Background

Expressive art (EA) is utilized to calm and balance the mind, body, and spirit improving quality of life and patient vitality (Hattori et al., 2011) through enhanced relaxation (Heuberger et al., 2001). EA 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 factors that affect physiological factors in nursing students. An education-instructional project was developed and implemented in a nursing course with the purpose to enlighten BSN students of the steps in the research process using the holistic modality of expressive art interventions. Upon completion of the educational-instructional project, the data collected from these participants provided experiential learning sessions in the nursing research course (Kolb, 1984). The data were originally collected for another purpose. However, the outcome of a secondary analysis of this data may assist in developing a stress management intervention for BSN nursing students.

Specific Aims

The purpose of this pilot study was to explore the effects of EA on stress in the nursing students. The specific aims of this study were: (1) determine the baseline stress level (Perceived Stress Scale [PSS-10]) and (2) evaluate the effectiveness of EA on psychological, biophysical and perceptual factors (Perceived Stress Levels [PSL]) of nursing students. Hypothesis: Expressive Art (IV) will decrease stress levels (PSL scores [DV]) and biophysical markers (HR and RR [DV]) in nursing students.

Specific Aim 1: The PSS mean score (M = 2.4) revealed the students were "sometimes" stressed over the last month correlating to the PSL score (M = 6.7) as "moderately" stressed this session (see Figure 2 and Table 1).

Specific Aim 2: Means from heart rates, respiratory rates and perceived stress levels, before the EA intervention were compared to the respective means after the EA intervention using t-test. Analysis showed no statistical significance.

Hypothesis: The hypothesis was clinically significant. A mean HR and RR was calculated pre-intervention (M = 77; M = 17.5, respectively) with post-intervention calculations (M = 73.4; M = 14.9, respectively). The pre-intervention PSL was (M = 6.9) with the post-intervention calculation (M = 5.3) [see Table 1].

Conclusions

A clinically significant decrease was measured in HR, RR and PSL after completing the EA intervention in nursing students. Further studies using larger samples are needed and could yield significant generalizable results. The outcome of this secondary analysis of this data may assist in developing a stress management intervention for BSN nursing students.

References