



## International Journal of Advanced Psychiatric Nursing

E-ISSN: 2664-1356  
P-ISSN: 2664-1348  
[www.psychiatricjournal.net](http://www.psychiatricjournal.net)  
IJAPN 2022; 4(2): 22-32  
Received: 16-04-2022  
Accepted: 21-05-2022

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### A quasi experimental study to assess the effectiveness of mindfulness meditation programme on the level of stress and anxiety among B.Sc. nursing first year students in selected nursing colleges of Shimla, H.P, 2019-2021

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**DOI:** <https://doi.org/10.33545/26641348.2022.v4.i2a.89>

#### **Abstract**

**Background:** Stress and Anxiety are normal part and parcel of life. These cannot be avoidable, but learning techniques to manage stress and anxiety with mindfulness meditation techniques could help to decrease negativity in life.

**Aim:** The aim of the study was to assess the effectiveness of “Mindfulness”- Meditation Programme” on the level of stress and anxiety among B.Sc. Nursing first year students.

**Methodology:** Quasi experimental research design was selected. Total 60 B.Sc. nursing 1st year students were included in the study with non-probability convenient technique. Data was collected by using demographic variables, 5-point likert Perceived stress scale and Self structured Anxiety scale. Final study was done at Shimla Nursing College, Shurala and Shivalik Institute of Nursing, Bhattakuffar. A Total of 15 sessions of Mindfulness Meditation Programme were administered in the experimental group for 45minutes.

**Result:** Findings of the study showed that the mean post-test score of stress in experimental group was lower than the mean post -test stress score of control group (11.50, :t=19.98, p=0.001) and the mean post-test score of anxiety in experimental group was lower than the mean post -test anxiety score of control group (18.93:t=17.57, p=0.001), Hence it can be concluded that Mindfulness Meditation Programme was found to be effective in reducing stress and anxiety scores among nursing students. There was positive correlation between post-test level of stress and post-test level of anxiety with (r =0.568, p=0.001). There was significant association on the level of post-test stress and post-test anxiety scores with selected demographical variables.

**Conclusion:** The study concluded that Mindfulness Meditation Programme was effective in reducing the level of stress and anxiety among B.Sc. Nursing 1st year students and beneficial in improving mental well-being of nursing students.

**Keywords:** Assess, effectiveness, mindfulness meditation programme, stress, anxiety, B.Sc. Nursing first year students, nursing colleges

#### **Introduction**

“Health is wealth” is a common proverb which reveals a very simple meaning by comparing the value of health with the wealth <sup>[1]</sup>.

The current WHO definition of health (1948), describes health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity <sup>[2]</sup>.”

During college, students have 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 upon the individual. It has been reported that student nursing students were affected with the stressors in academic, clinical, financial, parental expectations, competition for grades, and career choice <sup>[3]</sup>. 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 disorders usually have recurring intrusive thoughts or concerns. They may avoid certain situations out of worry. They may also have physical symptoms such as sweating, trembling, dizziness or a rapid heartbeat. Anxiety may be defined as an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure <sup>[4]</sup>.

An estimated 275 million people suffer from anxiety disorders. That's around 4% of the global population, with a spread of between 2.5% and 6.5% of population per country. Around 62% of those suffering from anxiety were female (170 million), compared with 105 million male sufferers [5].

Dodson Jamaie (April 17, 2021) conducted a quasi-experimental study to test anxiety in nursing students of first semester cohort of a mid-western university pre-licensure nursing program in Kanas city, Missoure. A sample of 40 students from the first semester cohort of a mid-western university pre-licensure nursing program has been selected through convenience sampling technique. A paired-sample t-test was conducted to determine the significance of the change. There was a significant decrease in test anxiety between the pre-intervention total test anxiety scores ( $M = 53.92$ ;  $SD = 12.86$ ) and the test anxiety scores post-intervention ( $M = 44.67$ ;  $SD = 12.33$ );  $t(39) = 7.00$ ,  $p < .001$ . Through the mindfulness intervention, nursing students gained coping skills they may utilize while finishing school and once in the professional field of nursing during high anxiety times [6].

As we know stress and anxiety both were of measuring concerns and to combat with both, mindfulness meditation techniques were found to be beneficial. "If we talk about specifically about mindfulness meditation in treating stress and anxiety, then Mindfulness is a technique to increase awareness of the present moment by blocking both past and future thoughts. Mindfulness originated from ancient eastern and Buddhist philosophy and dates back around 2500 years. The concept of mindfulness was introduced to the western world by Jon Kabat-Zinn in 1979. Mindfulness training has shown to decrease stress and anxiety and increase mental acuity of both health c were providers and nursing students [7].

### Need of the study

Mindfulness meditation is a mental training practice that teaches you to slow down racing thoughts, let go of negativity, and calm both your mind and body. M Mindfulness techniques can vary, but in general, mindfulness meditation involves a breathing practice and awareness of body and mind [8].

Nursing is one of the hectic and dedicated professions. Everyday most of the nursing students face burnout and lots of pressure, so it is quiet essential to prepare our nursing students from the very beginning phase of training period. "During first year, students were anxious about many aspects especially new syllabus and academic performances. The young adulthood is the period full of conflicts when the individual experiences social and physical changes, is subject to emotional, behavioral, sexual, economic, academic and social conflicts and the efforts exerted to discover the identity [9].

Therefore it is very important to train nursing students mind and body from the beginning, so that they can wisely handle every situation and make balance in their life style through proper guidance and other measures like mindfulness meditation techniques.

To combat with stress and anxiety mindfulness meditation practice is found very beneficial as researcher reviewed many articles, books, journals, websites etc.

### Problem statement

"A Quasi Experimental study to assess the effectiveness of

Mindfulness Meditation Programme on the level of stress and anxiety among B.Sc. Nursing first year students in selected nursing colleges of Shimla, H.P, 2019-2021".

### Objectives of the study

1. To assess the level of stress and anxiety among B.Sc. Nursing first year students in experimental and control group.
2. To develop and administer Mindfulness Meditation Programme on the level of stress and anxiety among B.Sc. Nursing first year students in experimental group.
3. To evaluate the effectiveness of mindfulness meditation Programme on the level of stress and anxiety among B.Sc. Nursing first year students.
4. To determine the relationship between the level of stress and anxiety among nursing students in experimental and control group.
5. To find out the association between the level of stress and anxiety scores among nursing students with the selected demographic variables.

### Operational Definitions

**Assess:** In this study, it is the systematic, organized and planned way to determine and analyze the effectiveness of mindfulness meditation programme on the level of stress and anxiety among B.Sc. Nursing first year students.

**Effectiveness:** In this study, it refers to the degree to which the objective of "Mindfulness meditation Programme" to reduce the level of stress and anxiety was achieved.

**Mindfulness Meditation Programme:** In this study, it refers to a systematically developed Programme designed to provide awareness regarding different techniques/strategies to reduce the level of stress and anxiety among study samples.

**Stress:** In this study, Stress is a feeling of emotional or physical tension by nursing students. It means during the 1<sup>st</sup> year of training period, holding pressure of academics, new surroundings make difficult for nursing students to handle situations.

**Anxiety:** In this study, it is a feeling of fear, apprehension or nervousness by nursing students for not coping up with the stresses in a positive way which is coming in the daily life situations related to studies, environment and clinical practice etc.

**BSc. Nursing first year students:** In this study, the students who enrolled in the first year for the Bachelor of Science in Nursing and were totally new to the curriculum and practices involved in Nursing.

**Selected Nursing Colleges:** In this study, selected nursing colleges means other Nursing Colleges, where the study has to be conducted. For final research study selected Nursing Colleges were Shimla Nursing College, Shurala for experimental group and Shivalik Nursing College, Bhattakuffar for control group.

### Materials and Methods

**Research Approach:** Quantitative Research Approach.

**Research Design:** Quasi experimental study, (Non-Randomized Control Group Pre-test, Post-test Design).

**Variables****Independent variable:** Mindfulness Meditation Programme.**Dependent variables**

- Level of stress among B.Sc. Nursing first year students.
- Level of anxiety among B.Sc. Nursing first year students.

**Extraneous variables:** Environmental conditions, neurotic traits and any physical illness in nursing students.**Research Setting****Final Research study****For experimental group-** The study was conducted at Shimla Nursing College, Shurala and Shivalik institute of nursing, Bhattakuffar, Shimla.**Study Population**

The study population was nursing students of Shimla Nursing College, Shurala and Shivalik Nursing College, Bhattakuffar, Shimla, included: B.Sc. Nursing Students.

**Sample Population**The sample population was BSc.Nursing 1<sup>st</sup> year students.**Sample Size**The sample size was (N=60 B.Sc. Nursing 1<sup>st</sup> year students). (Experimental group: n=30 students, Control group: n=30 students)**Sampling Technique**

The Non-probability convenient sampling technique was used to select the sample.

**Criteria for sample selection****Inclusive criteria**

- Students of BSc. Nursing 1<sup>st</sup> year.
- Students who understood English language
- Students who were present at the time of data collection.

**Exclusive Criteria**

- Students who refused to participate in the study
- Students who were not present at the time of study.

**Results****Organization and presentation of data:**

Raw data was collected and entered in a master sheet for the statistical analysis. The findings of the study were organized in terms of the objectives and hypothesis tested. The results are presented under the following sections:

**Section A:** Findings related to distribution of frequency and percentage of demographic variables among nursing students in experimental & control group.**Section B:** Findings related to assessment of the pre-test & post-test level of stress and anxiety scores among nursing students in experimental & control group.**Section C:** Findings related to comparison of pre-test & post test stress and anxiety scores among nursing students to determine effectiveness of Mindfulness Meditation Programme.**Section D:** Findings related to correlation between stress and anxiety scores among nursing students in experimental & control group.**Section E:** Findings related to association of stress scores among nursing students with selected demographic variables**Section F:** Findings related to association of anxiety scores among nursing students with selected demographic variables**Section A:** Findings related to distribution of frequency and percentage of demographic variables among nursing students in experimental & control group.**Table 1:** Frequency and percentage distribution of nursing students as per demographic variables

S. No.	Sample characteristics	Experimental group (n= 50) f(%)	Control group (n=50) f(%)
<b>Age in years</b>			
1.	1.1 17-18years	21(70.0)	11(36.7)
	1.2 19-20years	7(23.3)	19 (63.3)
	1.3 21-22 years	2(6.7)	0 (0)
<b>No. of siblings</b>			
2.	2.1 0	7(23.3)	16(53.3)
	2.2 1	14(46.7)	7 (23.3)
	2.3 2	2(6.7)	4(13.3)
	2.4 3	5(16.7)	3(10.0)
	2.5 More than 3	2(6.7)	0(0)
<b>Type of family</b>			
3.	3.1 joint family	13(43.3)	13(43.3)
	3.2 nuclear family	11(36.7)	16(53.3)
	3.3 Extended family	3(10.0)	1(3.3)
<b>Place of stay</b>			
4.	4.1 Hosteller	24 (80.0)	30(100)
	4.2 Day scholar	6(20.0)	0(0)
	4.3 Paying guest	0(0)	0(0)
	4.4 Others	0(0)	0(0)
<b>Residence</b>			
5.	5.1 Rural	16(53.3)	25(83.3)

	5.2 Urban	14(46.7)	5 (16.7)
	<b>Father education</b>		
6.	6.1 Post graduation	7(23.3)	3 (10.0)
	6.2 Graduation	7(23.3)	18(60.0)
	6.3 Senior Secondary Education	8 (26.7)	3(10.0)
	6.4 High School Education	8 (26.7)	3(10.0)
	6.5 Primary School Education	0	2(6.7)
	6.6 No formal Education	0	1(3.3)
	<b>Mother Education</b>		
7.	7.1 Post graduation	5(16.7)	1(3.3)
	7.2 Graduation	5(16.7)	9(30.0)
	7.3 Senior Secondary Education	10(33.3)	11(36.7)
	7.4 High School Education	8(26.7)	6(20.0)
	7.5 Primary School Education	2(6.7)	2(6.7)
	7.6 No formal Education	0	1(3.3)
	<b>Father Occupation</b>		
8.	8.1 Govt.Employee	16(53.3)	6(20.0)
	8.2 Private Employee	7(23.3)	2(2.7)
	8.3 Self Employed	4(13.3)	13(43.3)
	8.4 Unemployed	2(6.7)	9(30.0)
	<b>Mother Occupation</b>		
9.	9.1 Govt.Employee	11(36.7)	3(10.0)
	9.2 Private Employee	4(13.3)	1(3.3)
	9.3 Home Maker	15(50.0)	26(86.7)
	9.4 Others	0	0
	<b>Family Monthly Income</b>		
10.	10.1 10000-20000	4(13.3)	8(26.7)
	10.2 21000-30000	11(36.7)	11(36.7)
	10.3 31000-40000	9(30.0)	1(3.3)
	10.4 41000-50000	4(13.3)	5(16.7)
	10.5 More than 50000	2(6.7)	5(16.7)
	<b>Selection choice of nursing profession</b>		
11.	11.1 forced by parents	8(18.7)	3(10.0)
	11.2 student own choice	17(56.7)	22(73.3)
	11.3 Any other	5(16.7)	5(16.7)
	<b>Adjustment difficulty in college</b>		
12.	12.1 Easily adjusted	12(40.0)	21(70.0)
	12.2 To some extent	16(53.3)	6(20.0)
	12.3 Not adjusted	2(6.7)	3(10.0)
	<b>Previous knowledge about mindfulness meditation</b>		
13.	13.1 Yes	25(83.3)	27(90.0)
	13.2 No	5(10.0)	3(10.0)
	<b>Source of knowledge about mindfulness meditation</b>		
14.	14.1 Family member	21(70.0)	10(33.3)
	14.2 Peer Group	2(6.7)	3(10.0)
	14.3 Mass Media	7(23.3)	17(56.7)
	<b>Practice of mindfulness breathing</b>		
15.	15.1 every day	9(30.0)	5(16.7)
	15.2 several times a week	2(6.7)	2(6.7)
	15.3 once a week	5(16.7)	7(23.3)
	15.4 once a month	0(0)	2(6.7)
	15.5 never	15(33.3)	14(23.3)

Data presented in Table 1 showed the sample characteristics of B.Sc nursing 1st year students in both experimental and control group. In experimental group, maximum students (70%) were in the age group of 17-18 years, maximum B.Sc nursing 1st year students (46.7%) have one sibling, most of the students (46.7%) resides in joint family, maximum students were hosteller (43.3%). Most of the students belong to rural area (53.3%). In the experimental group (26.7%) fathers of study subjects have senior secondary education and same (26.7%) have high school education and (33.3%) mothers of the study subjects were having senior secondary school education. (53.3%) *i.e* majority of the fathers of study subjects were government employee and (50.0%) *i.e* majority of the mothers of study subjects were home maker.

Majority (36.7%) of the family monthly income of study subjects were in range of between (21000-30000). Most of the study subjects had joined B.Sc nursing course by their own choice (56.7%). Maximum (53.3%) of the study subjects found adjustment difficulty in the college. Maximum of the study subjects (83.3%) had knowledge of mindfulness meditation and the Source of knowledge about mindfulness meditation in majority (56.7%) was family members. Majority (33.3%) of the study subjects had never practiced mindful breathing.

In the control group, (70.0%) of the study subjects were in the age group of (17-18) years, maximum study subjects have no siblings (53.3), most of the study subjects (53.3) belongs to nuclear family. In control group, maximum study

subjects (43.3) resides in hostel and about (83.3%) study subjects belongs to rural area. Majority of fathers of study subjects are graduates (60.0%) and (36.7%) mothers of the study subjects were having senior secondary school education.(53.3%).Majority of the fathers (43.3%) of study subjects were self employed and majority (86.7%) of the mothers of study subjects were home maker. Majority (36.7%) of the family monthly income of study subjects were in range of between (21000-30000). Most of the study subjects had joined B.Sc nursing course by their own choice

(73.3%). Maximum (70.0%) of the study subjects were easily adjusted in the college. Maximum (90%) of the study subjects had stress of mindfulness meditation and the Source of stress about mindfulness meditation in majority was mass media (70.0%). Majority (23.3%) of the study subjects had never practiced mindful breathing.

**Section B:** Findings related to assessment of the pre-test &post-test level of stress and anxiety scores among nursing students in experimental &control group.

**Table 2:** Depicts frequency and percentage distribution of Pre-test score of stress among nursing students in experimental and control group. N=60

S. NO.	Level of stress	Actual range of score	Experimental group n = 30		Control group n = 30	
			Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
1.	Mild	0-20	0	(0)	0	(0)
2.	Moderate	21-40	17	(56.6)	14	(46.6)
3.	Severe	41-60	13	(44.4)	16	(53.3)

Minimum Marks= 0  
Maximum Marks=60

Table 2: showed, in pre-test, majority of nursing students in the experimental group 17(56.6%) had moderate stress, 13(44.4%) had severe stress whereas in control group,

majority of nursing students 16(53.3%) had severe stress and 14(46.6%) had moderate stress.

**Table 3:** Depicts frequency and percentage distribution of Post-test on the level of stress score in experimental and control group N=60

Level of stress	Actual range of score	Experimental group n = 30		Control group n = 30	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Mild	0-20	30	(100%)	0	(0)
Moderate	21-40	0	(0)	14	(46.6)
Severe	41-60	0	(0)	16	(53.3)

Minimum= 0  
Maximum=60

Table 3: showed, in post-test level of stress, majority of the nursing students 30(100%) in the experimental group were seemed to reduce stress from moderate level of stress 17(56.6%) as in pre-test stress score to mild stress

whereas in control group, majority of the nursing students 16(53.3%) were having the same severe stress as in pre-test stress score.

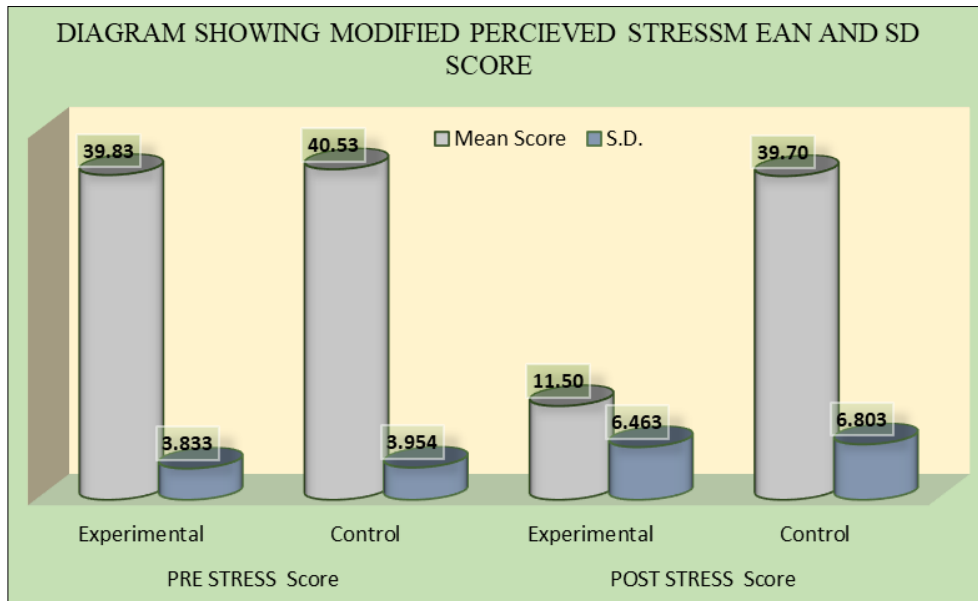
**Table 4:** Depicts frequency and percentage distribution of pre-test &post-test level of stress in experimental and control group N=60

Level of stress	Pre-test		Post-test	
	Experimental group	Control group	Experimental group	Control group
Mild level of stress	0(0%)	0(0%)	30(100%)	0(0%)
Moderate level of stress	17(56.7%)	14(46.7%)	0(0%)	14(46.6%)
Severe level of stress	13(43.3%)	16(53.3%)	0(0%)	16(53.3%)

Minimum =0  
Maximum=60

Table 4 showed that in pre-test level of stress in experimental group 17(56.7%) had moderate level of stress, 13(43.3%) had severe level of stress and 0(0%) had mild level of stress whereas in pre-test level of stress in control group 14(46.6%) had moderate level of stress, 16(53.3%) had severe level of stress and 0(0%) had mild level of stress.

In post-test level of stress in experimental group 30(100%) had mild level of stress, and none had moderate and severe level of stress where as in control group 16(53.3%) had severe level of stress, 14(46.6%) had moderate level of stress and none had mild level of stress.



**Fig 1:** Depicts Cylindrical Diagram showing Comparison of between pre-test and post-test stress scores in Experimental and control group in terms of mean &SD.

Hence, it was concluded that in post-test level of stress, there was reduction on the level stress in experimental group where as in control group there was no reduction on the level stress.

**Table 5:** Depicts frequency and percentage distribution of Pre-test scores on the level of anxiety in experimental and control group N=60

S. No	Level of stress	Actual range of score	Experimental group (n=30)		Control group (n=30)	
			Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
1	Mild	15-35	0	(0)	0	(0)
2	Moderate	36-55	27	(90%)	28	(93.3%)
3	Severe	56-75	3	(10%)	2	(6.7%)

Minimum= 15  
Maximum=75

Table 5 showed, in pre-test level of anxiety, majority of the nursing students in experimental group *i.e.* 27(90%) had moderate anxiety and 3(10%) had severe anxiety where as in control group, majority of nursing students *i.e.* 28(93.3%) had moderate anxiety and 2(6.7%) had severe anxiety.

**Table 6:** Depicts frequency and percentage distribution of Post-test scores on the level of anxiety in experimental and control group N=60

S. No	Level of Anxiety	Actual range of score	Experimental group n = 30 Frequency	Experimental Group n = 30 Percentage	Control group n = 30 frequency	Control group n = 30 Percentage
1	Mild	15-37	30	(100%)	0	(0)
2	Moderate	38-56	0	(0)	30	(100%)
3	Severe	57-75	0	(0)	0	(0)

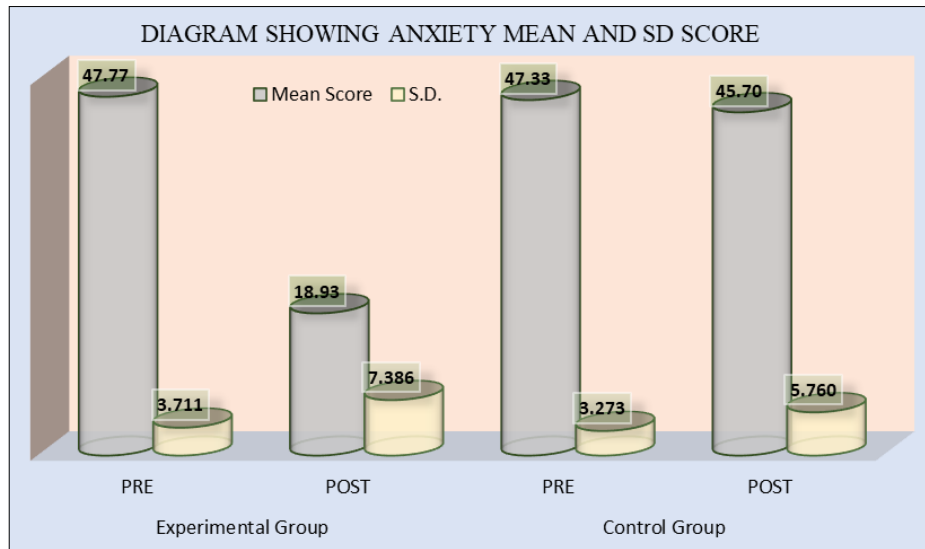
Minimum= 15  
Maximum=75

Table 6: showed in post-test level of anxiety, majority of nursing students in experimental group *i.e.* 30(100%) had mild level of anxiety and none had moderate or severe level of anxiety, where as in control group majority of nursing students had moderate level of anxiety and none had mild or severe level of anxiety.

**Table 7:** Depicts frequency and percentage distribution of Pre-test &Post-test scores on the level of anxiety in experimental and control group

Level of Anxiety	Pre-test		Post test	
	Experimental group	Control group	Experimental group	Control group
Mild level of anxiety	0(0%)	0(0%)	30(100%)	0(0%)
Moderate level of anxiety	27(90%)	28(93.3%)	0(0%)	30(100%)
Severe level of anxiety	3(10%)	2(6.7%)	0(0%)	0(0%)

Minimum =15  
Maximum=75



**Fig 2:** Depicts Cylindrical Diagram showing Comparison of within pre-test and post-test anxiety scores in Experimental and control group in terms of mean and SD.

Table 7 showed that in pre-test level of anxiety, majority of nursing students in experimental group *i.e* 27(90%) had moderate level of anxiety, 3(10%) had severe level of anxiety and none had mild level of anxiety whereas as, majority of nursing students in control group *i.e.* 28(93.3%) had moderate level of anxiety, 2(6.7%) had severe level of anxiety and none had mild level of anxiety. Hence, it was concluded that in pre-test level of anxiety there was moderate level of anxiety in experimental and control group whereas in post-test level of anxiety, majority of nursing

students in experimental group *i.e* 30(100%) had mild level of anxiety, none had moderate and severe level of anxiety where as, majority of nursing students in control group *i.e.* 30(100%) had moderate level of anxiety and none had mild and severe level of anxiety.

**Section C:** Findings related to comparison of pre-test & post test stress and anxiety scores among nursing students in experimental and control group to determine effectiveness of mindfulness meditation programme.

**Table 8:** Depicts Comparison of pre-test and post-test stress scores among nursing students with-in and between the groups with paired and unpaired ‘t’ test. N=60

Group	N	Stress Score				Paired T Test		
		Pretest		Posttest		df	t	Result
		Mean	SD	Mean	SD			
Experimental Group	30	39.83	3.833	11.50	6.463	29	19.985*	Significant
Control Group	30	40.533	3.954	39.70	6.803	29	0.883 <sup>NS</sup>	Non-Significant
Unpaired T Test		58		58				
	T	0.696		16.459				

Minimum = 0

Maximum = 60

\*significant, <sup>NS</sup>-Non Significant

\*Significant at<0.05 level

Table 8: showed comparison of pre-test and post-test level of stress scores with in group with paired ‘t’ test ,degree of freedom for both the groups was 29.In experimental group ,value of pre-test mean was 39.83 and post-test stress score was 11.50 at SD(6.463) and Value of ‘t-test’ was 19.985 at 0.05 level of significance where as in control group value of pre-test mean was 40.53 and post-test stress score was 39.70 at SD(6.803) and Value of ‘t-test’ was 0.883 which was non-significant at  $p \leq 0.05$  level of significance.

With regard to comparison between the groups with unpaired ‘t’ test, degree of freedom for both the groups was 58. value of unpaired ‘t’ test for post-test was 16.459 which was significant at  $\leq 0.05$  level of significance. So it was concluded that, mean post-test stress score *i.e.* 11.50 in experimental group was significantly less than the mean post-test level of stress score *i.e.* (39.70) of control group as evident from “unpaired t-test” value *i.e* 16.459 at 0.05 level of significance.

**Table 9:** Comparison of pre-test and post-test anxiety scores in Experimental and control group.

Group	N	Anxiety Scale Score				Paired T Test		
		Pretest		Posttest		df	T	Result
		Mean	SD	Mean	SD			
Experimental Group	30	47.77	3.711	18.93	7.386	29	17.573*	Significant
Control Group	30	47.33	3.273	45.70	5.760	29	1.395 <sup>NS</sup>	Non-Significant

Unpaired T Test	df	58	df	58
	T	0.480	T	15.652

Minimum = 15

Maximum = 75

\*Significant, <sup>NS</sup>-Non-Significant

\*Significant at <0.05 level

Table 9: showed comparison of pre-test and post-test level of anxiety scores with in group with paired ‘t’ test ,degree of freedom for both the groups was 29. In experimental group ,value of pre-test mean was 47.77 and post-test anxiety score was 18.93 at SD(7.386) and Value of ‘t-test’ was 17.573 at 0.05 level of significance where as in control group value of pre-test mean was 47.33 and post-test stress score was 45.70 at SD(5.760) and Value of ‘t-test’ was 1.395 which was non-significant at p≤ 0.05 level of significance.

With regard to comparison between the groups with

unpaired ‘t’ test, degree of freedom for both the groups was 58. value of unpaired ‘t’ test for post-test was 15.652 which was significant at ≤ 0.05 level of significance. In experimental group the mean post –test level of anxiety score (18.93) was significantly less than the mean post anxiety score of control group (45.70).

**Section D:** Findings related to correlation between stress and anxiety scores among nursing students in experimental &control group.

**Table 10:** Depicts correlation between the level of stress and anxiety among nursing students in experimental group. N=60

S. No.	Correlation	r value	P value
1	Pre-test stress and post-test stress	-0.077	0.685 <sup>NS</sup>
2	Pre-test stress and pre-test anxiety	0.215	0.253 <sup>NS</sup>
3	Pre-test stress and post-test anxiety	-0.183	0.333 <sup>NS</sup>
4	Post-test stress and pre-test anxiety	0.045	0.812 <sup>NS</sup>
5	Post-test stress and post-test anxiety	0.568	0.001**
6	Pre-test anxiety and post-test anxiety	-0.227	0.228 <sup>NS</sup>

\*\*Significant, <sup>NS</sup> Non-significant,

\*Significant at 0.05 level

Table 10 showed correlation between the level of stress and anxiety among nursing students in experimental group. Highly Significant correlation between Post-test level of

stress and anxiety (r=0.568) at 0.05 level of significance was found.

**Table 11:** Depicts correlation between the level of stress and anxiety among nursing students in control group. N=60

S. No.	Correlation	r value	P value
1	Pre-test stress and post-test stress	0.615	0.432 <sup>NS</sup>
2	Pre-test stress and pre-test anxiety	-0.142	0.454 <sup>NS</sup>
3	Pre-test stress and post-test anxiety	0.097	0.612 <sup>NS</sup>
4	Post-test stress and pre-test anxiety	0.003	0.987 <sup>NS</sup>
5	Post-test stress and post-test anxiety	0.765	0.867 <sup>NS</sup>
6	Pre-test anxiety and post-test anxiety	0.073	0.701 <sup>NS</sup>

\*\*Significant, <sup>NS</sup> Non-significant,

\*Significant at 0.05 level

Table 11 showed correlation between the level of stress and anxiety among nursing students in control group. No Significant correlation, was found between the level of Post-test stress and post-test anxiety in control group.

**Section-E:** Findings related to association of stress scores among nursing students with selected demographic variables.

**Table 12:** Association of stress Score with Demographic variables N=60

S. No.	Sample Characteristics	Mean	df	F/ t Test	P Value
1.	<b>Age in years</b>				
	1.1 17-18years	20.69	59	.869	0.58 <sup>NS</sup>
	1.2 19-20years	32.68			
1.3 21-22 years	7.00				
2.	<b>No. of siblings</b>				
	2.1 0	11.29	59	1.705	.096 <sup>NS</sup>
	2.2 1	27.17			
	2.3 2	34.00			
	2.4 3	21.89			
2.5 More than 3	27.80				
3.	<b>Type of family</b>				
	3.1 joint family	25.96	59	.556	.866
3.2 nuclear family	28.37				



	3.3 Extended family	17.25			
4.	<b>Place of stay</b>				
	4.1 Hosteller	27.46	59	1.44	0.17 <sup>NS</sup>
	4.2 Day scholar	8.83			
	4.3 Paying guest	25.60			
	4.4 Others	0			
5.	<b>Residence</b>				
	5.1 Rural	28.85	59	1.81	.074 <sup>NS</sup>
5.2 Urban	18.58				
6.	<b>Father education</b>				
	6.1 Post graduation	19.70	59	.707	0.737 <sup>NS</sup>
	6.2 Graduation	32.32			
	6.3 Senior Secondary Education	18.55			
	6.4 High School Education	19.00			
	6.6 middle school education	40.00			
	6.7 Primary School Education	38.00			
6.6 No formal Education	0				
7.	<b>Mother Education</b>				
	7.1 Post graduation	14.67	59	1.09	0.38 <sup>NS</sup>
	7.2 Graduation	30.29			
	7.3 Senior Secondary Education	26.86			
	7.4 High School Education	23.29			
	7.5 middle school education	41.00			
	7.6 Primary School Education	7.00			
7.7 No formal Education	38.00				
8.	<b>Father Occupation</b>				
	8.1 Govt. Employee	18.68	59	1.32	0.23 <sup>NS</sup>
	8.2 Private Employee	19.11			
	8.3 Self Employeed	33.06			
8.4 Unemployee	34.82				
9.	<b>Mother Occupation</b>				
	9.1 Govt. Employee	16.71	59	1.44	0.18 <sup>NS</sup>
	9.2 Private Employee	18.40			
	9.3 Home Maker	29.51			
9.4 Others					
10.	<b>Family Monthly Income</b>				
	10.1 10000-20000	33.00	59	.952	0.50 <sup>NS</sup>
	10.2 21000-30000	24.50			
	10.3 31000-40000	13.80			
	10.4 41000-50000	26.22			
10.5 More than 50000	32.43				
11.	<b>Selection choice of nursing profession</b>				
	11.1 forced by parents	20.25	59	.569	<b>0.85NS</b>
	11.2 student own choice	28.08			
11.3 Any other	25.00				
12.	<b>Adjustment difficulty in college</b>				
	12.1 Easily adjusted	26.00	59	.734	0.71 <sup>NS</sup>
	12.2 To some extent	23.17			
12.3 Not adjusted	31.40				
13.	<b>Previous knowledge about mindfulness meditation</b>				
	13.1 Yes	26.04	59	.796	0.65 <sup>NS</sup>
13.2 No	26.67				
14.	<b>Source of knowledge about mindfulness meditation</b>				
	14.1 Family member	20.68	59	2.25	0.21
	14.2 Peer Group	26.40			
14.3 Mass Media	31.79				
15.	<b>Practice of mindfulness breathing</b>				
	15.1 every day	19.64			
	15.2 several times a week	25.05			
	15.3 once a week	28.83			
	15.4 once a month	42.50			
	15.5 never	27.23			

NS-non significant

In post test ANOVA and ‘t’ test were applied to check the association of post test stress score with selected sample characteristics. The computed value of B.Sc. nursing 1st

year students with all variables found to be non significant at level 0.05 of significance in experimental group. Hence proved that their was no association of post test stress score

with selected sample characteristics. Thus stress of B.Sc. independent of selected sample characteristics.  
nursing 1st year students in experimental group were

**Table 13:** Association of Anxiety with demographical variables. N=60

S. No.	Sample Characteristics	Mean	df	F/ t Test	P Value
<b>Age in years</b>					
1.	1.1 17-18years	27.09	59	.869	0.58 <sup>NS</sup>
	1.2 19-20years	38.40			
	1.3 21-22 years	19.00			
<b>No. of siblings</b>					
2.	2.1 0	17.00	59	1.705	.096 <sup>NS</sup>
	2.2 1	32.33			
	2.3 2	40.78			
	2.4 3	30.67			
	2.5 More than 3	35.60			
<b>Type of family</b>					
3.	3.1 joint family	31.88	59	.556	.866
	3.2 nuclear family	34.78			
	3.3 Extended family	23.00			
<b>Place of stay</b>					
4.	4.1 Hosteller	33.57	59	1.44	0.17 <sup>NS</sup>
	4.2 Day scholar	16.17			
	4.3 Paying guest	0			
	4.4 Others	0			
<b>Residence</b>					
5.	5.1 Rural	35.41	59	1.81	.074 <sup>NS</sup>
	5.2 Urban	24.11			
<b>Father education</b>					
6.	6.1 Post graduation	24.90	59	.707	0.737 <sup>NS</sup>
	6.2 Graduation	38.28			
	6.3 Senior Secondary Education	25.45			
	6.4 High School Education	25.91			
	6.6 middle school education	45.50			
	6.7 Primary School Education	48.00			
	6.6 No formal Education	0			
<b>Mother Education</b>					
7.	7.1 Post graduation	21.00	59	.82	0.62 <sup>NS</sup>
	7.2 Graduation	35.07			
	7.3 Senior Secondary Education	32.95			
	7.4 High School Education	30.29			
	7.5 middle school education	25.50			
	7.6 Primary School Education	19.00			
	7.7 No formal Education	48.00			
<b>Father Occupation</b>					
8.	8.1 Govt. Employee	25.18	59	1.09	0.38 <sup>NS</sup>
	8.2 Private Employee	23.22			
	8.3 Self Employeed	39.71			
	8.4 Unemployee	41.36			
<b>Mother Occupation</b>					
9.	9.1 Govt.Employee	23.50	59	1.32	0.23 <sup>NS</sup>
	9.2 Private Employee	22.20			
	9.3 Home Maker	35.85			
	9.4 Others	0			
<b>Family Monthly Income</b>					
10.	10.1 10000-20000	37.75	59	1.44	0.18 <sup>NS</sup>
	10.2 21000-30000	31.14			
	10.3 31000-40000	20.00			
	10.4 41000-50000	34.22			
	10.5 More than 50000	37.71			
<b>Selection choice of nursing profession</b>					
11.	11.1 forced by parents	20.25	59	.952	0.50 <sup>NS</sup>
	11.2 student own choice	28.08			
	11.3 Any other	25.00			
<b>Adjustment difficulty in college</b>					
12.	12.1 Easily adjusted	26.00	59	.569	0.85 <sup>NS</sup>
	12.2 To some extent	23.17			
	12.3 Not adjusted	31.40			

Previous knowledge about mindfulness meditation					
13.	13.1 Yes	32.29	59	.734	0.71 <sup>NS</sup>
	13.2 No	32.83			
Source of knowledge about mindfulness meditation					
14.	14.1 Family member	26.48	59	.796	0.65 <sup>NS</sup>
	14.2 Peer Group	35.20			
	14.3 Mass Media	38.04			
Practice of mindfulness breathing					
15.	15.1 every day	27.93	59	2.25	0.21 <sup>NS</sup>
	15.2 several times a week	31.26			
	15.3 once a week	34.00			
	15.4 once a month	46.50			
	15.5 never	32.62			

<sup>NS</sup>–Not Significant.

In post test, ANOVA and ‘t’ test value for association of post test anxiety score with selected variables in experimental group. Anxiety score of the B.Sc nursing 1st year students were independent of selected sample characteristics and it denotes that these variables have no association with anxiety score.

### Conclusion

The present study was conducted to assess the effectiveness of “Mindfulness Meditation Programme” on the level of Stress and Anxiety among B.Sc Nursing first year students of selected Nursing Colleges of Shimla, H.P. The findings of the study revealed that, in experimental group pre-test level of stress score, majority of students had moderate level of stress that was 17(56.6%) which was reduced to mild level of stress in post-test 30(100%) whereas in control group pre-test level of stress score ,majority of students had moderate level of stress *I.e.* 16(53.3%) which remained same in post-test level of stress *I.e.* 16(53.3%).The findings of the study revealed that, in experimental group pre-test level of anxiety score, majority of students had moderate level of anxiety that was 27(90%) which was reduced to mild level of anxiety in post-test, that was 30(100%) whereas in control group pre-test level of anxiety, majority of students had moderate level of anxiety *I.e.*28(93%) ,which was again on the moderate level in post-test level of anxiety *I.e.*30(100%).

### Limitations

- The researcher found difficulty in getting adequate literature related to the study
- Due to time constraints the researcher was unable to take large samples for the study
- The time limit for data collection was very less
- The Study was limited to a small group of sample. It cannot be generalized to all.
- Time duration of administration of Mindfulness Meditation Programme was very less to get satisfactory results.
- Due to covid-19 situation it was difficult to conduct study with a short time of duration.

**Source of funding:** Self

**Conflict of interests:** Nil

**Ethical clearance:** Ethical clearance was obtained from institutional ethical committee.

### References

1. Health Is Wealth || PESALIFE. (n.d.). Retrieved February 20, 2021, available from <https://pesalife.com/blog/read/health-is-wealth>
2. Callahan, D. (2013). The Roots of Bioethics: Health, Progress, Technology, Death. available from <https://doi.org/10.1093/acprof:oso/9780199931378.001.0001>
3. Managing Stress as a College Student | Case Study Template. (n.d.). Retrieved February 22, 2021, available from <https://acasestudy.com/managing-stress-as-a-college-student/>
4. Anxiety. (n.d.). Retrieved February 23, 2021, available from <https://www.apa.org/topics/anxiety>
5. This is the world’s biggest mental health problem - and you might not have heard of it | World Economic Forum. (n.d.). Retrieved February 23, 2021, available from <https://www.weforum.org/agenda/2019/01/this-is-the-worlds-biggest-mental-health-problem>.
6. [https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/83241/DNP\\_2021\\_Dodson.pdf?sequence=1](https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/83241/DNP_2021_Dodson.pdf?sequence=1)view edon21/10/2021
7. Koren ME. Mindfulness Interventions for Nursing Students: Application of Modelling and Role Modelling Theory Correspondence. International Journal of Caring Sciences. 2017;10(3):1710–1716. Available from, [www.internationaljournalofcaringsciences.org](http://www.internationaljournalofcaringsciences.org)
8. Mindfulness Meditation: What It Is and How to Practice. (n.d.). Retrieved February 24, 2021, Available from <https://www.verywellmind.com/mindfulness-meditation>.
9. <https://healtheminds.com/stress-dos-donts/>viewedon19/11/2021.