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**Therapeutic/Expressive Writing and Resilience Promotion for Nurses to Reduce Burnout
Syndrome**

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Abstract

COVID-19 accelerated the rate in which nurses were unable to maintain resilience and reduce burnout. This evidence-based DNP project obtained data from a therapeutic/expressive writing intervention and group resilience discussion with Women's Care Center (WCC) nurses to improve resilience acuity and reduce symptoms associated with burnout syndrome. A review of previous studies indicated therapeutic/expressive writing and group resilience discussions have been beneficial in improving resilience and reducing burnout. A demographic and two pre-intervention surveys were completed by WCC nurses in the hospital relaxation room or skills lab. The Connor-Davidson RISC-25[®] was used to determine resilience scores for morning and evening shift nurses. The Maslach Burnout Inventory[®] (MBI) Survey for Medical Personnel was used to assess emotional exhaustion (EE), depersonalization (DP), and personal achievement (PA) in the same groups. Participants (n =20) nurses completed the pre-intervention resilience and burnout surveys. Day and night shift nurses (n= 19) resilience mean average increased after the intervention 2.65 mean score ($M = 83.31$, $SD = 9.86$) for the Connor-Davidson RISC-25[®] survey which is in the intermediate range: 50% of the population. The burnout mean for the morning shift nurses, EE ($M = 21.88$), DP ($M = 4.88$), and PA ($M = 39.27$) which indicated moderate burnout for all categories. The burnout means for evening shift nurses, EE ($M = 17.33$), DP ($M = 7.22$), and PA ($M = 40.00$), which fell within the moderate burnout range.

Keywords: resilience, burnout syndrome, nurses, therapeutic writing, group discussions

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Therapeutic/Expressive Writing and Resilience Promotion for Nurses to Reduce Burnout Syndrome

Resilience provides nurses with the capacity to confront circumstances, demonstrate patience, adjust to unique challenges, and execute job functions in extreme healthcare situations (Anderson et al., 2021). Nurses who struggle maintaining resilience are at risk for reduced efficiency, missed workdays, and diminished ability to provide care (Ausar et al., 2021; Brown et al., 2018; Henshall et al., 2020). Additionally, nurses struggling with resiliency challenges are susceptible to increased medication errors, poor patient engagement, and negatively impacting coworkers (Rushton et al., 2021). Burnout syndrome results from diminished resiliency and creates similar conditions when symptoms of burnout become unmanageable and produces compromised individuals (Bridgeman et al., 2018). This project sought to implement evidence-based resilience training strategies to improve resilience among nurses and decrease burnout syndrome.

Background and Significance

Current nursing positions remain vacant as a result of a myriad of issues, overload of extremely ill patients, lack of practice independence, workplace intimidation, patient frustration, and continuous pressure to name only a few (Zhai et al., 2021). Resilience is a shielding mechanism against nurse departure, stress-related illnesses, mental collapse, controversy, and burnout syndrome. It is utilized to improved patient fulfillment, employment pleasure, and colleague connections (Lanz & Bruk-Lee, 2017; Manomenidis et al., 2019; Yu et al., 2019). Cultivating resilience in nurses highlights a critical intervention in focusing on the passionate conflict of nurses and crushing consequence of stress on their emotional well-being (Delgado et al., 2017; Stephens et al., 2017; Thomas & Asselin, 2018).

Shah et al. (2021) implemented a cross-sectional survey sampling 50,273 nurses within the United States indicating that 31.5% reported leaving in 2018 because of burnout. MacKusick & Minick (2010) reveal an estimated 30%-50% of all new nurses decide to change positions or abandon nursing entirely within the first three years in clinical practice. Within all age classifications, approximately 40% of full-time nurses take a respite from nursing and the percentage of part-time nurses requiring reprieve from work increased to 70% (MacKusick & Minick, 2010). Dropout statistics for new graduate nurses are expanding with nearly 35% to 60% leaving their initial job within one year (Bowles & Candela, 2005; Halfer & Graf, 2006).

Literature has shown a lack of initiative within healthcare organizations to address burnout syndrome within its nursing staffs. Numerous well-designed studies indicated patient safety and patient and caregiver understanding are disintegrating because of burnout syndrome (Baskin & Bartlett, 2021). Healthcare organizations are cognizant of decreasing job fulfillment, efficiency, quality of care, protection, and work execution that comes with diminished nurse responsiveness (Virkstis et al., 2018). Unfortunately, health care leaders are uncertain in addressing and implementing practices in what appears to be a significant nebulous task (Baskin & Bartlett, 2021).

Pehlivan & Güner (2020) used an intervention combining short and long-term compassion fatigue resiliency program (CFRP) resulting in minimal improvement in compassion fatigue and resilience. Information from this research provided evidence that organizations must take a more effective role in supporting nurses and their emotional well-being.

One reason cited in the study for minimal improvement related to low total years of nursing experience. Nurses receiving short-term training had $M = 1.9$, $SD = 1.8$ years of

experience; nurses receiving long-term training had $M = 2.9$, $SD = 2.2$ years of experience; and the control group had $M = 3.3$, $SD = 2.8$ years of experience (Pehlivan & Güner, 2020). One explanation provided for continuing elevation in compassion fatigue scores could be associated with nurses' extreme workloads, together with time-consuming orientation and training for newly hired nurses and other adverse circumstances influencing turnover rates in organizations, which was observed to be elevated throughout the research period. Coincidentally, 45.6% of nurses resigned from their organization the year after this study (Pehlivan & Güner, 2020).

Defining Burnout Syndrome

Burnout syndrome is a psychological disorder that develops as a continuing response to chronic stress in health care organizations (Maslach & Leiter, 2016). Point of service nurses are creating declining health care quality (elevated occurrences of adverse events and errors, inadequate care, diminished patient safety) (Anderson et al., 2021). Galanis et al. (2021) described the overall prevalence of emotional exhaustion to be 34.1% in a study of 18,935 nurses, 12.6% experienced depersonalization and 15.2% had lack of personal accomplishment.

Consequences of Failure to Address Burnout Syndrome

One consequence of not dealing with burnout syndrome is nurses do not believe their safety is being protected. The American Nurses Association (2020) implemented a COVID-19 survey among 32,000 nurses throughout the United States concluding levels of unease from "somewhat" to "very" about personal protective equipment (PPE), safety of their friends and family, personal safety, staffing, acceptable education, testing, and information. Raso et al., (2021) concluded that 31% of nurses surveyed in the research were undecided about leaving or would leave.

Contributing to burnout syndrome is understaffed nurses in health care facilities absorbing increased workload responsibilities (Andel et al., 2021). Due to staffing shortages, nurses attempt to complete additional tasks by resorting to safety shortcuts and circumventing built-in safety procedures (Halbesleben & Rathert, 2008). The term '*safety workarounds*' is applied to these activities performed by nurses and arise so repeatedly that nurses are frequently considered '*masters of workarounds*' (Morath & Turnbull, 2005). This practice routine provides evidence to support data showing safety workarounds are related to increased risks of accidents and injuries at work (Tucker et al., 2020). Due to the current pandemic, employment situations, and work capacity, nurses are facing secondary traumatic stress (Grabbe et al, 2020). Secondary traumatic stress as defined by Finley (1995) as "the natural consequent behaviors and emotions resulting from knowledge about a traumatizing event experienced by a significant other." It is stress resulting from helping or wanting to help a traumatized or suffering person (Salston & Figley, 2003).

Fiscal Impact of Burnout Syndrome

Burnout has caused a shift in accessibility to nurses and nursing pay. The ability of healthcare organizations to retain nurses instead of utilizing traveling nurses will reduce expenditures for nursing staff. According to Nursing Solutions, Inc. "NSI, 2021", average travel nurse fee is \$249,000 annually and average hospital nurse's salary (including 28% for benefits) is \$95,420 annually. NSI also noted cost difference between a travel nurse and a staff nurse results in a \$154,180 imbalance for one year. According to NSI, providing a hospital with staff nurses could reduce its dependency on traveling nurses by 20 agency nurses; resulting in savings produced a surplus of \$ 3,083,600 annually.

Information submitted from hospitals indicates average cost of turnover for registered nurses is \$40,038 with values ranging from \$28,400 to \$51,700 and leading to hospital's losing on average \$5,100,000 per year (NSI. 2021). Hospitals, according to NSI, spend between \$3,600,000 to \$6,500,000 annually for nurse turnover. NSI found goals were established to reduce turnover by 3.7% in hospitals in 2020, but turnover margin increased 1.7% across similar timeframes. Since 2016, hospitals incurred a 90.8% replacement rate of its personnel according to NSI. In short, addressing burnout could have a major budgetary impact.

Organizational Implications

Budgets for health care organizations are adversely affected by nurses becoming burned out and leaving. Added expenses of recruiting, orienting, and training new nurses compounds the cost of implementing fresh staff to the organization. According to NSI (2021), average cost/savings per 1% change in turnover rate is \$270,840 annually. This indicates by decreasing attrition rates of nurses, it effectively supports health care budgets and delivers savings to organizations. The average hospital registered nurse (RN) staff turnover rate is at 15.7% according to NSI, potentially resulting in estimated savings of over \$4 million per year (NSI, 2021).

The pandemic continues to deplete already thinned nursing workforce, it is imperative health care organizations implement measures to decrease nursing burnout and reduce reliance on agency nurses. D'Sa et al. (2018) highlighted potential dangers of nurses working overtime including patient outcomes and conflicting results. Findings from D'Sa et al. (2018) found for every 10 hours of overtime nurses worked, sick time increased by 3.3 hours. Nurses working 40 hours/week (omitting overtime) show a significant relationship with both central line infections (CLI) and nosocomial methicillin resistant staphylococcus aureus (MRSA) infections (D'Sa et

al., 2018). Every additional 10 hours worked on the unit, the danger of CLI incidents increased by 0.1% (D'Sa et al., 2018). A relationship existed between nursing hours worked and nosocomial infection suggested for every 10 additional hours worked, the risk of MRSA increased by 0.2% (D'Sa et al., 2018). Research shows long nursing hours resulted in increased rates of death from pneumonia (Odds Ratio [OR] = 1.42, $p < 0.01$), acute myocardial infarction (OR = 1.33, $p < 0.01$), and abdominal aortic aneurysm (OR = 1.39, $p < 0.01$) (Trinkoff et al., 2011). The fragility of the current workforce requires health care organizations to become accountable to its workforce by employing evidence-based programs strengthening nurse's resiliency and minimize burnout syndrome.

Opportunity to Improve

Organizations implemented different formats of mindfulness interventions to help clinicians decrease burnout by using this mind-body training to increase their well-being (Kabat-Zinn, 1994). Mindfulness is defined as the characteristic of having intentional, present-moment awareness in everyday activities (Kabat-Zinn, 1994). Mindfulness can be achieved because of numerous meditation exercises, which have demonstrated ability to reduce anxiety, fear, and reported burnout (Kabat-Zinn, 1994).

Joint Commission (2019) issued a "Quick Safety" information piece to advise health care organizations about benefits of resilience training in reducing burnout in employees. Current resilience programs include the Multi-modal Resilience Program, the Stress Management and Resilience Training (SMART) program, and the Road to Mental Readiness Program (R2MR) (Scheuch et al., 2021). The partnering organization has provided a "relaxation room" for the past three years enabling nurses to utilize, unfortunately few nurses have taken advantage of the opportunity. Nursing leadership has indicated the Women's Care Center (WCC) has been

adversely affected with turnover in staff and within the management sector and has been identified as a need for resilience training to reduce burnout (BHR, 2022).

Use of Resilience to Address Burnout Syndrome

Nursing resilience has been recommended as a resolution to burnout syndrome (Lanz & Bruk-Lee., 2017; Manomenidis et al., 2019; Yu et al., 2019) and psychological trauma matters (Jackson et al., 2018), which nurses repeatedly struggle with and research is aggressively pursuing (Delgado et al., 2017). Nursing resilience encompasses a complicated, forceful procedure that modifies frequently and depending on circumstances exemplifies not only individual elements but outside forces and illustrates a nurse's capability to adjust to stress and harsh conditions.

The American Nurses Association promoted, "Health Nurse, Healthy Nation" by inspiring nurses to be emboldened in managing their emotional health enabling them to continue teaching, promoting, and displaying examples of well-being, support, and activists for entire communities (American Nurses Association, 2019). A healthy nurse as described by the American Nurses Association (2019) is one who preserves a centrality and collaboration of mind, body, educational purpose, religious affiliation, self-monitoring, and professional accountability.

Writing Enhancing Mental Health

Literature indicates writing (expressive and therapeutic) provides benefits to patients by encouraging positive psychological and physical health outcomes and is a fundamental approach of expressing thoughts and feelings to others and to oneself (Gladding & Drake Wallace, 2018; Pavlacic et al., 2019). Participants who engaged in writing about thoughts and feelings

corresponding to a stressful/traumatic event, described a lesson in health appointments at the university medical clinic (Pennebaker & Beall, 1986).

Writing as a therapeutic instrument assists individuals confronting mental health concerns including anxiety, depression, ambivalence, and trauma (Gladding & Drake Wallace, 2018). Individuals writing just 15 minutes a day, three days a week, frequently encounter a liberation or release, according to Pennebaker & Seagal (1999). Pennebaker & Symth (2016) found participants who wrote about their traumatic experiences for 15 minutes, four days in a row, experienced better health outcomes up to four months later. Individuals having experienced a traumatic or stressful period are more inclined to avoid thoughts and feelings associated with their encounter as compared to individuals who have no association with the events (Bodor, 2002). Writing about stress can change an individual's perspective and alleviate personal stress as improvement in physical, mental, behavioral, and social components occur (Pennebaker & Symth, 2016). Writing permits individuals to sort out their lives in significant and beneficial aspects (King, 2001).

Therapeutic writing exercises are individualistic and must be designed to accommodate different personalities and thought processes (Gladding & Drake Wallace, 2018). Four therapeutic writing exercises that were implemented in this project are described in the following:

- **Five Minute Writing Sprint-** participants write for five minutes. The goal is to keep the writing instrument in motion for the entire period. One can doodle scribble or draw to simulate the action of writing if one prefers not to write sentences.
- **Journaling-** participant is given an opportunity to reflect upon personal experiences and feelings that arise throughout the workday.

- **Optimistic Writing-** provides a challenge to participants into changing beliefs to be more positive or neutral by writing them down.
- **Word Cluster-** allows participants to use a central theme such as anger, anxiety, happiness, peace, or distress to connect words that relate to one another. The figure should resemble a spider web.

Ranging from a short five-minute session to journaling or writing for extended periods, these methods for writing therapeutically can aid in positive mental outlook and hopefulness (Carver & Scheier, 2017).

Group Resilience Program

A systematic review of literature was conducted by Stacey & Cook (2019) explored how conceptualization of resilience impacts interventions to promote resilience. Of significant importance is all studies implemented a group format, some using a one-to-one design, but the prevalent theme was group work (Stacey & Cook, 2019; Wallbank, 2013; Mealer et al., 2014). One study, Im et al. (2016) established their huddling program intervention on group dynamics and support.

Literature provides support for group intervention promoting resilience. Although not specified in the literature, it is noted group intervention using resilience-based strategies helps to encourage resilience building (Stacey & Cook, 2019). The introduction of pictures representing forms of resilience can be used to coordinate small group meetings to achieve strategies assisting in dealing with stress and stressful situations (Stacey & Cook, 2019).

Belini Jacques et al. (2018) created a “Wellness Room” for nurses to utilize for rest and when other activities within the research project were not occurring. Data from the study showed

nurses had a decrease in perception of psychological demand and an increase in control and in social support received at work (Belini Jacques et al., 2018). Another study by Gurney et al. (2020) found creation of a “Wobble room” like a relaxation room, which was a conference room renovated into a dedicated “time out” space, available to any emergency department (ED) staff member, provided an area for quiet time and to unwind. Salmela et al. (2020) conducted a study in which a “Serenity room” was created for ED staff because of low employee satisfaction survey scores and high nurse turnover rate within the unit. Responses from an online survey after a 3-month period indicated 55% of staff using the room was nurses and a score of 7.4 from a ten-point Likert-type scale showed the room was effective in reducing stress, refocusing, or relaxing (Salmela et al., 2020).

Proposed Evidence-Based Intervention

Purpose Statement

Bedside nurses are depleting resilience battling mental and physical exhaustion. Nurses are being driven to exhaustion, breakdowns, increases in patient errors/events, and decreased patient satisfaction scores (Zhai et al., 2021) Providing evidence-based individual expressive writing intervention (EWI) and group resilience interventions within the organization’s relaxation room and skills lab describing, and discussing resilience and dealing with burnout, provided a supportive component in maintaining resiliency. Gladding & Drake Wallace (2018) indicated writing is a beneficial tool which can be implemented in dealing with a range of mental health issues including depression, anxiety, ambivalence, and trauma. Doll (2019) describes resilience building tools specifically, defining resilience through pictures in a group setting. This allows individuals to create a private perception of resilience and then express in a group setting (Doll, 2019). The purpose of this project was to explore evidenced-based interventions

improving/increasing resilience in nurses and reducing effects of burnout syndrome and increasing use of the hospital relaxation room.

Review of Literature

A formal review of literature was conducted to answer the question, “Among nurses (P), what evidence-based interventions (I), as compared to no intervention (C), improves resilience (O), and minimize burnout syndrome (O)?” The databases searched included Academic Search Ultimate, Cumulative Index to Nursing and Allied Health Literature Complete (CINAHL), APA Psycinfo, and Medline. The keywords used were *nurse* OR (*nurses* OR *nursing*), AND *burnout* OR *burnout syndrome*, AND *expressive writing intervention*, AND *systematic review*, OR (*meta-analysis* OR *randomized control trial* OR *RCT*), AND *resilience* OR (*resiliency* OR *resilient*), AND *interventions* OR *strategies*. The findings were further narrowed by limiting findings to publications in English, publications within the last five years, evidence-based practice, and exclusion criteria included nursing students, student nurses, undergraduate student nurses, physicians or doctors.

In total 75 studies were found. After completing a hand search of titles and abstracts, 14 were selected for further examination. After a secondhand search, including critical assessment of the research, eight articles were selected for inclusion. All evidence was appraised using Melnyk-Fineout Overholt Rapid Critical Appraisal Forms. A hierarchy, evaluation, and intervention tables are available in Appendix A, B1-B8, and C respectively.

Relevant Studies

Evidence #1

A meta-analysis (MA) conducted by Zhai et al. (2021) was implemented to investigate the influence of resilience training in nurses. Analyzed outcome examined nurses before and after resilience training and nurses who did not participate in resilience training. For this study, quantitative variations were examined for resilience in nurses as a product of resilience training by effecting a systematic review (SR) of findings involving resilience training for nurses and executing a MA of measurable effects of chosen findings.

Researchers applied a complete literature search strategy for published articles from the date of database inception until April 2020 (Zhai et al., 2021). Various instruments were used to measure endpoints: resilience, Connor-Davidson Resilience Scale (CDRS), Workplace Resilience Inventory (WRI), Depression, Anxiety, and Stress Scale (DASS-21), and the Perceived Stress Scale (PSS). Four comparative studies evaluated the instrumental scores of research subjects of resilience training with those of whom received no training. Two studies randomized participants in the intervention and control groups as well. Findings indicated post-intervention resilience scores of participants who received resilience training increased (*SMD*, 0.583; 95% *CI*, [0.228, 0.938]; $p = .001$), while there was no significant change in resilience scores of control nurses who did not participate in trainings (*SMD*, -0.132; 95% *CI*, [-0.537, 0.273]; $p = .523$) (Zhai et al., 2021). Following resilience training, participants noted statistically significant decreased stress levels (*SMD*, -0.601; 95% *CI*, [-0.800, -0.403], $p < .00001$) and no reduction was noted in nurses who did not participate in trainings (*SMD*, 0.042; 95% *CI*, [-0.418, 0.50]; $p = .859$) (Zhai et al., 2021).

Other findings measuring burnout scores of nurse participants also reduced after resilience training (*SMD*, -1.01; 95% *CI*, [-1.25, -0.76]; $p < .0001$). Anxiety and depression scores also decreased from resilience training participants (*SMD*, -0.05; 95% *CI*, [-0.80, -0.20]; $p = .001$ and *SMD*, -0.43; 95% *CI*, [-0.67, -0.19]; $p < .0001$) (Zhai et al., 2021). Resilience training reduced negative affect (*SMD*, -0.22; 95% *CL*, [-0.37, -0.06], $p = .007$) and improved mindfulness (*SMD*, 0.80; 95% *CI*, [0.35, 1.25]; $p = .001$), self-efficacy (*SMD*, 0.44; 95% *CI*, [0.21, 0.66]; $p < .0000$), well-being (*SMD*, 0.43; 95% *CI*, [0.08, 0.78; $p = .017$), and positive effect (*SMD*, 0.55; 95% *CI*, [-0.11, 1.21], $p = .102$) scores of participants (Zhai et al., 2021).

The hierarchy of evidence utilized for intervention strategy was designed by Melnyk & Fineout-Overholt (2019). The SR and MA represents the highest level of evidence that implements meticulous methodology to increase reliability and validity while reducing bias. This SR supports the researcher's question in providing evidence showing resilience training improves resilience in nurses and decreases incidence of BS (Zhai et al., 2021). The study also provides evidence that nurses' mindfulness, self-efficacy, well-being, and creating a positive effect are improved (Zhai et al., 2021). Important levels of evidence from this MA indicates that resilience training can be a viable instrument in combating burnout syndrome and improving resilience in nurses.

Information acquired from this MA indicates resilience training, including creative writing, resilience perceptions, and resilience discussions have evidence-based research that can be incorporated into this DNP project proposal. Having the opportunity to utilize the organization's relaxation room will provide a quiet, uninterrupted environment in which participants can make use of writing time, reflection, or group discussions involving resilience promotion.

Evidence #2

Romppanen & Haggman-Laitila (2017) conducted a SR to assemble, appraise and produce existing research on interventions to improve nurse's well-being at work. The quantitative SR was based on the procedure of the Centre for Reviews and Dissemination. A total of 13 articles (N =13) were assessed before bias was evaluated. Two interrupted time series (ITS) studies were eliminated because secular trend changes were disregarded and one controlled before-after (CBA) article described only post-intervention results (Romppanen & Häggman-Laitila, 2017). Subsequently, 10 articles presented eight studies on six interventions for improving nurse's well-being at work. Five studies comprised target groups with other health care employees besides nurses. Studies were comprised of varied participants (n = 36-1,173). RCT was implemented as the study design in three studies, CBA was utilized in three studies and ITS were used in two studies (Romppanen & Häggman-Laitila, 2017).

Interventions were arranged into three main classifications. One intervention exclusively focused on individuals and improving capacities in supporting well-being at work were classified as person-directed interventions. Another intervention centered only on organizational facets of work were classified as organization-directed interventions. Lastly, the third intervention blended person and organization-directed approaches, containing interventions improving nurse's individual abilities for improving well-being at work as well as their working conditions. Evidence and methods of interventions in each group differed and the interval of interventions differed from two workshops lasting a few hours to an intervention lasting five years. Measurements used included Maslach Burnout Inventory-General Survey (MBI-GS) used in four studies and the General Health Questionnaire (GHQ-12) used in three studies (Romppanen & Häggman-Laitila, 2017).

Person-directed interventions for nurse's well-being utilized two main themes: 1) teaching methods for stress management and resilience-building and 2) behavioral and mental change process. Application and direction of workshops provided techniques and technologies concentrating on enhancing self-regulation of emotional response to stress. The initial study generated many statistically significant, positive outcomes on personal, work community, and organizational levels. There remains concerns about the intervention because of study designs and mixed risk of bias (Romppanen & Häggman-Laitila, 2017). One study revealed teaching methods for behavioral and mental changes processes generated statistically significant results in only one primary result: psychological well-being. Other research generated two main results: stress experience and sense of coherence. Study design of RCT and CBA supplied compelling evidence supporting the intervention (Romppanen & Häggman-Laitila, 2017)

Organization-directed intervention for nurse's well-being consisted of two groupings: clinical supervision program (CS program) concentrating on professional growth from clinical guidance and development of work conditions and training. One study reported statistically significant positive results to the intervention group in areas of professional inefficacy, psychological distress, control over decisions, and feedback compared with nurses who did not attend CS (Romppanen & Häggman-Laitila, 2017). There was mixed/unclear risk of bias with the study and another RCT could not replicate findings from the previous study. Another study examined organizational interventions for measuring workload, reducing workload, increasing nursing staff and supervisor and coworker support, and enhancing recruitment and professional education. Results of this research were statistically significantly positive on five outcomes including work community and organizational levels. Because of poor study design the levels of evidence do not support the intervention.

Blended person and organization directed intervention used two classifications: improving interaction through personal training; civility, respect, and engagement at work (CREW) and development of stress management and working methods; integrated health program (IHP). The significance of these interventions to this project highlights the importance of interaction with employees and the organization. The CREW program created statistically significant positive outcomes on personal, work community, and organizational levels based on measurements performed one year after the intervention (Romppanen & Häggman-Laitila, 2017). Outcomes included improved employee's psychological well-being and job satisfaction, reduced skepticism, and turnover and improved multiple aspects of the quality of work interactions. IHP aided participants with physical exercises, health information, stress management exercises as well as analysis and creation of working methods. This is important because it indicated an improvement in resilience and stress reduction, which is crucial to the emphasis of this project. It only generated two positive outcomes of the seven measured effects during a nine-month follow-up period. Statistical significance was shown for the intervention groups physical condition and stress management and health preservation and decreased neck complaints compared to the control group. Bias was assessed in the lower level and the study supplied robust evidence for the intervention.

Melnyk & Fineout-Overholt's (2019) hierarchy of evidence for intervention studies classifies a SR as the highest level of evidence. Contributions made by this study presents some evidence to support resilience training with certain interventions, yet because of the risk of bias, short study time and lack of structural equality, lessened the effectiveness and validity of the studies. It is important to observe where bias occurred and work to implement more uniformed studies to support the aim of the study.

Willingness of the partnering organization to promote this project is important because Romppanen & Häggman-Laitila (2017) noted in their study the importance of an organization directed intervention as in the relaxation room and the importance of interventions including expressive writing and group resilience promotion as methods for teaching stress management and resilience building.

Evidence #3

A meta-analysis by Pavlacic et al. (2019) analyzed effectiveness of an expressive writing assignment on only experimental conditions in studies measuring posttraumatic stress (PTS), posttraumatic growth (PTG), and quality of life (QOL) using random effect models. This meta-analysis assesses research utilizing expressive writing techniques applying Pennebaker's (1986) concept written emotional disclosure (WED) and current written exposure therapy (WET) procedures on PTS, QOL, and PTG. Effect sizes are divided by each study's acknowledgement of a post-traumatic stress disorder (PTSD) diagnosis when sample sizes are large enough (Pavlacic et al., 2019).

Researchers compiled studies from online databases including PsychInfo and Google Scholar (Pavlacic et al., 2019). Articles examined change in outcome variables (PTS, PRG, QOL) from pre-to post-test being dependent variable. Study participants were arranged into experimental and control groups and then analyzed at different time intervals (Pavlacic et al., 2019).

A total of 264 meta-analysis documents were selected for inclusion. Research studies identifying PTS were divided by diagnosis conditions (intrusions, avoidance, and hyperarousal) when feasible (Pavlacic., 2019). After classification, 53 articles were selected to participate in this meta-analysis. Cohen's *d* was used to calculate effect size and after being reviewed by two

independent reviews, 223 effects were calculated (Pavlastic., 2019). Comprehensively, 165 effects were computed for PTS, 21 for PTG, and 37 for QOL (Pavlastic., 2019).

Findings for expressive writing affecting PTS examined four different effect sizes (fixed, random, fixed no outliers, and random no outliers). Overall effect sizes of PTS studies include a small effect size that is significantly greater than zero across all estimate types (Pavlastic., 2019). Analysis of expressive writing on PTG generated no outliers. Overall, PTG studies indicated a negligible to small effect size on implementation of both random and fixed models, and non-centralized confidence intervals indicate an effect that crossed zero (Pavlastic., 2019). For QOL effect size, studies revealed a slight to small effect that showed a nonsignificant decrease in QOL because of expressive writing,

After assessing pre- and post-test differences throughout each variable independently, results showed PTS studies produced a small effect size across all meta-analytic evaluations (Pavlastic., 2019). The data indicates that a short, easy-to-administer intervention can produce positive outcomes. Detailed earlier, PTS is operationally defined as re-experiencing thoughts and feelings related to a traumatic experience and consequently searching to avoid these thoughts and feelings (Pavlastic., 2019).

PTG and QOL findings suggested an insignificant to small effect size applying random effect models (Pavlastic., 2019). PTG effect in the meta-analysis evaluation was significant, other procedures showed this small effect is close to zero. Some of the causes determined to affect results were attributed to participants having an elevated level of admiration of their life. And it is probable that participants who had never experienced trauma in their life could not determine whether improvement had occurred (Pavlastic., 2019).

Hierarchy of evidence implemented for this meta-analysis was designed by Melnyk & Fineout-Overholt (2019). Meta-analysis signifies the highest level of evidence that utilizes detailed methodology to promote reliability and validity, in addition to eliminating bias. This meta-analysis provides data to support expressive writing as an intervention to effect PTS, PTG, and QOL (Pavlicic., 2019).

Although not directly addressed in the research, nurses working in reduced staffing situations, confrontational surroundings, and extended work hours are susceptible to PTS. The intervention of expressive writing for brief periods is a useful to support nurses by addressing PTS and providing a resource to improve their resilience. Opportunities to conduct an individual expressive writing intervention and a group resilience intervention within a relaxation room provided by the organization, allows participants to utilize the relaxation room and concentrate on improving mental health wellbeing and improving resilience.

Evidence # 4

A RCT by Pehlivan & Güner (2020) examined effectiveness of a short and long-term compassion fatigue resiliency program (CFRP) and evaluated its influence on nurses' professional quality of life (QOL), perceived stress, and resilience. The study was implemented with nurses from oncology-hematology inpatient services, outpatient chemotherapy units, and bone marrow transplant (BMT) units of three private hospitals in Istanbul. The sample comprised of (n = 125) nurses randomly assigned to experiment I, experiment II, or control group. Experiment I group (n = 34) received the short-term program consisting of (two hrs. per day for two days, 10 hrs. in total), experiment II group (n = 49) received long-term program consisting of (five weeks, two hrs. per week, 10 hrs. in total), and control group (n = 42) received no intervention. Measurements were captured during pre and post-test and at three, six, and 12

month intervals (Pehlivan & Güner, 2020). Attrition for group I lost to post-test ($n = 0$), attrition for group II lost to post-test ($n = 6$), and attrition for control group ($n = 2$) was lost to post-test.

Nurse receiving CFRP had no significant differences between the groups regarding mean PS scores of nurses participating in the group I short-term training ($M = 32.29$, $SD 3.27$), group II long-term ($M = 31.55$, $SD 3.28$) and those in control group ($M = 31.66$, $SD 3.96$). Effect of time variable related to PS outcome variable was not statistically significant ($p = .742$) (Pehlivan & Güner, 2020). Nurses who received CFRP had no statistically significant difference between groups regarding mean resilience scores (RS) of nurses in group I short-term ($M = 135.18$, $SD 17.45$), group II long-term ($M = 131.62$, $SD 19.08$) and the control group ($M = 133.36$, $SD 16.59$). Effect of time variable related to resilience outcome variable was statistically significant ($p = .005$). Nurses who received CFRP in group I short-term and group II long-term did not have QOL scores affected. There was no statistical significance between group I, group II, and control group.

This RCT article is classified as a level II article in Melnyk & Fineout-Overholt's (2019) hierarchy of evidence. Unfortunately, the CFRP had no effect on short-term or long-term effects on CF, burnout, compassion satisfaction, PS, and resilience. Though, both methods were found to positively affect compassion satisfaction levels. Although there was not significant improvement within short-term and long-term groups, the study indicated nurses suffering from all symptoms, use of interventions similar to expressive writing and group resilience intervention conducted in a relaxation room will provide benefits over a period of time.

Evidence #5

Grabbe et al (2020) performed a RCT to evaluate the effectiveness of the Community Resilience Model[®] to promote nurse well-being. Participants were a convenience sample of

nurses ($n = 1,600$) who were invited to a “Wellness Nurse” study at two large, tertiary care hospitals in Georgia. Nurses who responded ($n = 196$), signed informed consent and completed baseline surveys on well-being and stress (Grabbe et al., 2020). Participants were randomized for the study and placed in either intervention or control group. Participants in the intervention group attended a three-hour class CRM psychoeducational/sensory awareness skills training and the control group attended a three-hour class on nutrition/healthy eating. The intervention group ($n = 99$) received CRM training, and the control group ($n = 97$) received a nutritional intervention. After follow-up, the intervention group ($n = 40$) and control group ($n = 37$) were analyzed (Grabbe et al., 2020).

Pre-post surveys included five previously validated measures: the WHO-5 Well-being index (WHO-5), the Connor-Davidson Resilience Scale®-10 (CD-RISC), the Secondary Traumatic Stress Scale (STSS), the Copenhagen Burnout Inventory (CBI), and the Somatic Symptom Scale-8 (SSS-8). The first research question asked about characteristics of well-being, resiliency, secondary traumatic stress, burnout, and physical symptoms in a population of hospital-based nurses? Non-attendee nurses ($n = 119$) had slightly higher burnout scores ($M = 50.54$, $SD = 20.53$) compared to attendees ($M = 44.97$, $SD = 20.74$, $p = .068$). they also had higher SSS-8 scores ($M = 9.42$, $SD = 6.09$) compared to attendees ($M = 7.08$, $SD = 5.52$, $p = .007$) and they had higher proportions of medium, high and very high SSS-8 severity categories (medium: 20.3% vs. 15.6%, high: 20.3% vs. 13.0% and very high: 16.1% vs. 9.1% respectively (Grabbe et al., 2020).

The second question investigated the impact of three-hour CRM class on resiliency, well-being, secondary traumatic stress, burnout, and physical symptoms of nurses versus a control group. Data from these multilevel linear models for changes over time generated non-

significant results ($p > .05$). Though, four of the results produced significant time effects. Results indicated positive change over time were well-being ($p = .006$), resilience ($p = .004$), secondary traumatic stress (STSS) ($p = .009$), and somatic symptoms (SSS-8) ($p = .004$). Yet, time was not significant for burnout ($p = .149$) (Grabbe et al., 2020).

Grabbe et al. (2020) noted exhaustion and frustration related to burnout lead to heightened susceptibility to symptoms of STS. Modified psychological stability has been associated to “presenteeism”, or functioning in a less than resilient state of mind, creating an impact on quality of care and expenditures for organizations (Grabbe et al., 2020). Noted in Grabbe et al. (2020) nursing leaders are conscious of four “imperfections” in nursing settings: safety threats; compromises in care delivery; traumatic experiences without recovery, and protocols isolating nurses from interacting with each other as part of daily work. In combating stress management interventions for nurses, focus must not only center on individuals but also implementing organizational requirements to promote personal resilience training skills for nurses.

Grabbe et al. (2020) found only ($n = 196$) of the 1,600 nurses (12%) volunteered to take part in the Nurse Wellness and Well-Being class decided to be in the study and completed the initial survey on wellness and stress. Because of the limited sample size, statistical power used to find substantial discrepancies among improvement from the intervention group and control group, impacted only bigger classes by time. Further investigation revealed that self-reported measurements were documented in this study and physiological statistics of stress could be beneficial in further investigations trying to understand resiliency.

CRM[®] programs highlights importance of effective resiliency training to promote nurse resiliency and enrich stress capability and promote individual compassion in nurses exposed to

complicated work environments. This program can be useful in the DNP project because of its use of resiliency training to reduce burnout and support nurses' well-being. Findings provided an opportunity to implement training in a clinical setting. The CRM[®] program contributes to the research project because it provides a framework to build a resiliency training plan. It also delivers evidence that individual nurse participation is important, but organization needs to embrace group resilience intervention underscoring the necessary of resiliency training for nurses.

Use of resiliency training either through CRM[®] or proposed individual expressive writing and group resilience therapy provides participants an opportunity to focus on sensory awareness and to remove some conflicts that arise throughout the workday. Having an opportunity to utilize a relaxation room to perform these interventions will help participants remove stress factors they are constantly experiencing in their unit.

Evidence #6

Muir & Keim-Malpass (2020) performed a mixed methods study investigating a mindfulness intervention program and its implications on nurse burnout. The study's aim was to implement the Emergency Resiliency Initiative (ERI) to examine alterations in burnout scores and main indicators to burnout among registered nurses (RNs) and patient care technicians (PCTs) in a level I trauma center emergency department (ED). A mixed methods pre/post study and data collection points before and after a three-month intervention (Muir & Keim-Malpass, 2020). Participants working in the ED volunteered for the study from August thru October 2018 in Virginia, which totaled ($n = 35$) employees.

ERI was developed from Kabat-Zinn et al. (2017) mindfulness-based stress reduction (MBSR) model (Muir & Keim-Malpass, 2020). Educational information was delivered in sessions that began with five-minute grounding practice followed by 40-minute instructional explanation. Mindfulness meditation periods were examined by ERI mediators and utilized three reflection categories: (1) body scan, (2) sitting meditation, (3) loving kindness meditation. An individual meeting of integrated compassion training (Muir & Keim-Malpass, 2020).

Qualitative outcomes measuring burnout were utilized with the Maslach Burnout Inventory® (MBI) Health Services Survey for Medical Personnel calculating burnout through statements that relate to three stages of burnout (emotional exhaustion, depersonalization, personal accomplishment). Data analysis was utilized using frequencies and percentages. Mean burnout scores were critiqued within stages of burnout. Variations in baseline/posttest scores from RNs and PCTs were analyzed by independent-samples *t* tests. Paired *t* tests evaluated pre- and posttest variations within single and blended clinical groups (Muir & Keim-Malpass, 2020).

Qualitative outcomes were achieved by individual, in-person discussions with RNs and PCTs to explain the primary source of ED burnout, and what perspectives of the program employees felt were best suited to be utilized in the work environment. Participants were recruited from a convenience sampling strategy who finished all training of ERI and finished all pre- and post-program surveys. Five individual interviews were exchanged over a period of three months and were audio recorded and included in the investigation (Muir & Keim-Malpass, 2020). A semi-structured interview method concentrated on clinicians' insight of burnout pertinent to the ED unit and practicality of implementing the talked about topics and ideas. Auditory data was inserted into a qualitative software management application (Dedoose) for interpretation (Muir & Keim-Malpass, 2020).

Quantitative results from 35 participants: RNs ($n = 26$) and CPTs ($n = 9$) who participated in at least one class. burnout scores for RNs at baseline indicated significantly higher emotional exhaustion in comparison to PCTs, $M = 2.81$ vs. $M = 1.91$, $p = .03$ and RNs were significantly higher on depersonalization in difference to PCTs, $M = 2.73$ vs. $M = 1.33$, $p < .01$ at baseline. RNs scored lower on personal accomplishment compared to PCTs, but the difference was not significant. Post intervention periods, RNs scored lower on emotional exhaustion and personal accomplishment, although differences were not significant.

Qualitative results pursued participants' perspective into practicability of CRI programs and themes related to burnout (Muir & Keim-Malpass, 2020). One participant noted online format provided ease of accessibility, it also created a less personal format as in-person presentation. Participants also commented on implementation of sessions after their shift had ended noting after 12 hours of patient care nurses are "dead tire" and was not the optimum period for the session. Another participant thought sessions could be longer and meet in a location away from work.

Burnout topics surfaced from data included factors decreasing burnout as well as interventions to promote clinician resiliency. Topics to keep in mind included: (1) Prioritization distress, (2) Change fatigue, (3) Self-protection through superficiality, (4) Internal response, (5) Community and Chaos (Muir & Keim-Malpass, 2020). Prioritization distress involves meeting needs of all patients and trying to manage cumbersome workloads and concentrating on the most vulnerable patients. Change fatigue is derived from constant execution of new policies, procedures, and additional ED improvements to provide appropriate care delivery for all patients. Self-protection through superficiality occurs when ED staff are confronted with observing physical, mental, and emotional human suffering within their patients (Muir & Keim-Malpass,

2020). Intentional response refers to ability of care providers important devices from the ERI which assists them in navigating tense, challenging encounters within the ED. Community amid chaos allowed care providers to reflect with other staff their perceptions, obstacles, and hurdles to resiliency with other staff.

Muir & Keim-Malpass (2020) found the mindfulness intervention program was an appropriate approach because of mixed formats of in-person and on-line might improve participant enthusiasm and devotion to the program. Modifications in MBI scores supported arguments that burnout scores would be decreased in at least one category for RNs and PCTs. This article provided useful awareness of how ED RNs and PCTs react to assaults on their resiliency and use of ERI can improve these participants capability to reduce burnout. Allowing ED staff to divulge challenging work scenarios can enable health care organizations to implement further changes to support the workers. Peer-to-peer conversations can support self-care programs that promote emotional, psychological, and physical stability for clinicians. Contributions of ERI provides clinicians with a voice to address issues within the ED and use supportive phrases to help de-escalate stressful incidents (Muir & Keim-Malpass, 2020). It is reasonable to incorporate this study's findings into a body of evidence to incorporate in clinical practice because incorporating the practice of mindfulness when using group intervention allows participants to portray their unique perspective of resilience.

Muir & Keim-Malpass (2020) noted a mindfulness intervention program is beneficial in reducing volatility that can occur in stressful incidents. Implementing an individual writing activity helps participants to incorporate mindfulness training because of the need to focus on writing or concentrating on issues distracting the thinking process. Use of group resilience interventions help participants to provide care to colleagues through emotional and psychological

support. Allowing these interventions to be staged within a relaxation room provides additional support through a quiet, peaceful setting.

Evidence #7

Baskin & Bartlett (2021) conducted a literature review to investigate resilience among health care workers during the coronavirus disease-2019 (COVID-19) pandemic. The literature review consisted of five criteria: (1) problem identification, (2) literature search, (3) data evaluation, (4) data analysis, and (5) presentation. Two article examinations were implemented between December 2020 and February 2021 with a total (N = 191) articles (Baskin & Bartlett, 2021). After screening for inclusion criteria, (N = 32) articles were chosen for the review. Measurement of resilience scores were validated by the Connor-Davidson Resilience Scale (CD-RISC) utilizing both the 25-item version and 10-item version. Scores were categorized by low, moderate, and high categories to indicate influence.

Resilience scores among frontline health care workers during the COVID-19 pandemic were in the moderate range (CD-RISC range = 35.54-92.77). Frontline workers (doctors, nurses, support staff) had lower CD-RISC-10 scores than non-frontline workers (*Mdn* = 18 and *Mdn* = 23, respectively). Resilience scores had statistically significant ($p < 0.05$ or smaller) inverse relationship with PTSD, anxiety, and depression (Baskin & Bartlett, 2021). Almost 50% of the nurses stated moderate to high burnout, and those who had higher burnout scores stated lower resilience scores. Statistically significant ($p < 0.05$ or smaller) negative correlations occurred between resilience and the burnout subscales emotional exhaustion and depersonalization and a positive correlation with the burnout subscale personal accomplishment (Baskin & Bartlett, 2021). Caring for COVID-19 patients more than 50% of the time was connected to higher

burnout scores among health care workers as opposed to those who work with COVID-19 patients less than 25% of the time.

Results from this study validated information correlating the presence of an inverse relationship between resilience and burnout. This review highlighted resilience scores for first defense health care workers who were identified in the moderate range. Statistics from the United States indicated a decrease in nurse resilience prior to the pandemic and data from China showed increased resilience compared to pre-pandemic levels (Baskin & Bartlett, 2021). The article underscores the significance of nurses who had elevated resilience scores and experienced reduced negative mental consequences including anxiety, depression, and PTSD. An important segment of supporting nurse resiliency must be generated by nursing leadership and the organization. The article noted importance of expressions of gratitude for nurses as a strategies to increase resilience (Baskin & Bartlett, 2021). This article does not provide specific interventions to promote resiliency, it highlights the importance of nurses using their voice to stand-up for equitable workplace conditions. Resilience building is necessary to promote nurse well-being and interventions to decline burnout is essential in building nurse resilience.

Bartlett & Bartlett (2021) evidence showed the importance of promoting resilience in nurses. Expressive writing exercise and group resilience discussions are two ways research has shown these interventions do promote resilience building and reduces burnout (Doll, 2019; Pavlacic, 2019). The important factor within this project will be use and continued use of the relaxation room as an intervention area and post-project, continue to be accessed by the nursing staff.

Evidence #8

Joint Commission (2019) introduced an information piece highlighting the importance of developing and fostering resilient environments and individuals. The article promoted developing interventions for nurse resilience because of issues regarding patient safety because burnout adversely impacts physical and emotional health of staff and promotes rising costs (Joint Commission, 2019). Although designated as low-level evidence by the Melnyk & Fineout-Overholt (2019) hierarchy of evidence, the importance of a hospital accrediting body publishing this article, underscores the importance to publishers.

Evidence from an April 2019 survey which included over 2,000 healthcare partners indicated 15.6% of all nurses self-reported feelings of burnout, with emergency department nurses at greater danger of burnout (Joint Commission, 2019). A 2019 survey identified burnout as a leading patient safety and quality concerns of healthcare organizations finding: (1) 5% of surveyed workers remarked their organization was extremely successful in tackling staff burnout, (2) 39% of surveyed workers thought their organization was somewhat successful managing burnout, and (3) 56% of surveyed workers remarked their organization was marginally unsuccessful or exceedingly unsuccessful in decreasing burnout (Joint Commission, 2019).

Research revealed resilience is not only reducing burnout but promoting resources to fight health care setting barriers. Interventions including mindfulness (practice of learning to focus attention and awareness on the minute-by-minute experience with a mindset of interest, sincerity, and recognition) and resilience training could promote employee retention, decrease staff turnover, and job execution issues, and advance patient satisfaction. The article also addresses evidence that a lack of leadership will not promote any resilience building strategies

because obstacles must be eradicated that are obstructions to nursing workflow including staffing and addressing workplace issues.

Leadership Empowering Behaviors (LEB) are categories described in Joint Commissions (2019) categorizing actions supporting workplace empowerment. Categories include enhancing meaningfulness of work, fostering opportunity to participate in decision making, expressing confidence in high performance, facilitating attainment of organizational goals, and providing autonomy and freedom from bureaucratic restrictions. These LEBs in nursing are clearly connected with nurses' sense of equality in acute care settings and both LEBs and workplace equality are successful in reducing workplace conflict and increasing work efficacy (Joint Commission, 2019).

This article indicates a gap in literature describing inconsistency of health care organizations not adopting nursing leader interventions to support nurses. Joint Commission (2019) in issuing this "Quick Safety" document believes health care organizations do not prioritize nurse well-being and resiliency and could amend their regulations to make health care organizations provide documentation on interventions implemented within their facility to decrease burnout and improve resiliency.

Information from this article supports the research question in answering if interventions related to nurse resiliency and decreasing burnout syndrome are effective as opposed to no intervention. Findings from Joint Commission (2019) indicate actions including mindfulness and resilience training are appropriate evidence-based interventions. Collaborative commitment from nursing leadership and organizational leaders are necessary to support frontline nurses in building their resiliency. By implementing individual writing intervention and group resilience therapy

discussions, and having a relaxation room to conduct this project, will help nurses build upon their resilience strategies and improve their mental health coping skills.

Synthesis of Literature

Review of literature and the identified evidence-based research studies provide solid results from significant data in supporting the rationale of implementing interventions which utilize techniques described in multiple resiliency training programs (Grabbe et al., 2020; Zhai et al., 2021). Resiliency training for nurses provides crucial coping mechanisms to assist in diminishing effects of traumatic patient care, staffing shortages, and toxic work environments in health care organizations (Grabbe et al., 2020; Zhai et al., 2021). All studies underscored the importance of reducing burnout because of its inverse relationship to resiliency and to promote nurses' well-being. Additionally, the studies examined workforces throughout the world and integrated findings advocating for resilience intervention which similarly assist nurses in reducing burnout (Romppanen & Haggman-Laitila, 2017; Zhai et al., 2021). Yet, due to lack of randomization, diminished sample sizes, and unknown effect of research in nurses with existing resilience, vulnerable nurses need to be examined to grasp improved comprehension of the crisis (Romppanen & Häggman-Laitila, 2017). Moreover, nursing leadership and health care organizations must respond and authorize evidence-based interventions in support of nurses because of the gap between how nurses feel and the reaction from health care leaders (Baskin & Bartlett, 2021; Joint Commission, 2019).

Literature provided evidence-based interventions in therapeutic/expressive writing and group resilience interventions that provide documented results positively affecting individuals who use these techniques. Relatively short implementation periods are needed to engage in

writing and group discussion make these interventions applicable to nurses who have only 15 minutes for break yet need to take time to invest in themselves.

In summation, nurses are ground zero regarding patient care in hospitals and health care organizations. The quality of care and professionalism nurses exhibit during their involvement in supporting patients cannot be compromised with burnout and diminished resiliency. A significant volume of evidence reinforces the application of resilience training or resilience building programs including therapeutic/expressive writing and group resilience building to reduce burnout in nurses. Establishing an evidence-based program incorporating these interventions into a healthcare organization, bolsters nurse's self-efficacy and supports the goal of patient-centered care.

Guiding Theory

Addressing dilemmas of burnout syndrome and resilience building requires changing perception of nurses recognizing effects of burnout, changing how they manage psychological and physical impact of burnout, and addressing resources to aid in their recovery. The project theory utilized to be associated with implementing the proposed change within the organizational environment is adapted from Lewin's theory of planned change. Lewin (1947) developed the model in managing change by describing three steps organizations use to implement a change process: Unfreezing, Moving, and Refreezing. See Appendix D for Lewin's framework.

Unfreezing Stage. The first phase, unfreezing, describes how current process in managing diminished resilience in nurses is not being effectively achieved and the resulting dissatisfaction and work overload that creates unsafe working conditions and patient safety issues remain continual (Hussain et al., 2018). With the onset of the COVID-19 pandemic,

nursing leaders are analyzing reduced nursing workforces, critically ill patient volumes, and absence of evidence-based interventions to support nurses and the need for additional modification.

Moving stage. The second phase of Lewin's theory is the moving stage. It necessitates highlighting advantages of change for employee engagement to enhance participants' contribution into choices impacting organizational execution and employee mental and physical performance (Glew et al., 1995). In addition, it will diminish opposition that presents adverse outcomes for change (Lewin, 1947). Opposing influences on this change can be generated by nurses who have had failed experiences with earlier interventions, physical and mental exhaustion, the need to remove themselves from the work environment, and feelings of despondency. Positive influences are derived from employee involvement in change, knowledge sharing from the organization, and leadership promoting change and supporting employees (Hussain et al., 2018).

Execution of this quality improvement change will be determined by interventions that are evidence-based (pre and post intervention surveys) to examine effectiveness of resilience training (individual and group) from nurses in the Women's Care Unit. In addition, nurse managers will be invited to participate to provide buy-in and promote a transformation in culture that will encourage institutional shift affecting all nursing units. The efficacy of this intervention is dependent upon participation from all and delivering a thought-provoking presentation.

Refreezing stage. The final phase in Lewin's (1947) change model involves refreezing or adaptation of changes implemented within the organization. Specific activities are utilized in integrating change responsibilities, temporal orientation, and explicitly tying tasks according to the organization's change goals and priorities (Hussain et al., 2018). It is crucial nurses will

engage between themselves to provide support for each other and become entrenched in supporting resilience within the nursing unit. With proposed success of this project, will encourage organizational leaders to implement and sustain this project throughout the facility.

For this project, it was essential nurses realize the complexity of burnout and understand change in perspective cannot arise without changing of previous strategies to promote resilience. Most importantly, being accepting and willing to change their perception of making time for themselves by using evidence-based strategies to manage improving work environment and their personal beliefs. By accepting that nurses are struggling and coexist with nursing leadership and the organization, knowledge gained from new interventions will support nurses in maintaining resiliency in patient care responsibilities or help restore nurses' well-being.

Organizational Description

Setting

The partnering organization for implementation of this research project is the Women's Care Unit within an acute care medical facility. This regional hospital with a 105-bed capacity, is in the mid-western United States and provides multiple services for many surrounding counties.

Mission, Vision, and Values

The organization endeavors to incorporate the passion of Christ to deliver outstanding coordinated patient-centered care, including families, in accordance with the partnership of the community and nursing care utilizing best practices. This organization encompasses five main objectives in building its vision: 1) clinical excellence, 2) compassionate care, 3) growth to accommodate patient needs, 4) transforming as health care shifts, 5) respect. Directed by faith-

based principles, this organization attains its dream channeled by integrity, compassion, excellence, collaboration, and joy (Baptist Health, 2022).

Congruence of Nurse Resiliency to the Organization

Attack on individuals by the COVID-19 pandemic has resulted in health care organizations being desperate for nurses because of the nationwide nursing shortage. This organization understands the immense pressure and burden nurses take on daily and this project aligns with the organization in promoting nursing resiliency. Assisting nurses to improve their resilience helps them deliver better patient-centered care and provide efficacy within the organization.

The organization provides services listed in the employee handbook outlining available resources. These include:

- Chapel services: open to employee's morning or night dependent upon work schedules. Special services are presented to employees and times are distributed through communication within the facility.
- Employee Assistance Program (EAP): provides private assistance to employees with personal conflicts, mental health work issues, bereavement counseling, financial complications, or substance dependence. Services are provided by Magellan Healthcare.
- Employees Support Fund: financial assistance provided to employees through the partnering organization that provides monetary support for emergency use. Provides limited funding for basic living expenses, caused from an unanticipated fiscal crisis. Human resources provide support in dealing with exceptional circumstances.

- Compassionate Leave Sharing (PTO Donations): additional hours/time donated by partnering organization employees that allows staff members who have utilized all their paid time off (PTO) to utilize up to 480 hours of PTO time, hour for hour, to assist in managing the required time off (BHR, 2022).

Relevant Policy

Current national policies are weak on supporting nurses forced to work mandatory overtime with only 18 states currently having laws limiting or prohibiting mandatory overtime for nurses (Deering, 2022). ANA's *Healthy Nurse, Healthy Nation* (2019) outlines three criteria for improving the health of the nation's nurses: 1) engage nurses on five levels (physical activity sleep, nutrition, quality of life, and safety), 2) creating and maintaining balance and cooperation through physical, intellectual, emotional social, spiritual, financial, personal, and professional well-being, 3) create a healthy nurse population. The organization currently has received financial support from the government through COVID relief stimulus to help with decreased staffing and the use of expensive traveling nurses (BHR, 2022). The Governor of the state recently signed into law a bill increasing enrollment in nursing schools and incentives to bring more out-of-state nurses to work in this state (Associated Press, 2022). Because of overwhelming patient numbers from COVID-19, the organization has lacked resources or time to implement activities to support nurses.

Stakeholders

Organizational stakeholders consist of the Chief Nursing Officer, the Director of Nursing Professional Practice, Director of Education and Professional Development, managers within the Women's Care Center (WCC), and nurses who provide care within this unit. Nursing leaders

within the organization expressed concern about nurses within the WCC about their level of burnout and decreased resilience. There is a new unit director and unit manager, increased turnover, and decreased morale within the unit. This intervention provided nurses within the WCC, an individual and group component encouraging understanding of complexities of remaining resilient in a stressful workplace. The organization has also provided a relaxation room for nurses to utilize during the project and any other time when possible. To determine the necessity for an intervention, a strengths, weaknesses, opportunities, and threats (SWOT), as assessment provided evidence that specific education and evaluation is required for nurses working with decreased resilience and burnout (Appendix E).

Primary stakeholders and intervention group were patients and their families in the WCC. With the onslaught of COVID-19, the organization was forced to utilize this unit for COVID-19 patients and nurses within the unit were charged with caring for these individuals. Having to relearn critical care skills for many of the nurses, brought about stress, anger, feelings of helplessness, fatigue, burnout, and limited resilience. Closely following this group were the nurses because of the enormous amount of stress that accompanied caring for critically ill patients and the lack of experience/training these nurses had been provided. Nurses are patients' first line of defense and when these nurses become burned out and compromised, health care suffers.

Statement of Mutual Agreement

The document outlining the contract between the partnering organization and the DNP project coordinator is noted in Appendix F.

Methodology

This DNP project evaluated the efficacy of evidence-based resilience interventions to support nurses in promoting resilience building skills and utilize techniques that reduce symptoms of burnout syndrome in the WCC of an acute care facility. A primary goal was to improve feelings of resiliency in 25% of nurses who participated in therapeutic writing portion of the project. Another goal was reduction of symptoms of burnout syndrome by a 10% minimum in the group intervention using pictures and discussion. A third goal was to document an increase in use of the hospital's relaxation room by nurses, with use of a post-intervention assessment to create baseline usage of the hospital relaxation room, determine continued use, and assess amount of time the hospital relaxation room is utilized by nurses following study completion. The goal was to enable nurses an opportunity to better manage their resilience, reduce symptoms of burnout syndrome, and utilize the hospital relaxation room as a mental health strategy.

Objectives

1. Develop evidence-based resilience training intervention utilizing individual expressive writing sessions and group resilience building activity based on the recommendations by Pavlacic et al. (2019), Doll (2019), and *Healthy Nurse, Healthy Nation* (2019).
2. Implement the training:
 - a. Train 100% of nurses that wish to participate in the project within 12 weeks of IRB approval.
 - b. Collect data on resilience promotion and reduction of burnout syndrome.
 - c. Collect data for process improvement.
3. Evaluate project success by analysis of outcomes:

- a. Outcome 1: 100% of nurses that chose to participate in the project received training on therapeutic/expressive writing.
- b. Outcome 2: Resilience scores are increased by 25% over baseline.
- c. Outcome 3: Burnout is decreased 10 % from baseline.
- d. Outcome 4: The hospital relaxation room utilization is increased by evaluation of the post-intervention assessment indicating growth in usage (in minutes) from baseline to post-project.
- e. Outcome 5: Participants give feedback on resiliency interventions and training from a post-intervention survey measuring intent (in minutes) to continue utilizing the hospital relaxation room.

4. Plan for Dissemination and Sustainability

Design and Implementation Framework

The framework for this project was the Plan-Do-Study-Act (PDSA) model developed at the Institute for Healthcare Improvement. The project employed a Pre/Post-test design. Refer to Appendix G for a description of the implementation (Institute for Healthcare Improvement [IHI], 2021).

IRB Submission

The DNP project proposal was submitted to a review panel consisting of stakeholders including the Chief Nursing Officer, Director of Education and Professional Development (DEPD), Director of Nursing Professional Practice (DNPP), and nursing unit managers within the partnering organization. After permission was obtained from the panel, an application to the organization's Institutional Review Board was submitted by the PI, DEPD, and DNPP. Being

exempt status allowed for approval of the project to be granted immediately (Appendix H). Once approval was received, the IRB body from Eastern Kentucky University sent a letter of deferment, granting permission to the organizations IRB body (Appendix I).

Ethical Considerations

This DNP project eliminated all participant identifiers and did not incorporate tracking methods that would allow for recognition of participants. Instructions for participants included participation was voluntary, an individual could withdraw at any time, and no explanation was necessary for dropping out. Participants were advised the evidence-based interventions presented no greater than minimal risk to themselves. There was no monetary incentive proposed as compensation for participation in the research study.

Recruitment and Consent

Project participants were nurses recruited from the Women's Care Center within the organization. An informed consent document was attached to the first page of each survey and assessment notifying participants of their rights within the project. (Appendix J). The goal of the interventions was to have a maximum of $n = 50$ (project participants) with a minimum participation goal of 25% throughout the project. By participating in the research project, consent to participate in the project was implied. Inclusion criteria incorporate nurses working in the Women's Care Center. Participants could be staff nurses involved in patient care or nursing management, and full-time or part-time. Exclusion criteria included agency nurses and all patient care personnel apart from nurses already stated. Flyers explaining the project were posted in work areas of affected nursing units and the PI provided contact information for those individuals who had questions. An example of the recruitment flyer (Appendix K). This flyer

explained completion of surveys were strictly voluntary, and completion indicated consent of participation for data points evaluated in the DNP project.

In addition to the flyer, the PI attended the monthly virtual staff meeting prior to the start of the project to introduce themselves, answer questions, and provided additional information concerning how the project was to be conducted. An introductory email was provided to all nurses working in the WCC by the organization, discussing the project, outlining requirements, and encouraging participation in the project to help in dealing with issues related to work on the unit (Appendix L). After the project was launched, a follow-up letter was distributed to all project participants asking their perception of the project to that point and any concerns or questions that have ensued to this point (Appendix M). A confidentiality agreement was signed by each participant at the beginning of the group discussion intervention to provide added protection of the participants' identification and any statements that may be used during the discussions (Appendix N). A conclusion letter was sent to all project participants thanking them for their contribution to the project and provide them with contact information for questions after the project concludes (Appendix O).

Opportunity for Improvement

Two interventions implemented involved an individual writing component and a group intervention using individual perceptions of resilience. The individual intervention, which was completed in the hospital relaxation room away from the unit, or the skills lab adjacent to the WCC, required project participants to utilize one of several therapeutic/expressive writing exercises for two weeks (Gladding & Drake Wallace, 2018). The writing exercises consisted of four writing exercises (Five-minute writing sprint, Journaling, Optimistic writing, and Word cluster) each varying in length-of-time and content. Project participants chose which exercise to

interact with, the only requirement is to put thoughts to paper. Haertl & Ero-Phillips (2019) found that the therapeutic benefits of writing improved feelings of self-worth, expanded coping strategies, enhanced stress management, and provided greater flexibility to cope with negative interactions in daily living. Individuals within the study also benefited from writing through (a) heightened personal awareness and perspective, (b) self-examination of their lives, (c) better feeling of themselves, and (d) greater individual self-worth (Haertl & Ero-Phillips, 2019).

The group component using personal perception of resilience involved introducing, educating, and creating discussion about resilience, began two weeks after the therapeutic writing started in the hospital relaxation room and the skills lab. Assorted pictures indicating alternate forms of resilience were placed on a table. Project participants were requested to select a picture that best relates perception to resiliency. Participants then described what the card indicated in relation to resiliency and what resilience meant to the individual (Doll, 2022). Exercises lasted approximately 15 minutes and displayed new concepts concerning resilience. Project participants were reminded that at any time during the writing process or group resilience discussion, if they become uncomfortable or upset, they could leave without affecting their status in the intervention.

Intervention Description

Project participants were administered the Connor-Davidson Resilience Scale 25[®] (CD-RISC) and the Maslach Burnout Inventory[®] (MBI) surveys, in addition to the demographic survey prior to the individual intervention in the hospital relaxation room or skills lab. After a two-week period, completion of surveys ended. Participants were given instructions on the individual therapeutic/expressive writing portion of the intervention which were completed in the hospital relaxation room or skills lab. The initial time frame for this session was approximately

two weeks. The CD-RISC[®] post-intervention survey was completed by the individual writing participants. The group resilience building portion commenced after the initial two-week individual writing intervention began. The group resilience building component of the intervention met in the hospital relaxation room or skills lab. Once all participants had spoken, time was allotted for questions about resiliency and other related topics. The group portion lasted for four weeks. Following completion of the two interventions, project participants were administered the CD-RISC[®] and the MBI[®] assessment surveys. After a four-week period, where participants wrote or use the hospital relaxation room for discussion, project participants again completed the CD RISC 25[®], MBI[®], and post-intervention assessment surveys. A post-intervention assessment survey was administered to participants to determine continued use of the hospital relaxation room, amount of time spent utilizing the relaxation room, impact of individual writing, and group resilience discussion.

Survey Instruments

The PI obtained permission to utilize the Connor-Davidson RISC 25 (CD RISC 25) (Appendix P) from Becky Williams and the Maslach Burnout Inventory (MBI) from Katherine at Mind Garden Incorporated (Appendix Q). Project participants were given a post-intervention assessment survey by the PI to assess usage of the hospital relaxation room and any perceived benefits participants received from the project (Appendix R).

Demographic Questionnaire

Demographic questionnaire developed by PI (Appendix S). Project participants completed this document to understand impact years in nursing, educational training, and prior exposure to resilience training impacted their answers.

Connor-Davidson Resilience Scale[®]

Connor-Davidson RISC-25[®] utilizes a 25-question list using a 5-point Likert scale in assessing resilience in different occupations, including medical personnel (Appendix T). The Connor-Davidson RISC has developed good reliability ($\alpha = .88$ and $.89$) and test-retest reliability ($.87$), and convergent and divergent validity in the development of the scale (Connor-Davidson, 2003). According to Gonzalez et al. (2015) the Connor-Davidson Resilience Scale possesses exceptionally good reliability and validity. Internal consistency (Cronbach alpha) of CD RISC 25[®] was rated good at 0.90 (Kuiper et al., 2019).

Maslach Burnout Inventory[®]

The Maslach Burnout Inventory[®] Human Services Survey (MBI-HSS) employs a 22-question list using a 6-point Likert scale measuring effects of burnout (Appendix U). Cronbach's alpha values ranged from 0.71 to 0.90 in the findings of Maslach & Jackson (1981) in a study of 1,100 participants. Test-retest reliability or reducibility indicated the correlation coefficient was 0.95. An internal consistency of 0.922 was found in the survey by Montiel-Company et al. (2016). MBI-HSS has shown validity, reliability, and viability in measuring burnout in dental students (Montiel-Company, 2016).

Data Analysis and Storage

The CD RISC 25[®] and MBI[®] data was computed using statistical analysis from Excel and implementing the measure of central tendency (mean and standard deviation), in addition to the p -value, t -statistic: two-tailed paired two sample for means. Cohen's d was also calculated in Excel to measure effect size. To evaluate any change of measurements in resilience and burnout, paired sample t tests were utilized to monitor any change between the pre-intervention

and post-intervention. Observed changes were compiled, and data analysis was conducted to account for additional improvement or possible reduction in pre-intervention surveys. Analysis of post-intervention survey was included in data analysis. A survey to determine use of the hospital relaxation room, amount of time nurses spent in the relaxation room, perceived benefits, and plans for future utilization by nurses was used to collect data.

The PI was responsible for all data collection, interpretation, and presentation of findings for the DNP project. The PI provided any explanation of the individual and group interventions. Interpretation of the pre-intervention CD RISC 25[®] and MBI[®] surveys provided a baseline of resilience and burnout levels in nurses which can prepare them to understand and employ evidence-based interventions used to improve mental outlook.

Following use of resilience survey after two weeks, a second round of CD RISC 25[®] and MBI[®] surveys were administered following both interventions to determine effectiveness of the interventions. The intent of these surveys is for data collection, usage of the hospital relaxation room, understanding which (individual or group) intervention helped to accomplish goals of the project, and how best to incorporate these interventions into practice at the facility.

Protection of Data

Instruments to utilize data analysis of outcomes for this project were a demographic questionnaire and pre-and post-intervention surveys, and a post-intervention assessment survey. The PI oversaw securing all documents related to the study including forms containing demographic information, pre-and post-intervention surveys, any documents relating to individual writing portions of the intervention. All data was kept by the PI on a password protected, encrypted computer. Files were separated, and no data was stored in a file with corresponding data information. Tracking identification was assigned with a combination of

random letters and numbers. No birth dates, social security numbers, street addresses, or phone numbers will be used. All information will be kept for a period of three years by the PI, and then destroyed. The PI and Faculty Research Advisor has access data points. All surveys with any random identifiers will be destroyed at the end of the three-year period by shredding. Procedures are in place for maintaining the confidentiality of human subjects' data. The PI will only know the identities of all participants. No identifying characteristics will be required for the project intervention.

Project Timeline

The timetable for this project details from the inception of the project in June 2022 through the final presentation in May 2023. Listed below are the main features within the project:

- Project development: June-August 2022
- Project approval: December 2022
- IRB approval from partnering organization and letter of deferral from Eastern Kentucky University IRB: December 2022
- Project Implementation: January 2023-March 2023
- Data collection: February-March 2023
- Data Analysis: February-April 2023
- Final Writing: April 2023
- Final Presentation: May 2023

A graphic presentation is also provided to help coordinate the movement of the project (Appendix V).

The relaxation room is being utilized within the organization; the only additional expenses will be generated through the cost of materials for the DNP project. Since the organization is hoping to increase utilization of the relaxation room, this project should not incur additional expenses from the organization other than possible improvements proposed following the project completion. Below are estimated expenses of the project to the organization and to the PI.

Proposed Budget Expenses for Project

Program Expenses	Projected Costs	Actual Cost (Added Later)
Salaries/wages (Administrative support, practitioners, statistic consultant)	Currently accounted for by the organization	0
Start-up costs (Survey purchases, survey copies, writing/drawing, and paper supplies, etc.)	300.00	0
Capital costs (hardware, equipment)	Currently accounted for by the organization	0
Operational costs (heat/electricity)	Relaxation room expenses previously absorbed into budget due to usage	0
Other: Proposed badge for nurses (authorization required from BH)	To be determined	0
Total Budget Expenses	\$ 300.00	\$ 300.00

Results

Demographic Characteristics

Phase one of the intervention process included a pre-intervention demographic survey, the Connor-Davidson Resilience Survey®, and the Maslach Burnout Inventory®. Data assessment was calculated using Excel for both surveys. Means scores and standard deviation of those means were found and data analysis tool in Excel using two-tailed t-Test: paired two samples for means was utilized. The demographic survey totaled 59% (20 of 34) WCC nurses matching inclusion criteria participating upon implementation. Respondents were female and 85% were \geq 30 years old. Associate degree nurses (ADN) accounted for 35% of the workforce, bachelor degree nurses (BSN) 45%, and masters (MSN) prepared 20%. Participants with four years or less general nursing experience accounted for (50%), while nine nurses possessed 10 years or greater nursing experience. Nurses with four years or less experience working for WCC accounted for 10 (50%) of the nurses, eight (40%) with 10 years or greater experience. Nine nurses (45%) were in the 30-to-39-year range with six (30%) in the 40-to-49 range. No resilience training was found in 15 (75%) where only five (25%) received previous resilience training. Participants ($n = 19$) (95%) indicated they would participate in group intervention at work. Individuals 20 (100%) who participated in interventions received training on therapeutic/expressive writing and group resilience discussions.

Connor-Davidson Resilience Survey®

Participants were allowed two weeks to complete pre-intervention surveys. Pre-intervention CD-RISC 25® survey ($n = 20$) indicated WCC day shift nurses ($n = 12$) reported resilience mean scores ($M = 83.08$, $SD = 10.54$) and WCC night shift nurses ($n = 8$) reported a

resilience mean scores ($M = 77$, $SD = 7.85$). Mean scores were in intermediate resilience or 50% of the population. Therapeutic/expressive writing began two weeks following pre-intervention surveys. Resilience and burnout were given to participants determining impact of therapeutic/expressive writing. Day shift means scores ($M = 78.12$, $SD = 7.36$) decreased and night shift mean scores ($M = 75.14$, $SD = 8.75$) decreased. Mean scores remained in intermediate resilience levels. Lower scoring associated with night shift nurses could be attributed to 16.7% of participants being between 21 and 29 years-of-age. Resilience and burnout surveys were completed four-weeks after group resilience discussions started, showing mean scores ($M = 83.66$, $SD = 9.93$) increased for day shift from pre-intervention surveys. Night shifts mean scores ($M = 75.25$, $SD = 8.55$) remained lower than pre-intervention levels. Mean scores stayed in intermediate resilience levels.

An additional four-week period elapsed allowing for participant impact of both therapeutic/expressive writing and group resilience discussions. Final resilience surveys revealed a larger mean score increase ($M = 84.00$, $SD = 9.18$) in day shift nurses. Night shift nurses mean score ($M = 83.50$, $SD = 7.78$) increased from pre-intervention levels. Final mean scores stayed at intermediate levels. Findings from CD-RISC-25[®] are listed in Table 1.

Table 1

Connor-Davidson Resilience Survey® Pre-Post Intervention

Participants	<i>M</i> (<i>SD</i>)	<i>t</i>	<i>p</i>	<i>d</i>
Final Survey, n = 19 two tailed <i>t</i> -Test: Paired Two Samples for Means				
Day shift Pre	83.08(10.34)			
Post	84.00(9.18)	-0.34	0.74*	0.03
Night shift Pre	77.00(7.85)			
Post	83.50(9.18)	-1.39	0.21*	0.32
Second Survey, n = 20				
Day shift Pre	83.08(10.34)			
Post	83.66(9.93)	-0.10	0.92*	0.24
Night shift Pre	77.00(7.85)			
Post	75.25(8.55)	0.66	0.51*	0.14
Pre-intervention Survey, n = 20				
Day shift Pre	83.08(10.34)			
Post	78.12(7.36)	1.98	0.09*	0.10
Night shift Pre	77.00(7.85)			
Post	75.14(8.75)	0.69	0.51*	0.08

*Note: Indicates not statistically significant, $p > 0.05$

Stages of Mean Distribution for CD-RISC-25®:

0-73%: Low resilience, 25% of population

74-90%: Intermediate resilience, 50% of population

91-100%: Most resilience, top 25% of population

Maslach Burnout Inventory®

The Maslach Burnout Inventory® was included as a pre-intervention survey. Burnout subcategories have different scoring guidelines. The first subcategory emotional exhaustion (EE) (n = 20) indicated pre-intervention mean scores ($M = 28.75$, $SD = 6.94$) for day shift nurses

occurring in moderate level and mean scores ($M = 32.14$, $SD = 14.14$) for night shift signifying high level burnout. Two weeks following pre-intervention surveys therapeutic/expressive writing began. After an additional two-week period, resilience and burnout surveys were given to participants. Day shift means scores ($M = 21.57$, $SD = 6.05$) decreased from pre-intervention stages but remained at moderate level burnout and night shift means scores ($M = 14.14$, $SD = 14.14$) decreased from pre-intervention stages to low level burnout. The second survey ($n = 20$) EE subcategory came after a four-week period. Day shift nurses means scores ($M = 21.89$, $SD = 7.05$) increased from pre-intervention stages yet remained in the moderate level burnout and night shift means score ($M = 17.33$, $SD = 15.56$) increased from pre-intervention stages. Night shift nurses moved into moderate burnout level. The final survey ($n = 19$) EE subcategory category was implemented at the conclusion of an additional four-week period. Day shift means scores ($M = 19.00$, $SD = 8.51$) decreased by -32.5% from pre-intervention stages and remained in moderate burnout level. Results for night shift nurses mean scores ($M = 17.24$, $SD = 15.19$) revealed a decrease of -46.4% from pre-intervention ranges putting these nurses in moderate level burnout. Findings from Maslach subcategory EE found in (Table 2).

Table 2

Maslach Burnout Inventory: Pre-Post Intervention Emotional Exhaustion

Participants	<i>M(SD)</i>	<i>t</i>	<i>p</i>	<i>s</i>
Final Survey, n = 19 two tailed t-Test: Paired Two Samples for Means				
Day shift Pre	28.33(7.18)			
Post	21.57(6.05)	1.40	0.21*	0.30
Night shift Pre	32.14(17.48)			
Post	14.14(13.22)+	2.39	0.05*	0.31
Second Survey, n = 20				
Day shift Pre	28.33(7.18)			
Post	21.89(7.05)	1.93	0.08*	0.27
Night shift Pre	32.14(17.48)			
Post	17.33(15.56)	1.43	0.20*	0.31
Pre-intervention Survey, n = 20				
Day shift Pre	28.33(7.18)			
Post	21.57(6.05)	1.40	0.21*	0.30
Night shift Pre	32.14(17.48)**			
Post	14.14(13.22)	2.39	0.09*	0.31

*Note: Indicates not significantly significant, $p > 0.05$

Total Score Indicators

+17 or less: Low level burnout

18-29: Moderate exhaustion/burnout

** Over 30: High level burnout

Maslach' second subcategory depersonalization (DP) (n = 20) mean scores were obtained from pre-intervention surveys. Mean scores for day shift nurses ($M = 4.57$, $SD = 5.91$) showed burnout ranges at low level burnout. Night shift nurses mean scores ($M = 13.42$, $SD = 6.32$) suggested high level burnout. Two weeks after pre-intervention surveys, therapeutic/expressive

writing began. This intervention was applied for two weeks. After two weeks, the first resilience and burnout surveys ($n = 20$) were given to participants. Day shift nurse's mean scores ($M = 3.70$, $SD = 2.60$) decreased from pre-intervention ranges and remained at low level burnout. Night shift nurses mean scores ($M = 7.00$, $SD = 5.24$) decreased from pre-intervention ranges to moderate level burnout. The group resilience discussion was started in addition to therapeutic/ expressive writing and a second survey was given four weeks later. Results ($n = 20$) day shift mean scores ($M = 4.88$, $SD = 4.80$) increased from pre-intervention ranges but leaving day nurses in low level burnout. Night shift nurses mean scores ($M = 7.22$, $SD = 9.64$) decreased from pre-intervention ranges suggesting moderate level burnout. The final survey ($n = 19$) day shift nurses mean scores ($M = 6.37$, $SD = 7.40$) increasing from pre-intervention ranges suggesting moderate level burnout. Findings from Maslach DP subcategory is shown in (Table 3).

Table 3

Maslach Burnout Inventory: Pre-Post Intervention Depersonalization

Participants	<i>M</i> (<i>SD</i>)	<i>t</i>	<i>p</i>	<i>d</i>
Final Survey, n = 19 two tailed t-Test: Paired Two Samples for Means				
Day shift Pre	4.57(5.91)			
Post	6.25(5.26)	-0.27	0.78*	0.07
Night shift Pre	13.42(6.32)			
Post	6.92(8.54)	0.35	0.73*	0.64
Second Survey, n = 20				
Day shift Pre	4.57(5.91)			
Post	4.88(4.80)	-0.32	0.79*	0.02
Night shift Pre	13.42(6.32)			
Post	7.22(9.64)	1.04	0.35*	0.28
Pre-intervention Survey, n = 20				
Day shift Pre	4.57(5.91)			
Post	3.70(2.60)**	0.39	0.70*	0.04
Night shift Pre	13.42(6.32)			
Post	7.00(5.25)	2.50	0.34	0.38

*Note: Indicates not statistically significant, $p > 0.05$

Total Score Indicators

**5 or less: Low level burnout

6-11: Moderate burnout

12 or greater: High level burnout

Maslach's third subcategory is personal accomplishment (PA). The pre-intervention survey (n = 20) lasted for two weeks found mean scores ($M = 39.08$, $SD = 3.84$) in day shift nurses suggested moderate level burnout. Night shifts mean scores ($M = 38.42$, $SD = 4.96$) suggested moderate level burnout which translates to a decrease in burnout.

Therapeutic/expressive writing was implemented following pre-intervention surveys. First

surveys were obtained after two weeks of therapeutic/expressive writing. Day shift nurses mean scores ($M = 38.28$, $SD = 3.30$) decreased from pre-intervention findings suggested increased moderate level burnout. Night shifts mean scores ($M = 40.00$, $SD = 4.36$) increased suggesting low level burnout. Four weeks after therapeutic/expressive writing started, group resilience discussions began running concurrently. A second survey ($n = 20$) revealed day shift nurses mean scores ($M = 39.22$, $SD = 4.99$) increased slightly but remained at moderate level burnout. Night shifts mean scores ($M = 40.00$, $SD = 4.58$) increased remaining at moderate level burnout. Final survey $n = 19$ occurred four weeks after the second survey. Day shift nurses mean scores ($M = 37.22$, $SD = 4.49$) decreased indicating an increase in moderate level burnout. Night shifts mean scores ($M = 40.52$, $SD = 4.69$) increased suggesting low level burnout. For each category, Cohen's d was calculated measuring effect size (how meaningful the relationship between variables or difference between groups is (Cohen, 1992). From the findings, all variables for Cohen's d are small to minimal effect range. Personal accomplishment category indicated night shift nurses consistently scored higher than day shift nurses. Maslach's PA subcategory is found in (Table 4).

Table 4

Maslach Burnout Inventory: Pre-Post Intervention Personal Accomplishment

Participation	<i>M(SD)</i>	<i>t</i>	<i>p</i>	<i>d</i>
Final Survey, n = 19 two tailed <i>t</i> -Test: Paired Two Samples for Means				
Day shift Pre	39.08(3.84)			
Post	37.22(4.49)	0.49	0.63*	0.12
Night shift Pre	38.42(4.96)			
Post	40.52(4.69)	-1.37	0.45	0.17
Second Survey, n = 20				
Day shift Pre	39.08(3.84)			
Post	38.28(3.30)	-0.51	0.96*	0.01
Night shift Pre	38.42(4.96)			
Post	40.00(4.58)**	-0.14	0.89*	0.12
Pre-intervention Survey, n = 20				
Day shift Pre	39.08(3.84)			
Post	38.28(3.30)	2.39	0.05*	0.06
Night shift Pre	38.42(4.96)			
Post	40.00(4.36)**	-0.59	0.58	0.12

*Note: Indicates not statistically significant, $p > 0.05$

Total Score Indicators

33 or less: High level burnout

34-39: Moderate burnout

40 or greater: Low level burnout

Post-Intervention Assessment

Participants were asked to complete an assessment of the project obtaining perceptions of interventions, use of the relaxation room, and perception of taking breaks off the floor. First

question asked if nurses enjoyed participating in the project, 100% had positive responses. Another question asked if they enjoyed using the relaxation room, 74% acknowledging room was beneficial for unwinding and stress reduction. A question concerning taking a break indicated 89% did break because of being perceived as lazy or not wanting to burden co-workers. Do you feel uncomfortable using time taking care of yourself, 79% responded yes. Questions about usage of relaxation room after project conclusion, 73.7% responded they would use room. Group resilience discussions 56% were preferred intervention. Time in relaxation room after group resilience activity was 42% at five to 15 minutes. Amount of time participants gave for using relaxation room after project, 58% at five to 15 minutes.

Discussion

Summary

WCC nurses completing the CD-RISC-25[®] and MBI[®]-22 (n =19) 56% provided evidence supporting use of therapeutic/expressive writing and group resilience discussions in increasing resilience and decreasing burnout syndrome. The strengths of the interventions made nurses more aware of their stress levels, gave them opportunities to write out their feelings, have unbiased personnel to discuss similar roles, and take time for themselves. Participants reported needing more support when encountering alternate patient populations and managing patient care with reduced staffing levels. A higher mean score ($M = 28.33$, $SD = 7.18$) for EE day nurses indicated moderate exhaustion/burnout. Higher mean scores ($M = 6.92$, $SD = 8.54$) for DP night nurses indicated moderate burnout and lower mean scores ($M = 37.22$, $SD = 4.49$) for PA day nurses indicated moderate burnout.

Two objectives outlined in the project of 25% increase in resilience scores and 10% decrease in burnout scores by completion of the project. Results showed resilience means scores did not increase the projected amount. The largest increase was noted by night shift nurses at an 8.4% increase in mean scores. Other groups within the resilience surveys had minimal increases.

The Maslach Burnout Inventory® had varied results within the three categories. EE categories had day and night shift nurses recording greater than a 10% decrease in burnout means scores. Percentages of change ranged from -56.0% decrease in night shift nurses after the first burnout survey to -23.9% decrease in day shift after second burnout survey. Reasons for decreases in burnout could be associated with using interventions and/or taking breaks to leave the floor. These outcomes represented marked improvement over pre-intervention mean scores.

The DP category resulted in similar findings for night shift nurses. Percentages decreased -46.2% to -48.4% indicating significant improvement in burnout. Conversely, day shift had increases in second and final surveys (6.8% and 36.8% respectively). Causes impacting burnout mean scores suggested increased alternate patient populations and staffing reductions. The perception of constantly having to care for alternate patients in with mothers and babies influenced stress levels for these nurses.

The PA category indicated mixed results within day and night shifts. Mean scores went down for day shift nurses for first and final surveys (-0.80 and -1.74 respectively). Factors shaping these results stem from nurses indicating, “no changes will be made to make it easier on us”. Perceptions of negative outlook could have changed mean scores. Night shift indicated positive mean score increases resulting in decreased burnout. Mean scores increased 4.1% to 5.5% from first to final surveys. Although results did not achieve a 10% threshold, they indicated

decreased burnout. One situation impacting these results suggested younger mean ages for night shift nurses. Decreased nursing years of experience conceivably biased perceptions of work perhaps altered mean scores.

Assessment of hospital relaxation room provided responses from, “I did not know we had a room like this” to “This room is not close to our unit”. This project provided nurses an opportunity to find and utilize the room and enlighten other nurses about its existence. Responses from post-intervention assessments revealed 58% would attempt spending between five and 15 minutes each shift utilizing the relaxation room. This suggested positive attempts by both nursing shifts in addressing their resilience and burnout needs.

Overall impact of the project resulted in positive feedback from all participants. Each nurse was grateful someone took time to talk and listen to concerns without judgement or disapproval. Whether in the relaxation room or occasionally in skills lab, nurses were able to write or discuss issues surrounding job issues. Alternate sites provided time away from the unit, emphasizing to nurses the importance of taking breaks, and helping focus on their mental wellbeing. Results indicated 79% of nurses who participated in the project would use the relaxation room after project conclusion.

Explanation

Results highlighted the importance of nurses stepping away from their duties, if only for 10-15 minutes/shift, concentrating on their wellbeing and mental stability.

Therapeutic/expressive writing and group resilience discussions, in addition to using the relaxation room, provided effective strategies to support nurses and allowed them to focus on themselves (Belini Jacques et al., 2018; Gladding & Drake Wallace, 2018; Pennebaker & Symth,

2016; Stacey & Cook, 2019). Results from CD-RISC-25[®] and the MBI-22[®] surveys strengthen the need for healthcare organizations to provide opportunities and employ strategies supporting resilience of nurses and assisting reducing burnout (Carver & Scheier, 2017; Gladding & Drake Wallace, 2018; Im et al., 2016; Pavlacic et al., 2019; Salmela et al., 2020). Most evidence-based studies in resilience promotion and burnout reduction encouraged implementation of therapeutic/expressive writing and group resilience discussions being utilized within healthcare organizations containing large employee populations. Nonetheless, findings provided evidence which can be synthesized to implement strategies in healthcare agencies with decreased employee population.

Sustainability of Project

One objective in developing this DNP project explored how a practice change, encourages nurses to utilize the relaxation room, take time for themselves and sustain usage of the room as a mental resource can be achieved. An objective focused on continued use of the relaxation room once the project had ended, to offer therapeutic writing therapies and group discussions around resilience and burnout. Suggestions from project participants will be presented to nursing leaders within the organization outlining opportunities that would benefit nurses.

This organization offers the relaxation room to nurses providing items such as recliners and a noise distractor. Choices of music and/or choice of fragrances such as lavender, can provide a calming atmosphere in which to rest. Nursing management has been working to inform nurses about the room and modifying attitudes concerning leaving the unit taking personal time

for themselves. Having nurses take five to 15 minutes once or twice a day helps promote mental health and allows nurses to refocus on job priorities.

Improvement projects initiate new cycles once information is gained from previous cycles. This project ended in March 2023, promoting the relaxation room involves discussing it during monthly staff meetings. Repetition of information about the relaxation room provides nurses reminders and encourages peer-to-peer interaction and communication. Nurses who benefited from interventions may encourage peers to take time and use the room to experience relaxing effects or getting off the unit for short periods.

The relaxation room use by nurses has received support from nursing administration. It is essential nursing leaders buy-in to the relaxation room because it provides reinforcing use of the room without the PI present. Providing support creates a foundation for long-term success in nurses and other staff within the organization utilizing this room.

Solutions involve the creation of a badge indicating completion of training and prompting other nurses to highlight the importance of devoting personal time to themselves. Other strategies utilize discussion of changing perceptions within nurses about taking breaks. Culture change is challenging for these professionals because of their continued focus on patient care and maintaining charting for patient protection.

Limitations

Project limitations included small sample sizes for pre-intervention ($n = 20$) and post-intervention ($n = 19$), location and access to the relaxation room for nurses, and knowledge of a relaxation room. Accompanying support from other nurses promoting use of the relaxation room,

dispelling perceptions portraying nurses as lazy if taking breaks and nurses not wanting to take a break, due to the burdening amount of care required and documentation responsibilities.

Scholarship

This project will be stored within Eastern Kentucky University Encompass Digital Archive for reference and future discussion. The project will be presented to the administration of Baptist Health Richmond for consideration and possible implementation. Potential engagement with the organization will offer benefits of this project and utilization of strategies to other units in the facility.

Once the project has been presented to the organization, the plan is to publish the findings to encourage other organizations to utilize interventions and strategies implemented for this project. Ultimately, this would prove beneficial for all institutions within the organization.

Conclusion

Embracing evidence-based interventions promoting resilience and decreasing burnout in nurses could support healthcare organizations. It provided strategies and resources nurses can implement, providing mental support, in addition allowing for better mental outlook in caring for patients. Therapeutic/expressive writing and group resilience discussions would not increase risk of harm to participants (nurses) and requires insignificant funding to organizations. Currently, more research projects are necessary to examine the efficacy of therapeutic/expressive writing and group resilience discussions for nurses. Present research suggests therapeutic/expressive writing and group resilience discussions are successful in increasing resilience perception and decreasing burnout syndrome in nurses.

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Appendix A

Hierarchy Table

Table I

Hierarchy Table of Evidence

Melnky Level	Evidence1 (Baskin & Bartlett, 2021).	Evidence2 (Zhai et al., 2021).	Evidence3 (Grabbe et al., 2019).	Evidence4 (Pehlivan & Guner, 2020).	Evidence5 (Muir & Keim-Malpass, 2020).	Evidence 6 (Romppanen & Haggman-Laitila, 2017).	Evidence 7 (Joint Commission, 2019).
I	X	X					
II			X	X			
III							
IV							
V							
VI					X	X	
VII							X

Note: This table illustrates the selected studies, categorized by the level of evidence using the Melnyk System of Hierarchy of Evidence for Intervention.

Appendix B 1

Evaluation Table-Systematic Review

Table I

Evaluation Table Using Melnyk's Evaluation Table Template: Systematic Review

Table I-I. Final Evaluation Table

First Author (Year)	Conceptual Framework	Design/Method	Sample/Setting	Major Variables Studied (and Their Definitions)	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
Zhai X, et al. J Hos & Pal Nurs 2021; 23(6): 544-550	None	SR <ul style="list-style-type: none"> Searched 5 databases from Feb-Mar 2020 Included only RT for nurses, evaluated ROC 	N = 13 studies Setting: NR n = 576 Attrition: NR	IV: No RT DV: RT	<ul style="list-style-type: none"> CI P SMD 	<ul style="list-style-type: none"> CRBATRT NCOSQA Stata software 	RS <ul style="list-style-type: none"> Post-intervention SMD, 0.583 (95%CI, 0.228-0.938, P=.001) SL <ul style="list-style-type: none"> SMD=-0.601 (95% CI, -0.800 to -0.403. P < .0001) BS <ul style="list-style-type: none"> SMD, -1.01; (95% CI, -1.25 to -0.76; P< .0001) ADS <ul style="list-style-type: none"> SMD, -0.50; (95% CI, -0.80 to -0.20, P = .001) SMD, -0.43; (95% CI, -0.67 to -0.19; P<.0001) Improved <ul style="list-style-type: none"> M PE SE WB 	Weakness: <ul style="list-style-type: none"> Study design variation, multiple tools for measuring resistance. Use of SMD to conduct meta-analysis Lack of subgroup evaluation Strengths: <ul style="list-style-type: none"> RT improved RS, but also improved M, SE, and WB R links to better work and life expectations for nurses Conclusion: <ul style="list-style-type: none"> RT decreases anxiety and depression in nurses and is certainly linked to coping, SE, job satisfaction, and WB. Feasibility: <ul style="list-style-type: none"> RT is acceptable to execute. Risk/Benefit to be determined.

Key: ADS= anxiety and depression scale; Burnout scores; CI= confidence interval; CRBATRT= Cochrane risk of bias assessment tool for randomized controlled trials; DV= dependent variable; IV= independent variable; M= mindfulness; NCOSQACS= new castle-ottawa scale for the quality assessment of cohort studies; NR= not recorded; PE= positive effect; R= resilience; RS =resilience scores; RT= resilience training; SE= self-efficacy; SL= stress level; SMD= standardized mean differences; WB= well-being:

Appendix B 2

Evaluation Table-Systematic Review

Table II

Evaluation Table Using Melnyk's Evaluation Table Template: Systematic Review

Table I-II. Final Evaluation Table

First Author (Year)	Conceptual Framework	Design/Method	Sample/Setting	Major Variables Studied (and Their Definitions)	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
Romppanen J & Haggman-Laitila A J Adv Nurs; 73(7), 1555-1569	None	SR Purpose: effect of WB InV on RN WB at work <ul style="list-style-type: none"> • Searched 7 data bases from 2009-March 2015 • Included: target groups of nursing staff • Description of InV on WB at work or outcome of InV 	N = 10 studies n = 36-1,173 HCWs Facilities: hospitals, mental health facilities, academic health center & a nursing home Attrition: NR	InV 3: person-centered RN only InV 6-7: organization centered InV RN only	InV 3: CBI InV 6: clinical supervision InV 7: Development of working conditions & training	MBI-GS GHQ-12	3/10 studies described person-directed interventions for nurses WB at work 4/10 studies reported combined person and organization-directed interventions 3/10 studies described organization-directed interventions PO: <ul style="list-style-type: none"> • Decreased stress or BO, p <0.05 to <0.001 in intervention for 4 studies • Increased trust in leadership respect in both groups p <.05 to <0.001 in 2 studies • Increased respect in both groups p, < 0.05 to <0.001 in 2 studies 	Weaknesses: <ul style="list-style-type: none"> • Variation in sample size lessens reliability and validity of results. • 2 studies had no control group, only 3 studies had large sample sizes • Measurements used for interventions varied. • Unable to closely compare research results Strengths: <ul style="list-style-type: none"> • Judicious use of matrix increased reliability of analysis • Tested interventions were applied In five interventions Conclusion: <ul style="list-style-type: none"> • Enhanced evidence supports use of interventions to strengthen nurses WB Feasibility <ul style="list-style-type: none"> • Implementation does not provide strong enough results and the use of standardized interventions

Key: BO= Burnout; CBI= cognitive behavioral intervention; GHQ-12= general health questionnaire; GS= HCW= health care workers; InV= intervention; well-being; MBI-GS= maslach burnout inventory -general survey; NR= not recorded; RN= registered nurse; WB= well-being.

Appendix B 3

Evaluation Table-Meta-Analysis

Table III

Evaluation Table Using Melnyk's Evaluation Table Template: Meta-Analysis

Table I-III. Final Evaluation Table

First Author (Year)	Conceptual Framework	Design/Method	Sample/Setting	Major Variables Studied (and Their Definitions)	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
Pavlicic, et al. Review of General Psychology 2019; 23(2); 230-250	None	MA <ul style="list-style-type: none"> Searched databases including PsychInfo & Google Scholar Included only MA for PTS, PTG, & QOL 	N = 53 studies Setting: NR n = NR Attrition: NR	IV: No RT DV: No RT	<ul style="list-style-type: none"> EW SD CI M N 	<ul style="list-style-type: none"> Cohen's <i>d</i> Paired <i>t</i> test ANOVA 	<p>PTS</p> <ul style="list-style-type: none"> A small effect size that appears to be significantly greater than zero across all estimate types PTSD diagnosis: With outliers $d = 0.64, 95\% \text{ CI } [0.48, 0.79]$; without outliers $d = 0.52, 95\% \text{ CI } [0.39, 0.65]$ No PTSD diagnosis, small to medium effect size: $d = 0.31, 95\% \text{ CI } [0.24, 0.39]$ PTG Studies indicated a negligible to small effect size for both random and fixed effects models. QOL Studies indicated a negligible to small effect that showed minimal decreased QOL with ES 	<p>Weakness:</p> <ul style="list-style-type: none"> Participants may not be deeply engaged Nature of the construct of PTG The power found in current meta-analysis is very poor <p>Strengths:</p> <ul style="list-style-type: none"> In PTS studies, small effect sizes across all meta-analytic estimates A brief, easy-to-administer intervention can produce positive outcomes <p>Conclusion:</p> <ul style="list-style-type: none"> Although not shown to have small to medium effect sizes, PTG and QOL did indicate a slight improvement in effect sizes <p>Feasibility:</p> <p>EW, an evidence driven intervention that would benefit nurses within the organization</p>

Key: ANOVA= analysis of variance, CI= confidence interval, DV= dependent variable, EW= expressive writing, IV= independent variable, *M*= mean, MA= meta-analysis, N= population size, QOL= quality of life, PTG= posttraumatic growth, PTS= posttraumatic stress, PTSD= post-traumatic stress disorder, SD= standard deviation

Appendix B 4

Evaluation Table- Randomized Controlled Trial

Table IV

Evaluation Table Using Melnyk's Evaluation Table Template: Randomized Controlled Trial

Table I-IV. Final Evaluation Table

First Author (Year)	Conceptual Framework	Design/Method	Sample/Setting	Major Variables Studied (and Their Definitions)	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
Pehlivan T J Adv Nurs 2020; 76: 3584-3596	None	RCT Purpose: effect of CFRP on quality of life (CF, BO, PS, CS, & R) • Oncology nurs Jan 2017-Jan 2019	N = NR • Intervention group I (n = 34) • Intervention group II (n = 49) • Control group (n = 42) Setting: Istanbul Attrition: • DV I: n = 21 • DV II: n = 12 • CG: n = 16	IV: No intervention DV I: Short term pg DV II: Long term pg	BO as OV CS as OV R as OV	• Confidence Interval • Standard Error • p Value	• Both Short term and long term CFRP had no effect on CF • Both Short term and long term CFRP had no influence on mean BO scores • Mean CS scores of nurses receiving short term or long term training were greater than those in the control group • Short Term and long term CFRP had no influences on nurses mean PS scores or mean R scores	Weaknesses: • Nurses left their jobs at one-year follow-up • Some nurses went from private to public hospitals • OV affected by hospitals with different conditions Strengths: • Short term and long term methods influenced CS levels • Short term program suggested to engage more nurses Conclusion: • CFRP did not improve PQOL, PS, R • Needed organizational influence helps reduce CF and improve R Feasibility: • Implementing this intervention would not bring about needed improvements for nursing resilience

Key: BO= burnout; CS= compassion satisfaction; DV= dependent variable; CF= compassion fatigue; CFRP= compassion fatigue resiliency program; CG= control group; OV= outcome variable; PQOL= perceived quality of life; PS= perceived stress; R= resilience.

Appendix B 5

Evaluation Table- Randomized Controlled Trial

Table V

Evaluation Table Using Melnyk's Evaluation Table Template: Randomized Controlled Trial

Table I-V. Final Evaluation Table

First Author (Year)	Conceptual Framework	Design/Method	Sample/Setting	Major Variables Studied (and Their Definitions)	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
Crabbe L, et al. Nurs Outlook 2020; 68: 324-336	None	RCT Purpose: effect of RI on SA and TS	Setting: 2 large, urban TCH in USA <ul style="list-style-type: none"> Completed pre-test & randomized (n=196) Intervention group (n = 40) Control group (n = 37) Attrition: Intervention group (59) Control group (60) 	IV: NI DV: CRM	InV group used 3 hour CRM training CG used 3 hour nutrition class	<ul style="list-style-type: none"> ES p-values Qualitative data organized using "cut and paste" technique 	Baseline: 36% reported poor mental WB, 28% met criteria for PTSD, 55% low R scores, 47% work-related BO, and 31% physical symptoms Non-attendee nurses RQ1: <ul style="list-style-type: none"> Had slightly higher BO scores M= 50.54, SD= 20.53 compared to attendee nurses, M=44.97, SD= 20.74, p= .068 Higher SSS-8 scores, M=9.42, SD= 6.09 compared to attendees, M=70.8, SD=5.52, p=.007 Higher proportions of SSS-8 severity categories (medium: 20.3% vs 15.6%; high: 20.3% vs 13.0%; very high: 16.1% vs 9.1%) RQ 2 <ul style="list-style-type: none"> Outcome improvement (WB P=.006) 	Weaknesses: <ul style="list-style-type: none"> Only 196 of the invited 1600 nurses participated Only 77 nurses attended which lowers statistical power to interpret meaningful variations for the groups improvement Strengths: <ul style="list-style-type: none"> Sample size restricts a comparable nurse data base CRM equates positively with other interventions CRM stabilizes stress responses Conclusion: <ul style="list-style-type: none"> The CRM education intervention is effective in improving R and enriches nurses' stress tolerance Feasibility: <ul style="list-style-type: none"> CRM is acceptable to apply for R building

Key: CG= control group; CRM= community resilience model; DV= dependent variable; ES= effect sizes; IV= independent variable; R= resilience; RI = resilience intervention; SA= sensory awareness; TCH= tertiary care hospital; TS= tolerate stress; WB= well-being;

Appendix B 6

Evidence Table- Mixed Methods Pilot Study

Table VI

Evaluation Table Using Melnyk's Evaluation Table Template: Mixed-Methods Pilot Study

Table I-VI. Final Evaluation Table

First Author (Year)	Conceptual Framework	Design/Method	Sample/Setting	Major Variables Studied (and Their Definitions)	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
Muir, K J & Keim-Malpass J J Holistic Nurs 2020; 18(2): 205-220	None	Mixed-Methods Pilot Study Purpose: effect of MBI on ED RN & PCT Aug-Sep 2018	N = 35 n (1)= 26 RN n (2)= 9 PCT Level 1 Trauma center ED Setting: Virginia Attrition: 9 not completing post-test survey	Data collection points: • Pre-Intervention • Post-Intervention 1-3 months post-intervention (QP) only	ERI for ED MBI: • Mindfulness • BO scores Clinicians' perception driving BO in ED	Quantitative Methods: • Frequencies and percentages • Paired <i>t</i> tests • Descriptive statistics Qualitative Methods: • Immersion in the data • Line-by-line analysis and data reduction and code development related to BO • Developed codebook for codes • Sorting codes to create categories and subjects	Quantitative results: Baseline: BO scores • RNs scored on average better than PCTs on emotional exhaustion, M= 2.81 vs M= 1.91 <i>p</i> = .03 • RNs scored on average significantly higher on depersonalization compared to PCTs, M=2.73 vs M=1.33, <i>p</i> <.01 • RNs scored lower on personal accomplishment than PCTs, M=4.61 vs M=5.01 Post intervention: • RNs scored lower on emotional exhaustion, M=2.28 vs M=2.29 and personal accomplishment, M=4.99 vs M=5.04 • RNs scored higher on depersonalization to PCTs, M= 2.23 vs M=1.20 Qualitative findings: BO topics: • Prioritization Distress • Change Fatigue • Self-Protection through Superficiality	Weaknesses: • Self-selection bias • Lack of questioning and engagement for all groups • Lack of control group and • Gaps in mindfulness impact within the program • Small sample size and no <i>z</i> score analysis Strengths: • The MBI program provided RNs and PCTs with stress reduction Conclusion: • MBI program reduces BO scores Feasibility: • Consideration must be taken assess the healthcare facility and sample sizes

Key: ED= emergency department; MBI= mindfulness-based intervention; PCT= patient care technician; RN= registered nurse;

Appendix B 7

Evidence Table- Integrated Literature Review

Table VII

Evaluation Table Using Melnyk's Evaluation Table Template: Integrated Literature Review

Table I-VII. Final Evaluation Table

First Author (Year)	Conceptual Framework	Design/Method	Sample/Setting	Major Variables Studied (and Their Definitions)	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
Baskin MS, & Bartlett R J Nurs Manag 2021; 29: 2329-2342	None	<p>L R Purpose: Id. levels of R in HCW</p> <ul style="list-style-type: none"> Searched 2 databases from (2020-2021). <p>Includes QAT, QAL, CSS, D</p> <p>Methodology by Whittemore and Knafl</p> <p>32 articles were selected</p> <p>Study design included:</p> <ul style="list-style-type: none"> Associational Convergent MM Correlational Cross-sectional Descriptive Empirical Narrative Predictive Qualitative 	<p>N= 32 studies</p> <ul style="list-style-type: none"> Setting: acute care hospitals 4 countries worldwide. Average number of beds: NR <p>Affiliation: NR</p>	<ul style="list-style-type: none"> CD-RISC10 scores BO scores IR btwn R & work engagement, social support, PTSD, anxiety, depression 	<p>Monitoring R scores</p> <p>R scores has IR with PTSD</p>	<ul style="list-style-type: none"> Mean p value 	<ul style="list-style-type: none"> IR between R and BO Work engagement ($r=0.491$, $p<0.01$) Social support ($r=0.424$, $p<0.01$) PTSD ($r=-.412$, $p<0.01$) Anxiety ($r=-0.27$, $p<0.001$) Depression ($r=-0.43$, $p<0.001$) <p>6/12 studies that measured R reported R scores below the 25th percentile (<74) based on US population values</p> <p>Mean R scores of US HC workers was > Europe and Asia scores</p>	<p>Weaknesses:</p> <ul style="list-style-type: none"> The studies examined all types of healthcare workers instead of nurses only Lack of significant validity and reliability instruments other than CD-RISC-10 Quantitative measures to better evaluate R <p>Strengths:</p> <ul style="list-style-type: none"> Highlights importance of nurse leaders to support nurse WB Nurses report lower R scores than doctors and other HC workers Nurses with higher R scores feel less anxiety, depression, and PTSD <p>Conclusion: Nurse R needs supporting in HC organizations</p> <p>Minimal evidence to improve nurse R</p> <p>Feasibility:</p> <ul style="list-style-type: none"> Not feasible

Key: D= descriptive; CD-RISC-10= connor-davidson resilience score; CSS= cross-sectional studies; HCW= health care worker; IR=inverse relationship; NR= not recorded; QAL= qualitative research; QAT= quantitative research; R= resilience.

Appendix B 8

Evidence Table- Opinion Piece

Table VIII

Evaluation Table Using Melnyk's Evaluation Table Template: Opinion Piece

Table-VIII. Final Evaluation Table.

First Author (Year)	Conceptual Framework	Design/Method	Sample/Setting	Major Variables Studied (and Their Definitions)	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
Joint Commission 2019; Issue 50	None	Opinion piece Purpose: raise awareness to JC accredited organizations to promote RN R	2017- Literature review: n = 3,248 RNs Attrition: NR Setting: hospitals & health systems 2019 survey: healthcare partners 2019 survey: PSQH	LEB	None	None	National nursing engagement report: <ul style="list-style-type: none"> 15.6% of 2000= of nurse HC respondents self-reported feelings of BO, with ED nurses being at higher risk 2019 Survey: <ul style="list-style-type: none"> 5% stated their organization was highly effective in addressing BO 39% stated their organization was slightly effective dealing with BO 56% stated their facility was slightly effective or highly ineffective at addressing BO Exclusion from decision-making process Need for greater autonomy Security risks SI 	Weaknesses: <ul style="list-style-type: none"> Level 7 evidence No statistical data to support validity and reliability No randomization or bias control Strengths: <ul style="list-style-type: none"> Provided as informational piece as part of an accrediting organization Delivers view oint of encouraging <i>Leader Empowering Behavior</i> (LEB) LEBs in nursing are \positively associated with nurses' feeling of empowerment in the acute care setting

Key: BO=burnout; LEB=leader empowering behaviors; SI= staffing issues.

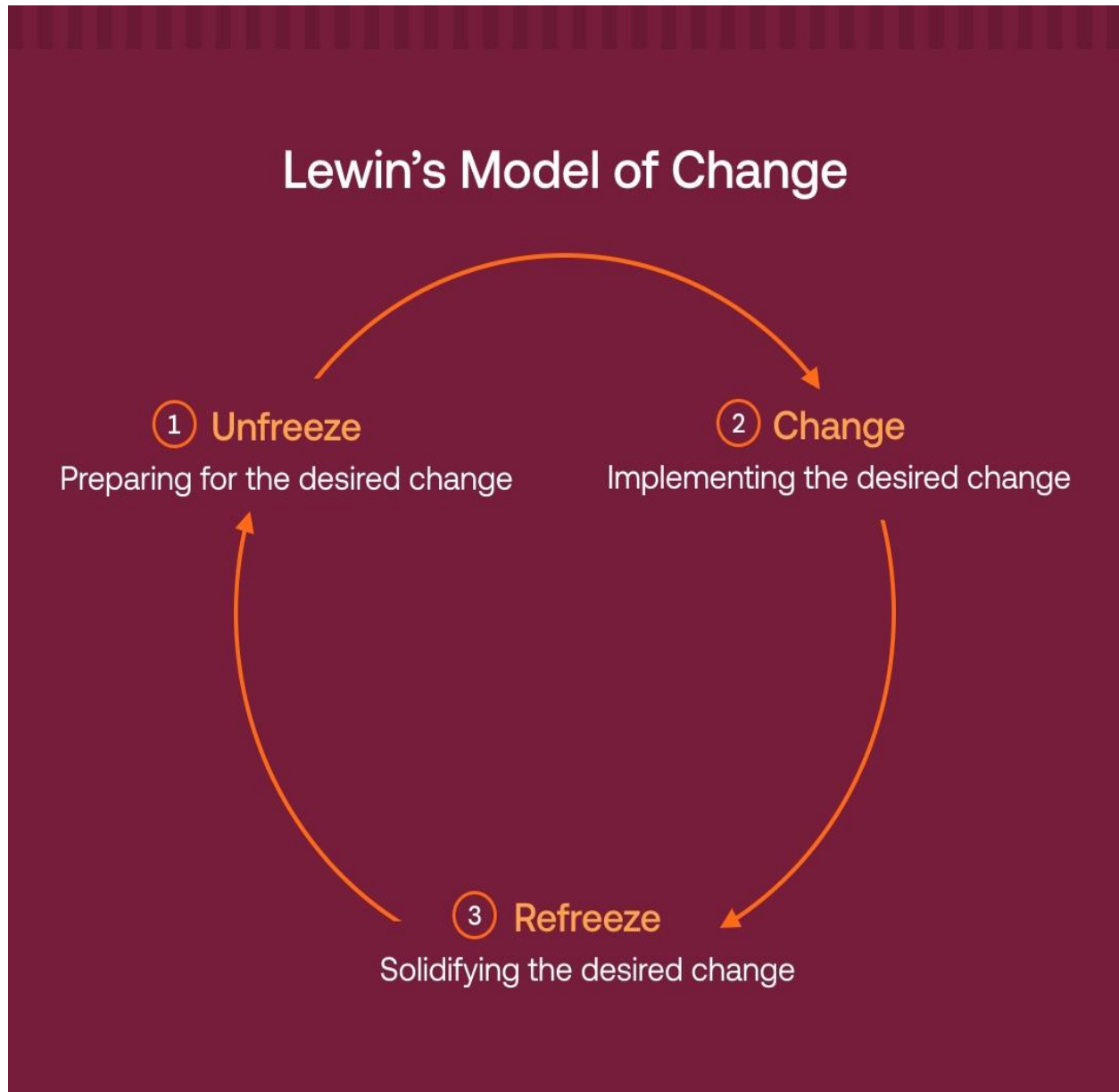
Appendix C

Intervention Table

Intervention Table Categorized by Evidence Level and Intervention

Intervention Details	Zhai X et al 2021	Romppanen J & Haggman-Laitila A 2017	Pehlivan T & Guner P 2020	Grabbe et al 2020	Muir K J & Keim-Malpass J 2020	Baskin R G & Bartlett R 2020	Joint Commission 2019
Resilience training	X	X					X
Community Resilience Model				X			
Mindfulness training	X			X	X		X
Promoting expressions of gratitude						X	
Compassion Fatigue RP short			X				
Compassion Fatigue RP long			X				
Mindfulness sessions					X		
Cultivating compassion					X		
Person-directed		X					
Organization-directed		X					

Note: This table includes the interventions that related to the promoting of resiliency.

Appendix D**Lewin's Change Model**

Appendix E**SWOT Analysis****Strengths**

- Pathway to Excellence® accreditation
- Magnet® accreditation
- Committed nursing staff
- Major health care provider in region
- Engaged professional development director
- Provides relaxation room

Weaknesses

- Limited acute care areas
- Impact of nursing shortage
- Influence of agency recruitment
- High patient acuity
- Restricted family access to patient
- Increase in workplace violence

- Empathetic organizational structure
- Opportunity to implement resiliency training
- Utilizing evidence-based intervention
- Providing individual and group training promoting resilience

Opportunities

- Burnout causing nurses to leave
- Salary discrepancy between staff and agency nurses
- Allowing time away from work
- Limited financial resources to support training

Threats

Appendix F

Statement of Mutual Agreement

Eastern Kentucky University
 Doctor of Nursing Practice (DNP) Program
 Statement of Mutual Agreement

The purpose of this document to describe the nature of the agreement for the Doctor of Nursing Practice (DNP) Project between:

Student Name: W. David Wagner MSN, RN (Principal Investigator)

Partnering Organization Name: Baptist Health Richmond

This statement of mutual agreement is completed in the DNP Project planning phase as a precursor to the Institutional Review Board (IRB) and to show general organizational support for the DNP Project.

General Information:

I/JP Project Title:	Therapeutic/Expressive Writing and Resilience Promotion to Support Nurses and Reduce Burnout Syndrome
'Partnering Organization:	Name of Organization: Baptist Health Richmond Name of Organizntiona1 Contact: Dr. Judy Ponder, DNR MSN, RN Phone: 859825-3649 Lawana Leonhardt, MSN. RN, CCRN-K, NEA Email : judy.ponder@bhsi.com etawana.leonhardt@bhsi.com

Brief Description of the Project:

Identified Problem/Gap:	Nurse's reduced resiliency and burnout in the WCU due to alternate patient populations, extended work hours and changes in leadership
Proposed Intervention(s):	An individual component using therapeutic/expressive writing and a group component using pictures to interpret significance of resilience.
Proposed Evaluation of: Outcomes a Process	Surveys will be utilized pre-intervention, post-intervention, and four-weeks after to determine results of intervention, Instruments used to determine effectiveness of the intervention will be Connor-Davidson RISC-25 and Maslach Burnout Inventory
Description of On-Site Activities: Student's Role Meetings Access to Data	Student as principal investigator (PI) will conduct and implement the intervention, collect all data, and analysis of all data. Meetings which include a meeting of introduction for the project, three separate surveys by pen/pencil, a group meeting for the intervention, and a concluding meeting. All data will be de-identified and will be kept at a secure location within BHR for a period of three years.
Intellectual Property: Ownership Plans for Dissemination	Ownership of intellectual property will be retained by the principal investigator. Dissemination of project and findings will be presented to BHR in consideration to implement interventions in additional facilities.
Non-disclosure expectations Publication Plans	*** All ECU DNP Projects will require at minimum a de-identified abstract 10 be uploaded into the digital repository as a marker of academic work.

Institutional Review Board:

EKU is the IRB of Record	The organization agrees to let ECU be the IRB of Record. Yes: No: X Other: (Explain)
Organization is the IRB of Record	The organization prefers to be the IRB of Record. Yes: X No: Other: (Explain)

Other elements for clarification prior to implementation of the DNP Project. Describe.

DOCTOR OF NURSING PRACTICE

Specific project details may vary as we begin/finalize this project as this document is serves as a requirement for a summer ECU course. Final mutual agreement will be completed prior to starting actual DNP project.

DNP Student Signature:

W. David Wagner MSN Ed, RN
7/22/2022

Partnering Organization's Signature:

Gudy Ponder / Louanna Lombard, MSN, RN, CCRN-K, NEA-EL
7/2/2022

Date:

Date:


EKU

Appendix G

PDSA Framework

Aim Statement: The implementation of an individual and group intervention to increase resiliency and decrease burnout syndrome in nurses.

- **Targeted Population:** The Women's Care Unit (WCU) in an acute care facility.
- **Measurable Goals:** a) Achieve a 25% increase in resiliency scores and achieve a 10% reduction in burnout scores. b) Provide nurses in the WCU with individual and group interventions they can implement to improve resiliency and lessen burnout indicators that they will verbally express or transcribe to be evaluated. c) Increase continued use of the Relaxation room by providing a post-intervention survey measuring impact of the project.
- **Plan for Achievement:**
 1. Introduce fliers in the unit, distribute an introductory email, and attend a monthly staff meeting to describe the research program and requesting participation in the study.
 2. Implement a demographic survey, pre-intervention surveys (Connor-Davidson and Maslach) to measure baseline unit resiliency levels and burnout scores.
 3. Utilize the individual therapeutic/expressive writing intervention for a two-week period. After this session the resilience survey will be given to project participants. Each session will last from 5 to 15 minutes.
 4. Following that time frame, the group resilience building intervention will start having 2-3 participants discussing pictures of resilience and the impact on them. This will last from 5 to 15 minutes and will continue for four-weeks.
 5. After completion, post-intervention survey (Connor-Davidson and Maslach) for impact of evidence-based intervention. This will last for one week. During this period, a follow-up email will be sent to address progress of the project.
 6. The project will then resume for an additional four-week period.
 7. At the conclusion of the four-week period, the same post-intervention surveys (Connor-Davidson and Maslach) in addition to a post-intervention assessment will be given to determine changes from baseline scores. a post-intervention survey measuring use of the Relaxation room and continued use of the room will be given.
 8. A concluding letter will be attached to the post-intervention survey for all participants covering completion of the project.
- **Relevancy of Plan:** Provide nurses with additional tools they can utilize to improve resilience.
- **Anticipated Length of Cycle:** 12 weeks.

Plan **Act** **Plan** 
 Study Do

What change will be tested or implemented?

The interventions will be implemented by W. David Wagner (principal investigator) in the WCC within a hospital. Participants will be given instructions on how to complete an individual therapeutic/expressive writing intervention within the hospital. At a different time, the participants will be provided with a group intervention related to their perception of resilience within the hospital, in the Relaxation room. The demographic survey, pre-intervention survey, intervention, and post-intervention survey and four-week secondary survey will be accomplished within a ten-week cycle with evaluation to follow for the first cycle. The second cycle is projected to follow the same schedule in time allotment.

Prediction: Project participants will provide statistical evidence of improvement in resiliency and reduced burnout symptomology.

Data Collection Plan


What data/measures will be collected? Results from the Connor-Davidson Resilience Scale and the Maslach Burnout Inventory Tool, a demographic questionnaire, and post-analysis survey measuring use and continued use of the relaxation room.

Who will collect the data? W. David Wagner (Principal Investigator)

When will the collection of the data take place? Approximately two weeks after the therapeutic writing intervention has been started.

How will the data (measures or observations) be collected and displayed? Results from pre and post interventions will be analyzed using mean, standard deviation, paired sample t-test, and p-values.

What decisions will be made based on data? Findings from data will be used to determine if the interventions improved nurse's resiliency and decreased burnout symptoms or if further interventions are required.

DO Act Plan
 Study **DO** 

Activities/Observations: a) The individual activity will require project participants to perform a therapeutic/expressive writing activity. Participants will meet in the Relaxation room and will be provided with writing tablet and writing instrument. They will be given a document describing one of five writing activities to choose from. The writing tablet and instrument will be there's to keep after the study's conclusion. Participants will be asked to either write or assess their writing from a previous session each time they attend. Each session will last from 5 to 15 minutes. Following the individual writing portion, the resilience survey will be given to participants. b) A group activity will be applied using cards/pictures representing resilience on them. Groups will be limited to 2-3 participants at a session. Project participants will choose a card and discuss with their group why the card demonstrates resiliency to them and then discuss their personal

definition of resiliency. The groups will gather to discuss impressions from each group member. These sessions will last from 5 to 15 minutes.

Record activities/observations that were done in addition to those listed in the plan (above):

Study Act Plan
 **Study** Do

Questions:

Prediction from plans and evaluate learning. Complete analysis of data. Insert graphic analytics when possible.

Prediction: The individual and group sessions performed by the project participants will indicate a statistically significant improvement in resiliency and a reduction in burnout symptoms.

Summary:

 **ACT** Plan
 Study Do

Describe next PDSA Cycle: Based on the anticipated “learning” that is acquired during the interventions, an additional project cycle will be offered to the project participants. Additional project participants will be recruited to participate, dependent upon percentage of resiliency improvement from the first project group (Institute for Healthcare Improvement (IHI), 2021).

Appendix H

BHL IRB Application

1.0 General Information

***Please enter the full title of your study::**

Therapeutic/Expressive Writing and Resilience Promotion for Nurses to Reduce Burnout Syndrome

***Please enter a short study name or number you would like to use to reference this study**

Therapeutic Writing for Nurses

* This field allows you to enter an abbreviated version of the Study Title to quickly identify this study.


2.0 Add departments

2.1 List departments associated with this study:

Is Primary?	Department Name
<input checked="" type="radio"/>	Baptist Health Richmond - Nursing

3.0 Assign key study personnel(KSP) access to the study

3.1 * Please add a Principal Investigator for the study:



Name	Role	Training Record
Wagner, W. David, MSN, RN	Principal Investigator	 View Training Record

3.2 If applicable, please select the Research Staff personnel:




A) Additional Investigators

Name	Role	Training Record
No Additional Investigators have been added		

B) Research Support Staff

Name	Role	Training Record
Jones, Aileen, DNP, MSN, APRN, PMHNP-BC	Data Analyst	 View Training Record
Wood, Angela, DNP, APRN, FNP-C, PPCNP=BC	Data Analyst	 View Training Record

3.3 *Please add a Study Contact:

Name	Role	Training Record
Leonhardt, Lawana, MSN, RN, CCRN-K, NEA-BC	Study Contact	 View Training Record
Ponder, Judy, DNP, RN, NPD-BC, NE-BC, CSSGB	Study Contact	 View Training Record
Wagner, W. David, MSN, RN	Study Contact	 View Training Record

The Study Contact(s) will receive all important system notifications along with the Principal Investigator. (e.g. The project contact(s) are typically either the Study Coordinator or the Principal Investigator themselves).

3.4 If applicable, please select the Designated Department Approval(s):

Name	Role	Training Record
Blair, Mendy, DNP, RN-BC, NEA-BC, CENP	CNO	 View Training Record

Add the name of the administrative individual authorized to approve and sign off on this protocol for your Department (e.g. Vice President or CEO).

3.5 If applicable, please select the Administrative Assistant(s):

Name	Role	Training Record
No Administrative Assistant have been added		

Administrative Assistant Note

4.0 IRB Application**4.1 Request for which type of review (Baptist Health Lexington Policy VIII: 1M):**

- ☒ Exempt / Expedited
☐ Full Board

4.2 Will your protocol / research study involve the implementation of one or more clinical interventions?

- ☐ Yes ☒ No

4.3 Is the Baptist Health Lexington Clinical Research Center assisting you with the submission of your IRB application or the execution of this study?

- ☐ Yes ☒ No

4.4 Email address of the principal investigator:

william_wagner5@mymail.eku.edu

4.5 Study contact (if different than the investigator):

4.6 Have the principal investigator and all study personnel completed human subject protection training?
***Note - Human subject protection training is required of all investigators and study personnel (If your answer is yes, please attach appropriate documentation certifying the completion when adding other study documents with this application. If you have previously submitted this documentation, you do not need to attach any additional documents. If your answer is no, please contact the IRB Office for further instructions.)**

☒ Yes ☐ No

4.7 Which specialty best describes the area of research for this study:

- ☐ Cardiology
- ☐ Cardiac Electrophysiology
- ☐ Oncology
- ☐ Obstetrics and/or Gynecology
- ☐ Neurology
- ☐ Orthopedics
- ☒ Nursing
- ☐ Pulmonary
- ☐ Pharmacy
- ☐ Pediatrics
- ☐ Speech-Language Pathology
- ☐ Physical Therapy
- ☐ Other

* If **other**, please specify:

4.8 Check all applicable Baptist Health providers listed below where your study will be conducted:

- ☐ Baptist Health Lexington
- ☐ Baptist Health Corbin
- ☐ Baptist Health LaGrange
- ☐ Baptist Health Louisville
- ☐ Baptist Health Madisonville
- ☐ Baptist Health Paducah
- ☒ Baptist Health Richmond
- ☐ Baptist Health Hardin
- ☐ Baptist Health Floyd
- ☐ Baptist Health Medical Group
- ☐ Your private office / clinic
- ☐ Other

If other, please specify:

4.9 Is this a multi-site study (Is the research also occurring at other sites outside of Baptist Health)?

☐ Yes ☒ No

4.10 Have you received a grant or external funding to support your research (ie. grant, sponsor, gift, etc.)?
☐ Yes ☒ No

4.11 * If yes to previous question, what is your grant/funding source(s)?

	Sponsor	Funding	Protocol Control	Data Coordination	Monitoring	Auditing
Personal						
Federal - NIH						
Pharmaceutical						
Private - Non-profit						
State Government						
Local Government						
Federal - Other						
General Hospital						
Business - Profit						

4.12 Expected start and completion dates of proposed research (Please note that you are not allowed to begin until you receive official approval notification from the BHL IRB):

11/18/2022

to

11/17/2023

Minors

Pregnant women

Fetuses/ fetal tissue/ neonates

Economically or educationally disadvantaged

Healthy volunteers

Baptist Health employees

N/A

4.14 Consent Document Regulations 45 CFR 46.116 and 21 CFR 50.20 state, except as provided elsewhere in the 45 CFR 46 policy and in 21 CFR 50.23, “no investigator may involve a human being as a subject in research covered by these regulations unless the investigator has obtained the legally effective informed consent of the subject or the subject's legally authorized representative.” Select one of the following based on your study:

I will be submitting an informed consent document for review that will be adapted to the BHL IRB approved informed consent template (available in Imedris or from the IRB Office) and I will be requiring participants or their legal representatives to sign the consent document.

I am requesting a waiver of documentation of informed consent (Consent will be obtained from the participant, but will not be documented with a signature, often referred to as implied consent. Examples may include surveys, internet research, etc.).

I am requesting a waiver of the requirement for the informed consent process, or alteration of some or all of the elements of informed consent (Examples may include medical record review, deception research, or collection of biological specimens)

Emergent use of test article notification - unable to consent

If this is an emergency use notification and proper consent was not possible, please explain (Was the subject confronted by a life-threatening situation necessitating the use of the test article, was the subject unable to communicate, was time insufficient to obtain consent from the subject's legal representative, was there no alternative method of approved or generally recognized therapy available that would provide an equal or greater likelihood of saving the subject's life?).

4.15 Will your research protocol involve the use or disclosure of protected health information (PHI)? **PHI includes a patient's personal health information, such as information in a patient's medical chart or a patient's test results, as well as an individual's billing information for medical services rendered, when that information is held or transmitted by a covered entity. PHI also includes identifiable health information about subjects of clinical research gathered by a researcher who is a covered health care provider.

☐ Yes ☒ No

Yes No

4.16 * If yes to the previous question, please select from the following based on your study.

☐ I will be providing participants with an “Authorization to Use or Disclose Health Information” form to sign (available with the informed consent template in Imedris or from the IRB Office).

☒ I am requesting a waiver of the “Authorization to Use or Disclose Health Information” form.

4.17 Will this study involve the collection of participant biospecimens (samples of material, such as urine, blood, tissue, cells, DNA, RNA and protein)?

Yes No

4.18 * If yes to the previous question, please select from the following based on your study.

☐ Information obtained will be recorded in such a manner that the identity of the participant can readily be ascertained, directly or through identifiers linked to the participants.

☒ Information obtained will be recorded in such a manner that the identity of the participant cannot readily be ascertained, directly or through identifiers linked to the participants.

4.19 Explain the rationale for this study / background information:

Nurses have been adversely affected by the Pandemic due to staffing shortages, mental and physical exhaustion, and increased patient acuity (Zhai et al., 2021). The Women's Care Center (WCC) has had to manage diverse

patient populations due to overcrowding in the traditional COVID-19 treatment units. The nurses in the WCC are dealing with death in pregnant women due to COVID-19, pregnant women who have contracted COVID-19, absence of support for mental health issues, a breakdown in their resilience, and increased symptoms of burnout syndrome (psychological disorder that develops as a continuing response to chronic stress in health care organizations [Maslach & Leiter, 2016]). The American Nurses Association (2020) implemented a COVID-19 survey among 32,000 nurses throughout the United States concluding levels of unease from "somewhat" to "very" about personal protective equipment (PPE), safety of their friends and family, personal safety, staffing, acceptable education, testing and information. Raso et al. (2021) concluded that 31% of nurses surveyed in the research were decided about leaving or would leave. The increase in nursing staff turnover, extended nursing work hours and overtime hours indicate the need for interventions that directly support nurses through the use of therapeutic writing and resilience promotion using group discussions to help nurses improve their mental outlook and take time for themselves using the Relaxation room (Gladding & Drake Wallace, 2018; Stacey & Cook, 2019; Belini Jacques et al., 2018).

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4.20 What is your study objective(s) / purpose:

Project Objectives:

1. Develop an evidence-based resilience training intervention utilizing individual therapeutic/expressive writing sessions and group resilience building discussion activity based on the recommendations by Pavlacic et al. (2019), Doll (2019), and Healthy Nurse Healthy Nation (2019).
2. Implement the training:
 - a. Train 100% of nurses that wish to participate in the project within 12-weeks of BH IRB approval.
 - b. Collect data on resilience promotion and reduction of burnout syndrome.
 - c. Collect data for process improvement.
3. Evaluate project impact by analysis of outcomes:
 - a. Outcome 1: 100% of nurses that chose to participate in the project received training on therapeutic/expressive writing and group resilience promotion.
 - b. Outcome 2: Resilience scores are increased by 25% over baseline.
 - c. Outcome 3: Burnout scores are reduced 10% from baseline.
 - d. Outcome 4: Hospital relaxation room utilization is increased by evaluation of post intervention assessment indicating growth in usage (in minutes) from baseline to post-project.
 - e. Outcome 5: Participants provide feedback on resilience interventions and training from a post-intervention survey measuring intent (in minutes) to continue utilizing the Relaxation room.
4. Plan for Dissemination and Sustainability

4.21 Describe your research protocol / study design /methods:

This research proposal will utilize a quality improvement project. The Institute for Healthcare Improvement's (IHI's) Plan, Do, Study, Act (PDSA) will be used as the framework for the project.

Description:

1. Nurses from the Women's Care Center (WCC) will be provided with an introductory email from the principal investigator (PI) upon approval from Baptist Health IRB, a flyer will be posted in each nurse's station within the units, and an in-person visit with nurses during their monthly staff meeting. The (PI) will instruct either Judy Ponder or Lawana Leonhardt to send the introductory email to all nurses in the WCC upon approval of the project from Baptist Health IRB. The in-person monthly staff meeting will be conducted by Laura Simpkinson and Mollie Moss. At the conclusion of the staff meeting, the PI will introduce themselves and ask the management personnel to withdraw from the meeting to eliminate any undue influence for nurses to participate in the project. The PI will present the project that encourages utilizing the Relaxation room for writing and group discussion in conjunction with the project. The PI will also answer questions about the project and emphasize this is voluntary participation and does not impact performance evaluations or is tied to any job requirement. The PI wants to assure participants that they will not be pressured into participating if they are not inclined to.
2. Once the information session is completed, three to four days will elapse giving potential participants time to make an informed decision. Instructions will be announced on the start date and times to be implemented in the hospital relaxation room.
3. Total time commitment required for each participant:
 - * Demographic survey, Pre-intervention surveys (Connor-Davidson, Maslach)- 15 minutes* Therapeutic/Expressive writing sessions (Up to 3 times a week, maximum 15 minutes per session, 10 weeks of writing). This is equivalent to 45 minutes per week and 450 minutes for this portion of the project.
 - * Post-intervention surveys (Once at the end of two weeks, then at six weeks, and at ten weeks). Total time required is maximum of 15 minutes for both. Post-intervention surveys are required once after each time frame. Total time required is 15 minutes for each round of surveys for 45 minutes for this portion.
 - * Group discussions will require participation two to three times a week for four weeks. All project participants will be required to sign the attached confidentiality agreement to protect information that may be covered during the group discussions. This is required to assure all communications will remain within the group to protect all participants. The next four weeks requires one to two sessions per week. Each session lasting a maximum of 15 minutes per session. Total time required 30 to 45 minutes for four weeks and 15 to 30 minutes the second four weeks. Total requirement is 120 to

180 minutes the first session and 60 to 120 minutes for the second four weeks. Maximum of 300 minutes for this portion.

* Post- intervention assessment will require a one-time commitment of up to 15 minutes for completion.

* Total time in minutes: Demographic and pre-intervention surveys- 15 minutes

Therapeutic writing- 450 minutes

Post-intervention surveys: 45 minutes

Group discussions: 300 minute maximum

Post-intervention assessment: 15 minutes

Total required commitment time: 810 minutes over twelve weeks

4. The PI will use the hospitals relaxation room at Baptist Health Richmond (BHR) to distribute all surveys, implement the writing and group portions of the interventions. Nurses will use either a break period (15 minutes) or part of a lunch period, to take part in the demographic survey, preintervention surveys, interventions, post-intervention surveys, second round of interventions, additional post-intervention survey, and final feedback opportunity. This will impact the 7am shift and the 7pm shift, to incorporate all nursing groups. The PI will be responsible for distributing all surveys, interventions, and feedback opportunities. Time schedules will be posted in the WCC nurse's stations. A demographic survey and pre-intervention surveys (Connor-Davidson Resilience Scale and Maslach Burnout Inventory) will be given to each project participant for baseline data. A consent form will be attached to each survey outlining the implications of consent. Each survey requires approximately 5-10 minutes to complete. After the surveys are completed, the participants will deposit the surveys in a secure location within the WCC unit. This location will only be accessed by the PI to maintain confidentiality.

5. The PI will distribute the surveys in the hospitals relaxation room during break times and lunch

times for all WCC nurses between 1000 to 1800 and 2100 to 0100, 7 days a week to

accommodate both shifts, unless otherwise notified. Time schedules will be posted in all WCC nurse's stations. After completion of all surveys (approximately one week), the individual therapeutic/expressive writing intervention begins. This portion will commence for two-weeks for project participants to become familiar with the writing process. After this time, the ConnorDavidson Resilience survey will be given by the PI to detect any

changes from baseline. These surveys will be put in a locked collection box by the participants in a secure location within the

WCC.

6. The PI will conduct the writing and group interventions in the BHR Relaxation Room from 1000 to 1800 and 2100 to 0100, 7 days a week to accommodate both shifts, unless otherwise notified. Time schedules will be posted in all WCC nurse's stations. The group resilience discussion intervention will start immediately after completion of the Connor-Davidson Resilience survey and is conducted by the PI. The group intervention will run concurrently with the writing intervention. The groups will comprise of 2-3 project participants discussing their interpretations of pictures representing resilience positioned on a table.
7. This intervention will cover a four-week period.
8. After completion of the initial six-week period, the PI will have participants come to the BHR Relaxation room, where the Connor-Davidson and Maslach surveys (Approximately 5 to 10 minutes to complete each) will distributed to project participants to measure and record impact of the interventions. A follow-up letter will be attached to the end of the post-intervention surveys to assess participants progression, answer questions, and obtain participants perception of the project. This will cover approximately one-week to complete all surveys. The surveys will be deposited by the participants in a locked container located in the WCC unit, accessible to the PI only.
9. Following the survey completions, the PI will continue having study participants to resume the therapeutic/expressive writing and group resilience discussions for an additional four-week period. New participants will be allowed to join the writing and group intervention at this time. They can contact the PI and arrangements will be made to allow them to participate in the project.
10. At the end of this cycle, the PI will distribute in the hospital relaxation room, the ConnorDavidson and Maslach surveys are given for a final time. Additionally, the PI in the hospital relaxation room will provide a post-intervention assessment survey to gain insight into effectiveness of the research project and document usage of the Relaxation room. Upon completion of these surveys, participants will place the documents in a lock container located within a secure location in the WCC unit. Only the PI will have access to these documents.
11. A conclusion letter will be attached to the end of the post-intervention assessment survey thanking participants for their participation in this project.

4.22 Approximate number of participants to be enrolled at Baptist sites:

50

Approximate number of participants to be enrolled study wide (if multi-site study):

Inclusion criteria:

Nurses employed by Baptist Health Richmond, age 21 and older, English speaking, working in a direct patient care role in the Women's Care Center.

Exclusion criteria:

Agency staff, PRN staff, non-English speaking staff, non-direct care staff. WCC employees that are not nurses.

4.23 How will participants be recruited for this study:

(Check **all** that apply)

Participants will not be contacted (e.g., review of medical records, collection of existing data)

Review of medical records, then direct contact

Direct contact by mail

Direct contact by

phone Direct contact

in person

Direct contact by email

Previous study participants who have agreed to be contacted for future studies

Appendix I

EKU Letter of Deferral

November 28, 2022

Baptist Health Lexington
1740 Nicholasville Rd
Lexington, KY 40503

Dear IRB Chair:

Please accept this communication as documentation of ECU's willingness to defer responsibility to the Baptist Health Lexington IRB through FWA00003601 for the review of W. David Wagner's project entitled, "Therapeutic/Expressive Writing and Resilience Promotion for Nurses and Reducing Burnout Syndrome."

Upon BHL's approval of this project, ECU will send an Authorization Agreement to be executed for ECU to rely on the review and approval of this project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gustav A. Benson". The signature is fluid and cursive, with a large initial "G" and "A".

Gustav A. Benson
Institutional Official

Appendix J

BHL Informed Consent Document

Dear Women's Care Center Nurses,

You are invited to participate in a nursing evidence-based practice project at Baptist Health Richmond. I am interested in encouraging nurses to take time for themselves during their shift, utilizing the hospital relaxation room, and that will assist you in enhancing your mental health perspective. I plan to use the information gained from this project to provide nurses with strategies in managing their resilience and reduce burnout in their work environment. This will entail the use of therapeutic writing strategies and group discussions helping to educate nurses on approaches to assist in dealing with resilience promotion.

Participation in this project involves completing a demographic survey, two pre-intervention surveys (approximately two weeks), a therapeutic writing exercise (approximately two weeks), post-intervention surveys to follow after the writing exercise, a (2-3 person) group discussion (lasting four weeks in conjunction with the writing), two post-intervention surveys (following the group discussion) a four week period implementing both writing and group discussions a final post-intervention survey, and a post-assessment survey. The time commitment of the project will cover twelve weeks. As time is a commodity, each survey will only take approximately 5-10 minutes. Additionally, the writing and group discussions are designed to last no longer than 15 minutes. Total time investment for this project will require approximately 810 minutes over the twelve-week project. This equates to about 70 minutes per week. If you agree to participate, I ask that you complete each questionnaire/survey. All responses are anonymous. None of the direct quotes from group discussions will be published or captured from participant responses.

Your participation or lack of participation will not change your employment status, impact your performance evaluation, or risk any potential reprimand at Baptist Health Richmond or the Baptist Health System. The only risk to you, if you choose to participate, is the potential loss of confidentiality. We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information. To protect individuals participating in the group discussions, a confidentiality agreement will be required to be signed. Any information you provide will be kept in a confidential file that only the principal investigator can access. This study may be reviewed by the Baptist Health Institutional Review Board (IRB).

Completing this questionnaire can contribute to our knowledge about strengthening resilience in nurses and providing them with additional approaches to help manage the work environment. Project results may be submitted for publication in a national journal but you will not be identified as a participant in the study. Of course, you have a choice about whether or not to complete the Maslach Burnout Inventory, the Connor-Davidson Resilience Survey, or any

of the additional questionnaires, but if you do participate, you are free to skip any questions or discontinue at any time.

Thank you in advance for your anticipated participation.

W. David Wagner RN, DNP student, and principal investigator
Email: william_wagner5@mymai.eku.edu

Appendix K

**Therapeutic/Expressive Writing and Resilience Promotion for
Nurses and Reducing Burnout Syndrome****WOMEN'S CARE NURSES**

My name is W. David Wagner RN, I am a DNP student at Eastern Kentucky University. I am implementing a project using therapeutic/expressive writing and group resilience discussions in the hospital relaxation room to provide nurses with stress management ideas and activities to support resilience.

The project consists of:

- Project introduction, question and answer session, and demographic survey.
- Two pre-intervention surveys (5-10 minutes) during shift.
- Individual writing prompt (5-10 minutes) with a choice of five different writing exercises (Writing instrument and paper provided) during shift.
- Group resilience exercise (2-3 individuals per session) using pictures of resilience (5-10 minutes) during shift.
- Two post-intervention surveys (5-10 minutes) during shift.
- After one month, repeat the post-intervention surveys during work.
- Complete post-assessment survey (5-10 minutes) at the completion of the project.

Goal of the Project: Helping nurses take time for themselves, utilize the relaxation room, improve their resilience, and decrease stress, burnout from work.

Contact Information: W. David Wagner RN, DNP student

Email: william_wagner5@mymail.eky.edu:

Phone: 859-333-4026

Appendix L

Introductory Email for Study Participants from Women's Care Center

Therapeutic/Expressive Writing and Resilience Promotion for Nurses to Reduce Burnout Syndrome

Women's Care Center Nurses,

My name is W. David Wagner, and I am a DNP student at Eastern Kentucky University. Baptist Health Richmond (BHR) has permitted me to conduct my final DNP project within the organization. The focus of my project will be to assist nurses within the Women's Care Unit (WCU) in taking a few minutes out of their workday to utilize the Relaxation room and concentrate on their own mental health. I will be offering a brief individual writing activity. Additionally, there will be small (2-3 individuals) group sessions discussing pictures of resilience. The project is scheduled to run from mid-October thru the end of December. Participation is voluntary, no identifiers including names or other personal information will be required. The end goals of the project are for nurses to take a few minutes for themselves, get away from the unit, and reduce some of the pressure and stress associated with working in the unit. I will be speaking at the staff meeting next month and will be posting a flyer in the workstation in the units.

If you have any additional questions, my contact information is below or you may contact my Project Chair, Dr. Angela Wood, Clinical Faculty at Eastern Kentucky University, 859-622-6313 or angela.wood@eku.edu. I am excited for the opportunity to provide strategies to help manage work stress and help reduce burnout. and manage the stress from work.

Thank you for your time,

W. David Wagner DNP student, Eastern Kentucky University

Email: william_wagner5@mymail.eku.edu

Phone: 859-333-4026

Appendix M**Follow-up Letter for Study Participants****Therapeutic/Expressive Writing and Resilience Promotion for Nurses to Reduce Burnout Syndrome**

Women's Care Unit Nurses,

I am following-up with participants in the writing and resilience promotion project to find out if any questions or concerns that need to be addressed. It is nearing the time for the second survey, and I want to make sure everyone is making progress and satisfied to this point. Please contact me during the project implementation in the hospital relaxation room or you can text or call me at 859-333-4026, if I can answer any questions.

Thank you,

W. David Wagner DNP Student, Eastern Kentucky University

Principal Investigator

Appendix N**Confidentiality Agreement****Therapeutic/Expressive Writing and Resilience Promotion for Nurses to Reduce Burnout Syndrome**

I _____, agree to keep confidential and private any oral or written information obtained during the group discussions associated with the Baptist Health Richmond DNP project concerning “Therapeutic/Expressive Writing and Resilience Promotion for Nurses to Reduce Burnout Syndrome”. The principal investigator (PI) W. David Wagner is providing this document to assure participants in the project concealment of any opinions, beliefs, or statements made within the context of group discussion will remain private and will not be discussed or referenced to by other group participants.

Thank you for your cooperation,

Principal Investigator: W. David Wagner

Project Participants Signature: _____

Date: _____

Appendix O**Study Conclusion Letter****Therapeutic/Expressive Writing and Resilience Promotion for Nurses to Reduce Burnout Syndrome**

Women's Care Center Nurses,

I would like to thank you on behalf of myself, and Eastern Kentucky University, School of Nursing for your participation in this DNP project. Your cooperation and involvement with this project were greatly appreciated. Once all the information has been compiled the findings will be presented to BHR. I am hoping to have the same opportunity to discuss the findings with you, as contributors to this project. I hope to encourage continued use of the hospital relaxation room as it is vital for nurses to prioritize their self-care needs by taking a few minutes every day for themselves. Again, please contact me with questions or comments after the study's conclusion. I will be glad to assist you in any way.

All the best,

W. David Wagner DNP Student, Eastern Kentucky University

Phone:859-333-4026

Principal Investigator

Appendix P

Permission to Use Connor-Davidson Resilience Scale®

Dear David,

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

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

Sincerely yours,

Becky Williams.

Agreed to by:

W David Wagner April 24, 2022
Signature (printed) Date

DNP Student

Title

Eastern Kentucky University
Organization

Appendix Q

Permission to Use Maslach Burnout Inventory®

Hi David,

Thank you for your interest in the MBI to study burnout. Please note that burnout is an occupational phenomenon according to the [World Health Organization \(WHO\)](#) and we recommend using the [Maslach Burnout Inventory \(MBI\) Toolkit](#) to measure and address the whole concept of burnout, i.e., the pattern and extent of the burnout components and the likely organizational causes.

The MBI Toolkit is the combined MBI + AWS (Areas of Work life Survey). This copyrighted instrument requires a purchased license for each reproduction/administration, e.g. to survey 150 people each twice you would buy a license for 300 administrations.

You have a choice of administration formats:

- [Online via the Mind Garden platform](#) – Select the applicable Toolkit form and purchase the Transform Survey Hosting option. Includes data download and automated scale scoring.
- [Remote Online Survey license](#) for online administration via another platform, e.g. Qualtrics, etc.
- [License for paper/pen administration](#) which is delivered to you in pdf format.

Type in the quantity you need and the price will calculate. Volume discount applies automatically to quantity 100+ on a single invoice. Unit price is the same regardless of format.

If your research is for a thesis or dissertation, and is unfunded, you are eligible for a 20 percent Student Discount on the **license** purchase. For more information about receiving a Voucher Code for the Student Discount, [please click here](#).

The [MBI/AWS Manual](#) (\$75) includes information on instrument reliability, validity, normative data, and guidance on interpreting your findings.

For MBI-only license information, see the [MBI web page](#) and select the applicable form.

Let us know if you have any further questions.

Best,

Katherine

Mind Garden, Inc.

Appendix R

Post-Intervention Assessment for Participants to Evaluate Individual and Group Interventions

Therapeutic/Expressive Writing and Resilience Promotion for Nurses to Reduce Burnout Syndrome

Please circle the letter for each question and feel free to comment on your response. Please use the backside of the survey for additional room.

Question #	Question	Aim Justification
1.	<p>Did you enjoy participating in the study?</p> <p>a. Yes. Explain.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <p>b. No. Explain.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <p>c. Prefer not to answer</p>	Understanding study impact.
2.	<p>Did you find the Relaxation room beneficial for relieving stress or to unwind?</p> <p>a. Yes, Explain.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <p>b. No, Explain.</p> <hr/> <hr/>	Input about Relaxation room

	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	
	c. Prefer not to answer.	
3.	<p>Was it difficult for you to take time for yourself?</p> <p>a. Yes, Explain.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <p>b. No, Explain.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <p>c. Prefer not to answer.</p>	Understand mindset of nurses taking time for them self
4.	<p>Which intervention did you find provided the best benefit from participating in?</p> <p>a. Individual Writing.</p> <p>b. Group Resilience Discussion.</p> <p>c. Use of the Relaxation room apart from participation.</p> <p>e. Prefer not to answer.</p>	Access impact of the interventions
5.	<p>Do you feel uncomfortable using time to take care of yourself?</p>	Gain ideas on how to best support nurses

	<p>a. If Yes, Explain.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>b. No</p> <p>c. Prefer not to answer</p>	
6.	<p>Would you consider using the Relaxation room now that the intervention has concluded?</p> <p>a. Yes</p> <p>b. No</p> <p>c. Prefer not to answer</p>	Long term usage feasibility
7.	<p>What suggestions would you use to encourage other nurses to utilize the Relaxation room?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	Insight from participants for improvements or changes
8.	<p>Indicate time spent in Relaxation room after completing the 1st post-intervention resilience and burnout survey.</p> <p>a. < 5 minutes</p> <p>b. 5 to 10 minutes</p> <p>c. 11 to 15 minutes</p> <p>d. 16 to 20 minutes</p> <p>e. 21 to 25 minutes</p> <p>f. > 25 minutes</p>	Engagement in Relaxation room

	g. Not at all	
9.	Indicate time spent in Relaxation room after completing 2nd post-intervention resilience and burnout survey. a. < 5 minutes b. 5 to 10 minutes c. 11 to 15 minutes d. 16 to 20 minutes e. 21 to 25 minutes f. > 25 minutes g. Not at all	Determine impression of interventions
10.	Indicate the amount of time you would dedicate to utilizing the Relaxation room after the project concludes. a. < 5 minutes b. 5 to 10 minutes c. 11 to 15 minutes d. 16 to 20 minutes e. 21 to 25 minutes f. > 25 minutes g. Not at all	Determine culture change with documented use of room

Appendix S

Demographic Questionnaire

Therapeutic/Expressive Writing and Resilience Promotion for Nurses and Reducing Burnout Syndrome

Demographic Questionnaire:

Resiliency Intervention Experiences

Question #	Question	Aim Justification
1.	What is your age? Choices: 18-24yr 25-34yr 35-44yr 45-54yr 55-64yr 65-74yr 75 or older Prefer not to answer	Correspond appropriate adult learning inclinations.
2.	What is your gender? a. Female b. Male c. Other _____ d. Prefer not to answer	Understanding different situational perspectives.
3.	Your highest level of education achieved? a. ADN b. BSN c. MSN d. DNP e. Other _____	Interpret educational impact.
4.	Years in nursing? a. 0-4yr b. 5-9yr c. 10-14yr d. 15-19yr e. 20-24yr f. 25-29yr g. 30 or greater h. Prefer not to answer	Determining possible coping strategies.
5.	Years in current position? a. 0-4yr b. 5-9yr c. 10-14yr	Impact of unit on nurse's perspective.

	d. 15-19yr e. 20 or greater f. prefer not to answer	
6.	Have you participated in resilience training at your facility? a. Yes b. No	Prior exposure to coping mechanisms.
7.	If yes, do you feel the training was effective? a. Yes b. No c. Unsure d. If yes, what made the intervention effective for you? _____ _____ _____ _____	Result of previous exposure.
8.	Would you participate in an individual intervention at work? a. Yes b. No	Willingness to engage.
9.	Would you participate in a group intervention at the facility? a. Yes b. No	Willing ness to engage.
10.	Describe your ability to handle exhaustion, burnout, or fatigue, changing patient dynamics and could you utilize additional strategies to help improve your resiliency? _____ _____ _____ _____ _____ _____ _____	Insight concerning adaptability and possible improvement.

11.	Which unit/units do you work in? a. Infants b. Labor & Delivery c. Mother Baby d. Multiple units e. Prefer not to answer	Examining area of practice
12.	Which shift do you work? a. 7am b. 7pm c. Prefer not to answer	Impact of shift work
13.	List in order of helpfulness (Individual writing, Group intervention, or Using relaxation room). a. b. c.	Determining effectiveness
14.	Did you continue to utilize the relaxation room after the study project concluded? a. Yes b. No c. Prefer not to answer	Sustainability

Appendix T

Connor-Davidson Resilience Survey®

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

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

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

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

Appendix U

Maslach Burnout Inventory®

MBI Human Services Survey for Medical Personnel

Christina Maslach & Susan E. Jackson

The purpose of this survey is to discover how various people in the human services or the helping professions view their job and the people with whom they work closely.

Instructions: On the following page are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about *your* job. If you have *never* had this feeling, write the number “0” (zero) in the space before the statement. If you have had this feeling, indicate *how often* you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

Example:

How often:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

**How often 0-6
Statement:**

1. _____ I feel depressed at work.

If you never feel depressed at work, you would write the number “0” (zero) under the heading “How often.” If you rarely feel depressed at work (a few times a year or less), you would write the number “1.” If your feelings of depression are fairly frequent (a few times a week but not daily), you would write the number “5.”

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		How	0	1	2	3	4
5	6 often:						
Every day	Never	A few times	Once a	A few times	Once	A few times	
	a year	month	a month	a week	a week	or less	or less

How often 0-6
Statements
ts:

1. _____ I feel emotionally drained from my work.
2. _____ I feel used up at the end of the workday.
3. _____ I feel fatigued when I get up in the morning and have to face another day on the job.
4. _____ I can easily understand how my patients feel about things.
5. _____ I feel I treat some patients as if they were impersonal objects.
6. _____ Working with people all day is really a strain for me.
7. _____ I deal very effectively with the problems of my patients.
8. _____ I feel burned out from my work.
9. _____ I feel I'm positively influencing other people's lives through my work.
10. _____ I've become more callous toward people since I took this job.
11. _____ I worry that this job is hardening me emotionally.
12. _____ I feel very energetic.
13. _____ I feel frustrated by my job.
14. _____ I feel I'm working too hard on my job.
15. _____ I don't really care what happens to some patients.
16. _____ Working with people directly puts too much stress on me.
17. _____ I can easily create a relaxed atmosphere with my patients.

18. _____ I feel exhilarated after working closely with my patients.
19. _____ I have accomplished many worthwhile things in this job.
20. _____ I feel like I'm at the end of my rope.
21. _____ In my work, I deal with emotional problems very calmly.
22. _____ I feel patients blame me for some of their problems.
-

(Administrative use only)

EE Total score: _____

DP Total score: _____

PA Total score: _____

EE Average score: _____

DP Average score: _____

PA Average score: _____

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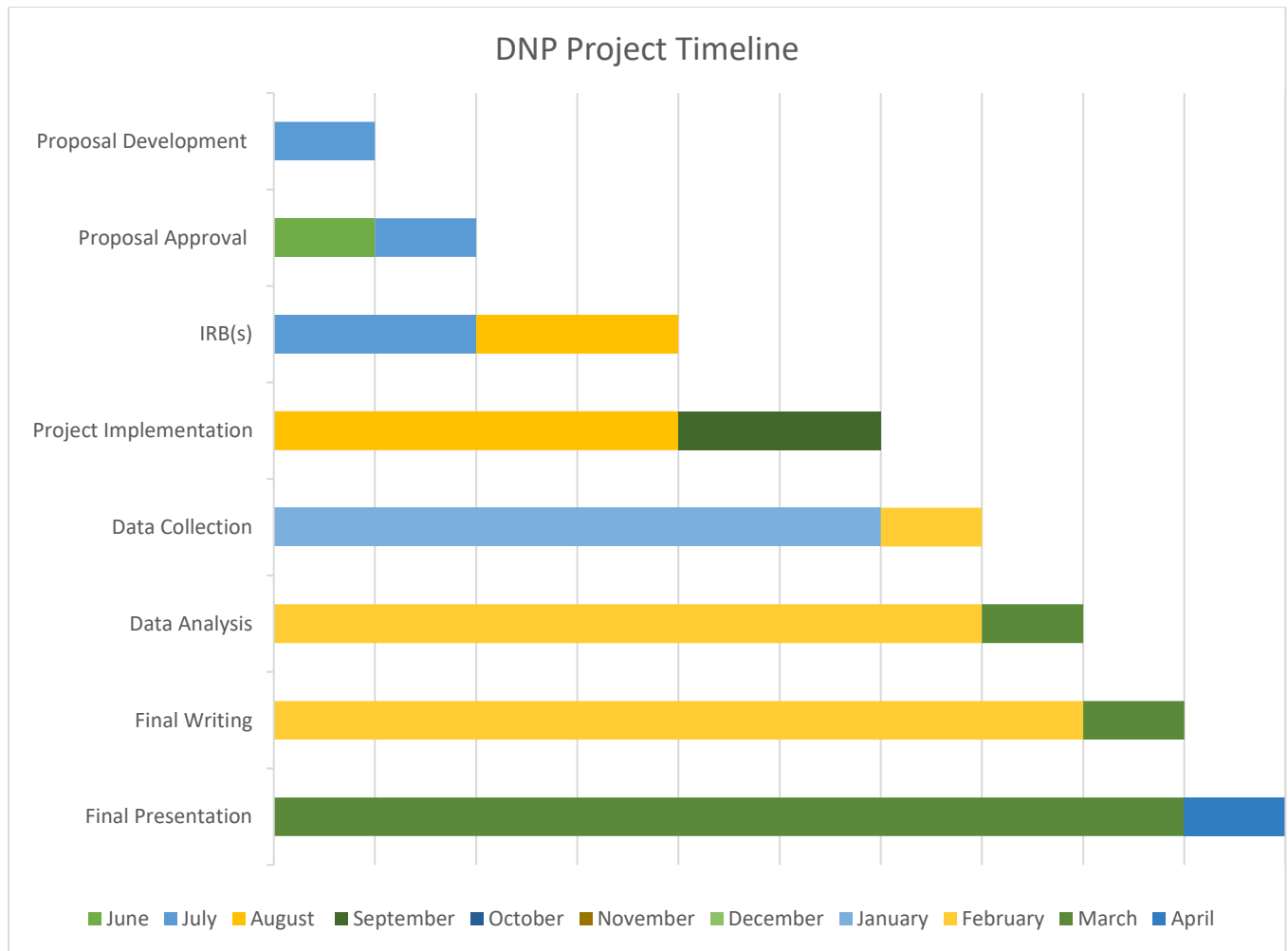
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Appendix V

Timetable for DNP Project Development to Completion

Figure 1



Note: Vertical lines indicate months starting with June through April.