



## **EFFECTIVENESS OF MINDFUL MEDITATION ON LEVEL OF STRESS AND ANXIETY ON REVISED BSC NURSING SYLLABUS COURSE OUT COME AMONG 1ST SEMESTER STUDENTS AT SELECTED COLLEGE, THIRUVALLUR**

**Lavanya E<sup>1\*</sup>, Abirami S<sup>2</sup>, Sivaranjani H<sup>3</sup>**

<sup>1</sup>Assistant Professor, Department of Mental Health Nursing, GRT College of Nursing, The Tamil Nadu Dr. MGR Medical University, Chennai, India.

<sup>2</sup>Vice Principal, Department of Mental Health Nursing, Indira College of Nursing, The Tamil Nadu Dr. MGR Medical University, Chennai, India.

<sup>3</sup>Assistant Professor, Department of Mental Health Nursing, Padmasree College of Nursing, The Tamil Nadu Dr. MGR Medical University, Chennai, India.

### **Article Info**

*Received 16/04/2026; Revised 15/05/2026;*

*Accepted 30/06/2026*

### **Corresponding Author**

**Lavanya E**

**Email:** [lavanyaanu31@gmail.com](mailto:lavanyaanu31@gmail.com)

### **ABSTRACT**

**Background:** Stress and anxiety are common psychological concerns among first-year nursing students, particularly following the implementation of revised Bachelor of Science (B.Sc.) Nursing curriculum outcomes. Persistent stress and anxiety can adversely affect students' academic performance, psychological well-being, and quality of life. Mindfulness meditation has emerged as a non-pharmacological intervention to enhance emotional regulation and reduce psychological distress among students. **Aim:** To evaluate the effectiveness of mindful meditation on the levels of stress and anxiety among first-year B.Sc. Nursing students in relation to the revised B.Sc. Nursing syllabus course outcomes. **Methods:** A quantitative research approach with a true experimental pre-test–post-test control group design was adopted. The study was conducted at Indira College of Nursing, Thiruvallur, and Sridevi College of Nursing, Ponneri. A total of 60 first-year B.Sc. Nursing first-semester students were selected using simple random sampling and allocated equally to the experimental group (n = 30) and control group (n = 30). Baseline stress and anxiety levels were assessed in both groups before the intervention. The experimental group received investigator-administered mindful meditation using the Circle of Excellence technique, while the control group received routine academic activities. Post-test assessments were conducted following the

intervention. Data were analyzed using descriptive and inferential statistics.

### **Results:**

The intervention demonstrated a significant reduction in stress and anxiety levels among students in the experimental group compared with the control group. Analysis of demographic variables showed that age was significantly associated with the mean difference in stress scores ( $F = 4.123$ ,  $p = 0.027$ ). Previous knowledge of mindful meditation was significantly associated with the mean difference in anxiety scores ( $F = 6.512$ ,  $p = 0.005$ ). These findings indicate that mindful meditation effectively reduced stress and anxiety among first-year B.Sc. Nursing students adapting to the revised curriculum. **Conclusion:** Mindful meditation was found to be an effective intervention for reducing stress and anxiety among first-year B.Sc. Nursing students. Incorporating structured mindfulness practices into nursing education may promote students' psychological well-being, facilitate adaptation to curricular demands, and improve learning outcomes. Further studies with larger samples and longer follow-up periods are recommended to strengthen the evidence for integrating mindfulness-based interventions into nursing education.

**Keywords:** Mindful meditation, mindfulness, stress, anxiety, nursing students, B.Sc. Nursing,



first-year students, true experimental design, psychological well-being.

## INTRODUCTION

“Health is wealth” is a common proverb which reveals a very simple meaning by comparing the value of health with the wealth.

The current WHO definition of health, describes health as a “state of physical mental and social well-being and not merely absence of disease or infirmity. During college students has to take on more responsibilities and learn how to manage them. Many college students deal with stress as they try to manage their busy social lives as well as the demands of their academic schedule (Larson). If we define stress, then it is a state of physical and psychological strain which imposes demands for adjustments up on the individual. It has been reported that student nursing were affected with stressors in revised syllabus of academic, clinical, financial, parental expectations, competitions for grades, and career choice. Stress and anxiety can be correlated. Anxiety may be defined as an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure. People with anxiety disorder usually have recurring intrusive thoughts or concerns. They may avoid certain situations out of worry. They may all so have physical symptoms such as emotions characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure.

Stress is normal part of life. It can be experienced from the environment, body and thoughts. It is the body's reaction to any change that requires an adjustment or response. The body reacts to these changes with physical, mental, and emotional responses. The human body is designed to experience stress and react to it. Stress can be positive, keeping us alert, motivated and ready to avoid danger. It become negative when a person faces continues challenges without relief or relaxation. Prolonged activation of the stress response causes wear and tear on the body, both physically and emotionally. According to study conducted stress prevalence among undergraduate students at a rate 57.4%. were the most often mentioned stressors were emotional and academic

Stress may lead to anxiety and depression. Anxiety and depression are very common negative emotional experience prevalent among contemporary college students. Prolonged exposure to anxiety and depression may cause physical and mental disturbances, lowering the level of academic performances, quality of life and other issues among students. Anxiety is a feeling of fear or apprehension about what is to come, and it is our body's natural response to stress. In a study at Husson University in the United States, the majority of the subject had higher level of state anxiety than usual, and more than half had higher level of state anxiety than usual and more than half had higher levels of trait anxiety.

An adjustment indicates that the individual face the new environment or a scenario, and individual needs to adjust him or herself in order to handle, learn and adapt to the multiple circumstances or environment. The prevalence of these issues has increase in the publications that address adjustments issues. The computer technology of the twenty-five century will inevitably cause pupils to act like machines, requiring extreme focus and quick thinking. The students ego and assertiveness would be more seriously threatened by kalaivani (2020).

## Objectives of the Study

1. To assess the Pretest level of stress and anxiety among Ist year BSc nursing semester students between experimental and control group.
2. To compare the post-test level of stress and anxiety among Ist year BSc nursing semester students between experimental and control group.
3. To determine the effectiveness of mind full meditation on level of stress and anxiety among the I<sup>st</sup> year BSc nursing semester students in an experimental group.
4. To associate the mean difference score level of stress and anxiety among I year BSc nursing semester students in experimental and control group with their selected demographic variables.

## MATERIALS AND METHODS

### Research Design and Setting

#### RESEARCHDESIGN

True -experimental research design pre testpost test control group was adopted for this study.

#### SETTINGOFTHESTUDY

The study was conducted in Indira College of Nursing at Thiruvallur and in Sridevi College of nursing at Ponneri.

#### Participants and Sampling

The students who are studying 1<sup>st</sup> year B.Sc nursing first semester students at Indira College of Nursing, Thiruvallur for experimental group.

The students who are studying Ist year B.Sc nursing first semester students at Sridevi College of Nursing, Ponneri for control group.

#### ACCESSIBLEPOPULATION

The accessible population comprised all the students who are studying B. Sc nursing in Indira College of Nursing and Sridevi College of nursing.

#### SAMPLE

All the semester batch students in selected college who fulfils the sample selection



criteria are the samples for the study.

### **SAMPLESIZE**

The sample size was determined using the power analysis according to the previous study on mindful meditation. The sample size comprises 60 semester batch students at selected nursing colleges, 30 samples for experimental group and 30 samples for control group.

### **SAMPLINGTECHNIQUE**

The samples were taken by Simple random sampling technique is used for this study.

### **Inclusion Criteria**

- The students who are studying B.Sc nursing 1<sup>st</sup> semester in Indira College of Nursing.
- Who are willing to participate in this study.
- Those who are available in the time of data collection.

### **Exclusion Criteria**

- Who are not willing to participate in this study
- The students who are not available at the time of data collection.

### **Variables**

Independent variables

In the study independent variable was mindful meditation.

Dependent variables

In the study in dependent variable was stress and anxiety regarding revised BSc nursing syllabus.

### **Data Collection Instrument**

#### **Demographic variables:**

Information on demographic data was collected from the 1st year BSc nursing semester students. With the use of structured questionnaire.

#### **Standardized perception stress scale:**

It consists of standardized stress perception scale which composed of 10 items for assess the stress among I year BSc nursing semester students.

#### **Hamilton anxiety rating scale**

It consist of Hamilton anxiety rating scale which is composed of 14 items for assess the anxiety among I year BSc nursing semester students.

### **Validity of the Instrument**

The content validity of tool was obtained from various experts such as 1 medical expert, 3 nursing experts, 1 language expert for English. They were requested to judge the items for their clarity, relevance, comprehensiveness and appropriateness of the content. Based on their valid

suggestions are incorporated in the tool.

### **RELIABILITY**

The reliability of effectiveness of mindful meditation on level of stress and anxiety on revised b.sc nursing syllabus course outcome among 1<sup>st</sup> semester students by karlpearson's method in which 6 college students were used 3 from study group and 3 from control group. The reliability score  $r=0.90$  and this indicated that the tool was highly reliable for the researcher to continue with the main study.

### **Data Collection Procedure**

The main study was conducted for one month from 13.05.2024 to 11.06.2024 in Indira college of nursing as an experimental group and Sridevi college of nursing for control group after obtaining formal written permission from the college Principals to conduct the study. The sample selection criteria, a total of 60 samples were selected using simple random sampling technique. Investigator explained study purpose to the students and obtained written and oral consent. Pre - test was conducted by using standardized stress perception scale and Hamilton anxiety rating scale to assess the stress and anxiety level. After completing the pretest, mind full meditation (circle of excellence) was given as an intervention for 30 minutes. Then post-test assessment was conducted on 7<sup>th</sup> day to assess the level of stress and anxiety with the same data collection tool was analyzed. No discomfort was experienced. In this manner, a total 60 samples in that for each day 10 samples were selected and assessed level of stress and anxiety.

### **RESULTS:**

The table 1 portrays that with regard to age, 22(73.3%) in the experimental and control group were aged 17 years, 26(86.7%) in the experimental and 23(76.7%) in the control group were female, 21(70%) in the experimental and 17(56.7%) in the control group were Hindus, 24(80%) in the experimental and 21(70%) in the control group were belonged to nuclear family, 22(73.3%) of fathers in the experimental and 19(63.4%) in the control group were employees, 22(73.4%) in the experimental and 20(66.7%) in the control group were residing in semi urban area, 30(100%) in both the groups had no previous graduate education, 23(76.7%) in the experimental and 25(83.3%) in the control group had no previous experience of stress and anxiety for more than 10 days and 19(63.3%) in the experimental and control group received previous knowledge about mindful meditation through media.

The table 2 depicts the frequency and percentage distribution of pretest and post test level



of stress among 1<sup>st</sup> year B.Sc. Nursing Students in the experimental and control group.

It shows that in the pretest, 20(66.7%) had high stress and 10(33.33%) had mild level of systolic BP and 10(33.33%) had moderate stress and in the control group, 22(73.33%) had high stress and 8(26.67%) had mild stress. The calculated chi-square value was not found to be statistically significant and this clearly indicates that there was no significant difference in the pretest level of stress among the 1<sup>st</sup> year B.Sc. Nursing students between the experimental and control group.

In the post test of experimental group, 22(73.33%) had mild stress and 8(26.67%) had moderate stress and in the post test of control group, 21(70%) had high stress and 9(30%) had moderate stress. The calculated chi-square value of 43.059 was found to be statistically significant and this clearly indicates that there was significant difference in the post test level of stress among the 1<sup>st</sup> year B.Sc. Nursing students between the experimental and control group.

The table 3 depicts the frequency and percentage distribution of pretest and post test level of anxiety among 1<sup>st</sup> year B.Sc. Nursing Students in the experimental and control group.

It shows that in the pretest, 24(80%) had high anxiety and 6(20%) had mild level of anxiety and in the control group, 22(73.33%) had high anxiety and 8(26.67%) had mild anxiety. The calculated chi-square value was not found to be statistically significant and this clearly indicates that there was no significant difference in the pretest level of anxiety among the 1<sup>st</sup> year B.Sc. Nursing students between the experimental and control group.

In the post test of experimental group, 18(60%) had mild anxiety and 12(40%) had moderate anxiety and in the post test of control group, 20(66.67%) had high anxiety and 10(33.33%) had moderate anxiety. The calculated chi-square value of 38.182 was found to be statistically significant and this clearly indicates that there was significant difference in the post test level of anxiety among the 1<sup>st</sup> year B.Sc. Nursing students between the experimental and control group.

The table 4 shows that in the pretest the mean score of stress in the experimental group was  $29.76 \pm 4.96$  and the pretest mean score of 29.93 in the control group was  $29.93 \pm 4.69$ . The mean difference score was 0.17. The calculated student independent "t" test value of  $t=0.134$  was not statistically significant at  $p<0.05$  level. This clearly infers that there was no statistically significant difference in the pretest score of stress between the two groups.

The post test the mean score of stress in the experimental group was  $12.76 \pm 2.59$  and the

post test mean score of stress in the control group was  $29.73 \pm 4.72$ . The mean difference score was 16.97. The calculated student independent "t" test value of  $t=17.234$  was statistically significant at  $p<0.001$  level. This clearly infers that there was statistically significant difference in the post test score of stress between the two groups. This confirms that Mindful Meditation administered among the 1<sup>st</sup> year B.Sc. Nursing students in the experimental group was effective in bringing down the level of stress than the students in the control group who had undergone normal daily routines.

The table 5 shows that in the pretest the mean score of anxiety in the experimental group was  $42.60 \pm 6.88$  and the pretest mean score of anxiety in the control group was  $42.36 \pm 6.75$ . The mean difference score was 0.23. The calculated student independent "t" test value of  $t=0.133$  was not statistically significant at  $p<0.05$  level. This clearly infers that there was no statistically significant difference in the pretest score of anxiety between the two groups.

The post test the mean score of anxiety in the experimental group was  $17.70 \pm 4.39$  and the post test mean score of anxiety was  $41.80 \pm 6.83$ . The mean difference score was 24.10. The calculated student independent "t" test value of  $t=16.244$  was statistically significant at  $p \leq 0.001$  level. This clearly infers that there was statistically significant difference in the post test score of anxiety between the two groups. This insists that Mindful Meditation administered among the 1<sup>st</sup> year B.Sc. Nursing students in the experimental group was effective in bringing down the level of anxiety than the students in the control group who had undergone normal daily routines.

The table 6 shows that in the experimental group, the pretest the mean score of stress was  $29.76 \pm 4.96$  and the post test mean score of stress was  $12.76 \pm 2.59$ . The mean difference score was 17.0. The calculated paired "t" test value of  $t=18.359$  was statistically significant at  $p<0.001$  level.

The pretest the mean score of anxiety was  $42.60 \pm 6.88$  and the post test mean score of anxiety was  $17.70 \pm 4.39$ . The mean difference score was 24.90. The calculated paired "t" test value of  $t=19.924$  was statistically significant at  $p<0.001$  level.

This confirms that Mindful Meditation administered among the 1<sup>st</sup> year B.Sc. Nursing Students in the experimental group was effective in reducing the level of stress among the 1<sup>st</sup> year B.Sc. Nursing Students.

The table 7 shows that in the control group, pretest the mean score of stress was  $29.93 \pm 4.69$  and the post test mean score of stress was  $29.73 \pm 4.72$ . The mean difference score was 0.20. The calculated paired "t" test value of  $t=1.795$  was not statistically significant at  $p<0.05$  level.



The pretest the mean score of anxiety was  $42.36 \pm 6.75$  and the post test mean score of anxiety was  $41.80 \pm 6.83$ . The mean difference score was 0.56. The calculated paired "t" test value of  $t=1.505$  was not statistically significant at  $p<0.05$  level. The table 8 illustrated that in the experimental group, the calculated Karl Pearson's Correlation value of  $r = 0.444$  shows a mild positive correlation between post test stress and anxiety scores among 1<sup>st</sup> year B.Sc. Nursing students in the experimental group statistically significant at  $p<0.05$  level which infers that after the Mindful Meditation the stress among the 1<sup>st</sup> year B.Sc. Nursing students reduces which ultimately reduces their anxiety level also in the post test.

The table 8 also illustrated that in the control group, the calculated Karl Pearson's Correlation value of  $r = 0.174$  shows a poor positive correlation between post test stress and anxiety scores among 1<sup>st</sup> year B.Sc. Nursing students in the control group statistically significant at  $p<0.05$  level which infers that after the daily routines the stress and anxiety level among the 1<sup>st</sup> year B.Sc. Nursing students were independent of each other.

The table 9 shows the mean differed score of stress regarding revised B.Sc. Nursing Syllabus

Course Outcome among 1<sup>st</sup> year B.Sc. Nursing Students with their selected demographic variables. It was observed that the demographic variable age ( $F=4.123$ ,  $p=0.027$ ) had statistically significant association with mean differed score of stress regarding revised B.Sc. Nursing Syllabus Course Outcome among 1<sup>st</sup> year B.Sc. Nursing Students at  $p<0.05$  level. The other demographic variables did not show statistically significant association with mean differed score of stress regarding revised B.Sc. Nursing Syllabus Course Outcome among 1<sup>st</sup> year B.Sc. Nursing Students at  $p<0.05$  level.

The table 10 shows the mean differed score of anxiety regarding revised B.Sc. Nursing Syllabus Course Outcome among 1<sup>st</sup> year B.Sc. Nursing Students with their selected demographic variables. It was observed that the demographic variable previous knowledge about Mindful meditation ( $F=6.512$ ,  $p=0.005$ ) had statistically significant association with mean differed score of anxiety regarding revised B.Sc. Nursing Syllabus Course Outcome among 1<sup>st</sup> year B.Sc. Nursing Students at  $p<0.01$  level. The other demographic variables did not show statistically significant association with mean differed score of anxiety regarding revised B.Sc. Nursing Syllabus Course Outcome among 1<sup>st</sup> year B.Sc. Nursing Students at  $p<0.05$  level.

#### Schematic Presentation of the Research Design.

| GROUP                                                                   | PRETEST                                                                                                           | INTERVENTION                                                      | POSTTEST                                                                                                                    |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Ist year B.Sc nursing first semester students<br><br>Experimental group | O1<br><br>Level of stress and anxiety among I year semester batch students regarding revised BSc nursing syllabus | X<br><br>Teaching about mindful meditation (Circle of Excellence) | Assessing post test Level of stress and anxiety among I year semester batch students regarding revised BSc nursing syllabus |
| Control group                                                           | O2<br><br>Level of stress and anxiety among I year semester batch students regarding revised BSc nursing syllabus | No                                                                | Assessing post test Level of stress and anxiety among I year semester batch students regarding revised BSc nursing syllabus |

**Table 1: Frequency and percentage distribution of demographic variables of 1st year B.Sc. Nursing students in the experimental and control group. N = 60(30+30)**

| Demographic Variables | Experimental Group |      | Control Group |      | Chi-Square for Homogeneity         |
|-----------------------|--------------------|------|---------------|------|------------------------------------|
|                       | F                  | %    | F             | %    |                                    |
| <b>Age in years</b>   |                    |      |               |      | $\chi^2=0.810$<br>$p=0.667$<br>N.S |
| 17                    | 22                 | 73.3 | 19            | 63.3 |                                    |
| 18                    | 5                  | 16.7 | 6             | 20.0 |                                    |
| 19                    | 3                  | 10.0 | 5             | 16.7 |                                    |
| >19                   | -                  | -    | -             | -    |                                    |
| <b>Sex</b>            |                    |      |               |      | $\chi^2=1.002$<br>$p=0.317$<br>N.S |
| Male                  | 4                  | 13.3 | 7             | 23.3 |                                    |
| Female                | 26                 | 86.7 | 23            | 76.7 |                                    |
| <b>Religion</b>       |                    |      |               |      | $\chi^2=1.164$                     |
| Hindu                 | 21                 | 70.0 | 17            | 56.7 |                                    |



| Demographic Variables                                                 | Experimental Group |       | Control Group |       | Chi-Square for Homogeneity       |
|-----------------------------------------------------------------------|--------------------|-------|---------------|-------|----------------------------------|
|                                                                       | F                  | %     | F             | %     |                                  |
| Christian                                                             | 6                  | 20.0  | 9             | 30.0  | p=0.559<br>N.S                   |
| Muslim                                                                | 3                  | 10.0  | 4             | 13.3  |                                  |
| Others                                                                | -                  | -     | -             | -     |                                  |
| <b>Type of family</b>                                                 |                    |       |               |       | $\chi^2=0.978$<br>p=0.613<br>N.S |
| Nuclear family                                                        | 24                 | 80.0  | 21            | 70.0  |                                  |
| Joint family                                                          | 4                  | 13.3  | 5             | 16.7  |                                  |
| Extended family                                                       | 2                  | 6.7   | 4             | 13.3  | $\chi^2=1.086$<br>p=0.780<br>N.S |
| <b>Occupation the father</b>                                          |                    |       |               |       |                                  |
| Daily wage worker                                                     | 2                  | 6.7   | 4             | 13.3  |                                  |
| Business                                                              | 4                  | 13.3  | 4             | 13.3  |                                  |
| Employee                                                              | 22                 | 73.3  | 19            | 63.4  | $\chi^2=0.495$<br>p=0.781<br>N.S |
| Unemployed                                                            | 2                  | 6.7   | 3             | 10.0  |                                  |
| <b>Area of residency</b>                                              |                    |       |               |       |                                  |
| Urban                                                                 | 4                  | 13.3  | 6             | 20.0  |                                  |
| Semi urban                                                            | 22                 | 73.4  | 20            | 66.7  | -                                |
| Rural                                                                 | 4                  | 13.3  | 4             | 13.3  |                                  |
| <b>Previous graduate education</b>                                    |                    |       |               |       |                                  |
| Professional Degree                                                   | -                  | -     | -             | -     |                                  |
| Arts & science                                                        | -                  | -     | -             | -     | $\chi^2=0.417$<br>p=0.519<br>N.S |
| None                                                                  | 30                 | 100.0 | 30            | 100.0 |                                  |
| <b>Previous experience of stress and anxiety for morethan 10 days</b> |                    |       |               |       |                                  |
| Yes                                                                   | 7                  | 23.3  | 5             | 16.7  |                                  |
| No                                                                    | 23                 | 76.7  | 25            | 83.3  | $\chi^2=0.000$<br>p=1.000<br>N.S |
| <b>Previous knowledge about mind fulmeditation</b>                    |                    |       |               |       |                                  |
| Through books                                                         | 8                  | 26.7  | 8             | 26.7  |                                  |
| Media                                                                 | 19                 | 63.3  | 19            | 63.3  |                                  |
| Neighbours                                                            | 3                  | 10.0  | 3             | 10.0  | $\chi^2=0.351$<br>p=0.554<br>N.S |
| <b>Any family history of psychiatric illness</b>                      |                    |       |               |       |                                  |
| Yes                                                                   | 2                  | 6.7   | 1             | 3.3   |                                  |
| No                                                                    | 28                 | 93.3  | 29            | 96.7  |                                  |

N.S – Not Significant.

**Table 2: Frequency and percentage distribution of pretest and post test level of stress among 1st year B.Sc. Nursing Students in the experimental and control group. N = 60(30+30)**

| Test      | Stress             | Experimental Group |       | Control Group |       | Chi-Square & p-value                |
|-----------|--------------------|--------------------|-------|---------------|-------|-------------------------------------|
|           |                    | F                  | %     | F             | %     |                                     |
| Pretest   | Mild (0 – 13)      | 0                  | 0     | 0             | 0     | $\chi^2=0.317$<br>p=0.573<br>N.S    |
|           | Moderate (14 – 27) | 10                 | 33.33 | 8             | 26.67 |                                     |
|           | High (28 – 40)     | 20                 | 66.67 | 22            | 73.33 |                                     |
| Post Test | Mild (0 – 13)      | 22                 | 73.33 | 0             | 0     | $\chi^2=43.059$<br>p=0.0001<br>S*** |
|           | Moderate (14 – 27) | 8                  | 26.67 | 9             | 30.0  |                                     |
|           | High (28 – 40)     | 0                  | 0     | 21            | 70.0  |                                     |

\*\*\*p&lt;0.001, S – Significant

N.S – Not Significant, p&gt;0.05

**Table 3: Frequency and percentage distribution of pretest and post test level of anxiety among 1st year B.Sc. Nursing Students in the experimental and control group. ©N = 60(30+30).**

| Test    | Anxiety            | Experimental Group |      | Control Group |       | Chi-Square & p-value |
|---------|--------------------|--------------------|------|---------------|-------|----------------------|
|         |                    | F                  | %    | F             | %     |                      |
| Pretest | Mild (0 – 18)      | 0                  | 0    | 0             | 0     | $\chi^2=0.373$       |
|         | Moderate (19 – 37) | 6                  | 20.0 | 8             | 26.67 |                      |



|           |                    |    |      |    |       |                                     |
|-----------|--------------------|----|------|----|-------|-------------------------------------|
|           | High (38 – 56)     | 24 | 80.0 | 22 | 73.33 | p=0.542<br>N.S                      |
| Post Test | Mild (0 – 18)      | 18 | 60.0 | 0  | 0     | $\chi^2=38.182$<br>p=0.0001<br>S*** |
|           | Moderate (19 – 37) | 12 | 40.0 | 10 | 33.33 |                                     |
|           | High (38 – 56)     | 0  | 0    | 20 | 66.67 |                                     |

\*\*\*p<0.001, S – Significant

N.S – Not Significant, p>0.05

**Table 4: Effectiveness of Mindful Meditation on level of stress regarding revised B.Sc. Nursing Syllabus Course outcome among 1st year B.Sc. Nursing Students in the experimental group. N = 60(30+30).**

| Stress    | Experimental Group |      | Control Group |      | Mean Difference Score | Student Independent “t” test & p-Value    |
|-----------|--------------------|------|---------------|------|-----------------------|-------------------------------------------|
|           | Mean               | S. D | Mean          | S. D |                       |                                           |
| Pretest   | 29.76              | 4.96 | 29.93         | 4.69 | 0.17                  | t= 0.134<br>p=0.894, N. S                 |
| Post Test | 12.76              | 2.59 | 29.73         | 4.72 | <b>16.97</b>          | <b>t= 17.234</b><br><b>p=0.0001, S***</b> |

\*\*\*p<0.001, S – Significant

N.S – Not Significant, p>0.05.

**Table 5: Effectiveness of Mindful Meditation on level of anxiety regarding revised B.Sc. Nursing Syllabus Course outcome among 1st year B.Sc. Nursing Students in the experimental group. N = 30**

| Anxiety   | Experimental Group |      | Control Group |      | Mean Difference Score | Student Independent “t” test & p-Value    |
|-----------|--------------------|------|---------------|------|-----------------------|-------------------------------------------|
|           | Mean               | S. D | Mean          | S. D |                       |                                           |
| Pretest   | 42.60              | 6.88 | 42.36         | 6.75 | 0.23                  | t= 0.133<br>p=0.895, N.S                  |
| Post Test | 17.70              | 4.39 | 41.80         | 6.83 | <b>24.10</b>          | <b>t= 16.244</b><br><b>p=0.0001, S***</b> |

\*\*\*p<0.001, S – Significant

N.S – Not Significant, p>0.05

**Table 6: Effectiveness of Mindful Meditation on level of stress and anxiety regarding revised B.Sc. Nursing Syllabus Course outcome among 1st year B.Sc. Nursing Students in the experimental group. N = 30.**

| Variables | Pretest |      | Post Test |      | Mean Difference Score | Paired “t” test & p-Value                 |
|-----------|---------|------|-----------|------|-----------------------|-------------------------------------------|
|           | Mean    | S. D | Mean      | S. D |                       |                                           |
| Stress    | 29.76   | 4.96 | 12.76     | 2.59 | <b>17.0</b>           | <b>t= 18.359</b><br><b>p=0.0001, S***</b> |
| Anxiety   | 42.60   | 6.88 | 17.70     | 4.39 | <b>24.90</b>          | <b>t= 19.925</b><br><b>p=0.0001, S***</b> |

\*\*\*p<0.001, S – Significant

**Table 7: Comparison of pretest and post test stress and anxiety scores among 1st year B.Sc. Nursing students in the control group. N = 30.**

| Variables | Pretest |      | Post Test |      | Mean Difference Score | Paired “t” test & p-Value |
|-----------|---------|------|-----------|------|-----------------------|---------------------------|
|           | Mean    | S.D  | Mean      | S.D  |                       |                           |
| Stress    | 29.93   | 4.69 | 29.73     | 4.72 | 0.20                  | t= 1.795<br>p=0.083, N.S  |
| Anxiety   | 42.36   | 6.75 | 41.80     | 6.83 | 0.56                  | t= 1.505<br>p=0.143, N.S  |

N.S – Not Significant, p>0.05

**Table 8: Correlation between post test stress and anxiety scores regarding revised B.Sc Nursing Syllabus Course Outcome among 1st year B.Sc. Nursing Students in the experimental and control group. N = 60(30+30)**

| Group              | Stress |      | Anxiety |      | Karl Pearson’s Correlation “r” & p-Value |
|--------------------|--------|------|---------|------|------------------------------------------|
|                    | Mean   | S.D  | Mean    | S.D  |                                          |
| Experimental Group | 12.76  | 2.59 | 17.70   | 4.39 | <b>r= 0.444</b>                          |



|               |       |      |       |      |                          |
|---------------|-------|------|-------|------|--------------------------|
|               |       |      |       |      | <b>p=0.014, S*</b>       |
| Control Group | 29.73 | 4.72 | 41.80 | 6.83 | r= 0.174<br>p=0.357, N.S |

N.S – Not Significant, p>0.05

**Table 9: Association of mean differed score of stress regarding revised B.Sc. Nursing Syllabus Course Outcome among 1st year B.Sc. Nursing Students with their selected demographic variables in the experimental group. N = 30.**

| Demographic Variables                                                  | Pretest |      | Post Test |      | Mean Differed Score |      | One Way ANOVA / Student Independent “t” test & p-value |
|------------------------------------------------------------------------|---------|------|-----------|------|---------------------|------|--------------------------------------------------------|
|                                                                        | Mean    | S.D  | Mean      | S.D  | Mean                | S.D  |                                                        |
| <b>Age in years</b>                                                    |         |      |           |      |                     |      | <b>F=4.123<br/>p=0.027<br/>S*</b>                      |
| 17                                                                     | 31.31   | 4.53 | 12.86     | 2.43 | 18.45               | 4.56 |                                                        |
| 18                                                                     | 25.40   | 3.50 | 12.40     | 3.20 | 13.00               | 4.47 |                                                        |
| 19                                                                     | 25.66   | 4.16 | 12.66     | 3.78 | 13.00               | 5.19 |                                                        |
| >19                                                                    | -       | -    | -         | -    | -                   | -    |                                                        |
| <b>Sex</b>                                                             |         |      |           |      |                     |      | t=0.889<br>p=0.427<br>N.S                              |
| Male                                                                   | 28.00   | 3.82 | 13.25     | 2.36 | 14.75               | 5.50 |                                                        |
| Female                                                                 | 30.03   | 5.12 | 12.69     | 2.66 | 17.34               | 5.02 |                                                        |
| <b>Religion</b>                                                        |         |      |           |      |                     |      | F=0.662<br>p=0.524<br>N.S                              |
| Hindu                                                                  | 30.09   | 4.86 | 13.14     | 2.81 | 16.95               | 5.22 |                                                        |
| Christian                                                              | 30.50   | 2.88 | 12.00     | 2.09 | 18.50               | 3.20 |                                                        |
| Muslim                                                                 | 26.00   | 6.71 | 11.66     | 1.52 | 14.33               | 7.50 |                                                        |
| Others                                                                 | -       | -    | -         | -    | -                   | -    |                                                        |
| <b>Type of family</b>                                                  |         |      |           |      |                     |      | F=1.120<br>p=0.341<br>N.S                              |
| Nuclear family                                                         | 30.41   | 4.98 | 12.83     | 2.77 | 17.58               | 5.02 |                                                        |
| Joint family                                                           | 26.50   | 3.00 | 13.00     | 2.16 | 13.50               | 4.35 |                                                        |
| Extended family                                                        | 28.50   | 7.77 | 11.50     | 0.70 | 17.00               | 7.07 |                                                        |
| <b>Occupation the father</b>                                           |         |      |           |      |                     |      | F=0.569<br>p=0.641<br>N.S                              |
| Daily wage worker                                                      | 31.50   | 6.36 | 12.50     | 0.70 | 19.00               | 5.65 |                                                        |
| Business                                                               | 28.50   | 5.44 | 12.25     | 3.77 | 16.25               | 7.50 |                                                        |
| Employee                                                               | 29.63   | 5.09 | 13.04     | 2.59 | 16.59               | 4.83 |                                                        |
| Unemployed                                                             | 32.00   | 4.24 | 11.00     | 1.41 | 21.00               | 2.82 |                                                        |
| <b>Area of residency</b>                                               |         |      |           |      |                     |      | F=0.680<br>p=0.515<br>N.S                              |
| Urban                                                                  | 26.25   | 4.57 | 12.00     | 2.58 | 14.25               | 6.13 |                                                        |
| Semi urban                                                             | 30.45   | 5.17 | 12.95     | 2.75 | 17.50               | 5.02 |                                                        |
| Rural                                                                  | 29.50   | 3.10 | 12.50     | 2.08 | 17.00               | 4.76 |                                                        |
| <b>Previous experience of stress and anxiety for more than 10 days</b> |         |      |           |      |                     |      | t=0.253<br>p=0.805<br>N.S                              |
| Yes                                                                    | 28.14   | 5.27 | 10.71     | 1.79 | 17.42               | 5.09 |                                                        |
| No                                                                     | 30.26   | 4.88 | 13.39     | 2.49 | 16.86               | 5.17 |                                                        |
| <b>Previous knowledge about mindful meditation</b>                     |         |      |           |      |                     |      | t=1.024<br>p=0.373<br>N.S                              |
| Through books                                                          | 31.00   | 4.50 | 12.00     | 1.92 | 19.00               | 4.37 |                                                        |
| Media                                                                  | 29.78   | 5.01 | 13.26     | 2.90 | 16.52               | 5.31 |                                                        |
| Neighbours                                                             | 26.33   | 6.02 | 11.66     | 1.52 | 14.66               | 5.03 |                                                        |
| <b>Any family history of psychiatric illness</b>                       |         |      |           |      |                     |      | t=0.082<br>p=0.948<br>N.S                              |
| Yes                                                                    | 29.50   | 3.53 | 13.00     | 5.65 | 16.50               | 9.19 |                                                        |
| No                                                                     | 29.78   | 5.10 | 12.75     | 2.45 | 17.03               | 4.94 |                                                        |

\*p<0.05, S – Significant

N.S – Not Significant, p>0.05



**Table 10: Association of mean differed score of anxiety regarding revised B.Sc. Nursing Syllabus Course Outcome among 1st year B.Sc. Nursing Students with their selected demographic variables in the experimental group. N=30**

| Demographic Variables                                                 | Pretest |       | Post Test |      | Mean Differed Score |       | One Way ANOVA / Student Independent “t” test & p-value |
|-----------------------------------------------------------------------|---------|-------|-----------|------|---------------------|-------|--------------------------------------------------------|
|                                                                       | Mean    | S.D   | Mean      | S.D  | Mean                | S.D   |                                                        |
| <b>Age in years</b>                                                   |         |       |           |      |                     |       | F=0.061<br>p=0.941<br>N.S                              |
| 17                                                                    | 42.95   | 6.72  | 18.04     | 4.35 | 24.90               | 6.25  |                                                        |
| 18                                                                    | 41.80   | 10.03 | 17.60     | 5.50 | 24.20               | 11.23 |                                                        |
| 19                                                                    | 41.33   | 2.08  | 15.33     | 3.21 | 26.00               | 3.60  |                                                        |
| >19                                                                   | -       | -     | -         | -    | -                   | -     | t=1.229<br>p=0.255<br>N.S                              |
| <b>Sex</b>                                                            |         |       |           |      |                     |       |                                                        |
| Male                                                                  | 41.00   | 6.73  | 18.50     | 5.19 | 22.50               | 3.51  |                                                        |
| Female                                                                | 42.84   | 7.00  | 17.57     | 4.36 | 25.26               | 7.19  | F=0.291<br>p=0.750<br>N.S                              |
| <b>Religion</b>                                                       |         |       |           |      |                     |       |                                                        |
| Hindu                                                                 | 43.57   | 6.59  | 18.42     | 4.69 | 25.14               | 6.25  |                                                        |
| Christian                                                             | 41.16   | 7.13  | 15.66     | 3.88 | 25.50               | 8.11  |                                                        |
| Muslim                                                                | 38.66   | 9.23  | 16.66     | 1.52 | 22.00               | 10.44 | F=0.691<br>p=0.510<br>N.S                              |
| Others                                                                | -       | -     | -         | -    | -                   | -     |                                                        |
| <b>Type of family</b>                                                 |         |       |           |      |                     |       |                                                        |
| Nuclear family                                                        | 43.54   | 7.02  | 17.95     | 4.45 | 25.58               | 7.29  |                                                        |
| Joint family                                                          | 37.00   | 5.47  | 15.75     | 4.92 | 21.25               | 4.11  | F=0.315<br>p=0.815<br>N.S                              |
| Extended family                                                       | 42.50   | 0.70  | 18.50     | 3.53 | 24.00               | 4.24  |                                                        |
| <b>Occupation the father</b>                                          |         |       |           |      |                     |       |                                                        |
| Daily wage worker                                                     | 47.50   | 4.94  | 19.00     | 2.82 | 28.50               | 2.12  |                                                        |
| Business                                                              | 41.00   | 9.48  | 15.25     | 2.98 | 25.75               | 10.68 | F=0.975<br>p=0.390<br>N.S                              |
| Employee                                                              | 42.59   | 6.92  | 18.36     | 4.68 | 24.22               | 6.74  |                                                        |
| Unemployed                                                            | 41.00   | 2.82  | 14.00     | 0.00 | 27.00               | 2.82  |                                                        |
| <b>Area of residency</b>                                              |         |       |           |      |                     |       |                                                        |
| Urban                                                                 | 43.00   | 4.08  | 16.75     | 4.78 | 26.25               | 7.50  | t=0.493<br>p=0.637<br>N.S                              |
| Semi urban                                                            | 43.04   | 7.18  | 17.59     | 4.64 | 25.45               | 6.84  |                                                        |
| Rural                                                                 | 39.75   | 8.22  | 19.25     | 2.87 | 20.50               | 6.19  |                                                        |
| <b>Previous experience of stress and anxiety for morethan 10 days</b> |         |       |           |      |                     |       | F=6.512<br>p=0.005<br>S**                              |
| Yes                                                                   | 44.71   | 8.36  | 18.28     | 5.21 | 26.42               | 10.22 |                                                        |
| No                                                                    | 41.95   | 6.44  | 17.52     | 4.23 | 24.43               | 5.67  |                                                        |
| <b>Previous knowledge about mindful meditation</b>                    |         |       |           |      |                     |       | t=0.715<br>p=0.596<br>N.S                              |
| Through books                                                         | 44.12   | 6.08  | 16.00     | 4.17 | 28.12               | 5.81  |                                                        |
| Media                                                                 | 43.68   | 6.02  | 18.42     | 4.74 | 25.26               | 5.88  |                                                        |
| Neighbours                                                            | 31.66   | 5.50  | 17.66     | 0.57 | 14.00               | 5.29  |                                                        |
| <b>Any family history of psychiatric illness</b>                      |         |       |           |      |                     |       |                                                        |
| Yes                                                                   | 45.00   | 4.24  | 16.00     | 4.24 | 29.00               | 8.48  |                                                        |
| No                                                                    | 42.42   | 7.05  | 17.82     | 4.45 | 24.60               | 6.80  |                                                        |

\*\*p&lt;0.01, S – Significant

N.S – Not Significant, p&gt;0.05

## DISCUSSION

This chapter discusses in detail about the findings of the study interpreted from the statistical analysis, in accordance with the objectives of the study and further discussion will denotes the fulfilment of objective by the study findings. The purpose of the study was to assess the effectiveness of mindful meditation on level of stress and anxiety regarding revised B.Sc nursing syllabus course

outcome among Ist year B.Sc nursing first semester students at selected college, Thiruvallur. The findings of the study are discussed based on the following objectives.

### Limitations

- The study was limited to six-week period only.



- The level stress and anxiety was assessed based upon the score obtained.
- The study was limited to the B.Sc. Nursing 1<sup>st</sup> semester student.
- The study was limited to selected Indira college of nursing for experimental group and Sri devi college of nursing for control group.

## CONCLUSION

The present study assessed the effectiveness of mindful meditation on level of stress and anxiety regarding revised B.Sc. Nursing syllabus course outcome among Ist year B.Sc. Nursing semester students at selected college, Thiruvallur. The study findings revealed that there was significant difference in the level of stress and anxiety among B.Sc. Nursing 1<sup>st</sup> semester students. So investigator recommended the use of this mindful meditation to improve the level of stress and anxiety among 1<sup>st</sup> semester B.Sc nursing students for their revised syllabus course outcome.

## Compliance with ethical standards

### Disclosure of conflict of interest

No conflict of interest to be disclosed.

## Statement of ethical approval

## REFERENCES

1. Ahuja, N. (2006). *A short textbook of psychiatry* (6th ed.). Jaypee Brothers Medical Publishers.
2. Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32.
3. Basavanthappa, B. T. (2007). *Nursing theories* (1st ed.). Jaypee Brothers Medical Publishers.
4. Binu, U., Jose, S., & Joseph, S. (2007). A study of perceived stress and coping behaviour among B.Sc. nursing students in selected colleges in Mangalore. *Nightingale Nursing Times*.
5. Burns, N., & Grove, S. K. (2003). *Understanding nursing research* (3rd ed.). Saunders.
6. Callahan, D. (2013). *The roots of bioethics: Health, progress, technology, death*. Oxford University Press.
7. Davidson, K. W., Mostofsky, E., & Whang, W. (2010). Don't worry, be happy: Positive affect and reduced 10-year incident coronary heart disease: The Canadian Nova Scotia Health Survey. *European Heart Journal*, 31(9), 1065–1070.
8. Elakkuvana Bhaskara Raj, D. (2010). *DEBR's mental health (Psychiatric) nursing* (1st ed.). Emmess Medical Publishers.
9. Gupta, K. R. (2007). Effectiveness of yoga nidra on stress level among student nurses. *Nightingale Nursing Times*.
10. Hamilton, S., & Fagot, B. I. (1988). Chronic stress and coping styles: A comparison of male and female undergraduates. *Journal of Personality and Social Psychology*, 55, 819–823.
11. Keltner, N. L., Bostrom, C. E., & McGuinness, T. M. (2011). *Psychiatric nursing* (6th ed.). Elsevier.
12. Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.
13. Stuart, G. W., & Laraia, M. T. (2005). *Principles and practice of psychiatric nursing* (8th ed.). Mosby.
14. Lippincott Williams & Wilkins. (2010). *Manual of nursing practice* (9th ed.). Lippincott Williams & Wilkins.
15. Townsend, M. C. (2010). *Psychiatric mental health nursing* (6th ed.). Jaypee Brothers Medical Publishers.
16. Nabis, N. (2010). *Psychiatry for nurses* (3rd ed.). Jaypee Brothers Medical Publishers.
17. Namboodiri, K. (2009). *Concise textbook of psychiatry* (3rd ed.). Reed Elsevier India.

Ethics is the system of moral values that is concerned with the degree to which the research procedures adhere to the professional, legal and social obligations to the study participants.

The study was carried out after obtaining an ethical clearance from the ethical committee of Indira College of Nursing. The approval was obtained from research approval committee. Formal permission was obtained from the principal, Indira college of nursing at Thiruvallur district. The details and purpose of study was explained to the higher authority and clients. Written and informed consent was taken from the clients to process the study. Assurance was given to the clients that confidentiality, privacy would be maintained and in harm will be inflicted on them and they can drop out of the study any time on their wish.

## Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

## Acknowledgement

I sincerely thank Indira College of Nursing for their support in conducting this research. My heartfelt appreciation goes to all the participants and my family for their unwavering support throughout this study.

