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Comparison of Stress Reduction Model and Traditional Method on the Basis of Tension and Self-Confidence of High School Students

Abstract
The present study pertained to find the Strategy to manage tension and self confidence. There are different Strategies available to manage tension and self confidence. 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 Reduction Model, Tension, Selfconfidence

Introduction

Lazarus (1978) said that Coping consists of intra-psychic and action oriented efforts by which to be managed Environmental and internal demands and conflicts. According to Wade and Tavris (1990), the Cognitive and Behavioural efforts are must to manage environmental demands of oneself that one feels to be Stressful.

George Valliant (1993) said that people with poor Mental Health become subjected to chronic illness and death as compared to men with better Mental Health. His study concluded that early ageing defined as Irresistible Physical decline is retarded by good Mental Health and accelerated by poor Mental Health. Chopra (1993) said that late middle age is the perilous often called, "the danger zone" that premature Heart attacks, Hyper Tensions, Cancer first show up in great numbers. Above studies concluded the people with good Mental Health teach their bodies to age well while those that are depressed, in-secured and unhappy teach them to age poorly. It one wants to ward off from the early ageing process and attain happy and long life, one needs ways of Coping with tension. The greatest threat to life is having nothing to live for, so when one has ambitions to realize and commitment to complete life becomes meaningful and worth live in.

If one does not learn to Cope with tension and lose their self confidence, it will lead to fatal consequences, such as, Hyper Tensions, neurosis, Depression, ulceration, impotence, Diabetes etc. Tension can lead to other Problems. Under Stress people generally lose their Ability to think objectively, about a solution in such a Situation they would feel puzzled and this would make doubt their own competence, so that they will find it difficult to concentrate. Not being able to think straight and being easily distracted.Feelings of tension, which remain unrelieved usually result in one or other of the long term conditions, namely, Anxiety, Aggression or Depression.

Stress Reduction Model

The Stress Reduction Model consists of five phases: setting the stage, warm up and transition, moving focus Relaxation, wind up, and debriefing and transfer. In phase I, the instructor helps people become physically comfortable. If possible their eyes should be closed along with they should loosen down their ties, belts etc. and take out their spects to enhance Relaxation. Phase II is a very short period of transition before the actual Relaxation exercises begin. Here the instructor orients the students in a general way to what they will be doing during the Relaxation therapy. Along with this the instructor establishes the atmosphere of Relaxation through the use of slow, relaxed, and soft tone of voice.

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The actual Relaxation exercise, called the moving focus Relaxation, beings in phase III. Individuals are instructed to focus on and then relax the group of muscles moving from the feet to the forehead/face

Rationale

Fear, worry and Tension are the natural fall-outs of Stress in students. Hence, researchers, like, Paul and Shennon (1966), Taylor (1971), Lazarus and Serber (1968), Jacobson (1938), Tsai (1933), Jainowak (1993) and Tate (1994) were advocating their theories for and against "Desensitization" as a possible answer to counter Stress and tension amongst students. Among the behavioral Techniques that have been used to help people control their Physiological Responses to Stressful Situations are Biofeedback, Relaxation Training, Meditation and Aerobic exercise, yoga, Imagery etc (Eysenck, et al., 1975).

Various researches show that different Relaxation Techniques are effective in reducing Stress, Anxiety, Hyperactivity and Inattentiveness and enhance Self-esteem, Self-awareness and Self-actualization. Jacobsons (1938), Tsai (1993), Janowiak (1993) and Tate (1994) found lower levels of Stress when treated through progressive muscle Relaxation, Relaxation Techniques, Meditation Practice and Mindfulness Meditation respectively.

Beck et al. (1976, 1988, 1991), Pruill (1992), Zasa (1993), Rankin (1993), Valentine (1993), Cohen (1994) and Mullins (1995) found lower levels of Anxiety when treated through Cognitive Therapy, Progressive Relaxation, Anxiety Control, Relaxation Treatment and Relaxation Strategies respectively. Papanikalaou (1993) and folk (1994) reported lower level of hyper activity and increased positive attention traits when treated through Relaxation Strategies and Stress Management program respectively.

Paul and Shannon (1966) and Taylor (1971) reported that Desensitization was ineffective.

Relaxation exercises, such as, Music (Fagen, 1982; Gross and Swart, 1982; Colwell, 1994; Adaman and Blancy, 1995; Byrnes, 1996; Iakovides et al., 2004; Voss et al., 2005; Kim & Koh, 2005; Knight and Rickard, 2001); Relaxation Treatment (Cohan, 1994; Wendy, 1996); Biofeedback (Carter and Russell, 1980; Hughes and Davis, 1980; Omizo, Loffredo & Hammett, 1982); Yoga (Diskin, 1977; Hopkins and Hopkins, 1976; Seiler and Renshow, 1978); Guided Imagery (Hammer, 1996); and Massage Therapy (Field, et al., 1997; Kim et al., 2001) were used as Treatment. These studies advocated for the effectiveness of Relaxation Therapies in reducing Phobia, Anxiety (Test Anxiety, Social Anxiety, State and Trait Anxiety), Insecurity, Fear, Stuttering, Stress, Tension, Blood Pressure, Depression, Mood, Nausea, Pain, Arthritis etc. and enhancing Positive Psychological resources.

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.

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 Self-confidence and Tension.

Statement of Problem

The Problem was worded as given below:

Comparison of Stress Reduction Model and Traditional Method on the basis of Tension and Self-confidence of High School students

Objective of the Study

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

Hypothesis

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

There is no significant difference between adjusted mean scores of Self-Confidence of Stress Reduction Model and Traditional Method Groups by considering Pre-Self-Confidence 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 rateof 35 min per day.

Review of Related Literature

The effectiveness of different Relaxation Therapies have been studied by various investigators, likeFagen (1982), Gross and Swartz. (1982), Omizo, Loffredo & Hammett (1982), Marino (1983), Setterlind (1983), Delmonte (1987), Edmund Jacobson (1938, 1987), Jocelyne (1987), Vicente Pedro (1987), D' Zurilla (1990), Preedy & Peters (1990, Elliot (1994), Mullins (1994), Adatnan and Blaney (1995), Cloner et al. (1995), Sloman (1995), Byrnes (1996), Hammer (1996)

Fagen (1982) applied Music Therapy in the Treatment of Anxiety and Fear in Terminal Pediatric Patients. The population examined here was the latency age child and early adolescent at the end stage of life-from time of diagnosis of terminal illness

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to death. Music Therapy was found to be an effective tool in uncovering and working through Fears and Anxieties related to death and mourning.

Gross and Swartz (1982) studied the effect of Music Therapy on Anxiety in chronically Ill Patients. The result showed that listening to happy, stimulating music elicited higher level of Anxiety than sad, sedate music and was less likely to reduce state Anxiety. Further exciting music produced more Aggression as well as higher level of Anxiety than calm and no music situations.

Omizo, Loffredo & Hammett (1982) reported Biofeedback was found to be effective in improving the Social and Academic Adjustment of learning-disabled children.

Marino (1983) studied the effect of Biofeedback Thermal Training and Relaxation Training on Reading Vocabulary and Comprehension, Locus of Control Orientation, State and Trait Anxiety, EMG readings, and fingertip temperatures of behavior disordered students. A group of 56 behavior disordered 10th, 11th, and 12th grades students from three private day-school summer programs were administered pretests and post-tests utilizing the Gates-MacGinitie Reading Vocabulary and Comprehension Tests, Rotter I-E Scale, Self-Evaluation Questionnaire-Forms X-I and X-2, Cyborg EMG J33 unit, and 3 I/2-inch mercury-type Biofeedback thermometer. The data were analysed with the help of t-test, Product Moment Correlation and Analysis of Variance. Results indicated that Reading Comprehension, Locus of Control Orientation, EMG readings, and fingertip temperatures were related to Biofeedback Thermal Training and Relaxation Training.

Setterlind (1983) found that regular practice of Meditation bring a positive change in well being of subjects.

Delmonte (1987) suggested that Meditation helped in improving Psychological well being.

Jocelyne (1987) conducted a study entitled "Behaviour Therapies for Social Phobia". It was found that Cognitive Behaviour Therapy effectively reduced Social Anxiety.

Vicente Pedro (1987) studied the effect of Yoga and found significant reduction in State and Trait Anxiety of the subjects due to regular practice of Yoga.

D' Zurilla (1990) investigated into the effect of Problem Solving Training for effective Stress Management and Prevention. It was found that (1) Social Problem Solving (i.e. real life problem solving) appeared to be an important general Coping Strategy that can have a significant effect on person's ability to reduce, control and prevent the experience of Stress in everyday living. (2) Problem Solving Training was a viable and promising approach to Stress Management which increased positive psychological resources (Problem Solving Ability, Self-Esteem, Life-Satisfaction) while reducing Stress and its negative effects.

Preedy & Peters (1990) reported significant reductions in Trait Anxiety and Depression during exercise. They also found that people with alcohol misuse problems who undertook aerobic exercise were better able to cope with Life-Stresses after discharge from the alcohol treatment programme. It was also reported that participation in exercise appeared to help reduce levels of alcohol consumption.

Mullins (1994) conducted a research to determine if Relaxation training strategies incorporated into a Stress management curriculum would reduce Anxiety levels and enhance Self-Esteem among college students. Some of the findings of the investigation were statistically significant, and verbal feedback from the students exposed to the Relaxation training was encouraging. Students who utilized Autogenic as a Stress Reduction Technique experienced significantly lower levels of Anxiety and enhanced Self-Esteem. Post-testing scores revealed the significant changes.

Adaman and Blaney (1995) studied the effect of Musical Mood Induction on Creativity. The researchers in this study used Musical Mood Induction to induce either elated, depressed, or neutral moods in undergraduate college students. Using three twenty-minute musical induction tapes that had been developed and approved by Pignatiello, et al. induced the mood. The tapes related to elated, depressed, and neutral conditions. Familiarity with the music played, the ability to concentrate during the mood induction, the years of musical training, and the enjoyments of the music presented were all assessed in relation to changes in mood scores. The elated subjects had a significantly higher score than depressed subjects on mood ratings and elated and depressed groups were significantly more Creative than the Neutral group.

Edmund Jacobson (1938, 1987), Carroll & Seers (2001) and Sloman (1995) found that Progressive Musical Relaxation (PMR), a Relaxation technique, was especially effective in Pain and Stress Management.

Cloner et al. (1995) experimented with Complementary Cancer Therapy and found that Complementary Cancer Therapy appeared to have a positive effect on Psychological Distress and Anxiety.

Byrnes (1996) studied the effect of Audio, Video, and Paired Audio-Video stimuli on the Experience of Stress. In this study the researcher assessed subjects' on-going experienced level of Stress as they received Audio, Video or combined Audio-Video stimuli. For all of the conditions the level of Stress and Anxiety was pretty low and the stimuli usually decreased Stress.The most significant change from before and after Stress levels was when they received the combined Audio-Video condition.

Hammer (1996) studied the effect of Guided Imagery through Music on State and Trait Anxiety. The finding was that there may be some benefit in using Guided Imagery through Music for people who had chronic Anxiety and Stress.

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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. 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 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 layout of Non – equivalent Control Group Design is as follows

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$$0 \qquad 0$$

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 Tension scale, and Self-confidence Inventory. The Experimental Group was treated through Stress Reduction Model.

Tools

In this study variables related to which data collected were Tension, Self-confidence .The tools used in respect of each one of them are following.

Tension

The Comprehensive scale of Tension Developed by Dr. Rajeevlochan Bhardwaj was selected for the present study by keeping in mind the age, reliability, the language and the availability of Tool .The tool consist of 32 item with five point scale, the minimum score of this tool in 32 and highest is 160 .

Self-Confidence

The present study was conducted on standard X students whose age ranged from 13-16 years. From the available tools, Verbal Measure of Self-Confidence developed by Bhawalkar (1992) 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 Tension and Self-confidence.

Data Analysis

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

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

Results and Interpretation
Comparison of Adjusted Mean Scores of Tension of Stress Reduction Model and Traditional Method Groups by Taking Pre-Tension As Covariate

The third Objective was to compare adjusted mean scores of Tension of Stress Reduction Model and Traditional Method Groups by considering Pre-Tension as covariate. Tension was assessed both before and after the Treatment of student belonging of Stress Reduction Model and Traditional Method Group. The data were analyzed with the help of One Way ANCOVA and the results are given in Table 1.

Table 1
Summary of one Way ANCOVA of Tension by considering Pre Tension as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x
Treatment	1	35775.06	35775.06	439.99 **
Error	274	22278.52	81.31	
Total	276			

** Significant at .01 level

From Table1 it is evident that the adjusted F-value is 439.99 which is significant at 0.01 level with df 1/274. It indicates that the adjusted mean score of Tension of Stress Reduction Model Group differs significantly from Tradition Method Group when Pre-Tension was taken as covariate. In this context the null hypothesis that there is no significant difference between adjusted mean scores of Tension of Stress Reduction Model and Traditional Method Groups by considering Pre-Tension as covariate is rejected. Further the adjusted mean score of Tension of Stress Reduction Model Group is 100.00 which is significantly lower than the Traditional Method Group whose adjusted mean scores of Tension in 123.60. It may, therefore, be said that Stress Reduction Model was found to be significantly superior to Traditional Method Group in reducing Tension of student when Pre-Tension was taken as covariate

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

The fourth Objective was to compare adjusted mean scores of Self-Confidence of Stress Reduction Model and Traditional Method Groups by considering Pre- Self-Confidence as covariate. Self–Confidence was assessed 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 ANVOVA and the results are given in Table 2.

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Table 2

Summary of One Way ANCOVA for Self-Confidence by considering Pre- Self-Confidence as covariate

Sources of Variance	df	SSy.x	MSSy.x	Fy.x
Treatment	1	33735.45	33735.45	1206.13 **
Error	274	7663.78	27.97	
Total	276			

** Significant at .01 level

From Table 2 it is evident that the adjusted F-value is 1206.13 which is significant at 0.01 level with df = 1/274. It indicates that the adjusted mean score of Self-Confidence of Stress Reduction Model Group differs significantly from Traditional Method Group when Pre-Self-Confidence was taken as covariate. In this context the null hypothesis that there is no significant difference in adjusted mean scores of Self-Confidence of Stress Reduction Model Group and Traditional Method Group by taking Pre-Self-Confidence as covariate is rejected. Further the adjusted Mean Score of Self-Confidence of Stress Reduction Model Group is 50.68 which is significantly higher than the Traditional Method Group whose adjusted mean score of Self-Confidence is 28.60. It may, therefore, be said that Stress Reduction Model was found to be significantly superior to Traditional Method in improving the Self-Confidence of students when Pre-Self-Confidence 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 Tension when by considering Pre-Tension as covariate.
2. Stress Reduction Model was found to be significantly superior to Traditional Method in improving Self-Confidence of students when by considering Pre- Self-Confidence as covariate Finally it is concluded that Stress Reduction Model is very useful to reducing tension of secondary students and it is also beneficial for improving self confidence.

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