



Full Length Research Article

**A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED
DEMONSTRATION OF RELAXATION TECHNIQUES ON PRE EXAMINATION STRESS AMONG
ADOLESCENTS IN SELECTED SCHOOLS, JALANDHAR, PUNJAB**

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ABSTRACT

A Quasi Experimental study was conducted to assess the effectiveness of structured demonstration of relaxation techniques on pre examination stress among adolescents in selected schools, Jalandhar, Punjab. The aim of the study was to find the effectiveness of structured demonstration of relaxation techniques on stress among adolescents. Results depicted that in pre-demonstration, most of the adolescents (67.71%) had moderate stress level (8-15 score). Mean pre demonstration stress score among adolescents was 12.58. So adolescents have stress as lesser the mean score, greater is the stress. Most of the adolescents (72.92%) had mild stress after receiving structured demonstration on relaxation techniques. Mean post demonstration stress score among adolescents was 16.55. So adolescents have less stress as their mean score is more. Pre demonstration mean stress score was 12.58 and post demonstration score was 16.55. The difference between the pre demonstration stress score was statistically highly significant at $p < 0.001$ level. There was decrease in stress after structured demonstration of relaxation technique among adolescents. After structured demonstration on relaxation techniques, majority of the adolescents (17.92%) had mild stress level (16-22). The difference between pre demonstration and post demonstration was statistically significant at $p < 0.01$ level.

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INTRODUCTION

Background of the study

Stress is not necessarily something bad; it all depends on how you take it (Hans Selye)

Generally, most people use the word stress to refer to negative experiences that leave us overwhelmed. Thinking about stress exclusively as something negative gives us a false impression of its true nature, however. Stress is a reaction to a changing, demanding environment. Properly considered, stress is really more about our capacity to handle change than it is about whether that change makes us feel good or bad. Change happens all the time and stress is in large part what we feel when we are reacting to it. We can define stress by saying that it involves the "set of emotional, physical, and cognitive (i.e., thought) reactions to a change." Thinking about stress as a reaction to change suggests that it is not necessarily bad, and

sometimes, could even be a good thing. Some life changes such as getting a new job, moving in with a new romantic partner, or studying to master a new skill are generally considered positive and life enhancing events, even though they can also be quite stressful. Other life changes such as losing a job or an important relationship are more negative, and also stressful. (Harry Mills, Natalie Reiss, Mark Dombeck, 2008) Every person experiences forms of stress throughout life. Stress can provide the stimulus for change and growth and in this respect some stress is positive and even necessary. However too much stress can result in poor judgment, physical illness and inability to cope. A number of studies have proposed the relationship between stressful life events and a wide variety of physical and psychiatric disorders. Stress is a phenomenon affecting all dimensions within a person's life. (Yatkin and Labbar, 1992)

Need of the study

The effect of stress management group therapy on a broad range of psychiatric symptoms was evaluated on an adolescent psychiatric unit. Adolescents' boys and girls from ages 11 to

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18 were placed in either an experimental group or a control group. The experimental group received three sessions of stress management group therapy in addition to the usual treatment on the unit, while the control group received only the usual treatment on the unit. Both groups were evaluated with the Brief Psychiatric Rating Scale (BPRS) before and after the stress management groups. Although both the experimental and the control groups improved their BPRS scores over the time of treatment, the experimental group showed a significantly greater improvement than the control group. The results indicate the stress management group therapy may be effective in reducing a broad range of psychiatric symptoms. (Karl Kessler, Robert Edelman, 2000) Every other day in the newspapers, suicide cases are reported which are more common among adolescents. The main reasons are study failures, scoring less mark than expected and so on. So the main reason is that adolescents are more prone to stress and are less aware of stress management techniques which ultimately force them to take their lives. So, keeping this in mind the investigators decided to analyze the stress among adolescents before exams, so that they may be educated regarding relaxation techniques to manage their stress.

Objectives of the study

1. To assess the pre demonstration stress among adolescents.
2. To assess the post demonstration stress among adolescents.
3. To compare the pre demonstration and post demonstration stress among adolescents.
4. To analyze the relationship of pre demonstration and post demonstration stress among adolescents with selected socio demographic variables.
5. To prepare structured demonstration of relaxation techniques to reduce the stress among adolescents.

Delimitations

1. The study is limited to adolescents in age group of 13 to 16 years.
2. The study is confined to New St. Soldier Senior Secondary School, Jalandhar, Punjab.
3. The study is limited to the students of 8th and 9th class only.
4. The population of the study is 500 students and the study is limited to 100 students that are included as the sample.
5. Study is limited to the adolescents who are willing to participate on the study.

Review Of Literature

The review of literature is defined as a broad, comprehensive, in-depth, systematic and critical review of scholarly publications, unpublished scholarly print material, audio-visual materials and personal communications. The review of literature is divided into following headings –

1. Studies related to assessment of stress
2. Studies related to effects of stress
3. Studies related to techniques to manage stress
4. Studies related to effectiveness of coping strategies

Studies related to assessment of stress

Vivien S. Huan, Yeo Lay See, Rebecca P. Ang, Chong Wan Har (1995), conducted the study to examine the contributing

role of the different aspects of adolescent concerns on the academic stress of youths in Singapore. Data was obtained using two self-report measures: the Adolescent Concerns Measure and the Academic Expectations Stress Inventory. The study examined four different aspects of adolescent concerns namely: family, personal, peer and school concerns. Gender differences were also explored in terms of these predictions as well as the academic stress experienced by the adolescents. Results obtained showed that only the scores on the Personal Concerns subscale were positively associated with the academic stress arising from self and other expectations, in both adolescent boys and girls. For the girls, school-related concerns were also predictive of academic stress arising from other expectations. They also obtained significantly higher scores on the Academic Expectations Stress Inventory than boys did. Possible explanations for the obtained results were suggested and implications of the findings were also discussed.

Binu, Saniya, Sherimol (2007), conducted study to analyze perceived stress and coping behaviour among B.Sc (Nursing) students. A non-experimental, descriptive study in selected colleges of Mangalore was conducted. Population included 40 B.Sc (Nursing) students selected by simple random sampling. The study concurs the findings of the other studies with regards to the predominance of female adolescent with more representation of urban community, majority of sample from Christian community, below half percentage of the sample got annual income less than Rs 25000, high percentage of sample lived in nuclear family, 55% of the sample experienced severe stress. Educational, Psychological, Sex related problems were considered as sources for severe stress among B.Sc (Nursing) students. A very less percentage of samples were used healthy coping behaviour. There is an association between perceived stress and selected variables. The study reveals the association between coping behaviour and selected variables, significant values at p 0.02 levels.

Description of tool

The tool consisted of

Section 1- Socio Demographic Variables .It contains 8 items to obtain personal and general information on aspects like age of adolescents, gender, education religion, type of family, family income, death of family in past one year, order among siblings.

Section 2 –Self Structured Checklist to measure the stress before examination among adolescents. It contained 22 items to assess stress score among adolescents in which 11 items were positive(3,4,6,9,13,14,15,16,17,18,22) and 11 items were negative(1,2,5,7,8,10,11,12,19,20,21).The responses of each item was in the form of yes or no .each yes will be given 1 point and each no will be given 0 point for positive items and the scoring will be reversed for negative items i.e. 0 point for yes and 1 point for no. .Maximum score was 22 and minimum score was 0.16-22 score shows mild stress level,8-15score shows moderate stress level and 0-7 shows severe stress level. So greater the score less is the stress.

Section 3-this part consisted of self structured demonstration providing information regarding relaxation techniques to manage stress which include deep breathing exercises, Jacobson muscle relaxation techniques and guided imagery.

Content validity

Content validity of the tool was confirmed by expert's opinion regarding the relevance of items. The tool was circulated among 8 experts from the field of psychiatric mental health nursing, pediatric nursing, medical-surgical nursing, obstetrical nursing, community health nursing. According to their valuable suggestion, modification in the wording of some items was made.

Pilot study

Pilot study was conducted in month of February, 2010 to ensure the reliability of the tool and feasibility of the study. Permission of the study was taken from the Principal of Dayanand Model Senior Secondary School, Jalandhar, Punjab. The sample consisted of 10 adolescents of 13 -16 years age group. Pre test of the subjects was taken and then structured demonstration on relaxation techniques for stress management was delivered. The time spent on teaching was 45 min. After 3 days, post test was taken to assess the effectiveness of structured demonstration on relaxation techniques on stress. Reliability of checklist was computed by split half method and was calculated by Karl Pearson Coefficient of Correlation and Spearman Brown Prophecy formula. The reliability of tool was 0.93. Hence tool was reliable.

Data collection procedure

Written permission was obtained from Principal of New St. Soldier Senior Secondary School, Jalandhar to collect data from 100 adolescents studying in 8th and 9th standard. The purpose and objectives were discussed with Principal and verbal consent was taken from the subjects. Data collection was started from the month of March and 3 days were spent to collect the data. The pretest was taken before the administration of structured demonstration on relaxation techniques to manage stress. Total time given for pretest was 20 min. and then structured demonstration was delivered. The time spent on teaching was 45 min. The post test was taken after 3 days. The time given for post test was 20 min. etc.

Ethical consideration

1. Written permission was taken from the Principal of New St. Soldier Senior Secondary School, Jalandhar, Punjab.
2. Verbal Consent was taken from students to be the sample for the study.
3. The purpose of study was explained to subjects and they were assured that their responses will be kept confidential.

Plan of data analysis

Analysis and interpretation of data was done by using descriptive and inferential statistics such as percentage, mean, mean percentage, standard deviation, t-test, ANOVA, chi square.

Major Findings

According to Section I

Socio Demographic Variables

Majority of respondents are of age group 14-15(54.17%). Most of them were males (52.08%) and studying in 8th

standard (58.33%). Majority of them were Hindu (75%) and most of them belongs to nuclear family (61.46%), majority of their family income as Rs 10,000 (44.79%) and most of them have birth order 1 (44.8%) and 77.08% were having no death in the family in past one year

According to Section II

According to objective 1

To assess the pre demonstration stress among adolescents.

In pre demonstration, most of the adolescents (67.71%) had moderate stress level (8-15 score). Mean pre demonstration stress score among adolescents was 12.58. So adolescents have stress as lesser the mean score, greater is the stress.

According to objective 2

To assess the post demonstration stress among adolescents.

Most of the adolescents (72.92%) had mild stress after receiving structured demonstration on relaxation techniques. Mean post demonstration stress score among adolescents was 16.55. So, adolescents have less stress as their mean score is more.

According to objective 3

To compare the pre demonstration and post demonstration stress among adolescents.

Pre demonstration mean stress score was 12.58 and post demonstration score was 16.55. The difference between the pre demonstration stress score was statistically highly significant at $p < 0.001$ level. There was decrease in stress after structured demonstration of relaxation technique among adolescents. After structured demonstration on relaxation techniques majority of the adolescents (17.92%) had mild stress level (16-22). The difference between pre demonstration and post demonstration was statistically significant at $p < 0.01$ level.

According to objective 4

To analyze the relationship of pre demonstration and post demonstration stress among adolescents with selected socio demographic variables.

According to Age, Gender, Religion, Type of Family, Family Income, Order Among Siblings, Death in family in past one year, stress is not affected by these demographic variables as these variables are statistically non significant at $p < 0.05$ level before and after structured demonstration on relaxation techniques. But Stress level is effected by the education as education increases the stress level decreases as it is statistically significant at $p < 0.001$ level.

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