**Research Article** 

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### A STUDY TO ASSESS THE EFFECTIVENESS OF BIBLIOTHERAPY ON REDUCTION OF TEST ANXIETY AMONG FIRST YEAR B.SC NURSING STUDENTS OF SELECTED NURSING COLLEGE AT BANGALORE

M. A. Anupama Das<sup>\*1</sup>, Tabassum Jan<sup>1</sup>, Usha Esther<sup>1</sup>

<sup>1\*</sup>Department of Mental Health Nursing, Ambalathara, Thiruvananthapuram, Kerala, India.

#### ABSTRACT

A pre-experimental study with one group pre-test- post-test design was used in this study. The population of the study, first year B.Sc. nursing students who were experiencing test anxiety was selected by purposive sampling. The findings of the study show that there is an urgent need to deal with the problems of the students associated with facing an exam. Most of the subjects in this study had moderate to high range of test anxiety. Mean post-test level of test anxiety indicate that bibliotherapy was effective in reducing the level of test anxiety among the students. This study has shown that bibliotherapy plays a major role in reducing the level of test anxiety among the first year B.Sc. nursing students. It would help the students to adopt better coping mechanisms in order to live an effective life in future.

#### **KEYWORDS**

Effectiveness, Bibliotherapy, Test anxiety and B.Sc nursing students.

#### Author for Correspondence:

Anupama Das M A,

Department of Mental Health Nursing,

Ambalathara, Thiruvananthapuram, Kerala, India.

Email: anjumetborns11@gmail.com

#### **INTRODUCTION**

Anxiety is a general feeling of apprehension about possible danger. It is an alerting signal; it warns of threat, external or internal and it is probably lifesaving. Test anxiety prevents from demonstrating their knowledge on examinations. They are frustrated, discouraged and beat themselves instead of understanding that this is a common phenomenon that can be overcome. If a person believes in himself and his abilities, and have positive expectations for how he will perform on the exam, he will be better able to cope with the anxiety. One technique that could be used to reduce this problem is bibliotherapy.

#### STATEMENT OF THE PROBLEM

"A study to assess the effectiveness of bibliotherapy on reduction of test anxiety among first year B.Sc. nursing students of selected nursing college at Bangalore".

#### **OBJECTIVES**

To assess the pre-test level of test anxiety among first year B.Sc. Nursing students

To assess the effectiveness of bibliotherapy on test anxiety among first year B.Sc. Nursing students.

To associate the pre-test level of test anxiety with selected demographic variables among first year B.Sc. nursing students.

#### HYPOTHESIS

**H1:** There will be a significant difference between the mean pre-test level of test anxiety and mean posttest level of test anxiety among first year B.Sc nursing students.

**H2:** There will be significant association between pre-test level of test anxiety with selected demographic variables among first year B.Sc. nursing students.

#### ASSUMPTIONS

The researcher assumes that,

Nursing students may experience anxiety during tests

Bibliotherapy may help to reduce test anxiety.

Level of test anxiety may vary according to selected demographic variables.

#### MATERIAL AND METHODS

The research design selected for this study is a preexperimental design that is, one group pre-test - posttest design because the study was intended to assess the effectiveness of bibliotherapy for the reduction of test anxiety among the first year B.Sc. Nursing students. The test anxiety level of the students were assessed after introducing bibliotherapy and the result was compared with pre-test score in terms of anxiety reduction. The samples were selected by

using non- probability sampling technique with the sample size of 30 first year B.Sc nursing students who had moderate to high level of test anxiety assessed by using modified Sarason's Test Anxiety scale. The inclusion criteria for participation were to be any first year B.Sc. student who are interested to participate in the study and who can attend the pretest and post-test. The exclusion criteria involved the first year B.Sc. nursing students who are all attended the same type of study earlier and those who are all sick at the time of bibliotherapy. The average completion time of this study was about 20 days. The standardized tool on assessment of anxiety was used by Sarason's Test Anxiety scale, which was modified to assess the pre-test level of test anxiety among the students.

The following tools were used to collect data,

Tool-1: Demographic Proforma

Tool-2: Test Anxiety Scale

Tool-1: It contained 9 items for obtaining information regarding age of the students, residential area, education of father and mother, occupation of both the parents and family income per month.

Tool-2: This tool is a checklist with responses 'yes' and 'no'. This tool represents the expressions of test anxiety. Items 1 to 15 represents general test taking anxiety. Items 16 to 22 represent expression of bodily symptoms. Item 23 to 30 represents thought disruptions. Each items carry 'one'mark for the 'yes' answers. The total number of 'Yes' answer is the level of test anxiety. Maximum score is 30.

#### **DEMOGRAPHIC VARIABLES**

The students are equally distributed to the age groups of 17 years (46.7%) and 18 years (53.3%). Majority of the students were belonged to rural area (90%). Most of their parents (mother and father) had secondary education. Regarding the occupation of father 46.7% were self-employed and 43.3% were agriculturist and only 10% were government employees. Majority of their mothers were (96.7%). housewives Students were equally distributed to the group of family income below Rs.5001/- (53.3%) and to the group of 5001 -10000 Rs (46.7%).

#### THE PRE-TEST LEVEL OF TEST ANXIETY AMONG FIRST YEAR BSC NURSING STUDENTS

The data presented in Table No.2 shows that the 73.3% of the samples had moderate level of test anxiety and 26.7% had high range of test anxiety.

#### THE EFFECTIVENESS OF BIBLIOTHERAPY ON TEST ANXIETY AMONG FIRST YEAR BSC NURSING STUDENTS

This section deals with the analysis and interpretation of the data in order to evaluate the effectiveness of bibliotherapy on reduction of test anxiety among first year B.Sc. nursing students.

Data in Table No.3 reveals that post-test level of test anxiety among the nursing students had reduced. The percentage of students with moderate level of test anxiety was reduced to 26.7% and no students were in the category of high range of test anxiety.

#### ASSOCIATION OF THE PRE- TEST LEVEL OF TEST ANXIETY WITH SELECTED DEMOGRAPHIC VARIABLES OF FIRST YEAR BSC STUDENTS

Chi-square was computed to find out the association between pre-test level of test anxiety and selected demographic variables.

The findings of the Table shows that the association between pre-test level of test anxiety with age, residential area and family income of the students was statistically significant at 0.05 level. There was no association between test anxiety and variables such as occupational and educational status of parents.

Thus, the hypothesis H2 was accepted in relation to the variables age, residential area and family income that is, there was significant association between the demographic variables and pre-test level of test anxiety.

#### **RESULTS AND DISCUSSION**

The main aim of the study was to determine the effectiveness of bibliotherapy on reduction of test anxiety among first year B.Sc nursing students.

#### Major findings of the study Sample characteristics

Age distribution of the sample showed that 46.7% of the students belonged to the age group of 17years and 53.3% were belonged to age group of 18years. Among the respondents 90% were from rural area and 10% were from urban area. Majority of their parents had secondary education that is, 83.3% of the fathers and 93.3% of the mothers. Most of the fathers were self-employed (46.7%) followed by 43.3% farmers and 10% of government employee. Data on occupation of mother showed that 96.7% were housewives, only 3.3% had government job. With regard to the family income 53.3% were from low-income families (less than Rs.5000/- per month) and 46.7% had monthly income of Rs.5001-10000/.

## Pre-test level of test anxiety among first year B.Sc nursing students

Pre-test score of test anxiety among first year B.Sc nursing students ranged from 14-28 (maximum score 30). The mean pre-test score of the group was  $18.37\pm3$ . Study results shown that 30% of nursing students were found to have high test anxiety, whereas 17% in the students in other fields.

### Effectiveness of bibliotherapy in reduction of test anxiety

The present study showed that post-test mean score of test anxiety for the group was  $8.33\pm3$ . Area wise test anxiety score showed that there was marked difference between the pre-test level of test anxiety and post-test level of test anxiety. Significant reduction was evident in three areas that is general test taking anxiety (30.0%), bodily expressions (38.1%) and thought disruptions (35.8%). These findings clearly indicate that bibliotherapy used by the investigator was effective in all the aspects.

#### Association between pre-test level of test anxiety and demographic variables

The Chi-square computed between pre-test level of test anxiety and selected demographic variables showed that there was significant relationship between pre-test level of test anxiety and some of the demographic variables such as age, residential area and family income at 0.05 level of significance. However, some variables like educational status of father and mother and occupation of parents did not show any relationship with pre-test level of test anxiety.

Chi-square test showed that students in the age group of 17 years experiencing more test anxiety than the students in the high age group (x 2 = 5.12). Most of the students in the age group showed test anxiety above the mean level of test anxiety. It inferred that test anxiety will be high in younger ages. From the analysis it is clear that some of the demographic variables were significantly related to the pre-test level of test anxiety.

#### Results

The mean pre-test level of test anxiety was  $18.37\pm3$ and the post-test level of test anxiety was  $8.33\pm3$ . The effectiveness of bibliotherapy was tested in terms of reduction in test anxiety in post-test at 0.05 level of significance. The mean pre-test and post-test level of test anxiety was analysed and the findings were statistically significant at 0.05 level. The association of pre-test level of test anxiety were found to be significant with age, residential area and family income at 0.05 level of significance. The findings of the study show that there is an urgent need to deal with the problems of the students associated with facing an exam. Most of the subjects in this study had moderate to high range of test anxiety. Mean post-test level of test anxiety indicate that bibliotherapy was effective in reducing the level of test anxiety among the students.

	11-00							
S.No	Domographia abaratariztica	Catagory	Students					
<b>3.110</b>	Demographic characteristics	Category	Frequency (f)	Percentage (%)				
1		17 years	28	46.7				
1	Age group	18 years	32	53.3				
2	Residential area	Rural	54	90				
Z	Residential area	Urban	06	10				
3	Educational status of father	Secondary	50	83.3				
3	Educational status of father	Graduate	10	16.7				
4	Educational status of the mother	Secondary	56	93.3				
4	Educational status of the mother	Graduate	04	6.7				
		Government	06	10				
5	Occupation of father	Agriculture	26	43.3				
		Self- employed	28	46.7				
6	Occupation of mother	Government	02	3.3				
	Occupation of mother	Housewife	58	96.7				
7	Family income/month	Below Rs.5000	32	53.3				
/	Family income/ month	Rs.5001-10000	28	46.7				

Table No.1: Frequency and percentage distribution of students according to Demographic Variables

# Table No.2: Frequency and percentage of pre-test level of test anxiety among first year B.Sc. nursing<br/>students n=60

C No	Test anxiety level	Catagory	Students			
S.No		Category	Frequency (f)	Percentage (%)		
1	Low	1-10 score	0	0.0		
2	Moderate	11-20 score	44	73.3		
3	High	21-30 score	16	26.7		
4	Total	-	60	100		

 Table No.3: Frequency and percentage of post- test level of anxiety among first year B.Sc. nursing students n=60

S.No	Test anxiety level	Category	Students			
			Frequency (f)	Percentage (%)		
1	Low	1-10 score	44	73.3		
2	Moderate	11-20 score	16	26.7		
3	High	21-30 score	0	0.0		
4	Total		60	100		

 Table No.4: Association between Pre-test level of Test Anxiety and Demographic variables of students (n=60)

S.No	Demographic Variable			Students Test Anxiety					
<b>3.</b> 110		Category	Sample	Moderate		High		χ2 Value	χ2 Table Value
				Ν	%	Ν	%		value
1	Age group	17 years	28	13	92.9	1	7.1	5.12*	3.841 (1df)
		18 years	32	9	56.3	7	43.7		
2	Residential area	Rural	54	22	81.5	5	18.5	9.17*	3.841 (1df)
		Urban	06	0	0.0	3	100		
3	Educational status	Secondary	50	18	72.0	7	28	0.14 NS	3.841 (1df)
	of father	Graduate	10	4	80	1	20		
4	Educational status of mother	Secondary	56	20	71.4	8	28.6	0.78 NS	3.841 (1df)
		Graduate	04	2	100	0	0		
	Occupation of father	Government	06	3	100	0	0	1.76 NS	5.991 (2df)
5		Agriculture	26	10	76.9	3	23.1		
		Self employed	28	9	64.3	5	35.7		
6	Occupation of	Government	02	1	100	0	0	0.38	3.841 (1df)
	mother	Housewife	58	21	72.4	8	27.6	NS	
7	Family income/	Below Rs.5000	32	15	93.7	1	6.3	7.31*	3.841 (1df)
	month	Rs.5001-10000	28	7	50	7	50		
8	Combined	-	60	22	73.3	8	26.7	-	_

NS: Non- significant

\*: Significant at 5% level

#### CONCLUSION

This study has shown that bibliotherapy plays a major role in reducing the level of test anxiety among the first year B.Sc. nursing students. It would help the students to adopt better coping mechanisms in order to live an effective life in future.

Pre-test results revealed that all subjects had moderate to high range level of test anxiety

Bibliotherapy was effective in reducing the test anxiety level of first year B.Sc. nursing students. The samples showed a significant reduction in the level of test anxiety after the intervention. It is evident that bibliotherapy was highly effective in reducing the level of test anxiety in first year B.Sc nursing students. Hence, it could be used in other anxiety disorders.

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#### **CONFLICT OF INTEREST**

We declare that we have no conflict of interest.

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