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Empowering Mental Healthcare Providers Through a Breathing Exercises Educational Program to Enhance Stress Management and Resilience at an Outpatient Mental Health Clinic

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Walden University

College of Nursing

This is to certify that the doctoral study by

Ophelia Matthews

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2025

Executive Summary: Staff Education Project
Empowering Mental Healthcare Providers Through a Breathing Exercises Educational
Program to Enhance Stress Management and Resilience
at an Outpatient Mental Health Clinic

by

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MS, Walden University, 2022

BS, La Salle University, 2008

Executive Summary Submitted in Partial Fulfillment
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Summary

This staff education project involved enhancing stress management and resilience among mental healthcare providers by introducing diaphragmatic and box breathing techniques. The practice problem was the high prevalence of occupational stress and burnout among outpatient mental health providers, which has been linked with decreased job satisfaction, reduced patient care quality, and increased staff turnover. The purpose of--- this doctoral project was to design, implement, and evaluate an evidence-based educational program that was aimed at empowering providers with simple, accessible, and effective stress-reduction strategies. The guiding practice-focused question involved determining the impact and increases in knowledge regarding a breathing exercises educational program in terms of stress management and resilience among outpatient mental health providers. Using pre- and post-educational session measures, findings indicated measurable reductions in perceived stress and emotional exhaustion, along with improvements in resilience scores among participants. They reported greater awareness of stress triggers and increased use of breathing techniques during clinical practice. Knowledge regarding burnout prevention and mindfulness breathing strategies increased by 17%. Notably, feelings of wellbeing in the workplace increased by 40%. Implications can extend beyond the local setting, supporting resilience-building as an organizational strategy to foster workforce retention and enhance patient care. This project demonstrates the effectiveness of a low-cost and easily implemented intervention to improve provider wellbeing, promoting equity by ensuring providers have access to wellness tools and supporting inclusive care delivery.

Background

Nursing professionals along with other healthcare workers are routinely exposed to high levels of occupational stress, contributing to burnout and a range of adverse mental health outcomes. These persistent challenges underscore the urgent need for both individual and system-level support, including integration of effective evidence-based strategies to mitigate burnout within this workforce. Mindfulness-based interventions (MBIs), when supported at the organizational level, offer a promising approach to fostering individual resilience, buffering impacts of chronic stress and promoting overall professional wellbeing.

Occupational stress and burnout are significant issues in mental health settings, particularly in outpatient clinics where providers manage complex cases with limited resources (Morse et al., 2019). Stress reduction and resilience training are effective MBI strategies to improve workforce stability and patient outcomes (Ong et al., 2024). I sought to address the gap in practice by providing a structured educational program that was focused on these techniques. Randomized controlled trials and systematic reviews have demonstrated benefits of controlled breathing exercises for healthcare workers. Implementing such programs is a cost-effective and sustainable strategy to support provider wellbeing and organizational resilience.

Ong et al. (2024) indicated small to large beneficial effects of mindfulness-based interventions (MBIs) in terms of anxiety, burnout, stress, depression, psychological distress, and job strain. Notable improvements were also observed involving self-compassion, empathy, mindfulness, and overall wellbeing. MBIs consistently alleviated stress-related symptoms among healthcare workers. Despite these promising outcomes,

structured and evidence-based stress management education remains largely absent from routine outpatient practice.

Wang et al. (2023) supported the moderate effectiveness of mindfulness-based training in terms of reducing stress (SMD = -0.81; 95% CI = -1.11 to -0.52). However, no significant effects were found for anxiety (SMD = -0.30; 95% CI = -0.72 to 0.13) or depression (SMD = -0.24; 95% CI = -0.55 to 0.07). Training demonstrated efficacy in terms of mitigating burnout, with reductions in emotional exhaustion (SMD = -4.27; 95% CI = -5.94 to -2.59) and depersonalization (SMD = -2.89; 95% CI = -4.24 to -1.54), along with increased personal accomplishment (SMD = 2.81; 95% CI = 0.12 to 5.50). Stress reduction effects were sustained in the short term (≤ 3 months), while improvements in burnout emerged more gradually. These findings suggest mindfulness-based training may be a viable strategy for enhancing nurses' psychological wellbeing, particularly via reducing stress and burnout. Skold et al. (2025) reported long-term follow-up of mindfulness training for medical and nursing healthcare students showed they sustained the capability to handle stressful work situations in their professional practice and developed more compassionate relationships with themselves following MBI training.

Burnout among providers manifests as emotional exhaustion, depersonalization, and a reduced sense of accomplishment, which can directly affect patient care outcomes (West et al., 2018). Interventions focusing on mindfulness, breathing, and resiliencebuilding can mitigate these challenges. Breathing interventions, particularly diaphragmatic and box breathing, have demonstrated strong efficacy in terms of reducing stress-related physiological arousal and improving emotional regulation in both clinical and occupational settings (Wang et al., 2021). Significant reductions in burnout ($p <$

0.00001), perceived stress ($p < 0.00001$), with significant increases in resilience ($p < 0.00001$), and work engagement ($p < 0.00001$) were observed among registered and advanced practice nurses in an 8-week work site (MIBs) Intervention to prevent burnout (Klatt et al., 2025). Notably, the number of nursing professionals who were no longer qualified as burned out following the intervention was 10% higher than pharmacists, physicians, chaplains, and social workers.

The purpose of this doctoral project was to design, implement, and evaluate an evidence-based educational program that was designed to empower providers with simple, accessible, and effective stress-reduction strategies. The guiding practice-focused question involved determining the impact and increases in knowledge regarding a breathing exercises educational program on stress management and resilience among outpatient mental health providers.

Staff Education Project Development

The purpose of this project was to design, implement, and evaluate an evidencebased educational program that was designed to provide nursing staff at a psychiatric primary care clinic with simple, accessible, and effective stress reduction strategies. Participants included outpatient psychiatric nurse practitioners, therapists, and support staff at the project site. The intervention consisted of a structured educational session on diaphragmatic and box breathing, with demonstrations, guided practice, and take-home resources. Evidence was collected through baseline and postintervention administration of the Perceived Stress Scale, Connor-Davidson Resilience Scale and Maslach Burnout Inventory data were analyzed for pre-post changes, and qualitative feedback was coded thematically to address provider perceptions. The evaluation process

involved incorporating both objective measures of stress and resilience and subjective assessments of program usefulness.

I recruited participants via email via informed consent forms and scheduled group education sessions. Each session lasted approximately 60 minutes and included didactic teaching, live demonstration, interactive practice, and distribution of educational handouts. Participants were encouraged to practice techniques daily.

Results

Postimplementation findings revealed significant improvements for all measured domains (see Table 1). Participant knowledge increased by 33%, reflecting enhanced understanding of stress management breathing strategies. Perceived stress levels, as measured by the PSS, decreased by 20%, while emotional exhaustion scores on the MBI declined by 22%, indicating reduced burnout. Depersonalization scores also dropped by 20%, suggesting improved interpersonal engagement. Resilience, which was assessed via the CD-RISC, rose by 17%, and workplace wellbeing showed the most substantial gain, with a 40% increase. Collectively, these outcomes underscore the effectiveness of the intervention in terms of promoting psychological health and professional vitality among participants.

Qualitative feedback indicated providers found breathing techniques simple yet powerful, and many reported applying them during patient interactions and personal stress situations. Organizational impacts included improved staff morale and increased interest in incorporating resilience training into ongoing professional development.

Limitations included the small sample size, short evaluation period, and reliance on self-report measures. Nonetheless, the project demonstrates meaningful potential beyond the local site, offering a scalable and low-cost intervention that is adaptable to diverse healthcare settings.

Table 1

Summary of Pre- and Post-Intervention Outcomes for Staff Education Project

Outcome measure	Pre-intervention score (mean)	Post-intervention score (mean)	Percent change
Staff knowledge	60%	80%	+33%
Perceived stress (PSS)	30	24	-20%
Burnout (MBI—Emotional Exhaustion)	32	25	-22%
Burnout (MBI—Depersonalization)	15	12	-20%
Resilience (CD-RISC)	65	75	+17%
Workplace well-being	50%	70%	+40%

Conclusions

The staff education project had a measurable positive impact on the outpatient mental health clinic. By increasing staff knowledge of mindfulness-based breathing techniques, the project led to significant reductions in stress and burnout and measurable improvements in terms of resilience and workplace wellbeing. These changes enhanced staff morale, encouraged self-care practices, and supported the clinic’s long-term goals of improving provider retention, reducing turnover, and maintaining high-quality patient care.

Recommendations

Future efforts should include integrating breathing practices into daily staff meetings and huddles, offering booster sessions to sustain practice, and expanding

interventions to additional outpatient clinics. Longer follow-up periods (e.g., 3 to 6 months) are recommended to evaluate sustained benefits. Incorporating digital supports such as mobile reminders or guided recordings could also reinforce practice and extend reach. Adaptation of the program for patient use may further improve provider-patient relationships and support cultures of wellness across the organization.

Implications for Nursing Practice

This project underscores the importance of equipping nurses and other healthcare providers with evidence-based and low-cost interventions that promote emotional regulation and stress management. Incorporating diaphragmatic and box breathing into staff development programs can foster resilience, reduce occupational stress, and enhance both professional performance and patient outcomes.

Positive Social Change, Diversity, Equity, and Inclusion

The project contributes to positive social change by promoting a healthier and more sustainable workforce that is capable of meeting the growing demand for mental health services. Because the intervention is simple, low-cost, and universally accessible, it supports diversity, equity, and inclusion by ensuring all staff, regardless of role, background, or resources, can benefit from the practice. By fostering resilience and wellbeing in providers, the project indirectly strengthens quality of care that is delivered to diverse patient populations.

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<https://doi.org/10.1111/joim.12752>

Appendix A: Pretest Questionnaire

(Anonymous – completed before the intervention)

1. I am familiar with diaphragmatic breathing techniques. (Yes/No)
2. I am familiar with box breathing techniques. (Yes/No)
3. I feel confident using breathing techniques to manage my stress. (Likert scale: 1 = strongly disagree to 5 = strongly agree)
4. I practice breathing or mindfulness techniques regularly. (Yes/No)
5. I believe structured breathing exercises can help improve resilience. (Likert scale: 1 = strongly disagree to 5 = strongly agree)

Appendix B: Posttest Questionnaire

(Anonymous – completed after the intervention)

1. I am familiar with diaphragmatic breathing techniques. (Yes/No)
2. I am familiar with box breathing techniques. (Yes/No)
3. I feel confident using diaphragmatic and box breathing to manage my stress. (Likert scale: 1–5)
4. Since the training, I have used these breathing techniques in daily practice. (Yes/No)
5. I believe diaphragmatic and box breathing are effective for improving resilience.
(Likert scale: 1–5)
6. Overall, I found the training session useful and practical. (Likert scale: 1–5)

Appendix C: Guided Practice Handouts

Guided Practice Handouts: Step-by-step instructions for diaphragmatic and box breathing, provided to participants to reinforce independent practice.

Breathing Techniques Handout

The following handout was distributed to participants during the educational session. It provides step-by-step instructions for practicing diaphragmatic and box breathing.

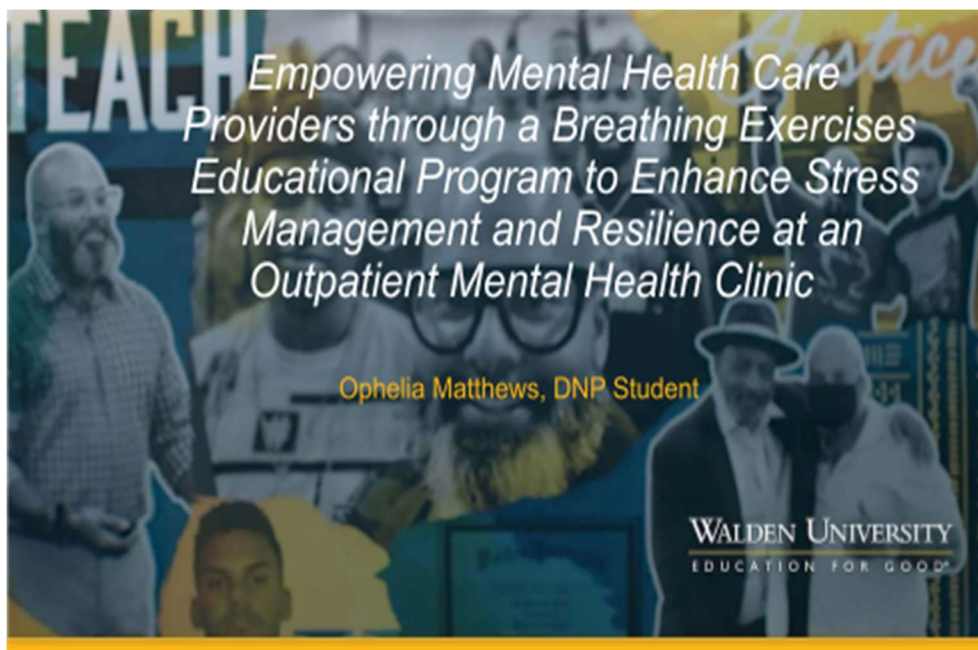
Diaphragmatic Breathing

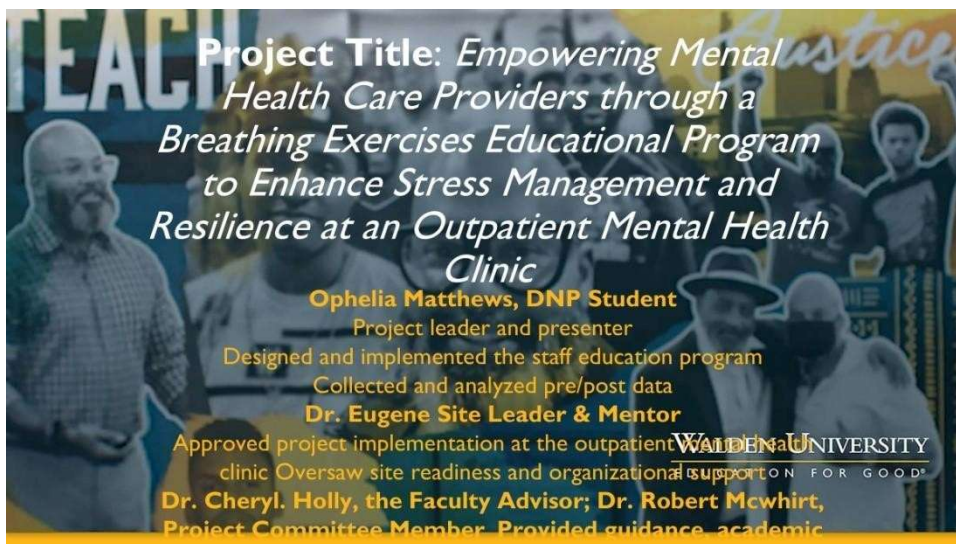
1. Sit comfortably with your back straight.
2. Place one hand on your chest and the other on your abdomen.
3. Inhale slowly through your nose, allowing your abdomen (not your chest) to rise.
4. Exhale slowly through your mouth, feeling your abdomen fall.
5. Continue this breathing cycle for several minutes, focusing on slow, deep breaths.

Box Breathing

1. Inhale slowly through your nose for a count of 4 seconds.
2. Hold your breath for a count of 4 seconds.
3. Exhale slowly through your mouth for a count of 4 seconds.
4. Hold again for a count of 4 seconds.
5. Repeat this cycle for several minutes, focusing on rhythm and calmness.

Appendix D: PowerPoint





Project Title: *Empowering Mental Health Care Providers through a Breathing Exercises Educational Program to Enhance Stress Management and Resilience at an Outpatient Mental Health Clinic*

Ophelia Matthews, DNP Student
Project leader and presenter
Designed and implemented the staff education program
Collected and analyzed pre/post data

Dr. Eugene Site Leader & Mentor
Approved project implementation at the outpatient clinic
Oversaw site readiness and organizational support

Dr. Cheryl Holly, the Faculty Advisor; Dr. Robert Mcwhirt, Project Committee Member - Provided guidance, academic

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Project Educational project

- Gap in Practice or Problem: Mental health care providers experience high levels of stress, burnout, and emotional fatigue due to heavy caseloads, complex patient needs, and emotionally demanding work environments. Despite the well-documented benefits of mindfulness practices, staff at the outpatient mental health clinic do not have access to a structured, evidence-based program teaching stress management strategies such as diaphragmatic and box breathing. This absence of formal training represents a gap in practice that directly impacts staff well-being, job satisfaction, and the quality of patient care. COVID-19 pandemic and the growing demand for mental health
- Background or Context Supporting Practice Change The h services have amplified occupational stress among healthcare providers. Research indicates



Evidence

- § Brief Summary: Research demonstrates that mindfulness interventions, such as diaphragmatic and box breathing, effectively reduce stress, improve emotional regulation, and build resilience among healthcare providers. These practices activate the parasympathetic nervous system, promoting calmness and focus, making them highly suitable for high stress mental health settings.
- § Grading of Evidence Systematic Reviews & Meta-Analyses: High-level evidence supports mindfulness-based interventions in healthcare workers (Ong et al., 2024).
- § Randomized Controlled Trials (RCTs) Demonstrated



Project Summary

- Program objectives By the end of the 30-day project:
 - Increase staff knowledge of diaphragmatic and box breathing by $\geq 20\%$ (pre/post scores).
 - Achieve $\geq 80\%$ **participation** in daily practice of breathing techniques.
 - Reduce perceived stress by $\geq 20\%$ (PSS).
 - Reduce burnout symptoms by $\geq 20\%$ (MBI).
 - Improve emotional resilience by $\geq 15\%$ (CD-RISC).
 - Enhance workplace well-being (job satisfaction and wellness) by $\geq 20\%$.

Project Summary

- Project Implementation Process implemented as staff educational program at outpatient mental health clinic. Duration: 30 days (one-time educational session and follow up evaluation). Intervention: face-to-face training (55minutes) with guided practice in diaphragmatic and box breathing.
- Components:
 - Pretest & introduction (15 minutes)
 - Guided demonstrations (30 minutes)
 - Posttest & feedback (10 minutes)
 - Handouts and daily practice log for continued use



Project Summary

- **Limitations: Small sample size:** Limited to one outpatient mental health clinic.
- **Short timeframe:** 30-day implementation may not capture long-term effects.
- **Self-report bias:** Reliance on questionnaires may influence the accuracy of responses.
- **Generalizability:** Results may not be transferable to other healthcare settings.
- **Resource constraints:** Limited capacity for ongoing training sessions.



Project Summary

- **Importance**
- **To organization:** Enhances staff well-being and resilience, leading to better retention and reduced burnout.
- **Improves the quality of patient care** by ensuring providers are emotionally stable and focused.
- **Supports organizational goals** of employee wellness and service excellence.
- **Provides a low-cost, evidence-based intervention** sustainable within routine operations.
- **Positive social change:** Promotes a culture of mindfulness

