NORTHERN ILLINOIS UNIVERSITY

Reducing Stress and Anxiety in Nursing Students Using Music Therapy

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Capstone Title (print or type)

Reducing Stress and Anxiety in Nursing Students Using Music Therapy

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Reducing Stress and Anxiety in Nursing Students Using Music Therapy

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Statement of Research Problem

- Stress and anxiety is something that every experiences in life. Stress is a response to a threat in a situation while anxiety is a reaction to stress.
- High stress and anxiety levels can lead to chronic health problems later in life and can affect a student's mental status in present time.
- The point of music therapy is to reduce stress and anxiety, which reduces, changes in mental status and decreases chances of developing a chronic condition related to stress and anxiety.
- This study examines nursing students stress levels before exams without and without music intervention and the impact of music on stress levels.

Hypothesis

- The intervention of music therapy will lower nursing students stress and anxiety levels before a test.

The Teagan DuVall Stress and Anxiety Scale

- A 3-point scale developed by the researcher was used to measure the stress and anxiety levels in the students students.
- The answers provided were given a number score (1-3) and were added up to determine how anxious or stressed out the student was before the test. The control group was just given the survey and the experimental group received the survey after the intervention.
- The lowest score of 10 meant the student reached a minimum of being stressed out and being anxious, while a high score of 30 meant there was no stress or anxiety.

Review of Literature


- Design and purpose of the study
  - The purpose of this study was to find alternatives to sedatives when patients are ventilated.
  - The design of this study was quasi-experimental with 12 different ICUs with 6 ICUs receiving music therapy while the other 6 received standard care.
- Method
  - The sample size was 373 patients in 12 ICUs. 6 ICUs were put into the intervention group of music therapy and the other 6 received standard care.
- Results
  - The results were statistically significant with the anxiety levels lower in the intervention group.
  - By the 5th day of music therapy, the anxiety levels we 36.5% lower in the intervention group than the control group.
  - The control group’s anxiety had a mean average of 32 while the intervention group had a mean average of 13, a decrease of 19.

Analysis/Results

- The count of the scores illustrates the distribution of student stress scores
  - There was no significant difference in stress scores in no music (M=17.97, SD=4.65) and music (M=18.12, SD=4.97) conditions [63] = .179, p = .859.
  - These results suggest that the nursing students stress levels remained high prior to the exam even during music interventions.

Method

- Sixty-five nursing students, who are in a third semester course, were participants in this study. The study was delivered on the two different days that the exam was given. The survey was given immediately before the exam.
- Students were informed about the study, an informed consent was given, and human subject protocols were followed.
- The stress levels were measured by the “Teagan DuVall Stress and Anxiety Scale” at the beginning of class time immediately before the test.
- Group one (n=32) on the first measurement day were not exposed to music therapy before the exam, which made them the control group.
- Group two (n=33) on the second measurement day were exposed to music therapy before the exam, which made them the experimental group.
- Once all the surveys were collected, the assessment survey was then scored.
- An independent t-test was conducted to compare student stress levels during music and no music conditions.

Conclusion

- Nursing students stress and anxiety levels remained high prior to the exam, regardless of the intervention given.
- However, there are multiple literature reviews proving that this intervention can be effective. Both of the literature reviews I have provided produced positive results and were statistically significant in hospital and outpatient settings.

Limitations

- Sample size – 32 participants in the control group and 33 participants in the experimental group.
- The Teagan DuVall Stress and Anxiety Scale is self-developed based on the literature and may not be sensitive enough to assess anxiety reduction.
- Reliability and validity of The Teagan DuVall Stress and Anxiety Scale has not be established.
- Cannot assume normality or homogeneity between the two participant groups.
- The test was given on two different days, one was given on Friday and the other was given on Monday.

What we can do in the future

- Recruit students across classes and schools.
- Establish reliability and validity of the scale.
- Control for extraneous variables.
- This intervention can still be used for future use. Our experiment was not statistically significant, but multiple studies that substantiate music therapy as a stress intervention.

Resources