Effectiveness of Guided Imagery Technique in reducing examination anxiety associated with selected demographic variables among college students – An Experimental study

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Abstract:

Anxiety is an automatic biological product of undischarged tension. Guided Imagery therapy is a cognitive behavioral technique in which under the guided instructions a client is guided in imaging a relaxing scene or series of experiences. The aim of the study was to assess the effectiveness of guided imagery relaxation technique in reducing anxiety in association with selected demographic data among examination going college students. ***Methodology:-****The samples were divided into 2 groups Experimental Group & Control Group, after fulfilling the inclusion and exclusion criteria. Pre-test was administered to both experimental (36.53 (SD =4.37)) and control group 36.6 (SD =4.59)using the Test Anxiety Questionnaire. A 25 minute audio visual relaxation of guided imagery program was provided to the students in the experimental group for once in a week for 8 weeks. Selected Demographic variables of examination going students were assessed to find out whether any association is there in reducing examination anxiety among students. Post test was also assessed for experimental group (27.47(SD =3.64) and control group (37.47 (SD =3.23)after 8 weeks.* ***Result:-****Shows significant decrease of examination anxiety in experimental group.* ***Conclusion:-****The results thus concluded the effectiveness of Guided Imagery Technique in reducing examination anxiety among college students. And it is also concluded that there is no association between the selected demographic variables and the examination anxiety.*

Keywords: *Anxiety, Guided Imagery Technique, college students*

I. INTRODUCTION

Anxiety is an automatic biological product of undischarged tension. It is a feeling of mingled dread and apprehension about the future without a specific cause for such fear. Anxiety is a psychological and physiological state characterized by somatic, emotional, cognitive, and behavioral components.[1] Anxiety can cause difficulty in concentration and prevent us from recalling material that we have learned.[2]A student who is experiencing test anxiety may do poorly on an exam even if he or she knows the material better than a classmate who is able to control anxiety.[3]

Anxiety is one of the most common psychological disorders in school-aged children and adolescent's worldwide. Exam Anxiety is a common phenomenon negatively affecting the academic, emotional, personal and social lives of almost 20% students across nationalities including India[1].Test anxious students score poor grades/marks and have poor mental health in comparison to others. There are reports of deliberate self-harm and suicide by students highlighting the need for timely intervention[4]. Exam anxiety can also be labeled as anticipatory anxiety, situational anxiety or evaluation anxiety. Some anxiety is normal and often helpful to stay mentally and physically alert.[5]

Guided Imagery therapy is a cognitive behavioral technique in which under the guided instructions a client is guided in imaging a relaxing scene or series of experiences[6]. It is a powerful technique, more often used o promote relaxation to provide therapeutic benefits, including lowering BP, managing pain, reducing stress and anxiety and even boosting the immune system. It involves the conscious use of imagination to create positive images in order to bring about healthful changes[7]. Numerous clinical observations suggest, it will be effective in helping individuals learn or modify behaviour such as learning to relax, changing and controlling their negative emotions in response to a particular situations, event or belief, preparing themselves for positive changes[6]. Arguments against individualisation for some professionals has popularised mass produced therapies available as tapes, CDs etc., incorporating self-hypnosis techniques, imagery and GI, with the same induction and training being presented to everyone using the CD or tape. This type of easily accessible and relatively inexpensive therapy is becoming more popular and is also being recommended to clients in therapy, to help clients relax (Bourne, 2001; Blanchard:1991)[8,9].

A review of the literature provided evidence that reported a positive relationship between guided imagery and a decrease in stress and anxiety. Therefore, the aim of the present study was to assess the effectiveness of guided imagery relaxation technique in reducing examination anxiety in association with selected demographic data among examination going college students.

Objective

The main objective of the study is to evaluate the effectiveness of guided imagery technique in reducing

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anxiety among examination going college students associated with selected demographic data variables.

II. METHODOLOGY

Study design:

An experimental, randomized pre test, post test control group design was selected for this study.

Sources of data:

30 Physiotherapy students of both sex fulfilling inclusion and exclusion criteria was selected from Medical Trust Institute of Medical Sciences, College Of Physiotherapy, Cochin.

Sample size: 30

Study duration: 8 weeks

Inclusion criteria:

- Age 18- 25
- Both sex are included
- Students who are having moderate to severe anxiety
- Students who are willing to participate in study

Exclusion criteria:

- Students who are not willing to participate in study
- Students with mental instability
- Any pre existing or acute medical condition.

Materials used for the study

- Section A: Demographic variables of examination going students which include age, occupation of father and mother, type of family, psychological support from friends and family, hours of sleep at night before the exam
- SectionB: Consists of standardized test anxiety questionnaire developed by Nist and Diehl (1990). The tool consists of 10 items which focus on testing experiences of writing exams.

Sampling Technique: Convenient Sampling

Technique of Application

Data Collection Procedure:-

To perform the study the samples were divided into 2 groups (Group A - Experimental Group & Group B – Control Group) of each using purposive sampling technique. The official permission was obtained to conduct the study. The samples were selected among the students of Medical Trust College of Physiotherapy, Kerala, India. The purpose of this study was explained to the samples and confidentiality was promised and ensured. Informed Consent was obtained from each individual. Pre-test was administered to both experimental and control group before the first sessional examination by using the Test Anxiety Questionnaire. The tool consists of 10 items which focus on testing experiences of writing exams. A 25 minute audio visual relaxation of guided imagery program was provided to the students in the experimental group for once in a week for 8 weeks. Demographic variables of examination going students which include age, occupation of father and mother, type of family, psychological support from friends and family, hours of sleep at night before the exam were assessed to find out whether any association is there in reducing examination anxiety among students. Post test was conducted for experimental and control group with the same scale with an interval of eight weeks after the guided imagery program and before the second sessional examination.

III. RESULTS

Table 1: Classification of samples according to demographic profile

		Experimental Group		Control Group	
		Frequency	%	Frequency	%
Age	18 – 20	8	26.67 %	10	33.33 %
	21 – 23	7	23.33 %	5	16.67 %
Occupation of Father	Govt. Job	4	13.33 %	3	10 %
	Private Job	7	23.33 %	9	30 %
	Business	4	13.33 %	3	10 %
Occupation of Mother	Govt. Job	3	10 %	3	10 %
	Private Job	4	13.33 %	5	16.67 %
	Housewife	8	26.67 %	7	23.33 %
Type of family	Nuclear	14	46.67 %	13	43.33 %
	Joint	1	3.33 %	2	6.67 %
	Extended	0	0 %	0	0 %
Psychological support from friends	Yes	13	43.33 %	13	43.33 %
	No	2	6.67 %	2	6.67 %
Hours of sleep at night before the exam	Less than or equal to 6 hrs	11	36.67 %	8	26.67 %
	More than 6 hrs	4	13.33 %	7	23.33 %

The table 1 shows the students demographical profile of both control and experimental group. Mostly near to equal distribution of age, occupation of father and mother, type of family, psychological support from friends and family, hours of sleep at night before the exam to both groups. In both the groups, the age of the students were between 18- 20 , and most of the fathers are working as a private employee and also most of the mothers were house wife. Most of the students family type was nuclear type, and in both group students were getting psychological supports from friends and family. In control group, 8 (26.67%) students were sleeping less than or equal to 6 hours at night before exam, where as, in experimental group, 11 (36.67%) students were sleeping less than or equal to 6 hours at night before exam.

Table 2: Paired Samples Statistics to assess the Relief in anxiety of Students in Experimental Group

Test	Mean	S.D.	n	Mean change	t	df	Significance (p-value)
Pre-test	36.53	4.37	15	9.06	9.223	14	$p < 0.01$**
Post-test	27.47	3.64					

The Mean column in the paired-samples t test table displays the average difference between the pre and post tests of the study. The Standard Deviation column displays the standard deviation of the pre & post scores.

The examination anxiety pretest mean score is 36.53 (SD =4.37) and posttest mean score is 27.47 (SD =3.64) and the 't' value is 9.223 (p-value is less than 0.01).

Since the significance (p-value) is less than 0.01, we can conclude that the average change in the level of anxiety, 9.06 is significant. So there is a highly significant effect of the guided imagery in reducing examination anxiety of the students.

Now we shall discuss whether there is any change in anxiety of the students in the Control group.

Table 3 : Paired Samples Statistics to assess there lief in anxiety of Students in Control Group

Test	Mean	S.D.	n	Mean Change in marks	t	df	Significance (*p*-value)
Pre-test	36.6	4.59	15	- 0.87 *	1.26	14	*0.229*
Post-test	37.47	3.23					

The examination anxiety pretest mean score is 36.6 (SD =4.59) and posttest mean score is 37.47 (SD =3.23) and the 't' value is 1.26.(p-value is greater than 0.05).

* The –ve symbol indicates that there is a slight increase in the anxiety level among students in control group, when the intervention is not provided.

Since the significance (p-value) is greater than 0.05, we can conclude that there is no significant change in the average of examination anxiety of students in the Control group.

By using paired t-tests, it is seen that the Experimental group students is having a significant relief in examination anxiety whereas the Control group students is having no significant change in their anxiety. So we can conclude that Guided Imagery Technique is very much effective in reducing examination anxiety among college students.

IV. DISCUSSION

Teaching guided imagery to children as a first line of defense against the start of worry and anxiety. Teaching this mindful practice would allow children to gain control of ruminating thoughts, help them to relax at an early age, and teach them to manage stress throughout life. Learning to practice these techniques at an early age as a life long practice may be worth a pound of prevention against onset of anxiety and stress that manifest in adulthood [10].

In this study, the exam anxiety mean score was reduced after guided imagery technique (pre test - 36.53 & post test 27.47) in experimental group, but in control group there is a slight increase in the anxiety level among students (pretest-36.6 & post test- 37.47). There was a significant difference seen in experimental group before and after guided imagery technique (t value- 9.223 & $p < 0.01$) where as in control group, there is no significant difference seen in pre and post tests, but also there is slight increase in the anxiety level (t value- 1.26 & p value – 0.229). This reveals that guided imagery technique is effective in reducing examination anxiety among college students.

Further results from, Table 1, indicates that, there is no significant association between the examination anxiety and selected demographic variables among control and experimental groups, such as, age, occupation of father and mother, type of family, psychological support from friends and family, hours of sleep at night before the exam.

V. CONCLUSION

Guided Imagery Technique helps students to modify their negative thoughts and behaviour into positive ones. Students are taught to react to the situation positively. Reduced examination anxiety in students can help them to perform well in the examinations. This will help the students to score high marks in University examination

The results thus concluded the effectiveness of Guided Imagery Technique in reducing examination anxiety among college students. And it is also concluded that there is no association between the selected demographic variables such as age, occupation of father and mother, type of family, psychological support from friends and family, hours of sleep at night before the exam and the examination anxiety.

Life's success is built upon success promoting belief. This is because mind does not know the difference between a real and an imagined experience. Guided imagery technique helps to reduce stress and anxiety of students at all levels and is a skill that benefits in many ways.

Limitations

- Sample size was small
- Limited to single college

Future Scope of The Study

- It can compare in healthy individuals and in elderly people with depression
- It can implement in school/ college time table for the better results in acedaemic.

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