

## Original Research Paper

Psychiatry

EFFECTIVENESS OF DEEP BREATHING EXERCISES ON LEVEL OF ACADEMIC STRESS AMONG 1ST YEAR B.SC. NURSING STUDENTS IN A SELECTED NURSING INSTITUTES: A QUASI EXPERIMENTAL STUDY PROTOCOL.

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**ABSTRACT** Background: Stress has become part of students' academic life due to the various internal and external expectations placed upon their shoulders. Adolescents are particularly vulnerable to the problems associated with academic stress as transitions occur at an individual and social level. It therefore, becomes imperative to understand the sources and impact of academic stress in order to derive adequate and efficient intervention strategies. Objective: To assess the effectiveness of deep breathing exercises on level of academic stress among 1st year B.Sc. nursing students in selected nursing institutes. Research Design: Quantitative approach with Quasi-experimental one group pretestpost test, Methodology: Through non probability convenient sampling, 801st year B.Sc. nursing students will be selected. Their academic stress will be assessed through pre-test with the help of standardize Academic stress scale. Validity and reliability of the tool and intervention program will be assessed through proper statistical measures and pilot study. This study will be conducted in selected nursing institutes. The duration will be fourteen days. Deep breathing exercises on level of academic stress will be administered. Post-test will be conducted after fourteen days. Using descriptive and inferential statistics, collected after fourteen days. The descriptive and inferential statistics are considered as the conducted after fourteen days. The descriptive and inferential statistics are considered as the conducted after fourteen days. The descriptive and inferential statistics are conducted after fourteen days. The descriptive and descriptive are conducted after fourteen days. The descriptive are conducted after fourteen days are considered as the conducted after fourteen days. The descriptive are conducted after fourteen days are conducted after fourteen days. The descriptive are conducted after fourteen days are conducted after fourteen days. The descriptive are conducted after fourteen days are conducted as the conducted after fourteen days. The descriptive are conducted after fourteen days are conducted as the conducted after fourteen days. The descriptive are conducted after fourteen days are conducted after fourteen days. The description day are conducted after fourteen days are conducted aftedata will be analyse. Expected Results: Expected reduction in the level of academic stress score will be about 25 to 50 % after administration of Deep breathing exercises on level of academic stress. Limitation: Study will be conducted in selected nursing institutes. Conclusion: This study findings will be contributed to the level of academic stress among 1st year B.Sc. nursing students and shed light on the effectiveness of deep breathing exercises on level of academic stress among 1st year B.Sc. nursing students and empower them to practice effective deep breathing exercises on student with academic stress.

KEYWORDS: Deep breathing exercises, Academic stress, 1st year B.Sc. nursing students, Nursing institutes.

#### INTRODUCTION

Academic pressure has increased over the past few years, there are examinations, assignments and many other activities that a student has to shuffle through. These expectations make the students work relentlessly and end up in creating more stress. With academics, the parents and the institutions want the students to participate in extracurricular activities too, the current expectations from the students is to be an all rounder. Lack of proper channels for counselling leads to more confusion and the students are unable to choose a career for themselves even after rigorous studying patterns. Heavy academic workloads and the feeling that you are constantly racing to meet another deadline can be daunting.

Breathing exercises, as an efficient integrative body–mind training for dealing with stress and psychosomatic conditions. Benefits of diaphragmatic breathing have been investigated in association with meditation and ancient eastern religions (such as Buddhism) and martial arts.

#### **Background Of Study**

Stress has become part of students' academic life due to the various internal and external expectations placed upon their shoulders. Adolescents are particularly vulnerable to the problems associated with academic stress as transitions occur at an individual and social level. It therefore, becomes imperative to understand the sources and impact of academic stress in order to derive adequate and efficient intervention strategies.

#### **Need Of The Study**

In today's highly competitive world, students face various academic problems including exam stress, disinterest in attending classes and inability to understand the subject. Academic stress is the feeling of anxiety or apprehension over one's performance in the academic activities. It can lead to students being unable to perform to the best of their abilities in examinations. Students were considered to be the future

pillars who take the responsibilities to take our country to the next phase they should be in better way.

## Objectives

#### Primary Objective

 To assess the effectiveness of deep breathing exercises on level of academic stress among 1<sup>st</sup> year B.Sc. nursing students in selected nursing institutes.

## Secondary Objective

- To assess the pre-test level of academic stress among 1<sup>st</sup> year B.Sc. nursing students in selected nursing institutes.
- To assess the post-test level of academic stress among 1<sup>st</sup> year B.Sc. nursing students in selected nursing institutes.
- To evaluate the effectiveness of deep breathing exercises on level of academic stress among 1<sup>st</sup> year B.Sc. nursing students in selected nursing institutes.
- To associate the level of academic stress score with selected demographic variable.

### **HYPOTHESIS**

Will be tested at 0.05 level of significance.

**H0:** There will be no significant difference between pre-test and post-test score on level of academic stress among 1<sup>st</sup> year B.Sc. nursing students in a selected nursing institutes.

**H1:** There will be significant difference between pre-test and post-test score on level of academic stress among  $1^{st}$  year B.Sc. nursing students in a selected nursing institutes.

#### MATERIAL AND METHODS

Research Approach: Quantitative research approach
Research Desing: Quasi experimental One group pre-test
post-test design

Study Setting: In a Selected nursing institutes.

Sample:  $1^{st}$  year B.Sc. nursing student in a Selected nursing institutes.

Sampling Technique: Non probability convenient sampling technique.

Sample Size: The sample size will be 80 students.

#### Inclusion Criteria

Nursing students who are,

- · Studying in 1st year B.Sc. nursing.
- · willing to participate in study.

#### Exclusion Criteria

Nursing students who are,

- already in practice of deep breathing exercise.
- Studying in P.B.B Sc. and G.N.M.

#### Data Collection Tool

Section A- Semi structured questionnaire on demographic variable.

It consists of demographic profile of 1st year B.SC. nursing student i. e. Age, gender, religion, type of family, family income per month, Academic performance in previous school examination, pattern of previous education, hobbies. Semi-structured questionnaire on demographic variable.

The investigator constructed this tool to collect the background data of the study subjects and to identify the influence of sample characteristics with them. It includes total 8 demographic variables like Age, gender, religion, type of family, family income per month, Academic performance in previous school examination, pattern of previous education, hobbies.

**Section B-** The standardized Academic stress scale uses to assess the level of academic stress, which consist of 40 questionaries. 5 Point Rating Scale.

The academic stress scale was developed by Kim (1970). It consists of 40 items. The items are classified into five areas containing 8 items each. They are personal inadequacy, fear of failure, interpersonal difficulties with teachers, teacher pupil relationships/teaching methods, and inadequate study facilities. The scale is in English language. The respondents answered these statements as no stress, slight stress, moderate stress, high stress and extreme stress respectively.

For each question choose from the following alternatives: 0-No Stress 1-Slight Stress 2-Moderate stress 3-High stress 4-Extreme Stress

### Scoring Of The Rating Scale

The scoring for each respondent is done by summing up the total ratings given to all situation experienced by respondent. The total items were 40. Therefore 160 is the maximum possible score and the highest score on each factor would be 32. The score was given on a 5-point scale from 0 to 4 as no stress, slight stress, moderate stress, high stress and extreme stress respectively. The higher the value of the score, the more is the academic stress and vice versa.

## Study Procedure and Data Collection

The study will be conducted only after the approval of IEC. Investigators will visit the research area and will obtain the necessary permission from the concerned authorities. 1st year B.Sc. nursing students who fulfil inclusion criteria will be assigned to the study. Written informed consent will be taken from the participants. Each participant will receive a code number and Semi structured questionnaires. A Semi structured questionnaires will be used to obtain information on the socio-demographics of participants. Thereafter, academic stress will be assessed with the standardized Academic stress scale. Ensuring proper spacing of participants in research studies is a common practice to minimize the potential for copying or sharing information

during data collection. This approach helps maintain the integrity and validity of the study results. Thereafter, Investigator will deliver deep breathing exercises on level of academic stress among participants on the same day. After fourteen days post-test will be conducted.

Validity over the questionnaire will be established for build up through both the construct & content manner to seek for the results what has intended purposely for the inferences & conclusion to measure. Reliability of the questionnaire will be calculated by using appropriate statistical test.

#### Data Analysis

All results will be calculated using SPSS version 26. Overall results for the outcome variables will be listed in tables and graphs for both descriptive (Mean, mean percentage, Standard deviation), & inferential statistics (Paired t - test will be used to find the significance difference between two groups (before & after), Association results will be analyse using chi square analysis).

#### **Expected Results**

Expected reduction in the level of academic stress score will be about 25 to 50 % after administration of Deep breathing exercises on level of academic stress. There will be positive or negative correlation between level of academic and selected demographic variables.

#### DISCUSSION

Findings of present study will support by previous studies where deep breathing exercises have been shown significant decrease in level of academic stress in a selected nursing institutes. The present study findings will be consistent with those of other studies, especially regarding the significant decrease in level of academic stress mean scores after the fourteen days of practicing deep breathing exercises.

#### CONCLUSION

This study findings will be contributed to the level of academic stress among  $1^{\rm st}$  year B.Sc. nursing students and shed light on the effectiveness of deep breathing exercises on level of academic stress among  $1^{\rm st}$  year B.Sc. nursing students and empower them to practice effective deep breathing exercises to student with academic stress. Ultimately, the outcomes of this study aim to reduce the academic stress enhance the daily practice of deep breathing exercises, there by promoting a healthier and more inclusive educational environment.

#### Consent And Ethical Approval

The study will be conducted after approval of Institutional Ethics Committee. Written consent will be taken from the participants for participation in the study.  $1^{st}$  year B.Sc. nursing student will be instructed that their participation in this study will be entirely voluntary, and they may opt out at any point of study. Throughout the Study, confidentiality will be maintained. The study's findings will be disseminated to participants and published in a peer-reviewed journal.

Conflict of Interest: No conflicts of interest declare by the authors.

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