Impact of PMR (Progressive muscle relaxation therapy) on anxiety of Students.

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ABSTRACT: The present is an experimental study to ascertain the impact of PMR progressive muscle relaxation therapy on anxiety of students. Students were trained in PMR for period of three months. Becks anxiety was used to test the anxiety of students. The pre post analysis reveal that PMR was effective in decreasing the anxiety. A significant difference in pre-post test and between experimental group –control group proves that Progressive muscle relaxation has significant impact in decreasing the anxiety.

I.   INTRODUCTION

Anxiety is individuals acquired disposition to perceive a wide range of objectively non dangerous condition as threatening. Anxiety can be described as, a state of suspended unconscious or conscious fear. In anxiety, the person is often not aware of the cause, but the mental and psychological systems of fright continuous to exist. Anxiety describes the individual level of emotionality characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure. Anxiety can be described as the physical and psychological feeling of worry. It is also associated with the emotions of apprehension, fearfulness and an uneasy cognitive sense of future end. It is associated with the arousal of the sympathetic division of the autonomic nervous system that leads to emotional change. Anxiety is important because it helps people prepare for a threat. Fear is important because it helps people fight or escape. The experiences of anxiety and fear are normal responses to threat or danger and are usually helpful. Anxiety and fear may be unhelpful if they interfere with a person's daily routine or prevent a person from doing things that he/she normally does. If the anxiety or fear is long-lasting and without relief, it may be a sign that a person has developed a more significant problem with anxiety, often called an anxiety disorder.

Anxiety interferes with school functioning only when an abnormal level is reached, whereas within normal range, being anxious does not automatically imply worst school functioning and indeed may to a certain extent be motivating and enhancing to academic performance . Anxiety can be classified into four levels: mild, moderate, severe and panic anxiety. Mild level of anxiety is healthy, at this level, perceptual field is heighten, pupils dilate to accommodate much light, hearing and smelling intensified, and sense of touch is highly sensitive. The individual is highly alert and attentive and learning and cognition is in its best state. This stage improves academic performance. Moderate level of anxiety on the other hand is unhealthy; the perceptional field of a person at this level is narrowed; Individuals experiencing this level of anxiety have selective inattention. They have decreased focus and automatism can be observed as repetitive purposeless movements such as shaking of the hands and feet, twirling of hair and, tapping of fingers. Academic performance at this level depends on the individual's ability to control the anxiety and carry out the assigned task. Severe level of anxiety is characterized by reduced perceptual field and a difficulty in communication. Gross motor movements, such as pacing are characteristic of people at this stage. Academic performance at this stage depends on the educator's ability to recognize such individuals and provide a safe environment for them.

A modern technique called Progressive Muscular Relaxation (PMR) found to be an effective one to treat anxiety. This is one of the most simple and easily learned techniques for relaxation, Progressive Muscle Relaxation (PMR), a widely used procedure today that was originally developed by E. Jacobson in 1939. The PMR procedure teaches to relax muscles through a two step process. First there will be a deliberate application of tension to certain muscle groups, and then to stop the tension, relax the muscles and turn the attention to noticing how the muscles relax as the tension flows away.

OBJECTIVE:
To study the impact of PMR progressive muscle relaxation therapy on anxiety level of intermediate student

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II. METHODOLOGY:

RESEARCH DESIGN

In order to examine the effectiveness of psychological intervention on anxiety and mental health among intermediate students in relation to their academic achievement, a research which tested the given hypotheses in a controlled context such as an experiment was required. Seliger and Shohamy (1989) point out that "Experimental research is carefully constructed so that variables can be controlled and manipulated." In other words, an experimental research design involves manipulating the independent variable and observing the change in the dependent variables. The goal of this genre of design is that researchers try to control changes in variance of the independent variables without allowing intervention of other unwanted variables (Perry, 2005). An experiment type of research consists of three basic characteristics, the presence of a control group, random selection and assignment to groups, and an administration of a pre-test to capture the initial differences in between the groups.

LOCALE OF THE STUDY

The present study was conducted in Hyderabad and Secunderbad districts of Telangana state. The twin cities are selected because there are hub of colleges who claim academic excellence, with long durations of study hours.

SAMPLE AND SAMPLING PROCEDURE

Criteria for sampling: Adolescents in age group of 15-18years studying science stream intermediate course in Government, private and corporate colleges of Hyderabad and Secunderabad districts of Telangana were selected for the present study

Purposive sampling was adopted to select the sample of particular characteristics which enables to answer the research

Sample size: Sample of 80 intermediate students were selected for the study of which 40 were experimental group and 40 control group

Tools and techniques used

To measure anxiety Becks Anxiety Inventory was used

Tool description:

Becks Anxiety Inventory (1996)

The Beck Anxiety Inventory (BAI), created by Dr. Aaron T. Beck and other colleagues, is a 21-question multiple-choice self-report inventory that is used for measuring the severity of anxiety in children. Several studies have found the Beck Anxiety Inventory to be an accurate measure of anxiety symptoms in children and adults.

Reliability: Internal consistency for the BAI = (Cronbach's α=0.92) Test-retest reliability (1 week) for the BAI = 0.75 (Beck, Epstein, Brown, & Steer, 1988).
Validity: The BAI was moderately correlated with the revised Hamilton Anxiety Rating Scale (.51), and mildly correlated with the Hamilton Depression Rating Scale (.25) (Beck et al., 1988).
Scoring: It is a four point rating scale with option given, Mildly, Moderately and Severely
Score interpretation: The total score is calculated by finding the sum of the 21 items.
Score of $0 - 21$ = low (mild) anxiety
Score of $22 - 35$ = moderate anxiety
Score of 36 and above = potentially concerning levels of anxiety

III. PROGRASSIVE MUSCLE RELAXATION THERAPY (4 SESSIONS)

SESSION 1: The first session consists of tightening and relaxation of sixteen major muscle groups. They are right and left hands, right and left arms, forehead, face, jaw, neck, chest, shoulder upper back, abdomen, right and left thigh, right and left calf, right and left shin. The students were asked to tense each muscle group vigorously, but without straining and then release the tension suddenly and feel the muscle relaxed. The students tensed the each muscle group for 5 seconds. Throughout the exercise they were asked to visualize the muscle tensing and wave of relaxation flowing over them as tension gets released. The importance of breathing throughout the exercise was explained. The students were advised to concentrate on each muscle working and also the breathing technique.
SESSION 2: Quick review of previous sessions**.** The second session involved combining some muscle groups together, so that seven general muscle group areas were the focus of relaxation.
SESSION 3: Quick review of first few sessions. Combined muscle groups further into four overall, focused only on general body scanning and relaxation.

SESSION 4: Follow up session to check the subject feelings and problems. The students were checked whether they were able to do it independently and were advised to do this regularly

RESULTS AND DISCUSSION
Table   1: Anxiety levels of Experimental and Control Groups before and after Intervention

Anxiety	Experimental n=40				Control n=40			
	Pre		Post		Pre		Post	
	N	%	n	%	N	%	n	%
Mild	-	-	15	37.5%	-	-	-	-
Moderate	9	22.5	25	62.5%	11	27.5	10	25
Severe	31	77.5	-	-	29	72.5	30	75

The anxiety levels of experimental group and control group before and after intervention are presented in the Table 4.11.The frequencies show that in experimental group before intervention 22.5% had moderate and 77.5% had severe anxiety levels. But after intervention the anxiety was decreased, in post intervention 37.5% of experimental group subjects had mild anxiety, 62.5% had moderate anxiety. None of the respondents in experimental group had severe anxiety levels. In control group, 27.5% of the respondents had moderate anxiety, and 72.5% of them had severe anxiety level in pre test conditions. After post test 25% had moderate and 75% had severe anxiety levels, as they did not receive any kind of psychological intervention their anxiety levels remained same.

Table 2: Mean differences in Pre intervention anxiety scores of experimental and control group

Trait	Experimental		Control		T	P
Anxiety	Mean	SD	Mean	SD	0.1773	0.8597
	32.52	8.06	32.85	8.58		

The mean differences in anxiety score of experimental and control group before intervention was given in table 2. The mean anxiety score of experimental was 32.5 and control group was 32.85 which were almost equal. Even the t test and p value (>0.05) show that there was no significant difference between the two groups before intervention

Table 3: Mean differences in pre and post intervention scores of experimental group

Trait	Pre		Post		T	P
Anxiety	Mean	SD	Mean	SD	6.4916	0.0001**
	32.52	8.06	21.1	7.67		

*p<0.05 NS-Not significant S- significant

The mean differences in anxiety score of experimental group before and after intervention was presented in the table below. The mean anxiety score of experimental group before intervention was 32.5 while after intervention the mean score reduced to 21.1. The p value (<0.01) indicates a significant difference between the pre and post scores of anxiety.

IV.   CONCLUSION

The study concludes that PMR was effective in lowering the anxiety of the students. Therefore, it is suggested to conduct educational programs about this technique for students in schools and colleges before their exams to reduce their test anxiety.

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