



## Effectiveness of progressive muscle relaxation technique on level of anxiety among first year graduate students in selected training college of nursing of Aurangabad City

Donit John

Lecturer, ACON, Aurangabad, Maharashtra, India

### Abstract

In this study the researcher evaluate the effectiveness of Progressive Muscle Relaxation Technique on level of anxiety among first year graduate students in selected Training college of Nursing. 30 samples were selected by non-probability purposive sampling technique. The research design used was one group Pre-test Post-test design. The conceptual frame work of the study was based on General Systems Model by Ludwig von Bertalanffy. Data was collected using State and Trait anxiety scale, analysed and interpreted by using descriptive and inferential statistics. Mean value at pre-test was 108.7 which decreased to 58.4 in post-test. This study depicted that Progressive Muscle Relaxation Technique is very effective in anxiety reduction among first year graduate students in selected training college of nursing. It is suggested that Progressive Muscle Relaxation Technique should be practised as an integral part of the nursing profession by the nurses working in college, community and hospital.

**Keywords:** progressive muscle relaxation technique, anxiety, first year graduate students, training school of nursing

### Introduction

Feeling of anxiety is so common in our society that they are almost considered universal. Anxiety arises from the chaos and confusion that exists in the world today. Fears of the unknown and conditions of ambiguity offer a perfect breeding ground for anxiety to take root and grow. Low levels of anxiety are adaptive and can provide the motivation required for survival. It becomes problematic when the individual is unable to prevent the anxiety from escalating to a level that interferes with the ability to meet basic needs<sup>[1]</sup>.

Nursing is a demanding profession with prolonged levels of stress and anxiety that account for high attrition rates observed among newly graduated nurses; attrition that negatively impacts patient care and increases costs. Increased stress begins in nursing school. In addition to personal stressors such as work and family, students in undergraduate nursing programs experience high levels of stress and anxiety in competitive programs of study in which both didactic and clinical coursework are covered simultaneously<sup>[2]</sup>. Stress negatively impacts students' physical and mental health and hinders academic performance and completion rates. Even prior to beginning nursing courses, nursing students experience high levels of stress and anxiety. Competition among peers seeking to gain entry into nursing programs can be intense, with limited space available due to budget restraints and a shortage of nursing faculty<sup>[3]</sup>. Upon admission to a nursing program, the typical nursing curriculum includes heavy course loads, stringent examinations, and continued pressure to attain a high grade point average in a competitive environment. The unique stressors nursing students face differ from students in other professional degree programs, including medical, social work, and pharmacy students. This is partly because nursing curriculums involve study in both didactic and clinical settings concurrently, which does not

occur at the undergraduate level for other health professions. Introduction to the clinical setting as an undergraduate presents a unique set of stressors. Personal demands exacerbate stress and anxiety for today's students as many more students hold full- or part-time jobs while in nursing school due to decreased financial assistance in comparison to previous years<sup>[2]</sup>.

Jacobson's Progressive muscle relaxation technique, also called progressive relaxation therapy, and was developed by Dr. Edmund Jacobson over half a century ago. Jacobson developed over 200 exercises and techniques which, taken together, relax the entire body by releasing muscular tension that accumulates as a person experiences a stressful situation. Jacobson, and those who have followed in his footsteps, claim that this technique will cure not only tight muscles and cramps, but also reduces the intensity of pain, and relieve stress and anxiety. Progressive muscle relaxation involves tensing and relaxing the muscles, one body part at a time to bring about a feeling of physical relaxation. By using progressive muscle relaxation students can counter the physical changes and sensations to achieve a "relaxation response." After two hours of intervention, students usually experience enough to successfully practice the techniques on their own. It involves systematically constricting and relaxing various muscle groups from feet upward or head downward. Today, the 200 exercises developed by Jacobson have been reduced to between 15 and 20 exercises. In order to receive maximum benefit, it is recommended to practice this technique every day for at least 20 minutes at the same time every day in a quiet, comfortable place<sup>[4]</sup>.

Progressive muscle relaxation technique is a safe, non-pharmacological, non-invasive, painless, cost effective method, independent intervention and easy to practice among first year graduate students to relieve anxiety and maintain

their balanced emotional state and teach them how to cope up with the anxiety and to perform their activities of living.

### Problem Statement

‘Effectiveness of Progressive Muscle Relaxation Technique on level of anxiety among first year graduate students in selected Training college of Nursing of Aurangabad City’

### Objectives of the Study

1. To assess the level of anxiety among first year graduate students.
2. To find out the effectiveness of Jacobson’s progressive muscle relaxation technique on level of anxiety.
3. To find out the association with post test level of anxiety and selected demographic variables.

### Hypothesis

**H<sub>0</sub>:** There is no significant association in the post-test level of anxiety after intervention.

**H<sub>1</sub>:** There is a significant association in the post-test level of anxiety after intervention.

### Methodology

- **Research Approach-** Evaluatory approach

### Result

**Table 1:** Frequency and Percentages distribution of Socio-Demographic variables of First Year graduate students (N=30)

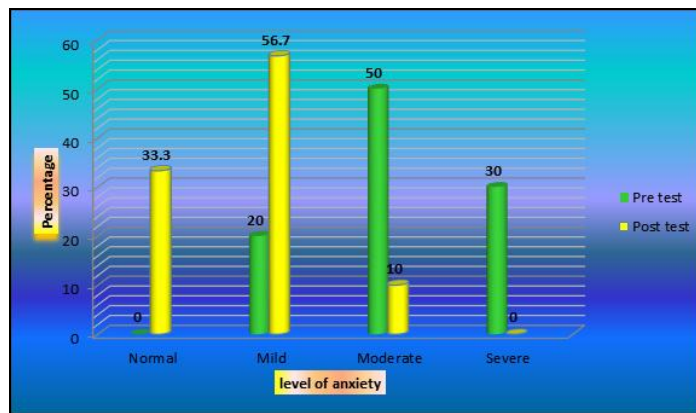
Demographic variable	Experimental group	
	Freq	%
<b>Age</b>		
18-20 years	23	76.6
21-23 years	5	16.6
23-25	2	6.6
<b>Type of Family</b>		
Nuclear	20	66.
Joint	10	33.3
<b>Monthly Family Income</b>		
Upto 10,000/-	5	16.6
10,001-15,000/-	10	33.3
15,001-20,000/-	10	33.3
Above 20,001/-	5	16.6
<b>Number of Siblings</b>		
None	2	6.6
One	6	20
Two	12	40
More than Two	10	33.3
<b>Nature of admission</b>		
Self interest	13	43.3
Forceful admission	5	16.6
Combine	12	40
<b>Type of Stay</b>		
Family	5	16.6
Hostel	23	76.6
With Relatives/ Friends	2	6.6

- **Research Design-** One group Pre-test Post-test design
- **Sample-** First year graduate students
- **Sample Size-**30
- **Sampling Technique-** Non probability purposive sampling
- **Setting-** Selected Training college of Nursing of Aurangabad City

### Tool

- Section A- Demographic Variables consist of 6 questions. Age, Type of Family, Monthly Family Income, Number of Siblings, Nature of admission, Type of Stay.
- Section B- A standardized tool of modified State- Trait Anxiety scale

On the first day samples were finished with pre-test, Progressive Muscle Relaxation Training was given for fifteen consecutive days for 30 minutes thereafter. On the sixteenth day the samples were finished with post-test. Permission to conduct the study was taken from the respective training college and informed consent taken from all participants. The data was collected and analyzed based on objectives of the study using descriptive and inferential statistics.



**Fig 1:** Percentage distribution of Pre-Test and Post-Test level of anxiety among First Year graduate students

**Table 2:** Mean, Standard deviation of Pre and post Test level of anxiety among first year graduate students (N=30)

Sr. No	Aspect-wise level of Anxiety	Maximum Statement	Maximum Score	pre test		post test	
				Mean	SD	Mean	SD
1	State Anxiety Scale	20	80	52.63	15.46	28.9	9.18
2	Trait Anxiety Scale	20	80	56.1	13.25	29.5	8.44
overall				108.73	28.71	58.4	17.62

**Table 3:** Evaluating the effectiveness of PMR

Group	Test	Mean	SD	‘t’ Value(0.05)	
				Calculated	Table
Selected first year graduate students	Pretest	108.73	28.71	8.19	2.05
	Posttest	58.4	17.6		

To find out the association between level of anxiety and demographic variables

Association was done using Chi Square test. It is inferred that there was a significant association between number of siblings ( $X^2 = 7.86$ ) and type of stay ( $X^2 = 12.8$ ) (Less than 0.05) with level of anxiety in selected first year graduate in selected training college of nursing.

**Recommendations**

1. Replication of the study could be done with a larger sample to validate and generalize the findings.
2. This study can be carried out on the mental disorder among the persons suffering from alcohol dependence in the community setting and de-addiction centre.
3. Comparative study can be carried out to determine the difference between progressive muscle relaxation technique and other relaxation techniques.
4. This study can be done by maximizing the duration of progressive muscle relaxation technique.
5. The study can be conducted to determine the effectiveness of progressive muscle relaxation technique on specific illness patients other than the one’s already taken up.
6. The study can be carried out in a different setting with a different rehabilitation program.

**References**

1. Mary C. Townsend, Psychiatric & Mental Health Nursing- Concept of care, 4th edition, FA Davis Company, Philadelphia, 2003, 7-10.
2. Cray P. Beliefs, behaviors, and health of undergraduate nursing students. *Holist. Nurs. Pract.* 2013; 27(2):74e88.

<http://dx.doi.org/10.1097/HNP.0b013e318280f75e>

3. Jeffreys MR. Tracking students through program entry, progression, graduation, and licensure: assessing undergraduate nursing student retention and success. *Nurse Educ. Today.* 2007; 27(5):406e419. <http://dx.doi.org/10.1016/j.nedt.2006.07.003>.
4. Ansgar Conrada, Walton Rotha T. Jacobson’s muscle relaxation technique for relieving anxiety. *American Journal of Drug & Alcohol Abuse.* 2013; 39(6):433-440.