

Title:

Expressive Art and Stress Levels in Baccalaureate Nursing Students: A Secondary Analysis Study

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Session Title:

Rising Stars of Research and Scholarship Invited Student Posters

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References:

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Abstract Summary:

Expressive art (EA) is utilized to calm and balance the mind, body, and spirit through enhanced relaxation. Stress is a common psychological factor that affects physiological factors in nursing students. This secondary analysis explored the effects of expressive art therapy on stress levels and biophysical markers of BSN students.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to describe the use of expressive art.	Describe the types of expressive art.
The learner will be able to explain the psychological and physiological effects of expressive art usage in BSN students.	Explain the statistical outcome determined in this cohort of BSN students regarding the effects of EA on Perceived Stress Levels, HR, and RR.

Abstract Text:

Introduction: Therapeutic work involving holistic complementary alternative therapies are utilized to calm and balance the mind, body, and spirit. Research suggests expressive art (EA) may improve quality of life and vitality (Hattori et al., 2011). An outcome of the positive effects on the human autonomic nervous system is enhanced relaxation (Heuberger et al., 2001). Expressive art therapy has been researched for the positive effects of decreased biophysical markers (heart rate, respiratory rate, blood pressure, and cortisol levels). Stress is a common psychological factor that affects physiological factors in nursing students. The National Institute for Health and Care Excellence (2009) recommends mindfulness based interventions for the prevention and management of stress. Expressive Art therapy is a multimodal therapeutic mindfulness based intervention.

Purpose: The purpose of this secondary analysis was to explore the effects of EA therapy on stress levels (perceived stress levels) and biophysical markers (heart rate and respiratory rate) of baccalaureate nursing (BSN) students. This secondary analysis specific aims were (1) to determine the baseline stress (Perceived Stress Scale-10[PSS-10]) level of the nursing student and (2) to evaluate the effects of EA therapy on physiological (heart rate [HR] and respiratory rate [RR]) and psychological (Perceived Stress Level [PSL]) factors of nursing students. This study hypothesized EA therapy will decrease the perceived stress level (PSL scores) and biophysical markers (HR and RR) in nursing students.

Methodology: This study used a secondary analysis design to analyze data that were originally collected for another purpose. A convenience sample of "level 1" BSN students ($n = 160$) enrolled in the NURS 3440- Concepts of Professional Nursing course who attended the Stress and Coping lecture were recruited as participants. The BSN students ($n = 131$) completed the PSS Survey at the beginning of the class. The biophysical markers and PSL score were taken at 4 different times pre/post intervention of the EA therapy session.

Findings: Specific Aim 1: The PSS mean score revealed the students were "sometimes" ($M = 2.4$) stressed over the last month correlating to the PSL score as "moderately" ($M = 6.7$) stressed this session. Specific Aim 2: The hypothesis was clinically significant. A mean HR and RR was calculated pre-intervention ($M = 79.4$; $M = 17.4$, respectively) with post-intervention calculations ($M = 73.4$; $M = 14.9$, respectively). The pre-intervention PSL was ($M = 6.7$) with the post-intervention calculation ($M = 5.3$).

Conclusions: A clinically significant decrease was measured in heart rates, respiratory rates and stress level after completing EA therapy in nursing students. Further study using larger samples is needed, and could yield significant generalizable results. However, the outcome of the secondary analysis of this data may assist in developing a stress management intervention for BSN nursing students.