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Comparison of Stress Reduction Model and Traditional Method on the Basis of Examination Stress and Anxiety of High School Students

Abstract

The present study pertained to find the Strategy to manage Stress. There are different Strategies available to manage Stress. In this context even Models of Teaching have been developed to overall improve the Cognitive, Affective and Psychomotor domains of human beings. In this study Stress Reduction Model was tried out to see whether Stress can be managed with its use.

Keywords : Stress Reducation Model, Coping Strategy

Introduction

The concept of Stress was first introduced in the Life Sciences by Hans Selye in 1936. It is a concept borrowed from the Natural Sciences. During the eighteenth and nineteenth centuries, Stress was equated with force, pressure or strain exerted upon a material objects or person which resists these forces and attempts to maintain its original state.

Causes of Stress

Almost any change, event or Situation in the environment can lead to Stress, as long as it is perceived as a demand. A Situation is perceived as a demand if the person feels that they don't possess the adequate resources to handle it. Those demands, which cause disequilibrium between body and mind, are known as Stressors. For example an exam can be Stress provoking for a person who has not prepared or thinks that he is not prepared, while it will not be Stressful for a person who has studied and feels well prepared. If a person has spent a great amount of time studying but he doesn't feel prepared, then he will still experience Stress.

Stress Reduction Model

There is different types of Coping Strategies. Stress Reduction Model is also a strategy to be used for managing Stress. It was proposed by Joyce and Weil (1980). As per Joyce and Weil (1980), the Stress Reduction Model gives a complete Relaxation and harmony by maintaining equilibrium among Cognitive, Affective and Psychomotor domains. It reduces Anxiety and increases individual's feeling of control and power, which in turn increases Self-Esteem. The students are taught to use this model independently. It increases self-awareness. The use of Stress Reduction Model can give rise to two effects, namely, Instructional Effects and Nurturent Effects. The Instructional Effects are the direct effects of the Stress Reduction Model, while the Nurturent Effects are the indirect effects or byproducts of Stress Reduction Model.

Review of the Literature

The different Relaxation Therapies have been studied by various investigators, like, Paul and Shannon (1966), Lazarus and Serber (1968), Taylor (1971), Gary & Guthrie (1972), Lazar et al. (1972), Ballou (1973), Palsane and Kohen (1973), Carter and Synolds (1974), Shafi et al. (1974), Hopkins and Hopkins (1976), Diskin (1977), Hopkins and Hopkins (1977), Abrams and Siegel (1978), Ferguson (1978), Seiler and Renshow (1978), Hopkins and Hopkins (1979), Carter and Russell (1980). Paul and Shannon (1966) conducted a study with college students suffering from interpersonal Anxiety and Taylor (1971) aimed at reducing Test Anxiety found that Desensitization was effective.

Lazarus and Serber (1968) presented two case histories in which Desensitization was effective. One case involved a male who would either



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withdraw or become violent in the face of criticism of his wife. Assertive Training proved to be effective. The second case involved a depressed female who improved following Assertive Training (as well as instructions to seek employment).

Gary & Guthrie (1972) found that self-esteem improved along with fitness in a 4 week jogging programme.

Lazar et al. (1972) studied the effect of Transcendental Meditation Programme on Anxiety and found that Anxiety was decreased.

Ballou (1973) studied the effect of Transcendental Meditation in a programme at Still Mater Prison Graduate Department of Social Anthropology and found that the Transcendental Meditation Programme decreased Anxiety.

Palsane and Kohen (1973) found that a short term Yogic Training Programme of three weeks on 30 school students using both Asana and Pranayama was effective as shown by Psychological tests. Memory was found to increase significantly.

Carter and Synolds (1974) used a series of Progressive Relaxation tapes to decrease Muscle Tension and Pressure with a group of minimally brain injured children. The program was effective in decreasing Muscular Tension and Pressure while writing and enhancing the quality of handwriting in their students as well as an increase in speed. There was a transfer effect to non-experimental situations and changes were stable as time passed.

Shafi et al. (1974) studied the effect of Transcendental Meditation on marijuana users. It was found that only 15 per cent of non-meditating marijuana users had decreased or stopped the drug intake while half to three quarters of the meditation, depending on the length of their meditation, had decreased or stopped the drug intake during the first three months after the initiation to meditation. Thus longer the period of practice of Meditation, the more likely was the decrease or stopping of marijuana use.

Hopkins and Hopkins (1976) found that a yoga program could benefit children, especially those with psychomotor deficits. They reported that yoga postures promoted body awareness, balance, and laterality. In addition, yoga could produce a calming effect, which helps children to get into a frame of mind conducive to learning. Further children often commented on feelings of well-being after taking part in yoga sessions; they became more aware of their bodies and bodily tensions which the yoga exercises helped to release.

Diskin (1977); Hopkins and Hopkins (1977); and Seiler and Renshow (1978) reported that Yoga as a Relaxation technique was found to reduce and relieve Stress and Tension, dissipate excess energy, relieve tiredness and lethargy, lengthen attention span, improve and maintain general physical health, develop sharper concentration and greater mental clarity and cultivate better interpersonal relationship.

Abrams and Siegel (1978) the effect of Transcendental Meditation Programme on Anxiety and found that Anxiety reduced significantly.

Ferguson (1978) presented a Self-report evaluation of the effect of the Transcendental Meditation Programme at Massachusetts Correctional Institution, Walpole. Transcendental Meditation Programme was found to reduce Stress and Tension.

Hopkins and Hopkins (1979) studied the effect of Yoga on Concentration of children. Participants were 34 children ranging age from six to eleven years of age. The students were not in a regular public school rather, they were from impact centers for children with severe disabilities. The results indicated that both the Yoga and Psychomotor Activities significantly improved concentration of the students, but there was no significant difference between Yoga and Psychomotor interventions.

Carter and Russell (1980) reported that Biofeedback Relaxation Training resulted in more efficient ability to cope in school; improvement in self-control, in finishing seat work, and in attention span, as well as in the academic subjects of reading, spelling, and arithmetic.

Rationale

From the above mentioned researches it can be observed that most of the studies have been conducted abroad and a very few researches in this area have been conducted in India. From available therapies, Moving Focus Relaxation (which include, Progressive Muscle Relaxation and Deep Muscle Relaxation) has not been experimented very much in India. Also, various Relaxation therapies were tried out at different levels. The dependent variables considered by different researchers were Stress, Anxiety, Tension, Cancer, Blood Pressure, Frustration, etc. It is evident that there are still large numbers of variables, which need to be studied in the context of Relaxation therapies. Further, the studies are so diverse in respect of Sample, Design, Treatment, Analysis and areas that no generalization can be made.

In Indian context, Sharma (2004) studied the effect of Stress Reduction Model on Stress and found that it significantly reduced Stress amongst students. This study is not enough to generalize. There is a need to undertake researches using different Relaxation Therapies. Moreover, most of the studies on Stress have focused on clinical sample or patients. The findings so obtained may or may not be applicable to general population. So, it was thought to take up Stress Reduction Model as a treatment.

Keep in view the paucity of researches related to Stress Reduction Model the present study was planned to find out the potentiality of Stress Reduction Model for managing Examination Stress, Anxiety, Self-confidence and Tension of secondary students.

Statement of Problem

The Problem was worded as given below:

Comparison of Stress Reduction Model and Traditional Method on the basis of Examination Stress, Anxiety of High School students

Objectives of the Study

The following were the objectives of the study.

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1. To compare adjusted mean scores of Examination Stress of Stress Reduction Model and Traditional Method Groups by considering Pre- Examination Stress as covariate.
2. To compare adjusted mean scores of Anxiety of Stress Reduction Model and Traditional Method Groups by considering Pre-Anxiety as covariate.

Hypothesis

The following were the hypotheses:

1. There is no significant difference between adjusted mean scores of Examination Stress of Stress Reduction Model and Traditional Method Groups by considering Pre-Examination Stress as covariate.
2. There is no significant difference between adjusted mean scores of Anxiety of Stress Reduction Model and Traditional Method Groups by considering Pre-Anxiety as covariate.

Delimitations

While conducting the study some of the specific restrictions with respect to sample, duration, variables etc. were made. Thus, the delimitations were:

1. The Study Was Confined To Class X Students.
2. The Treatment Continued For Three Months Before The Board Examination At The Rate Of 35 Min Per Day.

Methodology

Sample

The schools from Sultanpur District of Uttar Pradesh having secondary classes were selected through the use of Stratified Random Sampling Technique. The stratification was done on the basis of Gender, Residential Background, Examination Board, and Management of Institute. Thus four schools were selected. Further, from each Board one school was Private and other was Government funded. From the selected schools, class X students were taken up for this study. Thus, the sample consisted of 277 students of class X. Out of 277, 182 were Males and 95 Females. Thus the Gender was represented in the sample. Further 145 students were studying in schools affiliated to CBSE Board and remaining 132 students from Institutes affiliated with UP Board, Allahabad. In that there were 139 students in Experimental Group and 138 in Control Group. Students belonged to Rural as well as Urban area. Thus, Residential background was represented in the sample. Out of 277 students, 122 students were from Private funded Management and rest 155 from schools funded by Government. The medium of Instruction in class X was English and Hindi mixed in Institutes affiliated to UP & CBSE Board. All selected schools had infrastructure more or less to the some degree.

Experimental Design

The present study was Experimental in nature. The Non-equivalent Control Group Design was followed. According to Campbell and Stenly (1963), the lay out of Non – equivalent Control Group Design is as follows:

There were two groups. One Group was designated as Experimental Group and the other as Control Group. The students in both the groups were as existed in the field. Both the groups were pre-tested by administering Examination Stress Scale developed and standardized by researcher and Shinha's Comprehensive Anxiety Test.

Tools

Followings tools were used-

Examination Stress

For assessing Examination Stress, there is no tool available. So Examination Stress Scale was developed and standardized by researcher.

Anxiety

By keeping in mind the reliability, the age and the availability of the tool, Sinha Comprehensive Anxiety Scale was selected.

Procedure of Data Collection

The present study was Experimental in nature. There were two groups. One was designated as Experimental Group and the other as control Group. The data were collected from both the groups in respect of Examination Stress, Anxiety.

Data Analysis

The objective wise data analysis is as follows:

1. In order to compare adjusted mean scores of Examination Stress of Stress Reduction Model and Traditional Method Groups by considering Pre- Examination Stress as covariate, the data were analyzed with the help of ANCOVA.
2. In order to compare adjusted mean scores of Anxiety of Stress Reduction Model and Traditional Method Groups by considering Pre-Anxiety as covariate, the data were analyzed with the help of ANCOVA.

Results and Interpretation

Comparison of Adjusted Mean Scores of Examination Stress of Stress Reduction Model and Traditional Method Groups By taking Pre-Examination Stress Ascovariate

The first objective was to compare adjusted mean scores of Examination Stress of Stress Reduction Model and Traditional Method Groups by considering Pre- Examination Stress as covariate. Examination Stress was assessed both before and after the Treatment of student belonging to Stress Reduction Model and Traditional Method Groups. The data were analyzed with the help of ANCOVA and result is given in Table1

Table 1: Summary of One Way ANCOVA of Examination Stress by considering Pre-Examination Stress as covariate

Source of Variance	Df	SSy.x	MSSy.x	Fy.x
Treatment	1	54201.23	54201.23	548.46**
Error	274	27077.68	98.82	
Total	276			

** Significant at .01 level

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From Table 1 it is evident that the adjusted F-value is 548.46 which is significant at .01 level with $df = 1/274$. It indicates that the adjusted mean scores of Examination Stress of Stress Reduction Model (SRM) Group differs significantly from Traditional Method group when Pre-Examination Stress was taken as covariate. In this context the null hypothesis that there is no significant difference between adjusted mean scores of Examination Stress of Stress Reduction Model and Traditional Method Groups by considering Pre-Examination Stress as covariate is rejected. Future the adjusted mean scores of Examination Stress of Stress Reduction Model is 113.40 which is significantly lower than the Traditional Method whose adjusted mean score of Examination Stress is 141.50. It may, therefore, be said that Stress Reduction Model was found to be significantly superior to Traditional Method in decreasing Examination Stress of students when Pre-Examination Stress was taken as covariate.

Comparison of Adjusted Mean Scores of anxiety of Stress Reduction Model and Traditional Method Groups by Taking Pre-Anxiety As Covariate

To compare adjusted mean scores of Anxiety of Stress Reduction Model and Traditional Method Groups by considering Pre-Anxiety as covariate. Anxiety was assessed both before and after the treatment of students belonging to Stress Reduction Model and Traditional Method Groups. The data were analyzed with the help of One Way ANCOVA and the results are given in Table 2.

Table 2 : Summary of One Way ANCOVA of Anxiety by Considering Pre- Anxiety as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x
Treatment	1	27419.15	27419.15	505.13 **
Error	27	14873.07	54.28	
Total	27			

** Significant at .01 level

From Table 2 it is evident that the adjusted F-value is 505.13 which is significant at 0.01 level with $df = 1/274$. It indicates that the adjusted mean scores of Anxiety of Stress Reduction Model Group differ significantly from Traditional Method Group when Pre-Anxiety was taken as covariate. In this context, the null hypothesis that there is no significant difference between adjusted mean scores of Anxiety of Stress Reduction Model and Traditional Method Groups by considering Pre-Anxiety as covariate is rejected. Further the adjusted mean score of Anxiety of Stress Reduction Model Group is 30.59 which is significantly lower than the Traditional Method Group whose adjusted mean scores of Anxiety is 50.49. It may,

therefore, be said that Stress Reduction Model was found to be significantly superior to Traditional Method in reducing Anxiety of students when Pre-Anxiety was taken as covariate.

Findings and Conclusion

The following were the findings of this study.

1. Stress Reduction Model was found to be significantly superior to Traditional Method in decreasing Examination Stress.
2. Stress Reduction Model was found to be significantly superior to Traditional Method in decreasing Anxiety.

Finally it is concluded that Stress reduction model is found superior on traditional method approaches of teaching.

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