

4-21-2026

Staff Education to Integrate Evidence-Based Practice of Music Therapy as an Adjunct to Cognitive Behavioral Therapy for Anxiety and the Use of Anxiety Screening Tool in an Outpatient Clinic

Virginia Bahena
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Nursing Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Nursing

This is to certify that the doctoral study by

Virginia Bahena

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.

Review Committee

Dr. Anna Hubbard, Committee Chairperson, Nursing Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2026

Executive Summary: Staff Education Project

Staff Education to Integrate Evidence-Based Practice of Music Therapy as an Adjunct
to Cognitive Behavioral Therapy for Anxiety and the Use of Anxiety Screening Tool
in an Outpatient Clinic

by

Virginia Bahena

MS, Resurrection University, 2021

BS, Resurrection University, 2010

Executive Summary Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

February 2026

Summary

This Doctor of Nursing Practice project was a practice-focused quality improvement initiative that addressed a gap in staff knowledge and readiness to implement evidence-based practice (EBP) within an outpatient health clinic. In the project, I evaluated whether a structured staff education program improved EBP knowledge and implementation readiness. The practice focused question guiding this project was: Does a targeted staff education intervention improve knowledge and readiness to integrate brief music therapy as an adjunct to cognitive behavioral therapy (CBT) and appropriately utilize the Generalized Anxiety Disorder-7 (GAD-7) screening tool in an outpatient setting? Five staff members participated in an in-person educational intervention focused on EBP principles and practical application strategies. Comparison of a pre- and post training questionnaire demonstrated improved knowledge in four of five participants. Participants' mean knowledge scores increased from 6.0 pretraining to 8.2 post training. Findings supported that targeted staff education effectively strengthened EBP knowledge and readiness, supporting sustainable quality improvement within the project site organization.

Background

EBP has been recognized as essential to improving quality, safety, and organizational effectiveness; however, consistent implementation remains limited due to gaps in staff education and limited exposure to structured implementation strategies. At the project site, staff reported minimal formal EBP training, resulting in inconsistent application of evidence to clinical decision-making and quality improvement initiatives.

This gap highlighted the need for a structured staff education project focused on strengthening EBP knowledge, confidence, and readiness for implementation.

The practice-focused question guiding this project was: Does a targeted staff education intervention improve knowledge and readiness to integrate brief music therapy as an adjunct to CBT and appropriately utilize the GAD-7 screening tool in an outpatient setting? This question aligned with organizational priorities to strengthen staff competency in evidence-based, nonpharmacologic anxiety management strategies through education and training rather than through direct patient-level interventions.

A strong body of high-level evidence supported the use of educational interventions to improve EBP outcomes among nurses and healthcare professionals. A systematic review and meta-analysis by Sapri et al. (2022), classified as Level I evidence, according to the Research Evidence Appraisal Tool by Johns Hopkins Evidence-Based Practice Model, demonstrated that EBP education significantly improved nurses' EBP knowledge, skills, attitudes, confidence, and behaviors across clinical settings. Similarly, Portela Dos Santos et al. (2022; also classified as Level I evidence) found that multifaceted and computer-based educational interventions were effective and cost-efficient strategies for improving EBP competencies and organizational readiness.

Leadership-focused education further supported staff engagement in EBP. In a randomized controlled trial (classified as Level II evidence), Tucker et al. (2022) reported sustained improvements in EBP knowledge, beliefs, and competencies among healthcare leaders following an intensive EBP education intervention. Vaajoki et al.'s (2023) intervention study (classified as Level III evidence) demonstrated that structured EBP

education significantly improved nurses' EBP practices, skills, and attitudes, reinforcing the importance of organizational investment in ongoing EBP education.

In a descriptive and implementation-focused study (classified as Level IV evidence), McNett et al. (2022) emphasized the role of implementation science strategies, including staff education, auditing, feedback, and leadership engagement, in supporting successful and sustainable EBP uptake. Collectively, these studies provided strong, multilevel evidence supporting the use of structured staff education as an effective strategy to address EBP knowledge gaps and improve organizational readiness for EBP implementation.

Staff Education Project Development

I developed this Doctor of Nursing Practice project in response to identified gaps in staff knowledge related to the integration of brief music therapy as an adjunct to CBT and the appropriate use of the GAD-7 screening tool. Informal practice observations and baseline assessment findings indicated inconsistent understanding of CBT principles, limited familiarity with evidence supporting music therapy for anxiety reduction, and variability in the use and interpretation of the GAD-7 assessment. These gaps underscored the need for a structured staff education intervention focused on evidence-based anxiety management strategies.

Participants included five staff members from the project site clinic, an outpatient practice serving underserved populations in Chicago, Illinois. Participants represented diverse clinical and administrative roles, including a registered nurse, medical assistant, office administrator, and receptionist. Staff ages ranged from 19 to 44 years, with two

male and three female participants. The interprofessional composition supported team-based learning and reinforced shared responsibility for implementing EBPs.

The education intervention consisted of an in-person, PowerPoint-based training session delivered by me, the project leader. Training content included foundational principles of CBT, evidence supporting brief music therapy as a pre-session anxiety reduction strategy, standardized administration and interpretation of the GAD-7 tool, and practical steps for integrating music therapy into outpatient CBT workflows. I placed emphasis on staff roles in supporting implementation, documentation, and consistency of practice.

I conducted evaluation of the education intervention using a pre-/posttest design with a 10-item objective questionnaire to assess participants' knowledge related to CBT, music therapy integration, and GAD-7 utilization. Anonymous identifiers were assigned to each participant to compare their pre- and posttraining results. Descriptive analysis demonstrated overall improvement in staff knowledge following the training, supporting the effectiveness of targeted education in addressing identified practice gaps. This structured education approach aligned with evidence-based recommendations emphasizing staff training as a critical component of successful implementation of EBPs.

Results

Postimplementation results demonstrated improved staff knowledge related to the integration of brief music therapy prior to CBT sessions and appropriate use of the GAD-7 screening tool. Four of five staff participants demonstrated increased posttraining scores, with the greatest improvement observed among participants with the lowest baseline knowledge (see Table 1). Mean knowledge scores increased from 6.0 pretraining

to 8.2 posttraining. Areas of improvement included understanding the purpose and duration of pre-session music therapy, interdisciplinary team roles, and outcome measurement using the GAD-7. One participant demonstrated no change in score, while two participants with high baseline knowledge maintained their performance. These findings supported the effectiveness of brief, targeted staff education in addressing identified knowledge gaps related to evidence-based, nonpharmacologic anxiety management strategies in an outpatient setting.

Table 1

Pre- and Posttraining Knowledge Assessment Scores (N = 5)

Participant ID	Pretest score (0-10)	Posttest score (0-10)	Change in score
1047	4	4	0
9405	8	9	+1
5821	8	10	+2
2294	1	9	+8
7719	9	9	0

Note. Table 1 presents pre- and posttraining knowledge assessment scores for five outpatient clinic staff members who completed an in-person educational intervention on integrating music therapy with CBT and appropriate use of the GAD-7 screening tool.

Conclusions

This staff education project positively impacted the project site organization by strengthening workforce knowledge and readiness to implement EBPs related to the integration of brief music therapy with CBT and appropriate use of the GAD-7 screening tool. The development and implementation of a standardized education module and structured knowledge assessment supported consistent, evidence-informed clinical processes and provided sustainable resources for ongoing professional development.

Findings demonstrated that targeted education effectively addressed identified knowledge gaps among staff, reinforcing the value of brief, focused training interventions in outpatient settings. My recommendations include integrating the education module into staff onboarding and annual competency training as well as applying implementation science strategies, such as audit and feedback, to support long-term adoption.

Implications for nursing practice extend beyond the local site by demonstrating that low-cost, scalable educational interventions can enhance EBP capacity across diverse outpatient and community-based settings. The project supports positive social change by promoting equitable, evidence-informed care delivery through improved staff competency; organizational readiness; and alignment with holistic, nonpharmacologic approaches to anxiety management.

References

- McNett, M., Tucker, S., Thomas, B., Gorsuch, P., & Gallagher-Ford, L. (2022). Use of implementation science to advance nurse-led evidence-based practices in clinical settings. *Nurse Leader, 20*(3), 297-305. <https://doi.org/10.1016/j.mnl.2021.11.002>
- Portela Dos Santos, O., Melly, P., Hilfiker, R., Giacomino, K., Perruchoud, E., Verloo, H., & Pereira, F. (2022). Effectiveness of educational interventions to increase skills in evidence-based practice among nurses: The EDITcare systematic review. *Healthcare, 10*(11), 2204. <https://doi.org/10.3390/healthcare10112204>
- Sapri, N. D., Ng, Y. T., Wu, V. X., & Klainin-Yobas, P. (2022). Effectiveness of educational interventions on evidence-based practice for nurses in clinical settings: A systematic review and meta-analysis. *Nurse Education Today, 111*, 105295. <https://doi.org/10.1016/j.nedt.2022.105295>
- Tucker, S., McNett, M., O'Leary, C., Rosselet, R., Mu, J., & Thomas, B. (2022). EBP education and skills building for leaders: An RCT to promote EBP infrastructure, process and implementation. *Worldviews on Evidence-Based Nursing, 19*(5), 359–371. <https://doi.org/10.1111/wvn.12600>
- Vaajoki, A., Kvist, T., Kulmala, M., & Tervo-Heikkinen, T. (2023). Systematic education has a positive impact on nurses' evidence-based practice: Intervention study results. *Nurse Education Today, 120*, 105597. <https://doi.org/10.1016/j.nedt.2022.105597>

Appendix: CBT and Music Therapy Integration Training Questionnaire

Instructions: Please answer each question by selecting the best response.

Section 1: Knowledge of CBT and Music Therapy

1. Cognitive Behavioral Therapy (CBT) primarily focuses on identifying and modifying which of the following?
 - a. Unconscious conflicts
 - b. Automatic thoughts and behaviors
 - c. Family systems
 - d. Emotional suppression
2. The GAD-7 is used to assess which mental health condition?
 - a. Depression
 - b. Bipolar disorder
 - c. Generalized anxiety disorder
 - d. Obsessive-compulsive disorder
3. Which of the following is a core principle of CBT?
 - a. Free association
 - b. Exposure and response prevention
 - c. The connection between thoughts, emotions, and behaviors
 - d. Medication adherence
4. Music therapy is best described as:
 - a. Listening to music for entertainment
 - b. Using music interventions within a therapeutic relationship to achieve clinical goals
 - c. A form of spiritual healing
 - d. Playing instruments to improve motor coordination
5. Research supports that listening to calming music for at least 15 minutes before a CBT session can:
 - a. Increase heart rate and alertness
 - b. Promote relaxation and reduce anxiety
 - c. Decrease therapy engagement
 - d. Distract from therapeutic goals

Section 2: Application and Integration

6. How often should the GAD-7 assessment be administered for patients receiving CBT with music therapy?
 - a. Once during intake only
 - b. Before and after each session
 - c. Every six months
 - d. Only when symptoms worsen

7. What is the recommended duration for pre-session music therapy in this program?
 - a. 5 minutes
 - b. 10 minutes
 - c. 15 minutes
 - d. 30 minutes

8. In an outpatient setting, music therapy can be integrated by:
 - a. Replacing CBT entirely
 - b. Using recorded classical or instrumental music before sessions
 - c. Using loud, fast-tempo music during sessions
 - d. Avoiding music with any emotional content

9. Which of the following best represents a team-based approach to implementing music therapy with CBT?
 - a. Only the therapist is responsible for setup and monitoring
 - b. Collaboration between therapists, medical assistants, and administrators
 - c. Only psychiatrists can authorize music therapy use
 - d. Each clinician chooses whether to participate

10. Which outcome measure would best indicate the success of this intervention?
 - a. Reduction in GAD-7 scores
 - b. Number of therapy sessions completed
 - c. Patient age and demographic data
 - d. Attendance rate at follow-up appointments

Scoring and Use

- Each correct answer earns **1 point** (Total possible: 10 points).