by programs leaning heavily towards online learning, blurring the

boundaries between work and home life. Globally, students have an almost 24/7 access to faculty members through assignment posting, discussion boards, and email correspondence [11]. While the occupational demands of academia may still be relatively the same as in years past, Bittner & Bechtel [17], found that more than half of their study participants reported an increase in faculty workload related to vacant faculty positions. Perceptions of poor work life/balance have been found to have a negative impact on nurse faculty intent to stay [17,18]. Holland P, et al. [18], study findings clearly indicate that negative perceptions of work-life balance can be assuaged by workplace initiatives that place an emphasis on employee wellness.

Research conducted by Penn B, et al. [19], demonstrated that newer or more inexperienced nurse faculty faced unique work stressors within their roles because of their unfamiliarity with the job expectations and cultural nuances of the academic environment versus the clinical one. The significance of this is well demonstrated in Crosmer [20], study that found newer nurse faculty experienced higher levels of burnout than their veteran counterparts. In a study conducted by Falk [21], aging nurse faculty members reported enduring environmental challenges in both their professional and personal lives that left them mentally exhausted and less likely to extend their retirement date. Falk [21], found that aging nurse faculty are often exposed to distinctive work/life challenges such as those that are tasked with becoming caregivers to grandchildren, dependent children, spouses, and an infirmed parent(s). Pines A, et al. [22], determined that the these “sandwich generation” caregivers experienced higher levels of chronic stress and increased job burnout. Quantifying the correlation between work/life balance and job satisfaction, burnout and stress among nurse educators is crucial owing to the impact on retention of the nurse faculty workforce [23].

Hambly K [24], asserts that nurse work-related stress is in part due to an inadequate response to the issues stress causes which are three-fold in nature (psychological, physical, and behavioral) and are interconnected. Professional burnout may impact nurse faculty’s quality of life leading to negative outcomes; a poor quality of life is often a chronically pervasive issue that can present physiologically and psychologically. The health of nurse faculty plays a role in the current and future delivery of healthcare. Nurse faculty wellness or lack thereof can affect contributing factors for growth, retention, shortages, health, and the overall well-being of the profession.

Student Retention and Attrition

While nursing program attrition and retention rates have an immediately noticeable impact on key performance measures for program and institutional accreditation, it has a far greater impact on the welfare of society. Strategies to address faculty workforce demands to allow for adequate student admissions into nursing programs and alleviate attrition and retention rates should be a top priority in the nursing profession. The NLN Accrediting Commission recommends a retention rate of 80 percent in both associate and bachelor nursing degree programs to reverse anticipated rising

national nurse workforce shortages; graduation rates among both program levels average only 50 percent [25-27]. Factors that act as facilitators and barriers to student attrition and retention have been previously identified as situational (life circumstances), institutional (academic setting), and dispositional (individual) [28,29].

Quality of nurse faculty interactions with students and student-faculty relationships are key determinants in securing student retention which is essential for the inauguration and retainment of newly graduated nurses into the nursing profession and completion of nursing programs [30]. In a literature review conducted by Ingraham K, et al. [31], on student-faculty relationships a pattern emerged showing that caring and support by nurse faculty played a significant part in successful academic outcomes. Additional studies have shown that faculty support in the academic and clinical environment has a beneficial effect on students' success, faculty optimism, and the attrition rates of nursing students [30,32].

Burnout among nurse faculty is often transferred onto student-faculty relationships and the learning environment as difficulties in dealing with work, role effectiveness, loss of interest in teaching, cynicism, and withdrawal from students and co-workers [23,33]. To achieve optimal effectiveness in a profession that is built on caring nurse educators must be armed with the necessary tools to promote self-care within themselves to facilitate a caring learning environment for students. Through compassion, awareness, reflection, intentionality, and gratitude nurse faculty can illustrate caring towards others and construct an optimal environment for learning. McEnroe-Petitte [30], article suggests that "attention to the needs of the individual and society is identified and promoted by the actions of the caring faculty members as they interact with the nursing students and collaboration occurs within each other".

Nursing Faculty Shortage

On a national level, the United States (U.S.) has a limited ability to graduate enough nurses into the American workforce due to the shortage of nursing school faculty. On a local level approximately two percent of all the nation's nurses are employed in the state of Tennessee (TN) of which statistical data shows that of the 136,275 nurses (all levels), almost 30 percent, are over 55-years of age [34]. Between 2006 and 2010 the number of nursing professionals in TN grew by 11 percent which was four percent higher than the national average. In 2006 there were less than 500 nursing graduates in TN and by 2010 there were over 6,000; representing a 1208 percent increase in graduated nurses, 37 percent of the 2010 graduates earned an undergraduate certificate in nursing [35].

Current nationwide nursing faculty shortages are restricting the admittance number of potential nursing students during a time in which the need for registered nurses is continually growing [36]. According to a Special Survey on Vacant Faculty Positions released by the AACN in October 2018, faculty vacancies were nearly double the 872 nursing schools with baccalaureate and terminal degree programs nationwide [36]. The same AACN survey showed an almost eight percent nurse faculty shortage across the United States and some colleges are addressing this issue by increasing

nurse faculty to student ratios [36].

In a 2012 survey completed by the American Association of Colleges of Nursing (AACN) on vacant faculty positions, it was determined that there were almost 1,400 nurse faculty vacancies amongst almost 700 nursing schools across the nation. Admissions into nursing school is competitive. The American Association of Colleges of Nursing [37], 2019-2020 enrollment and graduation reported that prospective nursing students were being turned away from academic institutions has reached an all-time high with 80,407 qualified applicants being denied entry from baccalaureate and graduate programs due to insufficient faculty, clinical partnership, classroom space, clinical instructors, and budget. Almost two thirds of the nursing schools surveyed cited nursing faculty shortages as the basis for being unable to accommodate more qualified applicants. Considering U.S. nursing school enrollments inability to keep pace with the forecasted needs for registered nurse (RN) and advanced practice nurse (APN) services it is easy to see how patient outcomes may be affected.

The significance of the faculty shortage on nursing is a double-edged sword. A lack of nurse faculty to educate the burgeoning demand for baccalaureate-prepared nurses directly affects the nursing shortage. The shortage of educated registered nurses (RN) in the workforce thus compromises the quality and safety of patient care [38]. Without adequate numbers of nurse educators, the decline in the number of available professional nurses will continue and the quality of nursing care will suffer as there will not be enough nurses to care for the growing healthcare needs of our nations aging members [39].

The aging nursing faculty on average are 50-years of age or older, and/or examining retirement decisions in the next ten years. Increased financial needs and lengthier life spans, are pressuring the aging worker, including nursing faculty, to continue the working life [21]. By the year 2025, it is predicted by the American Association of Colleges of Nursing [40], that one-third of nursing faculty are expected to retire. The need to increase the qualified nursing faculty population is evident by the thousands of qualified nursing applicants that are turned away each year. The Labor Statistics of Employment Projections for 2012-2022, estimates the demand of nursing faculty to increase by 35 percent and 10,200 to retire. Overall, 34,200 new nursing faculty will be needed by the year 2022 [15]. The senior faculty impending exodus highlights, the need to cultivate the undeveloped nursing faculty for succession [40].

The need for academic institutions to address the registered nurse shortage through the retention and satisfaction of nursing faculty is pressing. The demand for registered nurses is predicted to grow at a rate of 15 percent from 2016 until 2026, which is higher than the average for any other occupation in the United States [41]. While current nursing faculty shortages can be attributed to retirement, declination in qualified applicants, long hours with strenuous workloads, and a noncompetitive salary, clinical nurse shortages can be directly linked to the growing shortage of qualified nursing faculty [41].

Generational Faculty

The higher education academic setting consists of a multigenerational faculty pool. A study conducted by Chakradhar K, et al. [42], examined generational differences in resilience and links between generational views of the workplace in the faculty workforce. Participants examined included Traditionalist (1922-1945), Baby Boomer (1946-1964) which was broken down into two categories of Leading-Edge Boomer (1946-1954) and the Trailing-Edge Boomer (1955-1964), followed by the Generation X (1965-1981), then Generation Y or Millennials (1982-1999) and lastly Generation Z (2000-2012). The study showed a significant difference of resilience in the differing generational faculty. The Leading-Edge Boomers' resilience score was significantly higher than the Trailing-Edge Boomers and Millennials [42].

Chakradhar K, et al. [42], further examined the traits that were associated with each generation that lead to higher resilience. The traditionalist/leading edge boomers were found to have greater resilience by not getting behind in work, having more time to complete task by working at a higher speed. The Boomers' also were found to have stronger feelings in regards to meaning of work completed and reported feelings of importance of their work. Generation X faculty showed resilient traits of meeting deadlines and demands, along with valuing work like Traditionalist/Edge Boomers. In addition, Millennials shared resilient characteristics with Trailing-Edge Boomers and Generation X with meeting demands and working at a high pace. Chakradhar K, et al. [42], study proposed that resilience may be influenced by sociocultural happenings that occur throughout a person's lifetime.

Generation Z is a unique generation due to profound changes occurring in the world, surrounding internet, communication, and availability of media. This unique generation was born and raised with technology and will identify easily with the electronic world. To better serve Generation Z, the workplace should address preferences to communication and flexibility with scheduling. To allow for Generation Z to thrive in a workplace, the organization should aim at acknowledgement, independence, honesty, and allowing outside ties to the community [43]. To maintain a top workspace, academic settings could benefit in supporting the variation of generational needs in their faculty. Changes aimed at recognition of worth and respect are two key elements have been found to aim at faculty retention [42].

Discussion

Project Setting and Population

The practice site for the doctoral project was a regionally accredited private, for profit, co-education college in Knoxville, Tennessee. The institution offers multiple nursing programs; Bachelor of Science in Nursing (traditional and accelerated), Bachelor of Science in Nursing (Licensed Practical Nurse to Bachelor of Science prepared Registered Nurse), and a fully online Bachelor of Science in Nursing (Registered Nurse to Bachelor of Science in Nursing). In addition, the institution offers a Certificate in Licensed Practical Nursing. The school was founded in 1882 and has strived to make changes in offering classes as accelerated, hybrid, transfer,

and distance learning. The Bachelor of Science in Nursing program received initial approval with the Tennessee State Board of Nursing in December of 2003 and full approval in September of 2008.

The institution's college of nursing has 12 full-time faculty, 40 adjunct faculty, and one associate dean of nursing, in the Knoxville, Tennessee campus. In total, the education levels for the school of nursing have 33.9 percent Bachelor of Science in Nursing, 58.5 percent Master of Science in Nursing, and 7.5 percent Doctoral of Science in Nursing. Approval for the execution of the proposed project at the practice site has been granted by the associate dean of nursing.

Methodology Implementation

Population

The SMART program is applicable across various populations and can be customized accordingly whether implemented among healthcare professionals, patients, students, the non-healthcare workforce, caregivers, educators, etc. Dr. Sood writes that the SMART program, while universally appealing, "has to be customized to the individual group yet offer a set of insights and skills that resonate with the majority." Highlights from a pilot study involving the implementation of a brief SMART program among public school educators exhibited efficacy in improving wellbeing through improving anxiety, stress, gratitude, happiness, QOL, and life satisfaction [44]. There is overwhelming evidence showing that burnout among educators can be linked to decreased effectiveness and suboptimal interactions with students [45].

Screening Tools

The following screening tools used in the project were the following: Brief Resilience Scale, Professional Quality of Life Scale, and the Perceived Stress Scale. The Brief Resilience Scale (BRS), developed to assess the primary and fundamental meaning of resilience (the ability to bounce back, resist illness, adapt to stress, or thrive in the face of adversity) was chosen for this DNP project due its specificity and brevity in assessing resilience instead of protective factors that involve personal characteristics such as optimism or self-efficacy and coping styles [46].

In a groundbreaking study conducted by Smith BW, et al. [46], the BRS, a self-reported screening tool that measures six items of resilience, was found to have good internal consistency and test-retest reliability among four sample groups. In a systematic review aimed at evaluating the psychometric rigor of resilience measures no 'gold standard' could be named; the BRS ranked in the top three out of 15 measures for content, criterion, and construct validity, internal consistency, reproducibility agreement and reliability, responsiveness, floor/ceiling effect, and interpretability [47]. Kyriazos TA, et al. [48], reports convergent, discriminant and concurrent validity with a good internal reliability, $\alpha = .80-.91$.

The Professional Quality of Life Scale (ProQOL-5), a 30-item self-reporting tool, measures risk for compassion fatigue (CF) and burnout as well as potential for compassion satisfaction (CS) by asking the respondent how frequently each item was experienced in the prior month and scoring responses on a 5-point Likert-

type scale [49]. The CF and burnout subscales consist of 10-items each; higher scores for each of these measures indicates that the individual is at a higher risk for experiencing symptoms of CF and burnout, respectively. An inverse relationship exists on the 10-item CS subscale which indicates that the individual is experiencing more satisfaction from the work they do [50].

The ProQOL-5 is an applicable survey tool for use with nurse faculty because both educators and health care workers are defined as helpers in the ProQOL model. Professional quality of life, influenced by both positive (CS) and negative (CF) aspects, refers to the quality an individual feels in relation to their work as a helper [49]. Good construct validity was noted in over 200 published papers with acceptable to moderate internal validity using Cronbach's alpha [51]. StammBH, et al. [52], reports a good convergent and discriminate validity; Compassion Satisfaction $\alpha=.88$, Burnout $\alpha=.75$, and Compassion Fatigue $\alpha=.81$.

The primary intent of the Perceived Stress Scale (PSS) is to measure the self-appraised psychological stress levels related to situations and events occurring in one's life that are associated with multiple demographics such as age, gender, education, employment status, etc. The PSS is 5-point Likert scale (ranging from never to very often) consisting of 14-items that assess an individual's feelings and thoughts during the last 30 days.

High stress levels and lack of learned coping strategies in educators has been proven to not only effect the psychological and physiological well-being of the individual (daytime sleepiness, atypical cortisol levels, overactive amygdala, increased pressures) but also the classroom environment, teacher-student dynamics, and the social-emotional development and academic learning of the student [53]. The PSS showed sufficient reliability (.84, .85, .86 for each of the samples) and correlation with life-event scores, symptoms of depression and physical illness, use of health services, and social anxiety [45]. Baik SH, et al. [54], report convergent validity and good internal consistency reliability, $\alpha=.78$.

Methodology

A self-paced, modified virtual resiliency and stress training program proffering specific mindfulness and coping strategies was administered via the Qualtrics platform to nurse faculty at Knoxville, Tennessee college campus. The e-learning resiliency program was developed and guided by the foundational principles and core overlapping constructs of awareness, attention, and attitude as laid out by Dr. Sood in his self-created SMART approach.

The SMART approach is an evidence-based practice developed by Dr. Amit Sood at the Mayo Clinic. The uniqueness of this approach is its ability to offer brief practical and comprehensive solutions to harness the power of one's mind and develop a healthy relationship with time - past (stress), present (mindfulness), and future (resilience) [55]. The intent of the SMART approach is to provide a comprehensive strategy to address individual (primarily) and organizational thriving through lifestyle and mind-body approaches, relationship-enhancing and meaning-centric solutions, resiliency training, and personal coaching [55]. Necessary elements

for individual and organizational thriving include a SWOT analysis of the organization and its team members and implementation of individual and problem-centric solutions. "None of these three components exist in a silo, and they support each other".

All the college's nurse faculty, in the Knoxville, TN location were offered the opportunity to participate in the self-paced, online learning resiliency training program. At onset, nurse faculty members completed several surveys used to assess for resilience, professional quality of life, and perceived stress. The intervention consisted of a total of no more than 80 minutes of virtual training broken into four manageable sessions of 15-20 minutes. The program was opened for a period of ten days. Baseline data and one-week post intervention data was collected and analyzed. Post-implementation data was collected one week after the ten-day open learning module period.

Ethical Considerations

Participants were invited to participate in the project by email invitation via Qualtrics. Study participants are considered volunteers and reserve the right to withdraw from the study at any time without fear of ramifications.

Potential benefits include improved resiliency, mindfulness, self-awareness, focus, stress, anxiety, self-image, compassion, gratitude, attitude, health, fatigue, burnout, insight, intention, neuroplasticity, engagement, presence, curiosity, meaning, purpose, and kindness. All nurse faculty were invited to participate with the aim of exploring the potential impact of a resiliency training program on levels of stress, and resilience in the academic institution.

Confidentially and anonymity was maintained through electronic survey completion via a secure online data collection site Qualtrics. Electronic data was retained on the project site's secure password protected and encrypted network for a period to be determined by the project site's C-suite and IT teams. After the determined data retention period the electronic data will be automatically eradicated through the electronic shredder approved by project site. No audio, or video formats was utilized in this DNP project implementation.

The DNP project was presented to the University of Tennessee's Institutional Review Board. The DNP project was ruled on October 1st, 2020, as exempt due to not meeting the definition of research by federal regulations.

Outcome Measures

The measurement for primary outcomes determined the success of the implementation of a stress reduction and resilience training based on the project's goals, the goals were to 1. decrease stress in nurse faculty within one week of implementation, 2. to increase resilience and quality of life for nurse faculty by one week of implementation. The evaluation plan was created to assist in the reporting of findings based on good validity and reliability scales to determine the aims measurements of the doctoral project. The validity and reliability of the Brief Resilience Scale, Quality of Life Scale, and Perceived Stress Scale.

Data Collection and Security

Data was collected in two increments. The first data collection occurred two weeks prior to implementation, this allowed for a baseline measurement. The second and final data collection was collected one week after implementation. All nursing faculty emails were collected by the executive administrator and placed into Qualtrics by co-authors. All full-time and adjunct nursing faculty emails were collected, and emails were generated by Qualtrics inviting the faculty to participate in the DNP project. The link created by Qualtrics was an anonymous link, participants were not provided an individual link, to assist with anonymity. Reminder emails were generated by Qualtrics web survey system, to all faculty.

All reports generated were stored on the institutional computer, which remained in a lock and key room. The computer is password protected, along with all report documents. If documents were needed to be printed, they were printed in the institutional print room, and did not leave the locked data computer room. Once the printed material was no longer needed, the items were shredded per the institution's policy. The participants each completed an online consent form in Qualtrics before completing baseline and post surveys.

The data collection was completed by the project leads. Each data collection point: baseline, and one week after implementation, was collected by the University of Tennessee's web survey, Qualtrics. Participants emails were collected by the project leads. The emails were then placed in the Qualtrics web survey tool. The participants received emails with reminders no more than three times to complete training program and surveys. The participants had ten days to complete the learning modules and survey tools.

The Brief Resilience Scale, Quality of Life Scale, Perceived Stress Scale, and learning modules follow-up participation data was collected with the use of the web Survey tool, Qualtrics. If data is needed to be shared to committee chair or the statistician, the project lead transferred files using the University of Tennessee's Vault. The secure University of Tennessee's Vault system allows for files to be safely shared while maintaining safeguard with by the certified HIPAA/PHI.

Data Analysis

The University of Tennessee's statistician, Cary Springer, assisted in the creation of the data analysis plan. The data from collection times of baseline, and one-week post-implementation was collected on Qualtrics. The participants had ten days to complete the learning modules. The post-implementation data was collected one week after the ten-day period. The data was analyzed by the most up to date Statistical Package for the Social Science software application. The pre-intervention and post-intervention survey tools were analyzed with a one sample t-test to determine if there was a significant difference between baseline Perceived Stress Scale, Quality of Life Scale, and Brief Resilience Scale and the post-implementation Perceived Stress Scale, and Quality of Life Scale, Brief Resilience Scale. Change from baseline was summarized using a point estimate of 95 percent confidence interval. Survey data collected on secondary traumatic stress as part of the ProQOL questionnaire were excluded from the statistical analysis.

Conclusion

Based on current employee status, it was anticipated that approximately 55 participants would participate in the survey tools and educational modules. The baseline survey tools and educational modules were completed by 17 participants. The follow-up survey tools were completed by 13 participants. The dropout rate for the doctoral project was approximately eight percent.

Outcomes were measured in the three-categories. At week one, after recommended completion of virtual module-based learning, the results showed slight improvement in all areas. Results showed a statistically significant decrease in stress ($P < 0.001$) and burnout ($P < 0.001$) and a statistically significant increase in resilience ($P < 0.001$) and compassion satisfaction ($P < 0.001$). Measures of resilience (BRS) increased from $3.89 + 0.66$ at baseline to $4.08 + 0.64$ at the end of week one. ProQOL compassion satisfaction scores increased from $41.71 + 3.95$ initially to $41.85 + 4.00$ and ProQOL burnout scores decreased from $23.18 + 5.80$ at baseline to $22.85 + 4.10$ at study completion. Measure of stress (PSS) decreased from $27.47 + 7.51$ at baseline to $27.31 + 5.89$ at end of week one.

Each educational module provides daily activities aimed at mindfulness, gratitude, kindness and resilience. Activities were suggested to be practiced in the workplace, home and leisure. Each participant was asked in the follow-up survey how often they used each daily practice. The questions were as the following, 1. Mindfulness: Over the last week how often have you completed the two-minutes of attention (giving two-minutes to a person that deserves your attention but is not receiving it, at home and at work), 2. Kindness: Over the last week, how often have you completed a kind thought practice (silently wishing others well, wishing walk, 3. Resilience: Over the last week, how often have you completed a grounding technique (at work or home), and 4. Kindness: Over the last week, how often have you completed morning thanks (thinking of three-people who mean a lot to you and sending them silent gratitude). Figure one summarizes findings of the follow-up survey on use of daily activities to improve resilience, stress and quality of life.

The follow-up survey tool aimed at collecting data on usage of activities aimed to decrease stress, increase quality of life and resilience suggested that participants were more likely to use mindfulness activities at home and work, along with gratitude. Participants showed that 12 out of 13, did silently wish others well throughout their day as acts of kindness. Acts of kindness was the highest reported usage. The use of the wishing walk, to improve kindness was reported by two-participants and nine of the participants stated they never used this kindness technique. Lastly, the resilience activities at home and at work, were reported by eight participants as never being used.

Acknowledgement

Dr. Pamela Hardesty chaired the DNP project and Dr. Tiffany Skinner acted as a community member.

Conflict of Interest

Authors declare no conflict of interest.

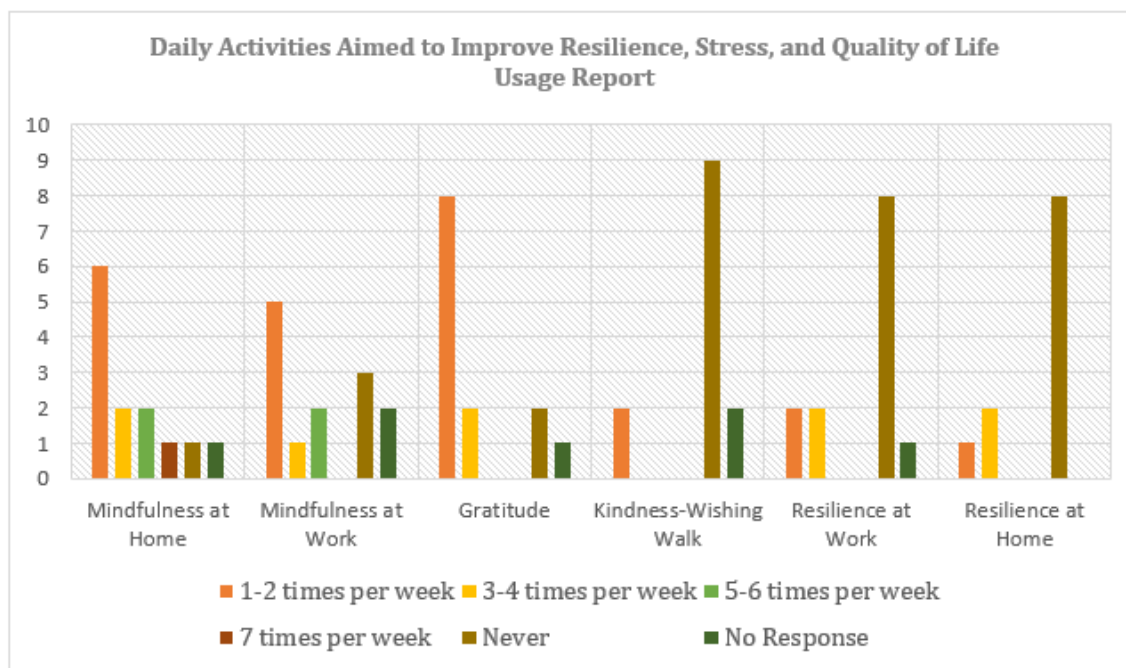


Figure 1: summarizes the usage of the suggested daily activities to improve participants resilience and quality of life, along with decrease stress at home and work.

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