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Restorative Yoga to Increase Mindfulness and Reduce Anxiety and Burnout of Inpatient Mental Health

Workers: A Quality Improvement Project

Rachaele Warden

University of Louisville School of Nursing

Abstract

Background/Significance: Burnout syndrome negatively impacts healthcare systems via quality reduction of patient care and communication, increased medical errors, hospital-acquired infections, staffing shortages, and costly malpractice suits (De Hert, 2020). The characteristic exhaustion, cynicism, job detachment, feelings of inadequacy and incompetence that emerge from burnout further hinder individual mental health and wellbeing.

Purpose: The purpose of the restorative yoga intervention strives to reduce employee anxiety, burnout and enhance mindfulness-based practice strategies within a local inpatient mental health hospital.

Methods: Quality improvement project with evidence-based interventions.

Interventions: The project intends to hold one instructor-guided and one video-guided 25-minute restorative yoga weekly session over four weeks for facility staff members to address project purpose and aims.

Results: Implementation barriers including delayed project initiation, facility personnel changes and limited staff participation contributed to lack of project data. Explanations were postulated using the Theory of Planned Behavior, and aggregate mean values for project measurements were noted.

Discussion: Deficient project data impeded hypothesized results, though project lessons may help guide future projects.

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Yoga for Psychiatric Inpatient Staff

Background and Significance

Burnout, an occupational phenomenon as classified by the 11th Revision of the International Classification of Diseases (ICD-11), results from “chronic workplace stress that has not been successfully managed” (World Health Organization, 2019). Burnout syndrome negatively impacts healthcare systems via quality reduction of patient care and communication, increased medical errors, hospital-acquired infections, staffing shortages, and costly malpractice suits (De Hert, 2020). The characteristic exhaustion, cynicism, job detachment, feelings of inadequacy and incompetence that emerge from burnout further hinder individual mental health and wellbeing. Mousavi and colleagues (2017) demonstrate a positive correlation between burnout and psychological symptoms of depression, anxiety and stress; in addition to insomnia, impaired cognitive function, interpersonal relationship conflict, increased risk of substance use and abuse, and increased risk of heart disease (Salvagioni et al., 2017).

Physiological Effects of Burnout

Stressors initiate sympathetic nervous system activation which leads to epinephrine and norepinephrine secretion; increasing heart rate, cardiac output, blood pressure, bronchodilation, release of glucose from the liver; and reducing gastrointestinal motility and inhibiting insulin secretion (Jansen & Emerson, 2019). Cortisol released from the adrenal glands keeps the body in alert, inhibits glucose uptake and suppresses the immune response (Jansen & Emerson, 2019). Eventually the stressor clears, cortisol levels decrease, activating the parasympathetic nervous system and diminishing the stress response; bringing the body back to equilibrium. However, daily persistent workplace stress - *chronic* stress - allows these physiological changes in the body to continue, preventing a balanced state necessary for survival.

Global Burnout

Burnout plagues healthcare systems worldwide. The International Council of Nurses report an increase in global nurse burnout as high as 80% with universal increase in desire and/or action to leave healthcare. According to the ICN's 2021 report, some countries experienced increase in nurse suicidal ideation and required mental health services. One in every three physicians reported to enduring work-related burnout (Carrau & Janis, 2021), with the global prevalence reaching over 54% (Soler et al., 2008). The direct relationship of high healthcare turnover rates with high burnout rates, high psychological stress and anxiety, higher levels of depression, and increases of compassion fatigue are evidenced throughout global healthcare systems (Poon, Y. et al., 2022); contributing to billions lost in healthcare profits.

United States Burnout

The United States Surgeon General's 2022 Advisory Committee addressing healthcare worker burnout report annual turnover cost estimates at \$9 billion for nurses and between \$2.6 and \$6.3 billion for physicians (Hans et al., 2019); with United States Bureau of Labor Statistics (2021) suggesting 1.1 million nurses needed nationwide by 2022 year end. The nation already at a deficit from burnout fatigue saw a surge of burnout and psychological symptoms from healthcare workers due to the COVID-19 pandemic; with 49% healthcare workers of various departments reporting burnout and 38% contributing work-related stress to symptoms of anxiety and depression (Prasad et al., 2021).

Centers for Disease Control and Prevention (2022) report 93% of healthcare employees feel stressed and overloaded, with 82% feeling emotionally and physically exhausted from work-related stress. Unavoidable and prolonged workplace stress has negative implications to health including increased risk of heart disease, musculoskeletal disorders, psychological disorders, injuries in the workplace, and impaired immune systems. Worker productivity additionally suffers from workplace stress, including increases in nonattendance, tardiness, and job abandonment (CDC, 2014). American

Psychological Association's 2021 Work and Well-being Survey noted a three-fold increase in the number of employees experiencing work-related stress and wanting to find alternative employment (71%) compared to 20% of employees who do not experience significant work-related stress. Poorly managed work-related stress contributes to burnout.

Burnout in Mental Health

Burnout remains high among psychiatric mental health employees; as much as 67% suffering burnout (Morse, et al., 2012) including doctors, nurses, social workers, psychiatrists, counselors, therapists, and administrative staff. Mental health staff are fraught with excessive and demanding caseloads, extensive paperwork, staffing shortages, lack of resources, and threats to personal safety. Mental health workers face high rates of emotional exhaustion, from acute crisis interventions, patient suicide attempts, physical violence, verbal abuse, ongoing patient suffering, and a lack of instant gratification from the constant support they provide to individuals with various mental illnesses (O'Connor et al., 2018).

Moreover, Hasan et al. (2017) highlights the ethical dilemma of mental health providers in which duty to prevent harm often limits available actions to control and subdue aggressive, violent and unpredictable patient behaviors. The difficulties in fulfilling the demands of mental health environments can induce feelings of stress and exacerbate burnout. Nayomi (2016) notes perception of stress, and the ability to handle the stressor, influence individual stress levels.

Incorporating effective strategies into the mental health environment can ease stress and burnout levels of mental health workers. Resilience, a necessary skill to safeguard against stress, may weaken the negative products of stress (Mealer et al, 2014). Mealer and colleagues (2014) suggest that through training, resilience coping skills can be taught, developed and strengthened to assist in adapting to stressful work situations.

Evidence-based Interventions

Yoga Background

Yoga origins trace back to India where its development was used to connect and enhance spirituality and healing among practitioners. The West received yoga practices within the last century and revisions to the traditional eastern practice now include meditation, relaxation, respiration control, postures and stretching (Khalsa, 2007). Khalsa notes the physiological significance of yoga techniques on the body, including “reductions of basal cortisol and catecholamine secretion, decrease in sympathetic activity with corresponding increase in parasympathetic activity, reductions in metabolic rate and oxygen consumption, salutary effects on cognitive activity and cerebral neurophysiology, and improved neuromuscular and respiratory function” (Khalsa, 2007, pg. 450). Additionally, the author highlights evidence for the impeding ability of yoga against harmful consequences of stress, suggesting the use of yoga to heighten stress tolerance and mood (Khalsa, 2007).

Yoga in Research

The trending popularity of yoga and its consequential effects has warranted research of yoga interventions for stress, burnout, depression and anxiety reduction. Along with reduction of negative symptoms, yoga enhances positive outcomes, behaviors and attitudes. Alexander et al. (2015) found significant improvements in emotional exhaustion and depersonalization scores following an 8-week yoga intervention, two factors contributing directly to burnout. Additionally, improvements to self-care and mindfulness scores were noted among the experimental group (Alexander et al., 2015). Emotionally distressed women participating in an intensive yoga program demonstrated reductions in perceived stress, anxiety and depression (Michalsen et al., 2005). Michalsen and colleagues (2005) found improvements in overall well-being and physical complaints, including back pain and headaches, following yoga intervention. Yoga practice during COVID-19 lockdown lowered anxiety, stress, and fear,

and increased the coping skills of Yoga group participants compared to non-Yoga group members (Nagarathna et al., 2021). Non-Yoga group members were also more likely to engage in unhealthy coping behaviors such as substance use and unhealthy food consumption, while Yoga group members reported quality sleep, endurance and adequate physical ability (Nagarathna et al., 2021). Review and meta-analysis by Della Valle and colleagues (2020) advocate for inclusion of workplace yoga interventions in corporate wellness programs to reduce perceived stress in employees.

Yoga's mindful practices are evidenced to lessen stress, anxiety, fear, anger and weakness in healthcare workers (La Torre et al., 2020) with implications for long-term effects on anxiety reduction. The mind-body applications of yoga include mindfulness practices such as deep breathing, relaxation, meditation and awareness of one's body in space; reducing work-related stress in mental health workers (Lin et al., 2015) and improving physical, mental and occupational health in various work environments (Cocchiara, 2019). Research shows significant improvements in positive affect, mindfulness, empowerment, self-compassion and work engagement with brief yoga-based programs (Dyer et al., 2020); outcomes extending two months post program participation. A mindfulness-based yoga group intervention implemented by Ofei-Dodoo and colleagues (2020) reported significant lower levels of burnout, anxiety, stress and depression while enhancing resilience and compassion. The authors suggest yoga intervention use as a preventative tool for burnout of healthcare employees, creating a stronger team in the face of work stressors (Ofei-Dodoo, 2020).

Restorative Yoga

Restorative yoga, brought forth by B.K.S. Iyengar's development of a yoga technique using props to assist practitioners with poses (Iyengar, 2006), was disseminated into the U.S. via Judith Lasater in the 1970s (Lasater, 2017). Props allow for comfortability in *asanas* (poses) to promote relaxation, gentle stretching, and reduce muscle tension (Sabel and Gallagher, 2007). Restorative yoga practices help

stimulate the parasympathetic nervous system which slows the heart rate, controls blood pressure and eases the body; and therefore benefits feelings of anxiety and stress (Caldwell, 2021).

Mind-body-soul connection emerge as a frequent theme in yoga practice; meditation and mindfulness are supported through restorative yoga poses to increase non-judgmental awareness and release tension from the body. Called “active relaxation”, restorative poses enable deep relaxation with focus on breath and/or anatomy to bring balance and restoration to the mind and body (Lasater, 2017). Restorative yoga can be employed by individuals of all ages, sizes, levels of experience and abilities.

Restorative Yoga in Research

Restorative yoga was found to reduce hot flashes in postmenopausal women by 30.8%, and 75% of study participants continued restorative yoga practice three months after (Cohen et al., 2007); indicating satisfaction of yoga type. Improvement trends to energy level, psychological well-being and perceived stress were demonstrated in a restorative yoga control group of overweight adults with metabolic syndrome (Cohen et al., 2008). Ali (2021) reported practitioners of restorative yoga outperformed traditional and non-yoga groups on the Wisconsin Card Sorting Test by having fewer perseverative answers ($p = .03$), fewer errors ($p = .15$), completed more categories ($p = .09$), and a higher learning index ($p = .06$); indicating a relationship between restorative yoga and cognitive flexibility and function.

Following a restorative yoga intervention for 51 women with ovarian or breast cancer, participants demonstrated a significant decrease in depression ($p \leq .01$), significant decrease in negative affect post-intervention and at 2-month follow up ($p \leq .01$), significant decrease of anxiety at 2-month follow up ($p \leq .01$) with trending decrease directly post-intervention, and fatigue was shown to improve post-intervention ($p \leq .05$) and at 2-month follow up (Danhauer et al., 2008). Ott (2002) emphasizes that the minimal physical effort requirements of restorative poses increase its effectiveness for those

suffering high stress or fatigue. Another study of ovarian and breast cancer survivors by Lapen and colleagues (2018) found preference of restorative yoga over vigorous yoga programs, and participants' ability to easily practice restorative poses in their home.

Restorative Yoga in Healthcare

Research of restorative yoga use among healthcare workers befalls limited but promising results in its use for stress reduction in healthcare employees. In Miyoshi's 2019 randomized crossover trial, effects of restorative yoga for occupational stress among Japanese nightshift nurses were explored and evaluated. Study participants received an hour guided restorative yoga session followed by four weeks of at home practice and four weeks of usual stress reduction techniques. Miyoshi found significantly lower psychological and physical stress reactions of the Brief Job Stress Questionnaire after the hour guided session ($p = 0$), showing immediate impact of restorative yoga on stress level. Participant mean BJSQ scores were significantly lower after four weeks of at home restorative yoga practice and lower than post hour guided session ($p = .01$), indicating benefits of continued use. Additionally, participant BJSQ scores following usual stress relief practices were significantly higher than after four weeks of restorative yoga at home practice with $p = .01$, suggesting restorative yoga to be more effective in stress reduction than usual practices.

Hetherington (2016) implemented a 6-week restorative yoga project for stress reduction in hospital workers, and found an increase in participant eagerness to practice poses after initial session. Significant reduction of Depression, Anxiety, Stress Scale scores were reported following week four ($p < .05$), with stated improvements to mind-body awareness from participants post-project (Hetherington, 2016). The study participants found that mindful practices taught within restorative yoga poses furthered their ability to be adaptable to stressful work situations (Hetherington, 2016).

Published literature reflects restorative yoga practice as suitable and effective for minimizing factors contributing to burnout, such as stress, anxiety and depression. Positive consequences of such intervention have been effective for self-care, compassion, job satisfaction, coping, and relief of physical complaints. As such, restorative yoga was chosen for project intervention to reduce anxiety and burnout, and increase mindfulness of inpatient mental healthcare staff. Secondary advantages including pose capability at any skill level and age, emphasis on comfortability without strain, and ability for lengthy or quick intervals make restorative yoga suitable for employees in a local community mental health facility.

Rationale

Needs Assessment

Employees of partnered local community-based inpatient mental health facility treat a variety of patients suffering from mental illness in mixed stages of severity. With an average of 200 admissions each month, frequent staffing shortages limit the amount of help necessary to care for the numerous patients on each unit. Staff nurses and mental health associates occasionally work without uninterrupted lunch breaks due to staffing shortages; minimizing available relief and prohibiting ability to walk away from unit responsibilities.

A heightened state of mental illness can cause patients to become verbally abusive, resistant to treatment, defiant, aggressive and physically abusive to staff and other patients. Nurses and mental health associates have constant direct patient contact, increasing their risk of unfavorable interactions. Events in which a patient exhibits physically aggressive behavior requires multiple staff, emergency orders from provider, extensive documentation, and a plethora of mental and emotional challenges for involved staff members. The fast-paced and busy environment often leaves little to no room for staff

debriefing after “code” situations, as staff members must quickly carry on throughout the day, left to process – or not – encountered stressful events.

Relative to Problem

Ramifications of emotional, mental, and physical strain of daily job requirements result in administrative struggles to fill empty staff positions, specifically for floor nurses and mental health associates. Soaring staff turnover rates in 2021 of 90.58% took a descent with 73.56% turnover in 2022. Despite turnover decline and 126 new staff by end of 2022, the facility necessitates 23 full-time registered nurses and 18 full-time mental health associates to operate at full capacity with appropriate staffing numbers.

Travel nurses have been utilized in attempt to fill demand; creating discontent of wage and assignment differences among regular employed nurses. New staff members are frequently novice to mental health, and therefore lack the experience with approaching patient situations and navigating the inpatient mental health environment. Employees lost due to the ineptitude at managing high caseloads and exhaustion from mental health demands begets additional shortfalls.

Guidance for Intervention

A project intervention focused on stress and burnout reduction and mindfulness enhancement was decided based on the conducted needs assessment. Stressors within inpatient mental health facilities are inevitable, and as such, this project takes on the perspective of self-managed emotional processing and awareness to build resiliency towards work-related hardships. Restorative yoga and mindfulness tactics used during pose sequences can be practiced before and after work, during break time, or when a quick 5-10 minute space allows. Techniques employed by the restorative yoga project are not strenuous, and can therefore be used by all persons desiring tension release and enhanced focus. Introduction of restorative yoga’s function and easy application hoped to reduce staff anxiety and

minimize the perceived burden of work stressors; thereby decreasing burnout and improving staff retention.

Purpose

The purpose of the 4-week restorative yoga project intended to examine the effects of restorative yoga on work-related burnout, anxiety, and mindfulness among stated inpatient mental health employees. Individuals working in inpatient mental health facilities face numerous work-related stressors. Promoting mindful methods of self-care with restorative yoga can potentially decrease negative effects of work environment challenges and lead to enhanced practice awareness.

Aims

Aim 1: Project participants will demonstrate a decrease of anxiety following a restorative yoga sequence as evidenced by Visual Facial Anxiety Scale (Appendix I) results.

Aim 2: Participants will report decreased symptoms of stress and burnout via The Burnout Assessment Tool and Secondary Symptoms scale (BAT-S) (Appendix II) during a two week follow up post project intervention.

Aim 3: Mindfulness skills will be significantly improved at two week follow up post project intervention as evidenced by Kentucky Inventory of Mindfulness Skills (Appendix III) scores.

Quality Improvement Model

Identification

Application of the Plan-Do-Study-Act (PDSA) cycle aided quality improvement project direction, and allow for continued improvement towards project goals. Introduced by Walter Shewart in the 1920s, and further developed by Edward Deming in 1986 for organizational development and leadership

of manufacturing industries (National Health Service England, 2022), the PDSA cycle provides an effective framework for small-scale quality improvement changes with possibility for large-scale utilization (Taylor et al., 2014). Gerald Langley and colleagues demonstrated the PDSA cycle's adaptiveness for use in healthcare settings in 1996, as it enables structure of the computational processes of change development (Langley et al., 2009). Recognized as parallel to the scientific method (Speroff & O'Connor, 2004), the PDSA cycle has since been used by hundreds of healthcare organizations to develop, analyze and integrate systemic quality improvement changes (Institute for Healthcare Improvement, 2022).

Application

Preparation of project intervention with means of execution and data collection designate the first step, *plan*, in the PDSA cycle (Appendix IX). Also included in the first step are objectives of said yoga intervention with hypothesis of outcomes, as previously described. Recruitment of participants, identified assessment tools, pre/post-test development, appropriated space selected for intervention sessions, day and time slot obtained, and designated yoga exercises made up the plan phase of the quality improvement project.

Do initiates the second step of the PDSA cycle, where project implementation, observation and documentation of problems and/or obstacles were noted, and analysis of data began. Weekly 25-minute restorative yoga sessions were carried out at a local inpatient mental health facility with acquired staff participants over a four week period. Demographic data, pre/post-test results, level of anxiety, attendance of participants, and post-session comments were collected. Problems or obstacles that arose during weekly sessions were noted in detail. Collected data was reviewed after each weekly session to compare participant outcomes and intervention feasibility.

Completion of data compilation, comparison of study data to projected outcomes, and summarization of findings made up the third step, *study*, of the PDSA cycle. Data results of the completed four week intervention sessions were documented with reference to hypothesized outcomes. A two-week follow up was conducted with each participant; the results of which were compared to participant pre-intervention data.

The fourth and final step, *act*, drove necessary modifications for future trials to ensure project effectiveness. With data complete and obstacles identified, adjustments to the project intervention and/or delivery can be made. Proposal for continued use of restorative yoga for facility staff can then be conducted and carried through.

Methods

Design

Quality improvement stems from the collective efforts of individuals within healthcare systems to improve patient outcomes, system performance, and professional development (Batalden & Davidoff, 2007). The mentioned project embraces evidence-based interventions of restorative yoga and the mindfulness attributes of yoga practices to reach project aims. Improvement often requires a new perspective or idea, and may warrant various methods to accomplish desired effects (Batalden & Davidoff, 2007). Guided by this outlook on quality improvement, the planned initiative meant to produce a realistic and attainable change within the partnered facility.

Video-guided restorative yoga sessions from project intervention were made to stay on site and be readily available in staff break room for at-work practice when staff members need to relax and reduce anxiety. The facility's staff break room currently holds a smart television with DVD and web-based access as well as accommodating space for one or two staff members to practice restorative poses simultaneously.

The project challenged staff members to learn, engage and develop skills to combat work-related stressors. Taking a new perspective on work-related obstacles, the project required active participation in one's awareness and stress reduction. Providing education and tools to build staff resiliency can improve levels of anxiety, perception and manageability of hurdles, and safeguard against burnout.

Setting

The local inpatient mental health hospital was chosen as the partnered project facility due to needs assessment findings and stressful work environment. The 88-bed hospital offers full continuum of inpatient, extended care, partial hospitalization and outpatient services for children ages 5-12 and adults 18 years of age and older. Treatment for a variety of mental illnesses and/or substance use are provided by psychiatrists, psychologists, social workers, addiction counselors, nurses, pastoral counselors and activity therapists.

The ongoing influx of patients, staffing shortages, and high stress environment surrounding inpatient mental health deemed this facility an appropriate project intervention site. Project participants consisted of staff members from various disciplines, those with direct patient contact especially desired. All part-time and full-time staff members were eligible for project participation, all mental health disciplines, amount of work experience, level of care, designated shift, and time with company. No exclusion criteria existed for staff members, though project excluded non-staff participants.

Sample

Participants were recruited voluntarily via face-to-face invitation from author and project champion. Project flyers (Appendix VII) were posted in the facility's break room and nurse stations as additional recruitment strategy two weeks prior to project launch. Sign-ups were used to solidify participation amount and necessary materials.

Context

Individuals working in high-acuity inpatient mental health environments are prone to increases in work-related stress and anxiety, leading to burnout and an increase in staff turnover. Providing staff with anxiety education and tools to counter the negative effects of stress and anxiety can reduce burnout, decrease staff turnover rates and improve patient outcomes as job performance and compassion enhances.

Key stakeholders included the chief nursing officer, staff nurses, and human resource representative. The facility strives to provide quality care with current positive patient reviews; quality service can continue to rise with mentally and emotionally healthy staff members. Equipping staff with necessary tools to build resiliency and prepare for potential difficult situations not only makes it easier to provide compassionate service, but also decreases stress for the employee, making a difficult task manageable. In the interest of the company, turnover rates are guaranteed to decrease when staff members feel prepared and supported for work expectations. The project intervention hoped to identify a solution and potential protective tool for the high demands of inpatient mental health environments.

Facilitators for project implementation included the nurse educator, chief nursing officer, and staffing coordinator. Yoga was reported as a previous therapy class for patients that was met with enthusiasm and high attendance. Weekly recorded restorative yoga sessions were designed to stay at project site to be used by staff members after project completion to ensure sustainability. Facilitators also indicated the potential equivalent for staff with project implementation, and the possibilities of future return to patient use. Project plan and implementation was reviewed and approved by facility chief nursing officer (Appendix VIII).

Originally, time slot posed the greatest barrier to project intervention, as the fast-paced environment does not often allow one the ability to step away from work demands for extended periods

of time. Attitudes from staff were thought to be another potential barrier to project intervention. Potential disinterest could prevent participation, inspire early drop out, or skew responses to interventions and questionnaires. Adequate space presented a possible issue due to unknown amount of scheduled participants and if predetermined space became imperative for other hospital purposes.

Measurement Instruments

Demographic information, level of burnout, and mindfulness skills of staff participants were obtained prior to project initiation. A questionnaire format addressed demographic information (Appendix IV). The Burnout Assessment Tool (BAT) was used to measure level of burnout (Appendix II). Mindfulness skills were determined using Kentucky Inventory of Mindfulness Skills (Appendix III).

Participant anxiety level was documented using the self-assessment Facial Anxiety Scale (Appendix I) preceding and proceeding intervention sessions. Two week follow up post project included the BAT and Kentucky Inventory of Mindfulness Skills in anticipation of assessing potential long term effects and continued practice of restorative yoga.

Intervention

Two weekly 25-minute intervention sessions were held over four consecutive weeks. One of each weekly sessions was guided by a 2022 Supreme Peace Yoga and Wellness certified yoga instructor who agreed to project details, holding weekly restorative yoga sessions for four weeks for inpatient mental health staff, and granted permission for video recording of sessions to stay with project facility for continued use. The second weekly session used the instructor-led recorded session from earlier in that same week for a video-guided session; allowing the possibility of increased staff participation while maintaining restorative pose content.

The twenty-five minute yoga session was conducted with the participant group; each week focusing on various restorative yoga poses held from 2-4 minutes. Week one consisted of the supported staff pose, legs up wall, supported butterfly, supported bridge, knees to chest, alternating knees to chest, supine tree alternating legs, and corpse pose. Week two incorporated knees to chest and alternating knees to chest, extended supported bridge, supported fish, supported cobra, alternating front shoulder stretch, alternating supine half-moon, and savasana pose. Week three involved supported staff pose, supine supported wide-legged fold, reclined supported butterfly, right ankle to left knee stretch into left knee to chest stretch and repeat with opposite legs, supported fish, and corpse pose. Week four contained supported cobra, child's pose, alternating front shoulder stretch, supported fish, supported backbend, supported bridge, alternating half-moon, and savasana pose.

Intervention leader took note of participation and level of difficulty for pose position and space allotment to ascertain if and when changes needed to be made. Intervention leader and/or instructor assisted participants into poses and periodically reminded participants to relax and breathe into the pose. The final 5 minutes of the intervention session were a wrap up discussion of yoga exercise.

Intervention Team

The DNP student facilitated as intervention leader, guiding and supporting participants through the weekly yoga sessions. The facility's scheduling coordinator assisted with data collection from participants and observational feedback during sessions.

Implementation

Prior to intervention sessions, participants rated pre-session anxiety level via the Facial Anxiety Scale (Appendix I). Directly following yoga sessions, participants rated post-session anxiety level using the Facial Anxiety Scale (Appendix I), and completed a brief optional post-session reflection (Appendix V). Before session dismissal, a reminder for the following week's session was announced to the group.

Two weeks following the 4-week restorative yoga intervention, participants were asked to complete the Burnout Assessment Tool (Appendix II) to assess post-intervention burnout and secondary symptoms. Participants completed the Kentucky Inventory of Mindfulness Skills (Appendix III) to assess enhanced mindfulness post-intervention. In addition, participants were given a 2-week post-intervention questionnaire addressing completion of all four weekly sessions, if video or instructor-led sessions were attended, at home practice, how long and often if practiced at home, if still practicing restorative yoga, how likely they are to continue restorative yoga, how likely they are to recommend restorative yoga, and any additional comments/thoughts. Reviews of intervention exercises and participant suggestions were meant to be collected for improving desired outcomes.

Data collection was HIPPA compliant. All participants completed an information/consent release form upon registering for the program to allow DNP student safe use of pertinent participant information for project implementation. Voluntary program involvement was announced with no expectation to notify project leader of self-termination.

Each participant created a unique identifier that was placed on each pre/post-questionnaire. The facility's nurse educator tracked participant identifiers prior to project launch to ensure participant confidentiality and kept record of participant responses. Paper and pencil format was utilized for tests and questionnaires.

Project plans did not require financial support from partner facility. Project materials needed from facility included paper and printer for copies, access to video and sound system, and space for intervention sessions. Project team members were given detailed project plans but were not required to participate in formal training as intervention sessions were led by project leader. The role of each team member was discussed and agreed upon with project leader prior to project initiation.

Permissions

Project proposal was submitted and approved by the University of Louisville IRB.

Measures

Demographic Data

Demographic information (Appendix IV) included staff role, part-time/full-time position, years of experience in assigned role, years of experience in mental health, years of experience with the facility, age of participant, sex of participant, prior experience with yoga, type of yoga, current frequency and duration of yoga practice, and other current practices for stress relief. Demographic information allowed understanding of background characteristics of participants in relevance to project theme and provided potential insight into amount of work-related stress. Furthermore, participant demographics helped to determine representation of current study sample.

Visual Facial Anxiety Scale

Weekly participant anxiety was measured using the Visual Facial Anxiety Scale, consisting of six cartoon-like faces illustrating increasing degrees of acute anxiety from “none (a neutral facial expression) to highest (a facial expression displaying extreme fear)” (Cao et al., 2017) before and after intervention sessions. Researchers appreciate the Visual Facial Anxiety Scale’s easy format as it allows for quick and reliable assessment of participant anxiety. Several studies demonstrate its effective use; Bahrami et al. (2019) employed the tool to assess anxiety in children with chronic kidney problems, Barhani et al. (2011) finding correlation between anxiety and pain with intravenous catheters, and one study assessing effectiveness of play-based occupational therapy (Mohammadi et al., 2017).

Burnout Assessment Tool

Burnout level was assessed via completion of the work-related version of the Burnout Assessment Tool (BAT) by each participant prior to project intervention and at two week follow-up. Core

burnout symptoms translate in the BAT under the scales *exhaustion*, *mental distance*, *cognitive impairment*, and *emotional impairment* and may be interpreted collectively or individually. Secondary symptoms under the scales psychological distress and psychosomatic complaints are added and interpreted together. Cronbach's alpha for core scales ranged from 0.90 to 0.92 with 0.95 for total BAT core scales; indicating internal consistency among core scales and overall assessment of the four core components of burnout (Schaufeli et al., 2020). Internal consistency of the BAT measured higher than the Maslach Burnout Inventory (0.84 to 0.92) and Oldenburg Burnout Inventory (0.78 to 0.85) in Schaufeli et al.'s study (2020). The multitrait-multimethod matrix conducted by Schaufeli and colleagues (2020) determined the Burnout Assessment Tool to be a valid measurement of burnout as it aligns with the MBI and OLBI. Burnout and secondary symptoms of burnout were measured using the work-related version of the Burnout Assessment Tool (BAT-S) based on overall degree of burnout cutoff values.

Kentucky Inventory of Mindfulness Skills

The Kentucky Inventory of Mindfulness Skills (Appendix III) was used to measure participant mindfulness skills before project opening and at follow-up post project intervention. The 39-item self-reported assessment covers four traits of mindfulness: *observing* (12 items), *describing* (8 items), *acting with awareness* (10 items), and *accepting without judgement* (9 items). The *observing* scale measures the likelihood that one observes internal and external stimuli, such as thoughts, feelings, sounds and smells. The *describing* scale measures the ability to label such observations, such as "joy" or "I am sad about this". *Acting with awareness* scale measures range of full engagement in activities, such as brushing teeth with full awareness in the moment. *Accepting without judgement* scale measures the capability to undergo experiences without criticism or evaluation (Baer et al., 2004). Good internal consistency of $r = .83$ to $r = .91$ was found for the four scales, indicating complementary but independent properties in trait measurement of burnout (Baer et al., 2004). Baum and colleagues'

(2010) study demonstrated the KIMS's capacity to finely identify mindfulness skill changes among patients with major depressive disorder.

Data Collection

Collected data obtained via pencil/paper format was stored in a locked cabinet behind a locked office door at project site.

Results

Minimal data was collected due to limited participation and the loss of two participants at 2-month follow up. As such, aggregate mean values of Visual Facial Anxiety Scale, Burnout Assessment Tool and Secondary Symptoms, and Kentucky Inventory of Mindfulness Skills scores were calculated and documented for comparison of pre and post-intervention. Descriptive statistics identified basic participant information and similarities between participant characteristics. No narrative responses were completed by participants, and were thereby excluded from data collection.

Results of collected data were constructed in written format and presented to project stakeholders and intervention team to assess effectiveness of project for designed purpose. Discussion addressed necessary modifications to be made for possible project replication and to establish feasibility of continued use of restorative yoga in the inpatient psychiatric facility.

Participants were employees at a local inpatient mental health facility. Five participants completed the pre-intervention assessments, two were lost to follow-up post-intervention. Each participant completed one instructor-led session; however, no participants were consistent in attending all four scheduled weekly sessions. One participant attended project week one, one participant attended week two, no participants were present on week three, and week four hosted three participants. No participants attended evening video-led sessions.

Demographics

All participants held full-time positions with three to four year employment 60% majority (n=3), though zero to one year experience in current position was 60% majority (n=3). Non-clinical staff members (60%, n=3), men (60%, n=3), and 31-40 year age range (40%, n=2) made up the larger part of participants. Years of mental health experience varied among participants with 40% (n=2) at 5-10 years and 40% (n=2) at 11-15 years. No participants reported prior or current yoga experience. Current stress relief practice themes among participants favored physical activities, followed by solitary and social engagements.

Table 1 Percentage of Participant Demographic Characteristics (N=5)

Sample Characteristics	Percent (n)
Gender	
Men	60% (n=3)
Women	40% (n=2)
Age	
20-30 yr	20% (n=1)
31-40 yr	40% (n=2)
41-50 yr	20% (n=1)
50 + yr	20% (n=1)
Employment Type	
Clinical	40% (n=2)
Non-Clinical	60% (n=3)
Scheduled Position	
Full-Time	100% (n=5)
Table 1 (continued)	
Part-Time	0% (n=0)
Years in Current Position	
0-1 yr	60% (n=3)
2-3 yr	20% (n=1)
4-6 yr	20% (n=1)
Years in Mental Health	
1-4 yr	20% (n=1)
5-10 yr	40% (n=2)
11-15 yr	40% (n=2)
Years Employed at Facility	

1-2 yr	20% (n=1)	
3-4 yr	60% (n=3)	
6-7 yr	20% (n=1)	
Prior/Current Yoga Experience		
Yes	0% (n=0)	
No	100% (n=5)	
Current Stress-Relief Practices		"Physical activities" "Time alone" "Meditation" "Going for walks and being with my son" "Yardwork"

Visual Facial Anxiety Scale

Likert-scale rating levels of the Visual Facial Anxiety Scale were assigned numerical values, in which *zero* indicated “none” anxiety, *one* for “mild” anxiety, *two* for “mild-moderate” anxiety, *three* denoted “moderate” anxiety, *four* for “moderate-high” anxiety, and *five* represented “highest” anxiety level. Aggregate mean values of Visual Facial Anxiety Scale scores were calculated pre and post restorative yoga sessions to represent anxiety level of participants.

Burnout Assessment Tool and Secondary Symptoms

The Burnout Assessment Tool’s core symptoms, *exhaustion*, *mental distance*, *cognitive impairment*, and *emotional impairment* may be calculated individually to distinguish differences among the four dimensions. However, for the purpose of this project, a comprehensive total BAT score was used to measure an overall level of burnout. Aggregate mean values were calculated for pre and post-intervention. Combined means were additionally calculated for the ten statements regarding secondary symptoms of burnout pre and post-intervention for documentation of overall psychological and psychosomatic complaints of burnout.

Kentucky Inventory of Mindfulness Skills

Each of the four Kentucky Inventory of Mindfulness Skills’ subscales *observe, describe, act with awareness, and accept without judgement* were calculated and documented. A KIMS total was additionally measured for representation of overall mindfulness before and two-months after restorative yoga project intervention. Aggregate mean values for each KIMS subscale score and for a KIMS total score were calculated and documented.

Table 2 Aggregate Mean Values for Project Assessment Scales

Project Measures	Pre-Intervention	Post-Intervention
Anxiety	1.8	0.2
Overall Burnout	2.15	2.36
Secondary Symptoms of Burnout	2.24	2.53
Mindfully Observe	42.6	44.66
Mindfully Describe	28.8	30.66
Mindfully Acting with Awareness	32	31
Mindfully Accepting without Judgment	33.4	31
Overall Mindfulness Skills	136.8	137.33

Discussion

Project Alterations

Project follow-up assessments were conducted two months following project completion instead of two weeks as formerly designed. Anticipation of continuing participant at-home practice and staffing changes made a two-month follow-up window appropriate.

Acquired project yoga instructor made adjustments to previously presented restorative yoga pose sequences to ensure beginner level sequence and ease of pose transition. Each session consisted of warm up stretches, common restorative yoga poses, and a brief closing stretch.

Week one consisted of full range of motion neck stretch, upper body stretch, alternating twisting side stretch, supported fish pose, alternating leaning side stretch, alternating knees to chest

pose, alternating spinal twist, and legs up wall pose. Visualization, awareness of body, breath and surroundings as well as breath control techniques were used during week one session. Week two included lengthening floor stretch, alternating crescent stretch, knees to chest pose, crescent moon neck stretch, alternating side neck stretch, alternating side stretch, child's pose, clam shell pose, supported bridge pose, and savannas. Breath ratio exercises were utilized during week two session. There was not a week three session due to zero participant attendance. Week four contained alternating side neck and shoulder stretch, full body stretch, knees to chest pose, clam shell pose, supported fish pose, supported bridge pose, shoulder rolls, alternating reaching side stretch, alternating spinal twist stretch, and legs up wall pose. Breath awareness and control were used during week four session.

Recordings of weekly sessions were uploaded to a facility-named Link Tree as opposed to originally anticipated DVD format. Link Tree application allowed multiple users to access videos simultaneously with convenience of smart devices.

Implementation Barriers

Barriers arose prior to and during project implementation. Application of project intervention, ease of project flow, and projected outcomes were affected. Challenges of notable mention include delayed project initiation, facility personnel changes and limited staff participation.

Yoga instructor clearance obstacles were not known during project planning and necessitated resolve prior to project initiation. The partner facility appropriated originally designated project space for staff training purposes which further delayed initial project start date. New project dates were posted throughout the facility, however, the delay could have caused indifference and/or confusion among staff members. Take-home handouts (Appendices X and XI) designed by project yoga instructor

were only available for two of the four project weeks. Additionally, handouts did not include all stretches and poses for weekly sessions, limiting review and guidance for optional at home practice.

Facility personnel changes during the project implementation course led to increased staffing shortages and discouragement from activities outside regular work duties. Verbal demand from new personnel to project leader dictated project discussion and/or activities were only to be carried out during employee break times and off company time. Staff members likely did not prefer to spend scheduled off days at employment place, and those working on project session days were likely unable to step away from assignments. Additionally, staff's presumable prioritization of meals to project activities during lunch break weakened project participation. Early evening video-led sessions were planned to gain non-clinical staff participation at end of shift, however, no video-led sessions were attended. Congruent with findings from Ross et al.'s (2019) study on barriers to health-promoting self-care activities, evening session non-attendance was possibly due to participant exhaustion, at-home responsibilities, and lack of motivation felt after completed work day.

Project buy in from facility staff was apparently unknown, as evidenced by limited participation, despite originally interested staff responses. Bohns et al. (2013) suggest people often agree to avoid discord; a possible explanation of noncompliance from earlier agreeable staff. Another study from Bohns and Flynn (2013) highlights the importance of influential people over one's decisions and the desire to appear helpful; an idea that could have swayed earlier recruitment numbers. If staff wanted to appear *helpful* to recruiting project leader or if staff seemingly liked project leader than that would increase the likelihood of agreeing to participate in the project, even if internal motivators were not present to warrant actual participation (Ben-Hur & Kinley, 2016). Additionally, face-to-face recruitment could have initially enticed staff to be agreeable to avoid discomfort of a rejected response (Roghanizad & Bohns, 2021). Speculation of further unknown reasons include disinterest, availability restraints,

and/or worry of personal performance during restorative yoga sessions. The Theory of Planned Behavior was used to surmise possible explanations for lack of project involvement.

Theory of Planned Behavior on Project Participation

Fishbein and Ajzen's (2010) Theory of Planned Behavior (TPB) analyzes patterns and connections of an individual's beliefs, attitudes, perceptions and intentions towards a behavior. A direct correlation exists between the intention and the conscious likelihood of performing a behavior. *Behavioral beliefs*, *normative beliefs*, and *control beliefs* affect intention and can predict probability of behavioral change. The theory postulates "the more favorable the attitude and subjective norm, and the greater the perceived control, the stronger the person's intention to perform the behavior in question" (Ajzen, 2012). Consequently, presumed negative beliefs about performing restorative sessions would lessen the intention to perform project activities, thereby contributing to the lack of participants.

Behavioral beliefs are beliefs about the outcomes of a behavior, and directly correspond to the attitude of performing a behavior (Bosnjak et al., 2020). If staff had negative outcome beliefs of performing project tasks, then the corresponding negative attitude would thwart participation. Restorative yoga involves prop-assisted poses meant for comfort and light stretching (Sabel and Gallagher, 2007); unlike more commonly known forms of yoga practice that require endurance, flexibility and strength. Staff experienced in common forms of yoga may have assumed they would take a positional dislike and displeasure after session conclusion, and therefore were not likely to engage in project sessions believed to be displeasing.

Early session times were not ideal for on-the-clock employees as mornings on the units are busy with various therapeutic groups and school for school-aged units; requiring a certain amount of staff present for efficient execution. Consequences of time constraint and work flow disruption (Taylor et al., 2014) from assignment absence could have alluded to negative staff attitudes of possible adverse

outcomes with project participation. Additionally, beliefs of unwanted organizational or co-worker conflict in response to staff absence (Ross et al., 2019) may have restricted project involvement.

Social pressures persuade individual motivations (Kelly & Barker, 2016); and *normative beliefs* align with an individual's perception of their associated social circle's values (Bredow & Culp, 2020). TPB declares a positive subjective norm when the influential group thinks the behavior should be done (Bredow & Culp, 2020). Thus, if a staff member did not believe people important to them valued restorative yoga practice, they would likely decline participation. Without policies or peer support for self-care activities in the facility's workplace, potential project participants may have deemed self-care activities unimportant to co-workers and facility personnel (Ross et al., 2019; Kelly & Barker, 2016); creating a negative subjective norm around project intervention. Additionally, a negative subjective norm formed from prior minimal participant acquisitions could have further hindered participants from joining.

Control beliefs are the perceptions of one's ability to perform the behavior (Bosnjak et al., 2020) given internal and external control factors. The expectation of yoga pose challenges may have prevented inexperienced staff members from participation out of the perceived belief of an inability to adequately accomplish poses. Results of which could bring frustration, embarrassment, and discomfort when attempting unfamiliar body positions. Limited known facility resources of yoga mats, blocks, and blankets for project intervention may have given the perception that yoga sessions would be unbearable or impossible for a group of participants. Restorative yoga's emphasis on prop assisted poses, coupled with a presumed lack of supplies, may have dissuaded involvement with concern for insufficient support during sessions. Constrained time and support allotted for project activities set by the current organizational culture prohibited suitable project participation. Project activities were difficult to fit into busy work responsibilities, staff breaks started later than scheduled yoga sessions, and inflexible lunch break times were unable to accommodate both nutritional need and yoga session.

Project Lessons

The unexpected project challenges of delay, time restrictions, and support barriers were disruptive in project flow and desired outcomes. However, the most significant implementation barrier was lack of project buy in from staff, minimizing participation and available data. Addressing challenges that hindered staff from engaging in project tasks would be required prior to any future project replications. Potential revisions may include an informational session and packet, take home supplies, restorative yoga sessions via Link Tree access, and supportive check-ins from project leaders.

An informational session for interested staff members would be beneficial to combat confusion or miscommunication about project tasks. Tarrant et al. (2018) suggest group sessions increase understanding, participation readiness, and engagement. The in-person informational session would take place on facility premises and would include project purpose, consents, expectations, tasks, and demonstration of project tools. Participants would additionally become familiar with project leaders and fellow staff participators, creating a sense of belonging and shared experience (van der Put & Ellwardt, 2022) that may additionally help with TPB's *normative beliefs* about project participation.

The revised project would have participants practice restorative yoga at home with certified restorative yoga instructor guidance via Link Tree videos. Videos would consist of various restorative yoga sequences at varying lengths to ensure continued motivation (Garne-Dalgaard et al., 2019) and practice ability despite possible time limitations (Ross et al., 2019). These changes may create positive *behavioral beliefs* as participants would be able to choose favorable sequences and times to fit desired focus and schedule. Perceived positive outcomes from at-home practice eliminate perceived negative outcomes of co-worker/organizational conflict, absence of work duties, and time constraints with at

work sessions. Link Tree videos via smart device access may help encourage project activity (Dallinga et al., 2015) because of its easy and convenient application.

The informational packet would contain written material from project informational session for participant reference. A session log would be included in the packet for participants to track restorative yoga practice time. Tracking information assists with “short term goals and decision making” (Rooksby et al., 2014) so that participants may gauge personal effort and time toward desired aims. Suggestions of common household materials for pose props would be included in the handout to aid TPB’s positive *control beliefs* in that participants have the ability to safely and comfortably position themselves in restorative poses at home. Supportive check-ins from project leaders could increase *normative beliefs* through perceived approval of group norms (van der Put & Ellwardt, 2022) and positive reinforcement of project tasks. Participants would be encouraged to discuss restorative practice with other participants to additionally create a positive subjective norm.

Implications for Future Research

Assessment of organizational and environmental culture toward self-care practices prior to future project implementation could provide direction for future researchers. The culture of an organization encompasses its values, beliefs, leadership, structure and expectations (Chalmers & Brannan, 2023). Understanding the organizational culture and environment, specifically how it relates to employee self-care practices, can aid in “reducing potential burnout . . . [by] addressing system constraints noted by employees” (Via et al., 2022, pp. 342). Ross et al. (2019) suggest leadership styles that promote autonomy, increase communication and support self-care efforts improve work environments and employee satisfaction. Implementing such leadership styles create a strong organizational culture which fosters employee engagement and purpose.

Further research on employee mind-set towards self-care and barriers to self-care should be conducted for effective methods on how to approach workplace limitations and address personal obstacles. For the purpose of conducting future similar restorative yoga projects, additional attention to time constraints, shortage of yoga supplies and availability of space should be considered. Possible solutions for how to perform restorative yoga activities with limited time, supplies and space could help increase participation and allow restorative use in a variety of settings.

Exploring ways to secure participant commitment would benefit future projects as lack of participation negatively impacted current project outcomes. Participant adherence should be considered for a larger sample size, an increase in data with the ability to statistically analyze, and to avoid any selection bias (La Torre et al., 2020). Considerations for a control group would help determine if restorative yoga interventions created hypothesized effects on anxiety, burnout, and mindfulness skills.

Conclusion

Recorded project sessions were made available via Link Tree (Appendix XIII) access with a QR code flyer (Appendix XII) posted throughout project facility for sustainability of restorative yoga practice. Staff members are able to access videos via any smart device for personal use of restorative sessions. The partner facility does not currently plan to incorporate restorative yoga with staff and/or patients but are open to a second project trial and future discussions of yoga classes on site. Current project findings and lessons from implementation barriers can help guide future project plans.

Deficient project data impeded hypothesized project results. Research literature has shown positive effects of restorative yoga on anxiety and symptoms of burnout (Hetherington, 2016; Miyoshi 2019). However, obtaining adequate data aids reliability and scientific outcomes of project research.

Therefore, further studies should be conducted to ascertain restorative yoga use in combatting burnout and anxiety, while increasing mindfulness skills of inpatient mental health workers.

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Appendix I

The Visual Facial Anxiety Scale (VFAS).

Anxiety Level	None	Mild	Mild-Moderate	Moderate	Moderate-High	Highest
Faces						

Appendix II

Work-related version of the BAT

Instruction

The following statements are related to your work situation and how you experience this situation. Please state how often each statement applies to you.

Scoring

Never	Rarely	Sometimes	Often	Always
1	2	3	4	5

Core symptoms

	Never	Rarely	Sometimes	Often	Always
<i>Exhaustion</i>					
1. At work, I feel mentally exhausted*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Everything I do at work requires a great deal of effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. After a day at work, I find it hard to recover my energy*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. At work, I feel physically exhausted*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. When I get up in the morning, I lack the energy to start a new day at work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I want to be active at work, but somehow I am unable to manage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. When I exert myself at work, I quickly get tired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. At the end of my working day, I feel mentally exhausted and drained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Mental distance</i>					
9. I struggle to find any enthusiasm for my work*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. At work, I do not think much about what I am doing and I function on autopilot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I feel a strong aversion towards my job*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I feel indifferent about my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I'm cynical about what my work means to others*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

BURNOUT ASSESSMENT TOOL

ENGLISH VERSION

	Never	Rarely	Sometimes	Often	Always
<i>Cognitive impairment</i>					
14. At work, I have trouble staying focused*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. At work I struggle to think clearly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I'm forgetful and distracted at work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. When I'm working, I have trouble concentrating*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I make mistakes in my work because I have my mind on other things*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Emotional impairment</i>					
19. At work, I feel unable to control my emotions*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I do not recognize myself in the way I react emotionally at work*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. During my work I become irritable when things don't go my way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I get upset or sad at work without knowing why	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. At work I may overreact unintentionally*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: * = Short version

Appendix III

Kentucky Inventory of Mindfulness Skills
 Ruth A. Baer, Ph.D.
 University of Kentucky

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

- ___ 1. I notice changes in my body, such as whether my breathing slows down or speeds up.
- ___ 2. I'm good at finding the words to describe my feelings.
- ___ 3. When I do things, my mind wanders off and I'm easily distracted.
- ___ 4. I criticize myself for having irrational or inappropriate emotions.
- ___ 5. I pay attention to whether my muscles are tense or relaxed.
- ___ 6. I can easily put my beliefs, opinions, and expectations into words.
- ___ 7. When I'm doing something, I'm only focused on what I'm doing, nothing else.
- ___ 8. I tend to evaluate whether my perceptions are right or wrong.
- ___ 9. When I'm walking, I deliberately notice the sensations of my body moving.
- ___ 10. I'm good at thinking of words to express my perceptions, such as how things taste, smell, or sound.
- ___ 11. I drive on "automatic pilot" without paying attention to what I'm doing.
- ___ 12. I tell myself that I shouldn't be feeling the way I'm feeling.
- ___ 13. When I take a shower or bath, I stay alert to the sensations of water on my body.
- ___ 14. It's hard for me to find the words to describe what I'm thinking.
- ___ 15. When I'm reading, I focus all my attention on what I'm reading.
- ___ 16. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.
- ___ 17. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.
- ___ 18. I have trouble thinking of the right words to express how I feel about things.
- ___ 19. When I do things, I get totally wrapped up in them and don't think about anything else.
- ___ 20. I make judgments about whether my thoughts are good or bad.
- ___ 21. I pay attention to sensations, such as the wind in my hair or sun on my face.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

- ___ 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.
- ___ 23. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.
- ___ 24. I tend to make judgments about how worthwhile or worthless my experiences are.
- ___ 25. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
- ___ 26. Even when I'm feeling terribly upset, I can find a way to put it into words.
- ___ 27. When I'm doing chores, such as cleaning or laundry, I tend to daydream or think of other things.
- ___ 28. I tell myself that I shouldn't be thinking the way I'm thinking.
- ___ 29. I notice the smells and aromas of things.
- ___ 30. I intentionally stay aware of my feelings.
- ___ 31. I tend to do several things at once rather than focusing on one thing at a time.
- ___ 32. I think some of my emotions are bad or inappropriate and I shouldn't feel them.
- ___ 33. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
- ___ 34. My natural tendency is to put my experiences into words.
- ___ 35. When I'm working on something, part of my mind is occupied with other topics, such as what I'll be doing later, or things I'd rather be doing.
- ___ 36. I disapprove of myself when I have irrational ideas.
- ___ 37. I pay attention to how my emotions affect my thoughts and behavior.
- ___ 38. I get completely absorbed in what I'm doing, so that all my attention is focused on it.
- ___ 39. I notice when my moods begin to change.

Appendix IV

Participant Demographic Information

1. Age
2. Identified Sex
3. What is your role/job title at The Brook Dupont Hospital?
4. Full-time or part-time?
5. How long have you worked in designated role/job title?
6. How long have you worked in mental health?
7. How long have you worked at The Brook Dupont?
8. Any prior experience with yoga?
 - a. Type?
 - b. Frequency?
 - c. Duration?
9. Any current experience with yoga?
 - a. Type?
 - b. Frequency?
 - c. Duration?
10. What are your current stress relief practices?

Appendix V

Did you attend the instructor led session or video led session?

Post Restorative Yoga Reflection

In a few sentences briefly share your thoughts, feelings, and/or concerns with today's session.

Appendix VI

Participant Post-Intervention Reflection

1. How many of the 4 restorative yoga sessions were you able to complete?
2. Did you attend the instructor guided sessions or video guided sessions?
3. Did you practice any of the restorative yoga poses outside of weekly sessions? If so, please indicate where, when, how often, and how long.
4. What did you like about the restorative yoga sessions?
5. What did you dislike or feel needs improvement with the restorative yoga sessions?
6. Will you continue to practice restorative yoga poses on your own? Why/why not?
7. Do you feel integration of restorative yoga for staff or patients would be beneficial? Why/why not?
8. Additional feedback or comments about the project:

Appendix VII

 **PARTICIPANTS NEEDED**
FOR QUALITY IMPROVEMENT PROJECT
INVESTIGATING THE EFFECTS OF
RESTORATIVE YOGA ON MINDFULNESS,
ANXIETY, AND BURNOUT

- All employees eligible
- Weekly sessions for 4 weeks
- Supplies provided

Tentative Start Date: June 8th
Tentative location: Unit 600
Tentative Times: 1000 / 1730

CONTACT RACHAELE FOR
ADDITIONAL INFORMATION:
RACHAELEWAR@GMAIL.COM

APPENDIX VIII

Good morning Rachel,

Your project plan looks good, it is approved. I appreciate you taking time out to review it with me. There are no additional sign-offs needed from a facility or organization standpoint. I look forward to hearing about impact and outcomes with our team members.

Have a great day.

Kim Mitchell BSN, RN-BC | Chief Nursing Officer
Office (502) 891-0310 | Facility (502) 896-0495 | kimberly.mitchell@uhsinc.com
The Brook Dupont | 1405 Browns Ln., Louisville, KY 40207
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APPENDIX IX

Continuous Quality Improvement Toolkit

A Resource for Maternal, Infant, and Early Childhood Home Visiting Program Awardees

Module 5: The PDSA Cycle—Step by Step

PLAN

Step 1: Identify area for improvement.

- Identify the area, problem, or opportunity for improvement.
- Estimate and commit the needed resources.

Step 2: Assemble a team.

- Identify and assemble team members.
- Specify team member roles and responsibilities.
- Specify meeting frequency and structure.
- Develop a SMART aim.

Step 3: Identify current process.

- Examine the current approach or process flow.
- Obtain existing baseline data or create a plan to obtain needed baseline data.
- Obtain input from stakeholders.
- Determine root causes of the problem.

Step 4: Identify potential change strategies.

- Identify all potential change strategies based on root causes.
- Select change strategy (or strategies) most likely to achieve the SMART aim.

Step 5: Identify improvement theory.

- Develop a theory of change for the change strategy.
- Develop a strategy to test the theory on a small scale (small number of participants).
- What is the strategy? Who will apply it? How will it be measured? What is success?

Adapted from: Tews, D. S., Heary, J., Jones, J., VanDerMoere, R., & Madamala, K. (2012). *Embracing quality in public health: A practitioner's quality improvement handbook*. Michigan Public Health Institute

This document was prepared for the U.S. Department of Health and Human Services, Health Resources and Services Administration, and Administration for Children and Families by James Bell Associates under ACP contract number HHQP2132013001330. For more information, see <https://www.bellin.com/research-publications/ohve>

DO

Step 6: Test the theory.

- Carry out the test on a small scale.
- Collect, chart, and display data to determine the effectiveness of the change strategy.
- Monitor fidelity of implementation of the change strategy; document problems, unexpected observations, and unintended side effects.

STUDY

Step 7: Study the results.

- Was the improvement successful on a small scale?
- Did the results match the theory/prediction?
- Were there any unintended consequences?
- Describe and report what you learned.

ACT

Step 8: Scale up implementation.

- Scale up successful change strategies and continue testing until improvement is achieved.
- Develop and test new theories for unsuccessful changes.
- Standardize successful improvements.

Step 9: Establish future plans.

- Repeat the PDSA cycle, when needed.
- Take steps to preserve gains and sustain successes.
- Make long-term plan for additional improvements.
- Celebrate your successes.



APPENDIX X

RESTORATIVE YOGA

Whenever animals in the forest are wounded, they rest. They look for a very quiet place and just stay there without moving for many days. They know it's the best way for their body to heal. During this time they may not even eat or drink. The wisdom of stopping and healing is still alive in animals, but we human beings have lost the capacity to rest.

- THICH NHAT HANH



TAKE ALONGS FOR 9/4/23:

Supported Fish Pose

Place a rolled up blanket or towel under your shoulder blade area as you lie back onto the floor. Breathe in and feel your chest expand.

Seated Forward Fold

Sit on the floor with your legs in front of you. Your knees can be bent or you can place a rolled blanket under them. Inhale and lean forward onto a chair or some soft pillows in front of you.

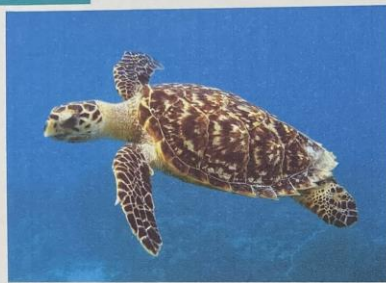
Legs Up the Wall/Chair

Sit on the floor and bring your legs over the chair. You want your knees to be at a 90 degree angle. Inhale as you relax. Exhale and melt your body into the floor.

**PAUSE AND NOTICE THE DIFFERENCE A FEW MINUTES OF REST CAN MAKE

APPENDIX XI

RESTORATIVE YOGA



Slowing down is one of our super powers!! When you slow down and focus on doing one thing at a time and give it your undivided attention, you give yourself space and time to reflect and react without distraction.

TAKE ALONGS FOR 9/11/23:

Supported Child's Pose

Kneel on the floor. Position legs widely enough to rest outside your ribs and slide blanket/pillows between your legs. With big toes touching together, sit back on your heels. Exhale and lay your torso down between your thighs.

Supported Bridge

Lie back onto the floor with knees bent. Lift the hips and lay a block underneath the tailbone. Lower the hips to rest on the blanket/block.

Legs on the Chair

Sit on the floor and bring your legs over the chair. You want your knees to be at a 90 degree angle. Inhale as you relax. Exhale and melt your body into the floor .

**PAUSE AND NOTICE THE DIFFERENCE A FEW MINUTES OF REST CAN MAKE

APPENDIX XII

Restorative Yoga Sessions

Slow Down

Relax

Mind-body Awareness

Restorative yoga uses props to create positions of ease and comfort that facilitate relaxation and health.

- Restorative poses can be adapted for ease and supportive rest
- For people of all ages, levels of yoga experience, and all states of health.

Judith Hanson Lasater, PhD, PT, 2017, Restore and Rebalance



Gain access to a library full of restorative yoga sessions from right here at The Brook!

APPENDIX XIII

