



A QUASI- EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF PRNAYAMA ON LEVEL OF STRESS AMONG FIRST YEAR HOSTELER STUDENTS AT SGT UNIVERSITY, GURUGRAM, HARYANA.

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ABSTRACT Stress is a significant individual and public health problem that is associated with numerous physical and mental health concerns. It is estimated that 75% to 90% primary care physician visits are caused by stress-related illnesses. Stress becomes challenge in academic life due to internal or external expectations placed upon the students.

THIS STUDY WAS CONDUCTED WITH THE FOLLOWING OBJECTIVES:

- To assess the level of stress among first year hosteller students.
- To deliver the Pranayama.
- To assess the effectiveness of Pranayama on the level of stress among 1st year hosteller students.
- To find out the association between the level of stress in first year hosteller students with selected demographic variables.

A quasi experimental research design was used on a total of 60 first year hosteller students who were selected using convenient sampling technique. A pre test was conducted among 1st year hosteller students through General Health Questionnaire (GHQ-28). Post test was conducted after 15 days. Major findings showed that 50% 1st year students had moderate stress in pretest and in post test 45% had no stress and 35% had mild stress. The data analysis and interpretation showed that there is significant difference between mean pre test and post test scores of level of stress.

KEYWORDS : Assess, Effectiveness, Level Of Stress, First Year Students, Hostellers, Pranayama.

INTRODUCTION

Stress is a significant individual and public health problem that is associated with numerous physical and mental health concerns. In an American survey on stress in 2011, 22% of respondents reported extreme level of stress and 39% reported increase in stress level during the past year. At conference on "world at work" (2012), more than 80% of the respondents reported that their health care costs were moderately or significantly contributed by Stress.

Serber E. (2000) explained that stress is a common condition in response to a physical threat or psychological distress that generates a host of chemical and hormonal reactions in the body. Many have noted the benefits of exercise in diminishing the stress response. Studies points to the benefits of Yoga. Pranayama has been reported to be effective in treating a range of depression, stress and other related disorders, improving autonomic functions, relieving and reducing signs of oxidative stress.

Kalavathi B., Rajeshwari H. (2015) conducted a study to assess the effectiveness of stress on the level of stress among 1st year BSc nursing students in Nallore. The quantitative one group pre test and post test design was used on a sample of 60 students selected using simple lottery method. Modified stress scale was used to assess the level of stress. The results showed that in pre test 15 (25%) students had mild stress, 22 (36.7%) students had moderate stress and 23 (38.3%) students suffered from severe stress. In post test, 15 (25%) students had very mild stress, 29 (48.3%) students had mild stress and 16(26.7%) students had moderate level of stress. This concluded that pranayama is effective in reducing in level of stress in 1st year BSc nursing students.

Latha A., Padma K., Indira S. (2016) conducted a study on assessing the effectiveness of pranayama on asthma among asthma patients in Narayana medical college hospital, Nellore. Quasi Experimental research design was used on a sample of 30 patients selected by purposive sampling technique. Data was used using asthma assessment scale. Data was analysed using SPSS. The results showed that in pre test 50% of the asthma patients had moderate symptoms but in post test 40% had intermediate and 50% had moderate symptoms of asthma. The study concluded that Pranayama is very effective in reducing symptoms of asthma in patients with asthma.

Tiwari V. K., Kumar D., Mittal M., Asthana A.B. (2018) conducted a study on yoga as an effective modality of stress reduction within medical population. The study design was qualitative design using

selected yoga practices (selected yogic asanas, pranayama, and yoga nidra) for 1 hour daily, 6 day a week for three months on a group of 30 participants. The tool used was PSS-10 scale to measure stress pre and post study. The results reported a significant reduction in PSS-10 score in the yoga group without any significant change in the control group. Study concluded that Yoga is an effective modality to reduce stress in 1st year medical students.

MATERIALS AND METHODOLOGY

RESEARCH APPROACH:

In the view of the nature of the problem selected for the present study to assess the effectiveness of pranayama on level of stress among 1st year hosteller students and to accomplish the objectives, evaluative research approach was considered apt.

RESEARCH DESIGN:

Research design used for the present study is pre-test and post-test quasi experimental research design.

Table 1. Research Design

Group	Pre test	Intervention	Post Test
Experimental Group	O _{E1}	X	OE2
Control Group	O _{C1}	-	OC2

RESEARCH SETTING:

Research was conducted at two hostels of SGT University located within SGT University campus, Chandu, Budhera, Gurugram. The criteria of selecting the setting was availability of subjects, feasibility of conducting the study, economy of time, easy accesses, expected cooperation and administrative approval for conducting the study.

STUDY POPULATION:

Target population for the study was 1st year hosteller students and accessible population was first year hosteller students of two of the SGT University Hostels.

SAMPLE AND SAMPLING TECHNIQUE:

The sample size for the present study was 60 (30 for experimental group and 30 for control group) 1st year hosteller students of SGT University, Gurugram.

Purposive sampling technique was used for the selection of students

DATA COLLECTION TOOL AND TECHNIQUE:

The tool consisted of three sections:

Section I: Socio Demographic Data: Age, Family income, Educational Background of mother, Educational Background of father , Occupation of mother & father, Religion, Type of Family, Place of residence, Diet.

Section II: General Health Questionnaire (standardized stress scale) It comprised of 28 questions related to stress

Table 2. Interpretation of Score according to Level of Stress in GHQ-28

S.No	Level of Stress	Score
1	No Stress	0-21
2	Mild Stress	22-42
3	Moderate Stress	43-63
4	Severe Stress	64-84

Section III: Implementation of Pranayama

PILOT STUDY:

A try out of the tool was done on 10 1st year hosteller students and all the items were clear to the subjects.

DATA COLLECTION PROCEDURE:

PHASE I: Assessed the pre-test stress score of level of stress using GHQ-28 among the students in both experimental and control groups

PHASE II: Implementation of Pranayama daily 30 minutes first year hosteller students of experimental and control groups.

PHASE III: For both the groups post-test stress score was assessed by using GHQ-28 by the end of 15 days.

PLAN OF DATA ANALYSIS:

Descriptive and Inferential Statistics was used for data analysis.

MAJOR FINDINGS:

SAMPLE CHARACTERISTICS:

According to age in years majority of percentage of students i.e. 93.3% were in the age group of 18-21 years.

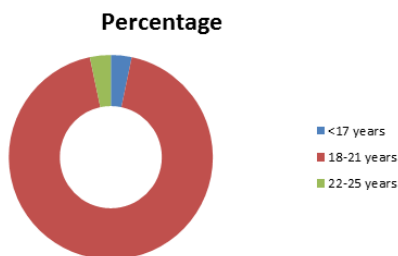


Fig.1. Percentage distribution of students according to age.

According to family income majority of %age (63.3%) of students were in the category of >40001 rupees per month

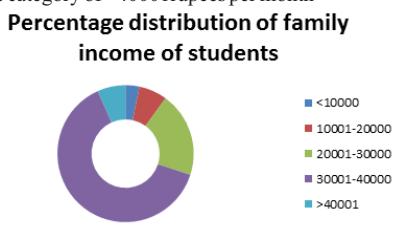


Fig 2. Percentage distribution of Family Income of students

According to the educational background of father most (33.3%) of the student's fathers were under the category of graduation.

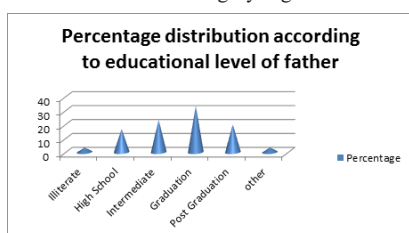


Fig. 3. Percentage distribution of Educational level of Father

Regarding educational background of mother majority of percentage (43.3%) were under the category of graduation.

Percentage distribution of educational level of mother

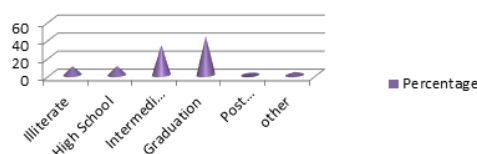


Fig. 4. Percentage distribution of Educational level of Mother

According to occupation of father majority of percentage (33.3%) were under the category of private and government jobs as well.

Percentage distribution according to Father's Occupation

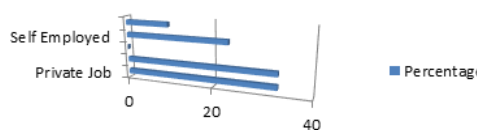


Fig. 5. Percentage distribution according to Father's Occupation

Related to occupation of mother majority of percentage (60%) of students were in the category of housewives.

Percentage distribution according to mother's occupation

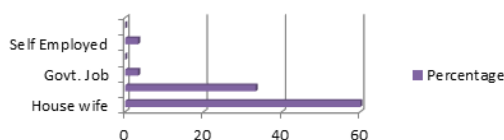


Fig. 6. Percentage distribution according to Mother's Occupation

According to the religion majority of percentage (80%) of students were Hindus.

Percentage distribution as per Religion

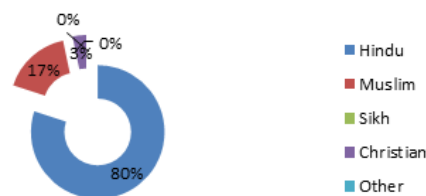


Fig. 7. Percentage distribution according to religion

According to the association of experimental group with selected demographic variables regarding level of stress among 1st year hosteller student such as family type and place of residence was found statistically non-significant i.e. p value was found more than .05 while age, family income, occupation of father, occupation of mother, diet and educational background of mother and father were found to be statistically significant as p value was found less than .05.

Regarding pre and post-test stress score among the students of experimental group, the change in post test score was statistically significant i.e. p value is less than .05 hence pranayama was effective in reducing stress among 1st year hosteller students of SGT University, Gurugram.

CONCLUSION:

Major findings showed that 50% (15) first year students had moderate level of stress in pre-test and in post-test 45% (14) had no stress and 35% (11) had mild stress. Data analysis proves that after implementing Pranayama, there was no stress among 45% (14) of first year hosteller students. Students with severe stress are more liable to depression, anxiety, personality disorders etc. The condition of severe stress needs immediate medical support. So it can be concluded that Pranayama is effective in reducing level of stress among first year hosteller students of SGT University, Gurugram, Haryana.

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