"A STUDY TO EVALUATE THE EFFECTIVENESS OF PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON JOB STRESS AMONG WORKERS IN SAKTHI SUGARS LIMITED, SAKTHINAGAR, ERODE DISTRICT".

By

R. TAMIZHSELVI

Dissertation Submitted to the

THE TAMILNADU DR M.G.R. MEDICAL UNIVERSITY,

Chennai, Tamilnadu

In partial fulfillment

of the requirements for the degree of

Master of Science

In

Psychiatric Nursing

Dharmarathnakara Dr.Mahalingam Institute of

Paramedical Sciences & Research

Sakthi Nagar, Bhavani, Erode

March 2010

1

"A STUDY TO EVALUATE THE EFFECTIVENESS OF PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON JOB STRESS AMONG WORKERS IN SAKTHI SUGARS LIMITED, SAKTHINAGAR, ERODE DISTRICT".

Approved by DMIPSR College Research Committee

Principal   : **--**

Prof.Mrs.R.Vasanthi,M.sc(Nursing)

Professor in Paediatric Nursing,
Principal, DMIPSR College of Nursing,
Sakthi Nagar, Bhavani, Erode-638315.

Research Guide   : -------------------------------------

Prof.
Professor in Psychiatric Nursing,
DMIPSR College of Nursing,
Sakthi Nagar, Bhavani, Erode-638315

Medical Guide   : --

Dr. Murugan, M.B.B.S.,
Medical Officer,
Reg.No: 66982
V.M.K. Hospital, Sakthinagar.

A Dissertation submitted to

The Tamilnadu Dr. M.G.R. Medical University, Chennai

In partial fulfillment of the requirement for

Degree of Master of Science in Nursing

VIVA VOCE   :

1. **INTERNAL EXAMINER:** --

2. **EXTERNAL EXAMINER:** --

MARCH 2010

ENDORSEMENT BY THE PRINCIPAL/HEAD OF THE INSTITUTION

This is to certify that the dissertation entitled **"A study to evaluate the effectiveness of progressive   muscle relaxation technique on job stress among workers in Sakthi Sugars Limited, Sakthinagar, Erode district.**" is a bonafide research work done by **R.Tamizhselvi** under the guidance of **Prof**.
Department of Psychiatric Nursing.

Date: **Seal & Signature of the Principal**

Place: Sakthi Nagar   **Prof .Mrs. R. Vasanthi M. Sc., (N)**

ENDORSEMENT BY THE RESEARCH GUIDE

This is to certify that the dissertation entitled **"A study to evaluate the effectiveness of progressive muscle relaxation technique on job stress among workers in Sakthi Sugars Limited, Sakthinagar, Erode District''** is a bonafide research work done by **R. Tamizhselvi** in partial fulfillment of the requirement for the degree of **Master of Science in Psychiatric Nursing.**

Date:

Place: Sakthi Nagar

Signature of the Research Guide

Prof.

Department of psychiatric Nursing

DMIPSR College of Nursing

Sakthi Nagar, Bhavani,

Erode- 638315

ACKNOWLEDGEMENT

I bow in reverence of **lord almighty,** the foundation of the knowledge and wisdom whose salutary benign benison enabled me to achieve this target.

I wish to express my sincere appreciation, and owe a deep sense of gratitude to all those who have contributed to the successful accomplishment of this task.

I am immensely grateful to **Sri Sri Sri Balagangadharanatha Mahaswamij, President, Sri** Adichunchanagiri Mahasamasthana Mutt**, Bangalore & Chairman Dr**. N. **Mahalingam,** Sakthi Group of Companies to undertake the course at Dharmarathnakara Dr Mahalingam Institute of Paramedical Sciences & Research, Sakthi Nagar.

I am grateful to **Sri B.T.Ramachandra** Secretary and Correspondent, Dharmarathnakara Dr Mahalingam Institute of Paramedical Sciences & Research, for giving me an opportunity to undertake the course at Dharmarathnakara Dr Mahalingam Institute of Paramedical Sciences & Research, Sakthi Nagar.

My heartfelt thanks to **Prof. Mrs. R. Vasanthi, M.Sc Paediatric Nursing, Principal,** Dharmarathnakara Dr. Mahalingam Institute of Paramedical Sciences & Research, for the encouragement, inspiration, support as well as for providing all facilities for successful completions of this study.

It is my felt desire to express the profound gratitude to **Mr.M.Anand M.Sc, Vice Principal** for his valuable guidance and thought provoking stimulation to present this study.

TABLE OF CONTENTS

SL. NO.	CHAPTER	PAGE NO.
I	INTRODUCTION	1
II	REVIEW OF LITERATURE	11
III	METHODOLOGY	25
IV	DATA ANALYSIS AND INTERPRETATION	37
V	DISCUSSION	60
VI	SUMMARY, CONCLUSION, RECOMMENDATION	63
VII	BIBLIOGRAPHY	70
VIII	ANNEXURE	76

LIST OF TABLES

LIST OF FIGURES

LIST OF ANNEXURE

S. NO	CONTENT
1	Letter seeking and granting permission to conduct the main study
2	Letter requesting opinion and suggestion of experts to validate the tool
3	Content validity certificate
4	Training certificate in Progressive Muscle Relaxation Technique
5	Data collection tool {English and Tamil}
6	List of experts
7	Photos

LIST OF ABBREVIATIONS USED

et al.	=	And others
DMIPSR	=	Dharamarathnakara Dr.Mahalingam Institute of Paramedical Sciences & Research
Fig	=	Figure
H_1	=	Research hypothesis
H_2	=	Research hypothesis
HOD	=	Head of the Department
n	=	Total number of samples
No.	=	Number
Prof	=	Professor
S.D	=	Standard deviation
=	=	Equal to
SSL	=	Sakthi Sugars Limited
PMRT	=	Progressive Muscle Relaxation Technique
WHO	=	World Health Organization
$\pm$	=	More than or less than

ABSTRACT

STATEMENT OF THE PROBLEM:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON JOB STRESS AMONG WORKERS IN SAKTHI SUGARS LIMITED, SAKTHINAGAR, ERODE DISTRICT"

OBJECTIVES OF THE STUDY:

1. To assess the pretest and posttest level of job stress among the workers in Sakthi Sugars Limited, Sakthinagar, Erode.

2. To evaluate the effectiveness of progressive muscle relaxation technique on job stress.

3. To find out the association between job stress and selected demographic variables.

METHODS:

The research approaches adopted for this study was quantitative evaluative approach. The research design adopted for this study was Quasi – experimental (pre-experimental) design-one group pretest posttest design. The Non-Probability purposive sampling technique was used in this study.

RESULT

➢ The major findings of the study showed that the pretest mean job stress score related to cognition, emotional, time, physical and physiological, social support, spiritual, activities and finance are 7.35 (73.5%), 9.38 (67%), 8.98 (74.83%), 17.1 (71.25%), 7.33 (73.3%), 6.05 (75.63%), 8.52 (71%), and 7.45 (74.5%) respectively.

➢ The post test mean job stress score related to cognition 5.03 (50.3%), emotional 6.38 (45.57%), time 6.05 (50.42%), physical and physiological 11.52 (48%), social support 4.47 (44.7%) spiritual 3.57 (44.63%) activities 5.25 (43.75%) and finance 4.35 (43.5%).

➢ The pre test overall stress score {mild (8%), moderate (25%), severe (67%)} was higher than the posttest overall stress score {(mild (30%), moderate (60%), severe(10%) }

➢ The findings of the study showed that there is significant association between the level of job stress and demographic variables such as educational status, marital status, monthly in come, years of experience and type of family.

CHAPTER I

INTRODUCTION

"People become attached to their burdens some times more

than the burdens are attached to them"

-George Bernard Shaw

BACKGROUND OF THE STUDY

'A Relaxed mind is a focused mind'. Due to the physical and psychological effects of disability person's stress level increases. We are connected to the environment.

Michael J.Smith (2008) stated that there are potentially many ways that job stress can affect the risk of ill health. The stress of first influence is the biophysiological stress reactions that can exacerbates the effects of physical strain and limit the ability of body's defense and repair systems to deal with micro trauma, the second influence is the effects of stress on the behavior of the individual that may increase exposures or decrease the motivation to seek help. The third is the general sensitization of the individual psychologically and physiologically by exposure to job stress; this may lead to greater perceived pain and poorer overall health and vital capacity.

National Institute of Occupational Safety Health (2005), stated that job stress as the harmful physical and emotional response that occurs when the requirements of job do not match the capabilities, resources or need of the works. Stress also occurs when the situation has high demands and the work has little or no control over it.

Randall.S.Hansen (2005), stated that certain working conditions are inherently stress inducing such as fear of job loss, excessive workload demands, lack of control, or clear direction, poor or dangerous physical working conditions, inflexible work hours and conflicting job expectation.

Carayon Sainfort (2005) stated that stress results from an imbalance produce a "load' on the human responses mechanisms that can produce adverse reaction, both psychological and physiological. The human response mechanisms, which include behavior, psychological reaction and cognition act to bring control over the environmental factors that are creating imbalance. These efforts coupled with an inability to achieve balance, produce overloading of the response mechanisms that leads mental and physical fatigue. Prolonged exposure of fatigue leads to strain and disease.

Kahen (2004) stated that job stress can affect the behaviors of a person in dealing with work environment. For instance, a person who is stressed may become angry and this would lead in using improper work methods, attitude problems, violence, persons under stress often develop poor attitudes, motivation, job, personal health and well being.

PEJ Health and Safety department (2004) stated that occupational stress is a major hazard for many workers. Increased workloads, downsizing, hostile work environment and shifts work are just a few of the many causes of stressful working condition.

Chandra sekar (2003) stated that one cannot visualize totally stress free life, one's life is not totally devoid of psychological stresses which in turn about the personality development. However, if then stresses becomes so severe and or too frequent, they may affect one's psychiatric equilibrium, during maladaptive patterns of behavior and possible mental disorders.

WHO Report (2003) stated that in the world's 2/3 population spends 1/3 of their lives in earning, living for themselves and their families. Their occupational activities generate revenue estimated at 21.6 trillions to sustain the world's economy and social program, but their essential occupation present hazards to worker's health

Fitzgerald (1992) stated that generally maladaptive coping behaviors have been related to poor overall health, less energy and general fatigue. This could make people more susceptible to injury or disease and lead to diminished capacity to work.

Franken Hauser (1976) stated that jobs with quantitative overload and qualitative under load resulted in acute stress reaction. Such as catecholamine excretion and in negative effects on perceived well being, job satisfaction, and health

Once the cause is known appropriate control strategies can be put into place, other techniques have been useful in reducing stress, include physical exercise, recreational activities, relaxation techniques.

NEED FOR THE STUDY:

In modern times, life runs on a fast lane everyone in the world is forced into stressful situation. Its employees who are more vulnerable to this situation stress is known to be the back bone of all psychiatric disorders.

World scenario:

A Roper Starch World Wide Survey (2009) reported that 30,000 people between the ages of 13 and 65 in 30 countries showed women who work full time and has children under the age of 13 report the greatest stress world wide, nearly one in four mother who work full time and have children under 13 feel stress almost everyday, globally 23% of women executives and professionals and 19% of this male peers say the full 'super stressed'.

Dawnaufuso (2009) stated that 64% of American workers describe themselves as either struggling or suffering due to economic stress.

Holmgren.K. et.al., (2009 Sweden) conducted a study on prevalence of work related stress and reported that 10% of group reported high perceived stress owing to individual demands and commitment, 20% reported low influence at work and 33% reported work interference with leisure time.

National Institute for Occupational Safety and Health(2009) in US stated that job burn out experienced by 25% to 40% of American workers is blamed on stress, depression only one types of stress reaction, is predicted to be the leading

occupational disease of the 21st century, nearly 50% higher fir workers who report stress.

Lyndsay Swinton (2008) in UK says that around 1 in 6 considers their work to be very or extremely stressful, stress in the second most commonly reported reason for work related ill health.

Elizabeth Scott M.S (2008) stated that the percentage of Americans who are stressed at work in high, and it's only getting higher and found number of Americans is extremely stressed at work range between 29-40%

Kendall et.al., (2008) conducted a study on measurement of occupational stress among Australian workers, perceived stressors and revealed that 33% employees are suffered by job stress.

Orietta Gurrea (2008) conducted the study in Australia found 17% of working women suffering depression could attribute their condition to job stress, compared with 13% of working men with depression.

Salleh, et. al., (2008) conducted a study on how detrimental is job stress in Malaysian furniture industry and the study indicated that 35.85% of the respondents feel they are stressful at work.

Zaeem Hag et. al.,(2008) conducted study on job stress among community health workers in Pakistan reported about ¼ of lady health workers were found to have significant occupational stress.

Elivia Luz Gonalez (2007) found that of the 95 workers participants, 26.3% presented a high level of job stress and 17.9% of the workers were found to present high level of mental workload. The results show that working hours, mental demand, mental demand and frustration. When faced with a given task may be considered risk factor for job stress.

WHO(2005) conducted a study stated that the workers view job stress as more prevalent than work related injury, the cost of work time lost to stress in Canada at 30 billion for annum, job related stress has been identified as world wide epidemic.

Gallup poll (2000) found that 80% of workers feel stress on the job, nearly half say they need help in learning how to manage stress and 42% say their 10 workers need such help 14% felt like scramming or shouting because of job stress, 10% an concerned about an individual at work, they fear would become violent ,9% at are aware of an assault or violent act in their workplace and 18% had experienced some sort of threat or verbal intimidation in the part year.

Indian Scenario:

Madan Mohan (2008) stated that prevalence of job strain among Indian foundary shop floor workers were experiencing high job strain, hazardous working conditions, limited decision making authority appeal to be main contributing factors for the higher levels of strain.

India's industry body association (2007) conducted a survey revealed that the menace of stress and mental fatigue has intensified in recent times at the top and middle position sectors comprising construction, shopping banks, government

hospitals, trading homes, electronic and print media, courier companies, small scale industries, retail and card franchise company. Employees of small scale industries in India have to work 15-16 hours, adversely altering their mental health and leading to depression and stress.

Srihari Dutta et. al., (2007) stated that prevalence rate for psychiatric morbidity of one month was 51.7% substance use, depression, anxiety and sleep disorders were common at a significant proportion of industrial employees had psychiatric morbidity due to job stress.

Noronha et. al., (2001) revealed that more than 1/3 workers had yet not recovered from their economic, social and job related problems.

The investigator during her service period in mental health centre observed many clients were attending the psychiatric clinic with a referral letter from the employers stating the adjustmental problems.

Therefore nurses in the industrial setting have the primary responsibility of integrating mental health care along with community and general health care this integration in accepted as the most important step for extending mental health care to the individuals in the community.

STATEMENT OF THE PROBLEM:

"**A STUDY TO EVALUATE THE EFFECTIVENESS OF PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON JOB STRESS AMONG WORKERS IN SAKTHI SUGARS LIMITED, SAKTHINAGAR, ERODE DISTRICT".**

OBJECTIVES OF THE STUDY:

1. To assess the pretest and posttest level of job stress among the workers in Sakthi Sugars Limited, Sakthinagar, Erode.

2. To evaluate the effectiveness of progressive muscle relaxation technique on job stress.

3. To find out the association between job stress and selected demographic variables.

HYPOTHESIS OF THE STUDY:

H_1: There is significant relationship between the progressive muscle relaxation technique and reduction of job stress.

H_2: There is an association between job stress and selected demographic variables.

ASSUMPTIONS:

1. Sugar factory workers may have stress towards their job.

2. Progressive muscle relaxation technique is helpful in reducing job related stress.

OPERATIONAL DEFINITIONS:

Stress

A stress is a mental or emotional strain or tension resulting from adverse or very demanding circumstances.

Progressive Muscle Relaxation Techniques

One method of reducing muscle tension through a technique called progressive muscle relaxation in which muscles are relaxed part by part.

In this study progressive muscle relaxation is a tension-reducing technique that involves the systematic tension and relaxing of specific muscle groups, helps to maintain positive attitude to make feel better emotionally, improve behavioural skills and enhance feelings of control on job stress.

Job

Confirmed activity done by the individual

Evaluate

Form an idea of the amount, number or value of, the study will assist in evaluating the impact of recent changes (a system for evaluating how well the firm is performing).

Effectiveness:

In this study effectiveness refers to the extent to which the progressive muscle relaxation technique has its impact on job stress measured by modified job stress inventory.

Job stress:

Physical and mental straining occur related to particular working situation.

Workers:

Persons who are working in the Sakthi Sugars Limited, Sakthinagar.

LIMITATIONS:

➢ The study was limited to workers in Sakthi Sugars Limited.

➢ The data collection period was limited to 6 weeks only.

➢ The study was not be generalized, since it includes only workers in SSL.

➢ The sample of the study was restricted to 60

CHAPTER II

REVIEW OF LITERATURE

The term "Review of Literature" refers to the activities involved identifying and searching for information on a topic and developing a comprehensive picture of the state of knowledge on that topic.

(Polit and Hungler, 2004)

Job stress is something we all face as workers and we all handle it differently. There is no getting around it but not at all stress is bad, and learning how to deal with and manage stress is critical to our maximizing our job performance staying safe on the job and maintaining on physical and mental health

Job stress can be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources or the needs of the workers.

Here the researcher has divided the review of literature under the following categories

I. Literature related to incidence, prevalence of job stress

II. Literature related to sources of job stress

III. Literature related to impact of job stress

IV. Literature related to effectiveness of progressive muscle relaxation technique

I. LITERATURE RELATED TO INCIDENCE, PREVALENCE OF JOB STRESS:

Elizabeth Scott (2008) stated that the percentage of American who are extremely stressed at work range between 29-40%. Over half of respondents are so stressed at work that they feel close to or consumed by burnout much.

American "**Integra Survey**" (2000) reported that 65% of workers said that workplace stress had caused difficulties and more than 10% described the major effects, 12% got sick because of job stress.

II. LITERATURE RELATED TO SOURCES OF JOB STRESS:

Randall (2009) reported that one theory differences in individual characteristic such as personality and coping style, the best at predicting that certain working conditions are inherently stress as fear of job stress, excessive workload, demands, lack of control or clear directions, poor or dangerous physical working conditions, flexible work hours and conflicting job experiences.

Vanroelenc (2009) reported that the occupational stressors contribute five dimensions immaterial demands, physical demands, control over work environment, social relationship at work and employment uncertainty are all significantly related with at least one of the health outcomes-with immaterial demands having the strongest effects.

Spector Paul (2008) reported that interpretation of observed relation between job stressors and job strain in cross sectional survey revealed that relations between

job stressors and job strain, however, work in most cases not affected significantly when prior strains and negative affectivity were controlled for the results suggested that "Negative Affectivity" measures are subject to occasions factors only on the job. Evidence found that some background factors affected.

Vijay Rao (2000) conducted a study at nuclear level complex Hyderabad to assess the shift workers problem. Effect on personal as well as social life was assessed and clearly demonstrated that, there is no significant adverse effect observed in the group as well as shift work.

Agarwel (1998) evaluated the occupational stress among employees in the technical field. Results shown that the technical and field staff including inspectors experienced a higher level of occupational stress, whereas depot management staff expressed at least amount of occupational stress, lack of staff trainings shortage of original space parts, lack of feeling of in policy making are the mediation of occupational stress.

III. LITERATURE RELATED TO IMPACT OF JOB STRESS

Tsutsumi.A (2009) conducted a study on "Occupational stress and risk of stroke" revealed a more than 2-fold increase in the total stroke among men with strain (combination of high job demand and low job control) compared with counterpart men with low strain results shows that no significant differences were found for any stroke incidence among women's occupational stress related to job strain was associated with incident strokes among men.

Andrew Steptoe (2008) stated that the effects of workload in psychological well being, cortisol, smoking and alcohol consumption were examined, results suggests that salivary cortisol was universally associated with job strain and did not vary across sessions, females but not male smokers consumed more cigarette's during periods of long working hours, and self reported smoking and nicotine concentration were greater among smokers with higher nicotine dependency scores. Men but not women with poor social supports consumed more alcohol as work hours lengthened. These data indicate that health behaviors that are affected only to a limited extent by variation in workload.

Oriettta (2008) stated that 17% of working women suffering depression could attribute their condition to job stress, compared with 13% of working men with depression.

Neizborala (2003) conducted a cohort study in France on job stress and occupational status to examine a possible relationship between various dimensions of occupational stress, on one hand and the occupational status and socio-demographic characteristics of workers on the others. Researcher found that existence of strong association between occupational status and dimensions of job stress known to be associated with adverse health outcomes.

Bunker SJ (2003) revealed that the increased risk contributed by these psychological factors (job demands and strains, dissatisfaction) is of similar order to the more conventional coronary heart disease risk factors such as smoking, dyslipidemia and hypertension. The identified psychological risk factors should be taken into account during the individual risk assessment and management.

Nedic (2002) stated that the job stress is a great problem in developed countries of the world. The aim of this paper was to examine sources and causes of job stress in health workers. Job stress increases absenteeism, reduces work responsibilities, causes, higher expanses of medical treatment rehabilitation, and staff training.

Holmes (2001) assessed work related stress; the paper reviews the concept of work related stress showing how it's deleterious impact on the work force thus affecting both individual and organizational effectiveness.

California Utility Company (2001) reported that men between the ages of 40 and 60, 36% who reported high job stress had chance of having signs of Atherosclerosis in their carotid arteries. Only 21% who reported low job stress had signs of Atherosclerosis.

Malik M.Merchant (2000) attempted to find out the stress and anxiety level among job stress on self rating anxiety rating scale results indicate that the executives were found to be under considerable stress, the prevalence of stress was positive in 60%,14.2% showed serious anxiety. The relationship between stress and work related factors like number of working hours ends and the relationship with colleagues at work place also significantly affect the well being of the executives.

Peddicord (2000) stated that strain is phenomenon associated with modern society. It's becoming increasingly most evident that stress results in physical symptoms, essential disease and mental health problems.

Carayon (1999) presented paper on "Work Organization Job Stress and Work Related Musculo Skeletal Disorders" proposes several pathway for a theoretical relationship between job stress and musculoskeletal disorders. one made stipulates that psychological work factors which can cause job stress, might also influence or to be related to ergonomic factors such as repetition and posture have been identified as risk factors for work related musculoskeletal disorders.

Loon Gruenberg (1998) conducted a study in china on work stress and problem of alcohol behavior revealed that these may be escapist (increased drinking, working through job dissatisfaction for those who believe that alcohol consumption is a effective means to reduce stress, and non escapist says that decreased drinking for those who are dissatisfied with their jobs but do not believe alcohol is an effective coping strategy)responses to stress, results shows moderate, support for the existence of both escapist and non escapist responses to job related stress.

Landsbergin (1998) conducted a study in Sweden on job stress and health behaviors states that among 189 men increases in job decision latitude over years was associated with decrease in cigarette smoking and the largest in latitude occurred among 13 men who quit smoking and changes in job characteristics was not associated with changes in overweight or alcohol use. The effectiveness of smoking cessation may be aided by modification of structural features of the work environment such as job stress latitude.

Gibran (1993) stated that no one is immune from job stress and any person in profession at any level can become a candidate of job stress.

Wiebe, Williams (1992) stated that occupational stress is associated to a variety of negative emotions such as anxiety, depression, job dissatisfaction, it's also implicated on a variety of disease and may alter immune function, some burns out and irritability are associated with provoked unsolved stressors.

IV. LITERATURE RELATED TO EFFECTIVENESS OF PROGRESSIVE MUSCLE RELAXATION TECHNIQUE:

Nazanin Mohajeri-Nelson (2008) conducted an experimental study in Mexico to determine whether or not a causal relationship exists between the 2 variables. Eleven nom-attorney employees of a large (more than 60 employees) law firm participated in this experiment with 6 participants in the experimental and 5 in the control groups. Pre-tests were conducted for stress level and job satisfaction, the results of which were used to assign the participants to the experimental and control groups. The experimental group practiced stress management techniques(breathing and stretching)for 2 weeks. Post-tests were conducted to determine whether stress levels were reduced by stress management techniques and whether or not job satisfaction had been increased.

Yoon Bok Hann (2007) conducted a study in Canada stated that the effectiveness of the thermal biofeedback training combined with the progressive muscle relaxation then treatment of patients with essential hypertension, blood pressure decline was measured on the treatment group who had thermal biofeedback and progressive muscle relaxation training. A significant decline of the systolic and diastolic pressure was observed in the treatment group.

Mark Bobella (2004) conducted a study in Thailand stated that exercise is an excellent method for reducing stress. Exercises are the first step if mental health with a regular routine which relieves stress, promotes self esteem and coping & enhancing immune function.

Van der klink (2001) conducted a quantitative meta-analysis study in England to determine the effectiveness of occupational stress-reducing interventions and the populations for which such interventions are most beneficial. Interventions, relaxation techniques, multimodal programs biofeedback was the least frequent technique used in work settings and also seemed to be the least effective technique. Meditation produced the most consistent results across outcome measures but was used in only six studies. In general, studies using a combination of techniques (e.g., muscle relaxation plus cognitive-behavioral skills) seemed to be more effective across outcome measures than single techniques.

Clinical Department of Psychology (2000) conducted a study in USA to examine whether acute relaxation training, conducted on two separate occasions, would be associated with reliable reductions in subjective and psychological indices of stress. Results indicated that a brief relaxation exercise led to experimental subjects having significantly lower levels of post intervention heart rate, state, anxiety, perceived stress, and salivary cortisol than control subjects, as well as increased levels of self report levels of relaxation. The result of this study may have implications for the use of relaxation training.

Vaughn M (1989) conducted a study in Taiwan stated that the effect of progressive muscle relaxation among clerical workers one stress management

technique which may be effectively implemented on the job for clerical workers is progressive muscle relaxation. In primary prevention, nursing intervention strives to reduce the effects of harmful stress by identifying and assessing stressors and then implementing measures to strengthen lines of defense.

De Berry S (1982) conducted a study in Canada regarding evaluation of progressive muscle relaxation on stress related symptoms in a geriatric population participants were also measured on state and trait anxiety, self report muscle tension , hours to fall asleep, number of nocturnal awakening and headaches. This study indicates significant differences on all five measures on experimental and control group. With the exception of trait anxiety, the experimental group manifested significant improvement on the remaining five measures from baseline to end of training. For state of anxiety, a significant improvement continued during the ten weeks of home practice following the end of training.

CONCEPTUAL FRAMEWORK

Roy's Adaptation Model Modified (1964)

Conceptual framework is global about a concept in related to a specific discipline. Conceptual are made up of concepts which discuss the mental images of phenomena and integrate them into a meaningful configuration.

Conceptual frame work decibels ROY'S ADAPTATION model (modified) the model were introduced by Sr.callista Roy(1964). Roy based on model on Harry Helson's work in psychophysics. She was influenced by the ability of the client to adapt major changes.

In 1976 Roy published "Introduction to Nursing" in adaptation model.

In 1984 after further classifications and refinement of the model. She published a revised edition.

Roy's model characterized as a system theory with a strong analysis of intervention the components which are.

Input, control, process, output,

INPUT

The stimuli are like:

➢ **Focal Stimuli**: Focal stimuli are those, which most immediately confront the person. In this study, it refers to job stress.

➢ **Contextual Stimuli:** These are the internal and external stimuli of the persons that can be identified as having a positive and negative influence on the

situation. In this study workers internal environment (age, sex, education, residence, years of experience), external environment (marital status, income, religion, type of family).

➤ **Residual Stimuli**: These are those internal factors whose current effects are unclear. The beliefs, attitudes and traits of an individual developed from the past but affective the current responses.

The residual stimuli in this study are past experiences, attitude towards the job.

CONTROL:

Individuals have biological abilities to cope with the changing environment. Roy has described these abilities as regulator and coping mechanism cognator coping mechanisms, which are considered the person as an adaptive system.

Coping mechanisms:

Coping mechanism used by the workers are taking leave frequently, depressed, tensed.

- **Regulator Subsystem**:

  o The regulator subsystem {PMRT} responds automatically through neuro – chemical process. During PMRT heart rate, respiratory rate, oxygen consumption and muscle tension were decreased.

- **Cognator Subsystem**:

  o The cognator subsystem responds through higher, complex process of perception, informational processing, judgments and emotion. The workers uses the cognator subsystem during job stress by perceiving the information given by the care provider, that is in this study the workers cooperating and welcoming the PMRT

ADAPTIVE MODES:

Roy has identified four adaptive modes / categories for assessment of behavior resulting from regulator and cognator subsystem responses namely physiological, self-concept, and role function and interdependence modes.

Physiological mode involves the body's basic needs and ways of dealing with adaptation. In this study, physiological mode is acceptance of PMRT provided by the investigator.

Role function mode identifies patterns of duty performance based on given position society. In this study role function mode is responds positively to PMRT.

Interdependence mode identifies patterns of human values, affection, love, affirmation. These processes occur through interpersonal relationship at individual and group levels. In this study it denotes that maintains good inter personal relationship and perceives the importance PMRT provided by the investigator.

Self concept mode was performing PMRT regularly.

OUTPUT:

Output is the outcome of the process, it may be the adaptive response or non adaptive response. In this study the adaptive response, PMRT was effective in reducing job stress and ineffective response, PMRT was not effective in reducing job stress.

STIMULI

Focal stimuli:

➢ job stress

Contextual stimuli:

➢ age, sex, education, residence, years of experience
➢ Marital status, monthly income, religion, type of family.

Residual stimuli:
Past experience, attitudes towards job

Interdependence Mode: Maintains good interpersonal relationship perceives the importance of PMRT

Role Function Mode: Accept and respond to PMRT

CONTROL Coping mechanism
➢ **Cognator:** Perceiving the importance of PMRT and deciding to accept it.
➢ **Regulator:** Neuro chemical process

Physiological Mode: Acceptance of PMRT

Self Concept Mode: Performing PMRT regularly

Adaptive response: PMRT was effective in reducing job stress

Ineffective response: PMRT was not effective in reducing job stress

Feed Back

Fig. 1: Modified Roy Adaptation model, 1984 (conceptual frame work)

39

CHAPTER III

METHODOLOGY

METHODOLOGY:

Methodology of research refers to the investigations of the ways of obtaining, organizing and analyzing data. methodological studies address the development, validation and evaluation of research tools or methods. **Polit, (2004)**

Research methodology is a way to systematically solve the research problems. It includes the step of process and strategic for valid reliable data for the study. It includes the research approaches, research design, sampling and selection, research settings and data analysis.

The methodology of research indicates the general pattern of organizing the procedure for getting valid and reliable data for the problem under investigation.

The present study aimed to evaluate the effectiveness of progressive deep muscle relaxation technique on job stress among the workers in Sakthi Sugars Limited, Sakthinagar, Erode district.

RESEARCH APPROACH

Polit, (2004), It is an applied form of research that involves finding out how well a program, practice, procedure or policies are working. It is a goal to assess or evaluate the success of a program.

A evaluative approach was used in this study. It is to evaluate the effectiveness of Progressive Muscle Relaxation Technique on job stress among the workers, in Sakthi Sugars Limited, Sakthinagar.

The nature of the study is also analytical where the hypothesis are tested, examining relationship of job stress and selected demographic variables.

RESEARCH DESIGN:

Polit, (2004), A research design is a blue print for conducting a study that maximizes the control over the factor that could interfere with the validity of the findings.

In this present study quasi experimental (Pre experimental) - one group pretest and posttest design was used to evaluate the effectiveness of Progresssive Muscle Relaxation Technique on job stress among the workers in Sakthi Sugars Limited, Sakthinagar, Erode district.

VARIABLE:

Polit, (2004), Variables are qualities, properties or characteristics of persons, things or situations that change or vary. Variables are also concepts of different levels of abstraction that are concisely defined to promote their measurement or manipulation within a study.

Independent variable:

Polit, (2004), An independent variable is a stimulus or activity that is manipulated or varied by the researcher to create an effect on the dependent variable.

In present study progressive muscle relaxation technique is independent variable.

Dependent variable:

Polit, (2004) A dependent variable is the response behavior or outcome that the researcher wants to predict or explain changes in the dependent variable.

In present study level of job stress is dependent variable.

Extraneous variable:

Age, sex, education, monthly income, marital status, type of family, residence, religion, years of experience.

POPULATION:

Polit, (2004), The term population refers to the aggregate or totality of all the objects, subjects or members that confirm to a set of specifications.

The population of the study was the workers who are working in Sakthi Sugars Limited, Sakthinagar, Erode district.

SAMPLE:

Polit, (2004) Sample is small proportion of the population selected for observation of analysis and the numbers of the sample are study objects.

In this study sample considered of workers in sugarcane processing unit, Sakthi Sugars Limited, Sakthinagar, Erode district.

SAMPLE SIZE:

The sample size comprised of 60 members who are working in sugarcane processing unit, Sakthi Sugars Limited, Sakthinagar, Erode district.

SAMPLING TECHNIQUE:

Talbot (1988) states that sampling is the process of selecting a portion of population to obtain data regarding a problem.

Sampling technique used for this study was Non-Probability Purposive sampling technique.

SITE:

Sakthi Sugars Limited, Sakthinagar, Erode district.

SETTING:

The setting of present study was undertaken in sugarcane processing unit, Sakthi Sugars Limited, Sakthinagar, Erode district.

CRITERIA FOR SAMPLE SELECTION:

I. Inclusion criteria:

- ➢ Workers those who are available at data collection

- ➢ Workers those who are willing to participate in this study

- ➢ Workers who knows Tamil, English language

II. Exclusion criteria:

- ➢ Workers who are having hearing disability

- ➢ Workers who are on leave

- ➢ Workers who are practicing other relaxation techniques

DEVELOPMENT OF THE DATA COLLECTION INSTRUMENT:

- ➢ Collection is the gathering of information that is needed to address a research problem.

- ➢ Instruments/tools are the procedure used by the researcher to collect data.

- ➢ The following tool was used in the study

The instrument selected in research should be as far as possible the vehicle that would best obtain data for drawing conclusion, which were relevant to the study.

Relevant literature was reviewed to develop instruments for analyzing the different causes of stress among the workers in work field.

The tool was divided into two parts. A close ended three point scale was prepared based on the literature review and in consultation with the experts in the field of psychiatric nursing.

DESCRIPTION OF DATA COLLECTION INSTRUMENT:

The instrument used for data collection was structured questionnaire, which consists of two sections.

Section-I: Demographic variables

Section-II: Job Stress Assessment

      a. Related to cognition

      b. Related to emotional

      c. Related to time

      d. Related to physical & physiological

      e. Related to social support

      f. Related to activities

      g. Related to spiritual

      h. Related to financial

TOOL:

Section I: Demographic Proforma

The demographic proforma consists of 9 items, which were used to collect the sample characteristics. The characteristics included were age, sex, education, marital status, monthly income, religion, residence, type, and years of experience.

Section II: Modified Job Stress Inventory Scale

The stress rating scale was a three-point scale. The questions were in the statement form. There were three options in the scale like always agree, sometimes agree, strongly disagree having 0, 1, 2 scores respectively. The maximum score of the scale was 100. there were 50 questions in the scale.

The scale was designed to determine the different level of stress was categorized under the following areas.

Subsection I

5 questions related to cognition

Subsection II

7 questions related to emotional

Subsection III

6 questions related to time

Subsection IV

12 questions related to physical and physiological

Subsection V

5 questions related to social support

Subsection VI

4 questions related to spiritual

Subsection VII

6 questions related to activities

Subsection VIII

5 questions related to financial

SCORING PROCEDURE AND INTERPRETATION:

Modified Job Stress Inventory Scale consists of 50 questions. The total score was 100. Level of stress was categorized as mild, moderate and severe.

TABLE-1

LEVEL OF STRESS

LEVEL OF STRESS	SCORES	PERCENTAGE
Mild	Below 25	0-25%
Moderate	26-75	26-75%
Severe	76-100	76-100%

VALIDITY AND RELIABILITY:

Validity:

Polit and Hungler (2004) states that content validity refers to the degree to which an instrument measure what it is suppose to measure.

The validity of tool was established in consultation with experts, psychiatrists, psychiatric nursing experts. The tool was modified according to the suggestions and recommendation of the experts.

Reliability

The reliability of the tool was established by testing stability and internal consistency. The stability was assessed by test & retest method.

Internal consistency was assessed by using split half method where the spearman's Brown prophecy formula will be used.

PILOT STUDY:

Polit (2004) a pilot study is a small scale version of a purposed study conducted to refine the methodology. The purpose of the study was to find out the feasibility of the study, clarity of language in the tools and to finalize the plan for analysis. It is developed similar to the purposed of study, using similar subjects, the same setting, same data collection and analysis technique.

Pilot study was conducted in Sakthi Sugars Limited, Modakurichi with 10 samples after obtained permission from the institution and prior information given to the participants and study was conducted from 1.11.2009 to 7.11.2009. The purpose of the study was explained to the subjects. Data analysis was done by using Descriptive inferential statistics and found that the study was feasible.

DATA COLLECTION PROCEDURE:

The data was collected for the period of 6 weeks and researcher obtained written consent from the participants.

During the break time the workers came to rest room. The researcher was given questionnaire to the workers between 12pm to 1pm. First week the researcher collected the demographic data and conducted pretest later on the researcher taught Progressive Muscle Relaxation Technique. Then daily the researcher observed the practice of exercises in the rest room. After PMRT job stress was assessed. At the end of the successful data collection, researcher conveyed thanks to the management and participants

PLAN FOR DATA ANALYSIS:

Data analysis is the systematic organization and synthesis of research data and testing of research hypothesis using those data.

The data obtained was planned to be analyzed on the basis of the objectives of the study using descriptive and inferential statistics.

> ➢ Organize data in master coding sheet.

- Demographic variables are to be analyzed in terms of frequencies and percentage

- Stress scores are to be presented in form of mean, mean percentage and standard deviation.

- Chi-square test was used to determine the association between level of stress and demographic variables among the workers.

S.No	Data Analysis	Methods	Remarks
1.	Descriptive	Mean, Standard deviation percentage	Assess the level of stress, among the workers
2.	Inferential statistics	Paired 't' test Chi-square test	Comparison of pretest and posttest level of job stress Analyses the association between demographic variables and level of stress among the workers.

ETHICAL CLEARANCE

- ❖ The study was performed after getting approval from the Principal, college of nursing, DMIPSR.

- ❖ Permission was obtained from the General Manager of Sakthi Sugars Sakthinagar.

- ❖ Interview was done after informing the subject about all the information which was collected, kept confidential.

SCHEMATIC REPRESENTATION OF THE STUDY DESIGN

POPULATION
Workers in SSL, Sakthinagar, Erode.

↓

STUDY SUBJECTS
(Workers in Sugarcane Processing Unit, SSL,
Sakthinagar, Erode)

↓

Sampling Technique
(Purposive/judgmental sampling)

↓

PRETEST: Assess the job stress using modified job
stress inventory scale

↓

Provide PMRT

↓

POSTTEST: Assess the job stress using modified job
stress inventory scale

↓

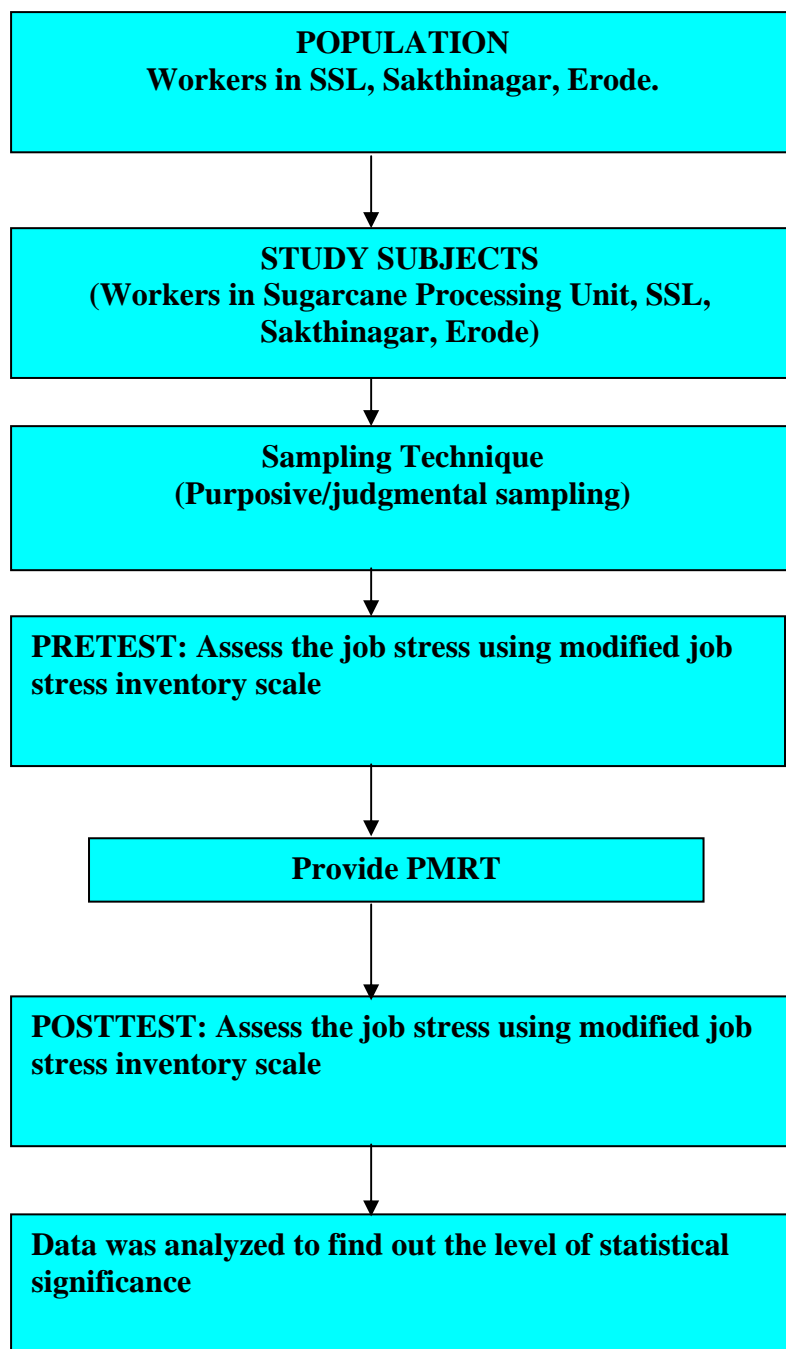Data was analyzed to find out the level of statistical
significance

Fig 2: Schematic representation of the study design

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

Polit, (2004) Analysis is the process of categorizing, organizing, manipulating and summarizing the data to obtain answers to research question. The purpose of analysis to reduce data to intelligible and interpretable from which the relations of research problem can be studied and tested.

STATISTICAL ANALYSIS:

This chapter deals with systematic presentation of the analyzed data followed by its interpretation the collected information was organized, tabulated analyzed and interpreted by using descriptive and inferential statistics. The findings were organized and presented in two parts with tables and figures. The details of each section are presented below to correlated with objectives.

OBJECTIVES OF THE STUDY

1. To assess the pretest and posttest level of job stress among the workers in Sakthi Sugars Limited, Sakthinagar.

2. To evaluate the effectiveness of progressive muscle relaxation technique on job stress.

3. To find out the association between job stress and selected demographic variables.

Organization of findings

The data analyzed were presented under the following headings

Section I: Description of sample characteristics.

Section II: Assess the pretest and posttest level of job stress among the workers those who are working in Sakthi Sugars Limited, Sakthinagar

Section III: Evaluate the effectiveness of progressive muscle relaxation technique in reduction of job stress.

**Section IV**:   Find out the association between job stress and selected demographic variables.

TABLE – 2

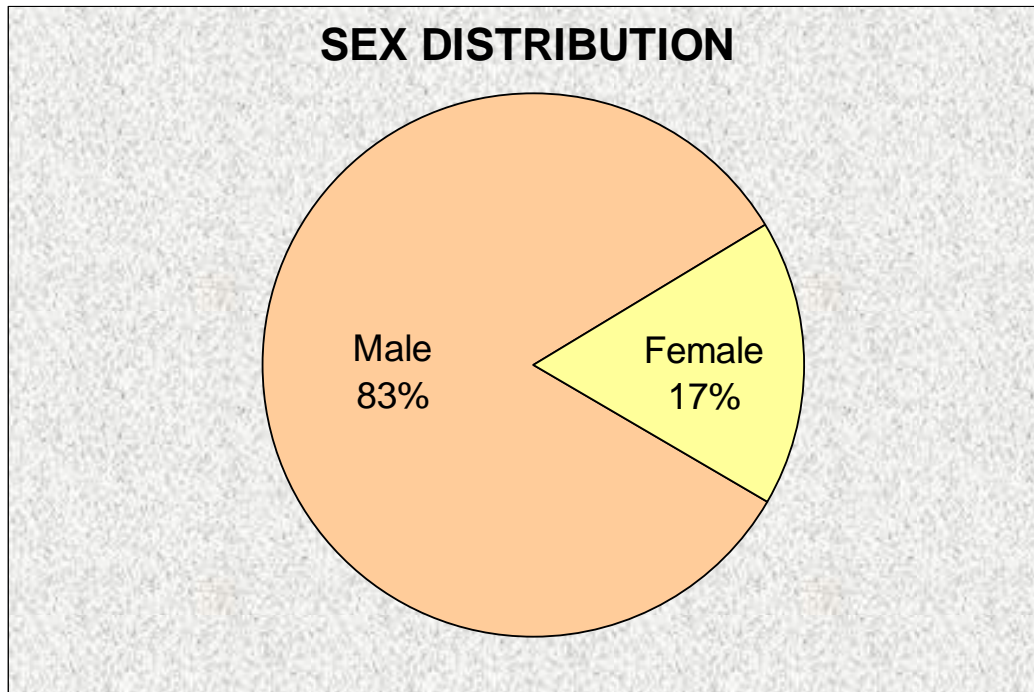**Distribution of workers according to demographic variables**

(N = 60)

S. No	Demographic Variables	Frequency	Percentage (%)
1.	Age (in years)		
	a. 20 – 25	20	33
	b. 26 – 30	15	25
	c. 31 - 35	10	17
	d. 36 - 40	15	25
2.	Sex		
	a. Male	50	83
	b. Famale	10	17
3.	Education		
	a. Illiterate	12	20
	b. Primary education	25	42
	c. Secondary education	15	25
	d. Graduate	8	13
4.	Marital status		
	a. Married	35	58
	b. Unmarried	21	35
	c. Divorced	3	5
	d. Widow	1	2
5.	Monthly Income		
	a. Below Rs.5000/-	30	50
	b. Rs.5001-10,000/-	20	33
	c. Above RS.10.000/-	10	17
6.	Religion		
	a. Hindu	40	67
	b. Christian	14	25
	c. Muslim	6	8
7	Residence		
	a. Town	20	33
	b. Village	40	67
8	Type of family		
	a. Nuclear	30	50
	b. Joint	20	33
	c. Extended	10	17
9	Years of experience		
	a. Below 1 Year	15	25
	b. 1-5 years	25	42
	c. 6-10 years	15	25
	d. Above 10 years	5	8

Figure 3: Cone Diagram depicting percentage distribution of the sample according to their Age.
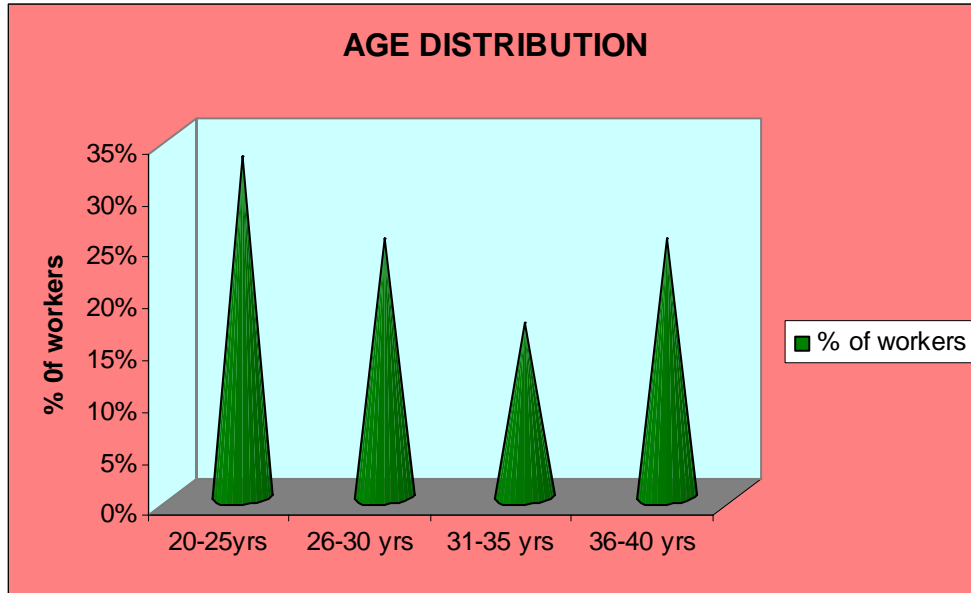

According to the age 33% of workers belonged to 20-25 yrs of age, 25% belonged to 26 -30 yrs of age and 36-40 yrs, 17% belonged to 31-35 yrs

Figure 4: Pie Diagram depicting percentage distribution of the sample according to their Sex.

SEX DISTRIBUTION

Male 83%

Female 17%

The above figure shows 83% of workers are males and 17% of the workers are females.

Fig 5: Pyramid diagram showing that distribution of workers according to educational status
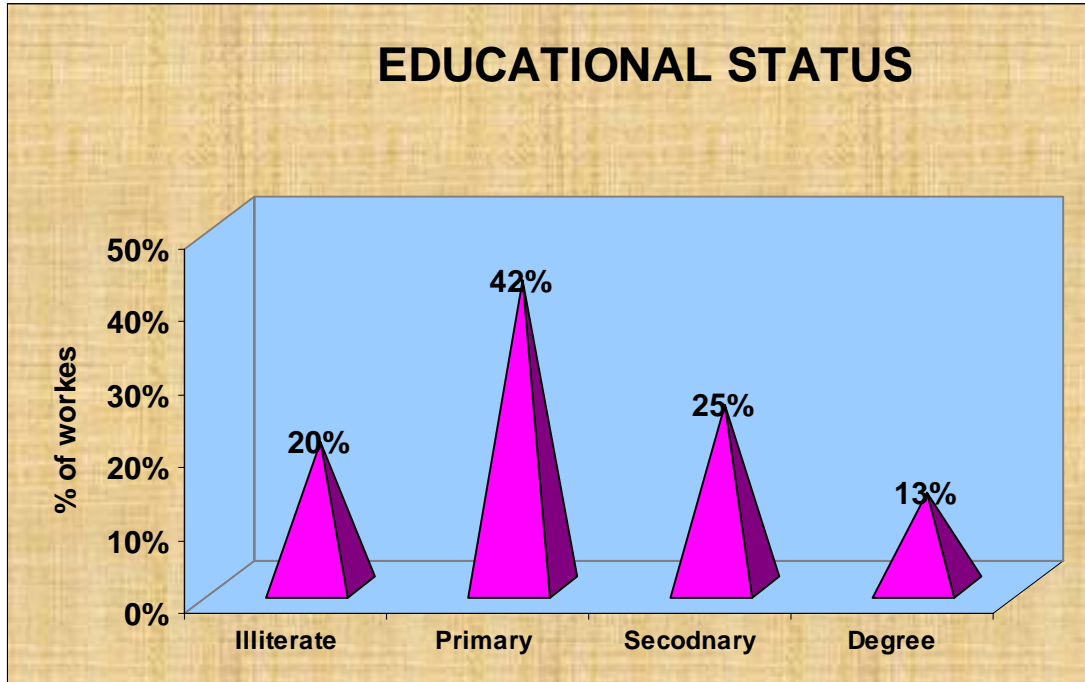
The above figure shows that 20% of the workers are illiterates, 42% of the workers had primary education, 25% of the workers had secondary education and 13% of the workers had degree holders.

Fig 6: Cylinder diagram showing distribution of workers according to marital status
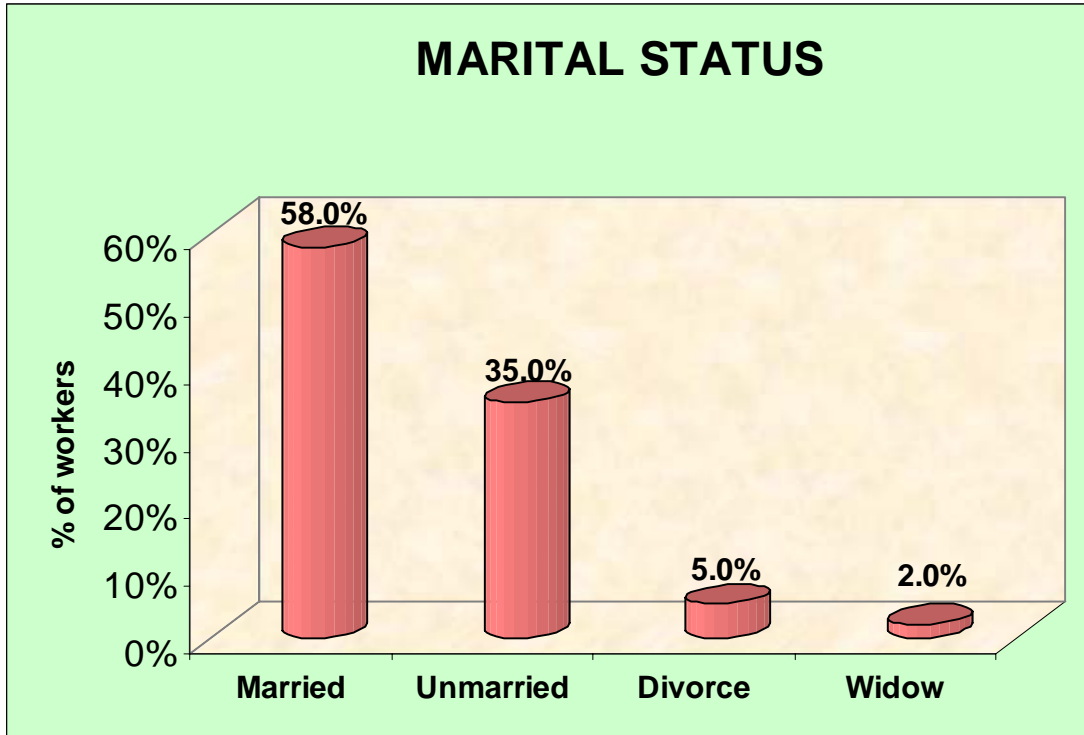
The above figure shows that 58% of the workers were married, 35% of the workers were unmarried, 5% of the workers were divorced and 2% 0f the workers were widows.

Fig 7: Cylinder diagram showing distribution of workers according to monthly income
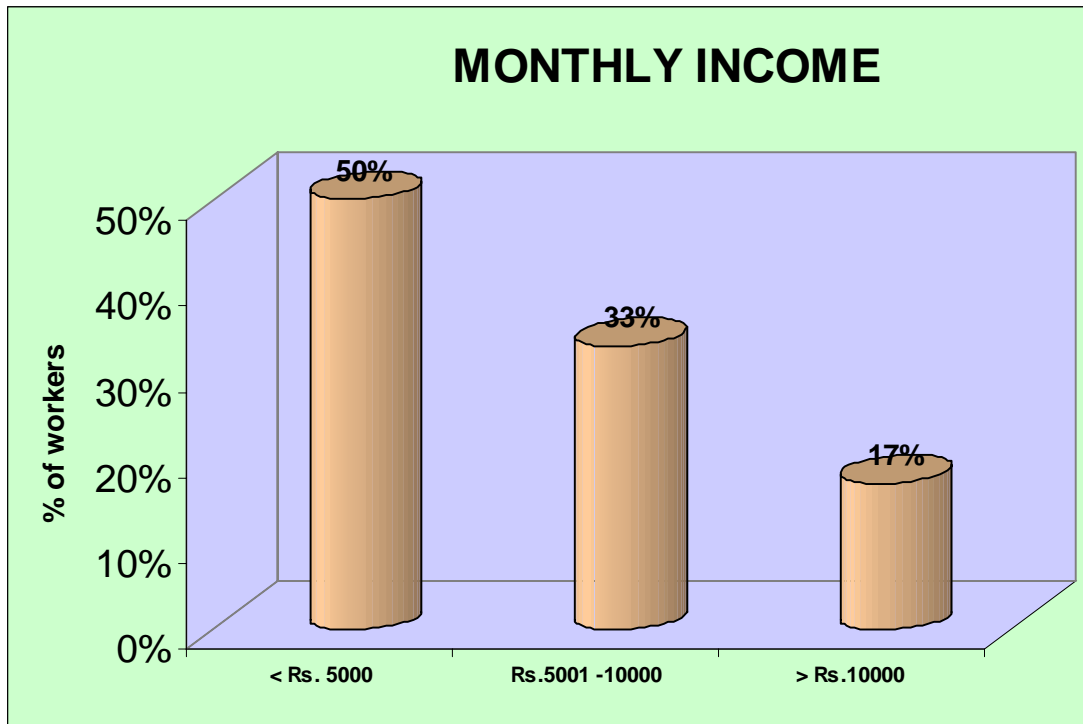
The above figure shows that 50% of the workers belonged to <5000 of monthly income, 33% of the workers belonged to 5001-10,000 of monthly income and 17% of the workers belonged to above 10,000 of monthly income.

Fig 8: Pyramid diagram shows distribution of workers according to their religion
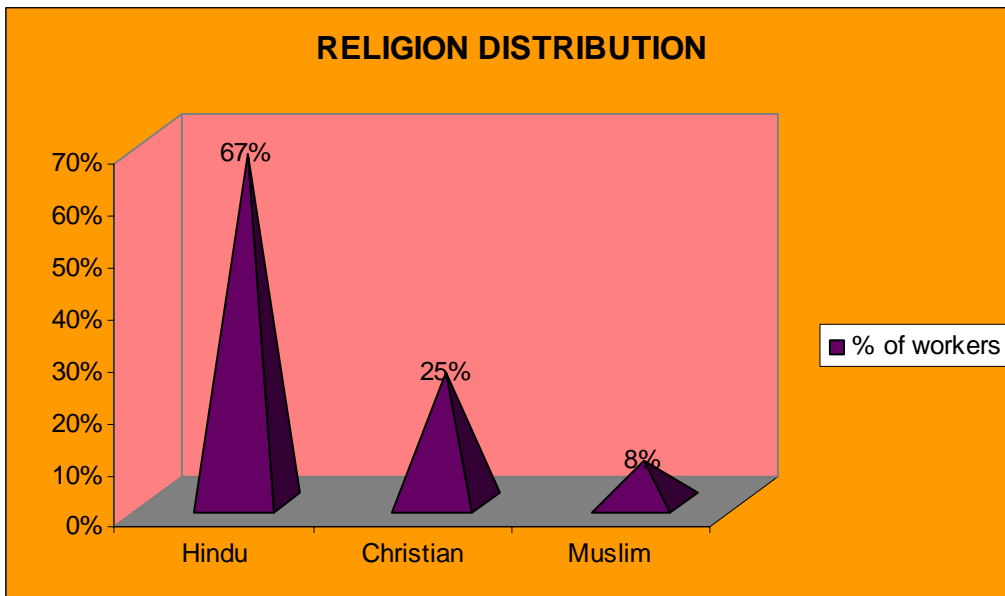
The above figure shows that 67% of the workers belonged to Hindu religion, 25% of the workers belonged to Christian and 8% of the workers belonged to Muslim.

Fig 9: Pie diagram shows distribution of workers according to their residence
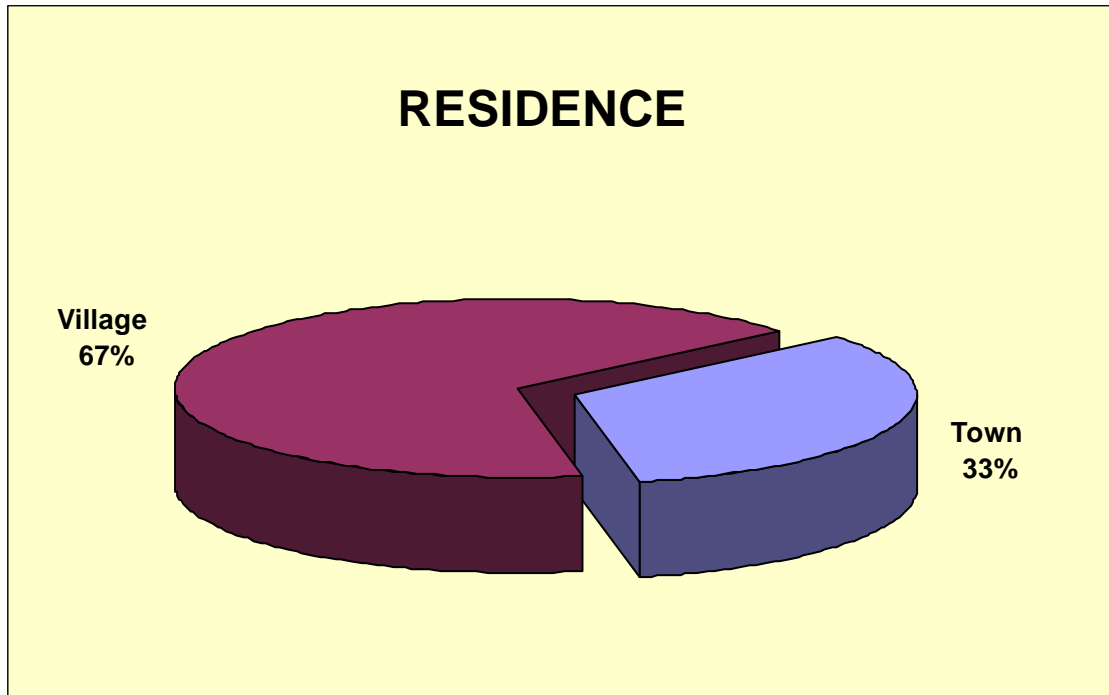
The above figure shows that   67% of the workers were resided in village and 33% of the workers were resided in town.

Fig 10: Cone diagram showing distribution of workers according to type of family
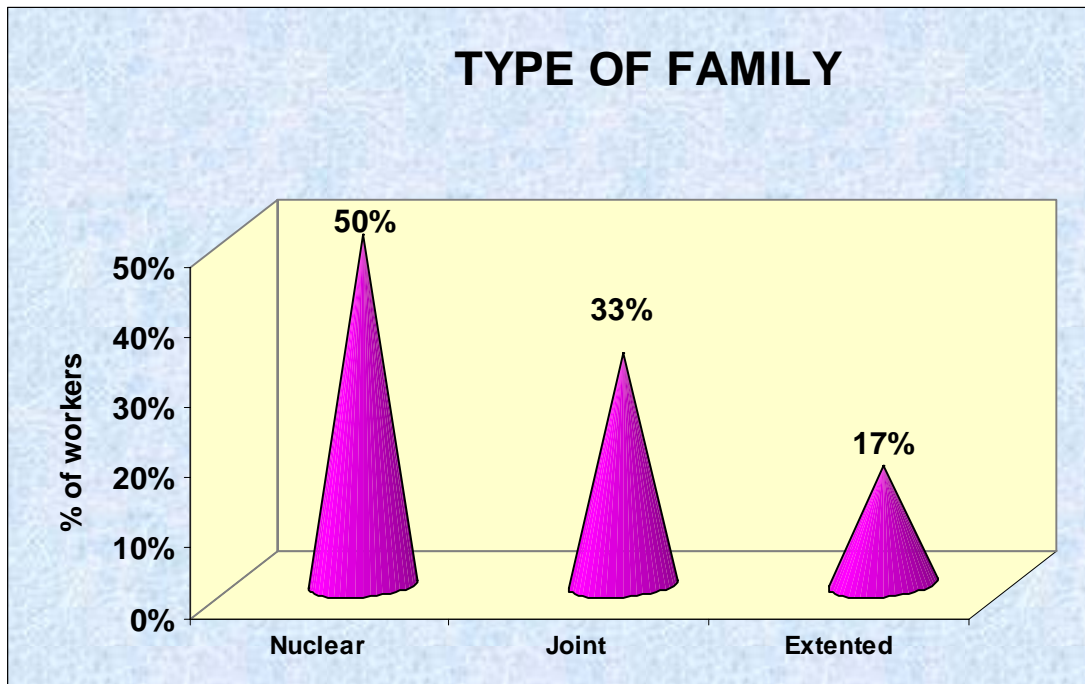
The above figure shows that   50% of the workers were nuclear family, 33% of the workers were joint family and 17% of the workers were extended family.

Fig 11: Bar diagram showing distribution of workers according to years of experience
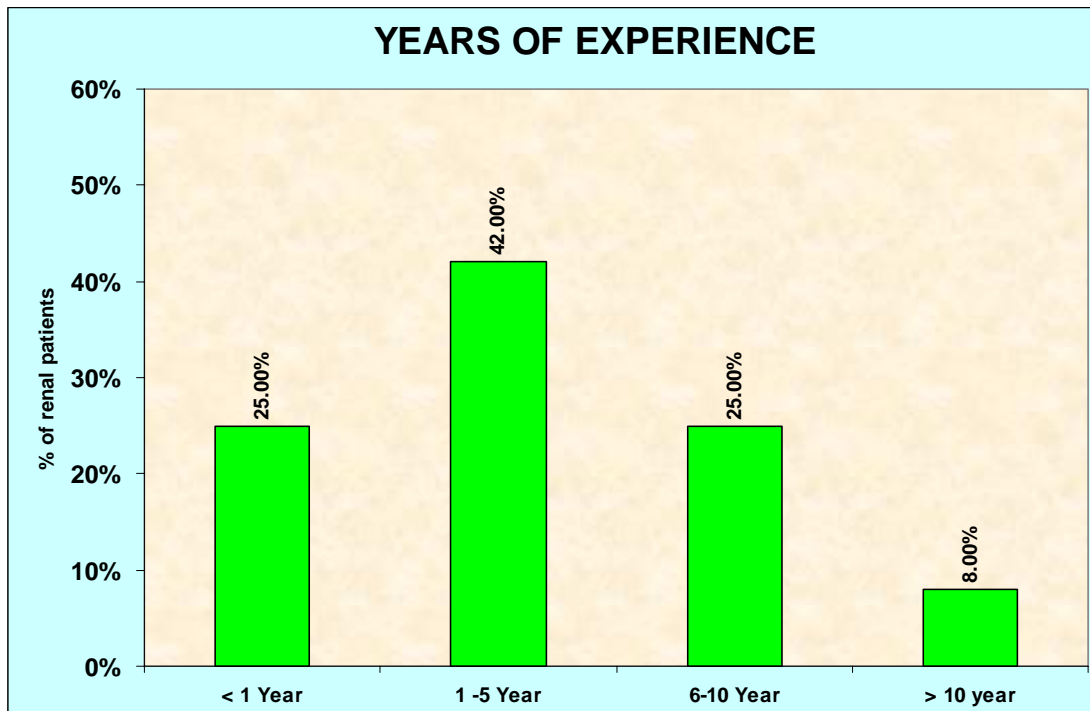
The above figure shows that 26% of the workers had below one year experience, 42% of the workers had 1-5 year experience, 26% of the workers had 6-10 year experience and 8% 0f the workers had above 10 year experience.

ASSESS THE PRETEST AND POSTTEST LEVEL OF JOB STRESS AMONG THE WORKERS

PART A

TABLE 3 : Aspect wise pretest percentage of job stress score among the workers

Aspect	Number of questions	Min-Max score	Stress Score	
			Mean score	Mean %
Cognition	5	0-10	7.35	73.5%
Emotion	7	0-14	9.38	67%
Time	6	0-12	8.98	74.83%
Physical and emotional	12	0-24	17.1	71.25%
Social support	5	0-10	7.33	73.3%
spiritual	4	0-8	6.05	75.63%
activities	6	0-12	8.52	71%
finance	5	0-10	7.45	74.5%

The pretest job stress score related to cognition (73.5%), emotion (67%), time (74.83%), physical and emotional (71.25%), social support (73.3%), spiritual (75.63%), activities (71%) and finance (74.5%).

Figure 12: Line graph depicting aspects wise pretest job stress score
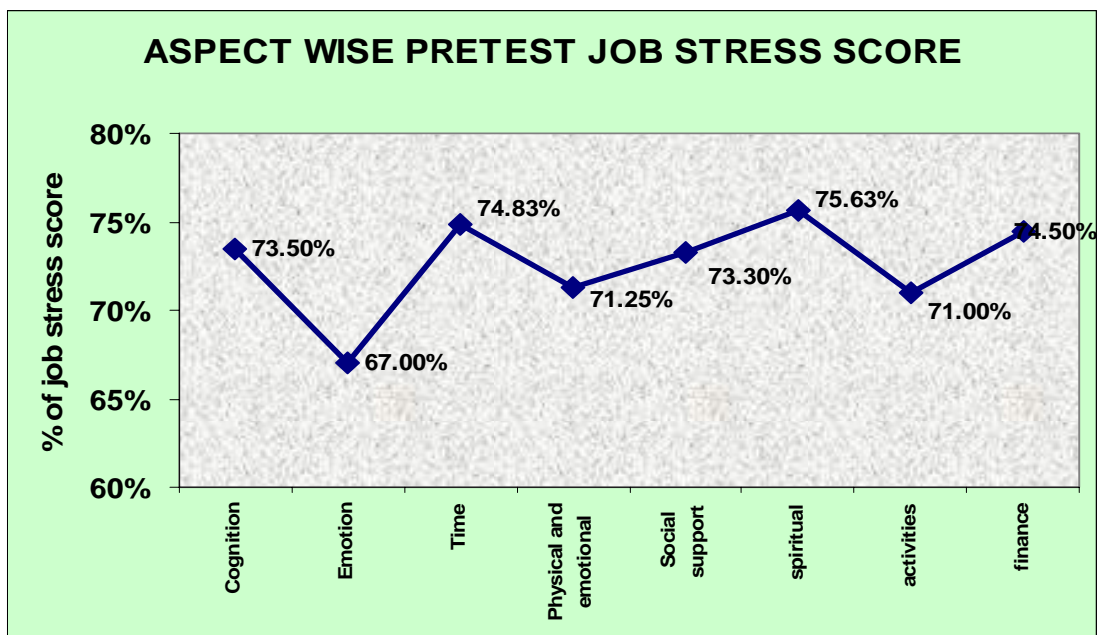
TABLE-4: Aspect wise posttest percentage of job stress score among the workers

Aspects	Number of questions	Min-Max score	Mean score	Mean %
Cognition	5	0-10	5.03	50.3%
Emotion	7	0-14	6.38	45.57%
Time	6	0-12	6.05	50.42%
Physical and emotional	12	0-24	11.52	48%
Social support	5	0-10	4.47	44.7%
spiritual	4	0-8	3.57	44.63%
activities	6	0-12	5.25	43.75%
finance	5	0-10	4.35	43.5%

The posttest job stress score related to cognition (50.3%), emotion (45.57%), time (50.42%), physical and emotional (48%), social support (44.7%), spiritual (44.63%), activities (43.75%) and finance (43.5%).

Figure 13: Line graph depicting aspects wise posttest job stress score
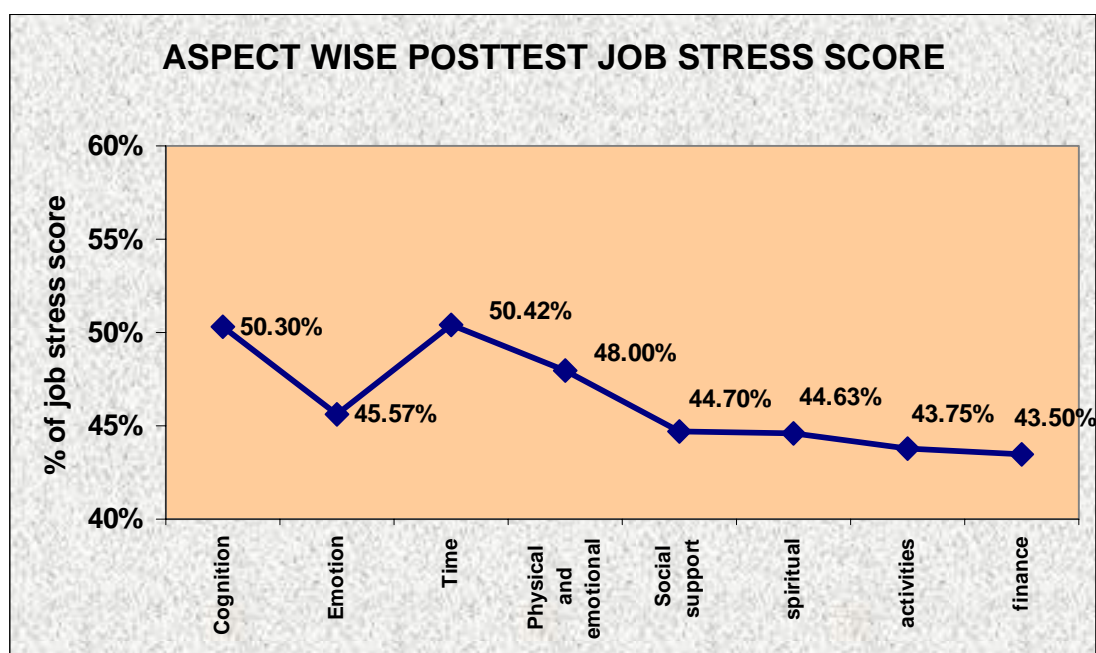
TABLE-5

PRETEST LEVEL OF JOB STRESS SCORE AMONG THE WORKERS

Level of Stress	Number of Samples	Percentage
Mild	5	8%
Moderate	15	25%
Severe	40	67%

Figure 14: Pie diagram depicting pretest percentage of job stress score
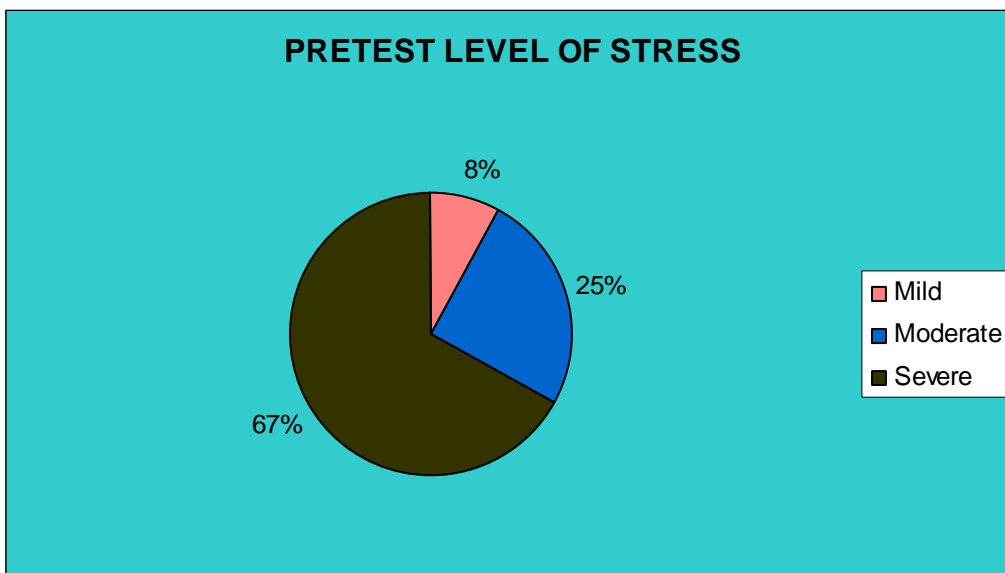
8% of the workers in SSL had mild job stress.

25% of the workers in SSL had moderate job stress

67% of the workers in SSL had severe job stress

TABLE-6

POSTTEST LEVEL OF JOB STRESS SCORE AMONG THE WORKERS

Level of Stress	Number of Samples	Percentage
Mild	18	30%
Moderate	36	60%
Severe	6	10%

Figure 15: Cone diagram depicting posttest percentage of job stress score

30% of the workers in SSL had mild job stress.

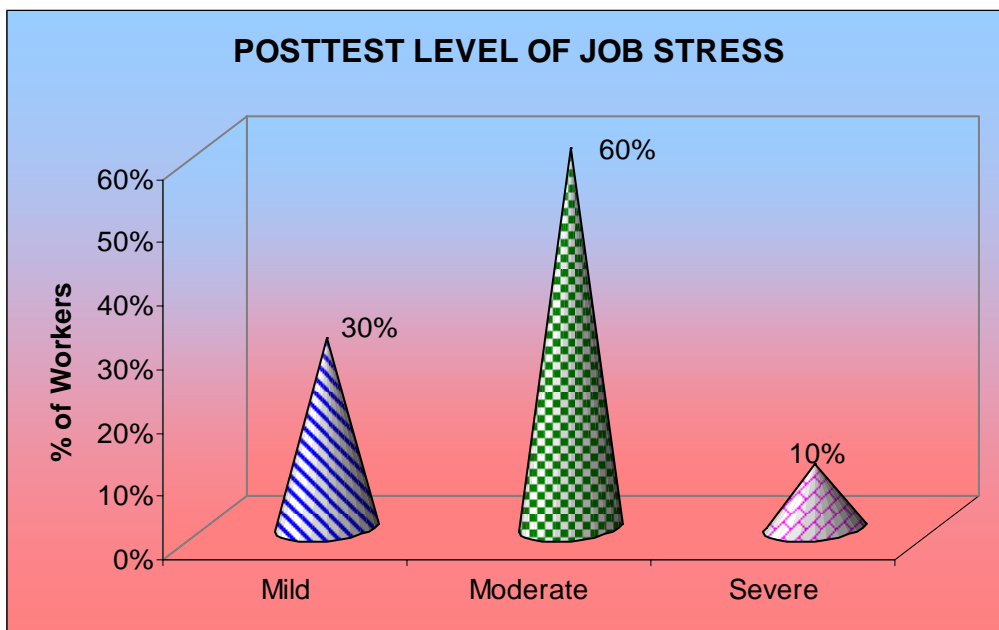60% of the workers in SSL had moderate job stress

10% of the workers in SSL had severe job stress

TABLE-7

ASPECT WISE COMPARISON OF MEAN SCORES BETWEEN PRETEST AND POSTTEST ON JOB STRESS AMONG THE WORKERS

Components	Observation	Mean	Mean Difference	SD	't' value	Significance
Cognition	Pretest	7.35	2.32	1.1326	0.89	**Significant P<0.05**
	Posttest	5.03				
Emotion	Pretest	9.38	3	1.6273	1.07	**Significant P<0.05**
	Posttest	6.38				
Time	Pretest	8.98	2.93	1.4450	1.41	**Significant P<0.05**
	posttest	6.05				
Physical and emotional	Pretest	17.1	5.58	2.8120	3.33	**Significant P<0.05**
	Posttest	11.52				
Social support	Pretest	7.33	2.87	1.1586	1.28	**Significant P<0.05**
	Posttest	4.47				
spiritual	Pretest	6.05	2.48	0.989	0.96	**Significant P<0.05**
	posttest	3.57				
activities	Pretest	8.52	3.27	1.4320	1.43	**Significant P<0.05**
	Posttest	5.25				
finance	Pretest	7.45	3.1	1.1717	1.53	**Significant P<0.05**
	posttest	4.35				

Table 7 depicts that the computed "t" value on cognition aspect, t=20.11, emotional aspect, t=21.65, time aspect t=16.08, physical and physiological aspect t=11.83, social support aspect t=17.27, spiritual aspect t=20.01, activities aspect, t=17.74, financial aspect t=15.65. These are all higher than the table value at 0.05 level of significance. Hence H1 (There is relationship between PMRT and reduction of job stress) was accepted. From the table job stress.

Figure 16: Line diagram shows comparison of mean scores between pretest and posttest on job stress among the workers
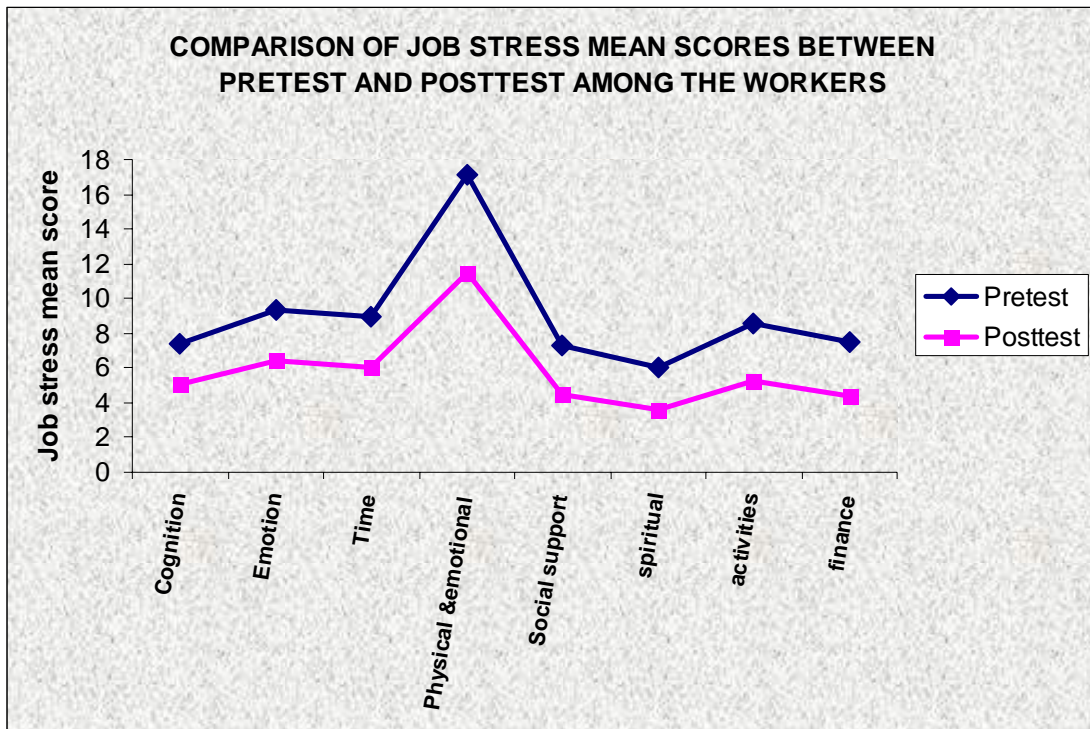
TABLE-8

OVER ALL MEAN SCORES BETWEEN PRETEST AND POSTTEST ON

JOB STRESS AMONG THE WORKERS

Components	Observation	Mean	Mean Difference	SD	't'value	Significance
Job stress score Total	Pretest posttest	72.167 46.617	25.55	7.708	25.67	Significant P<0.05

Figure 17: Cone diagram depicting total mean score
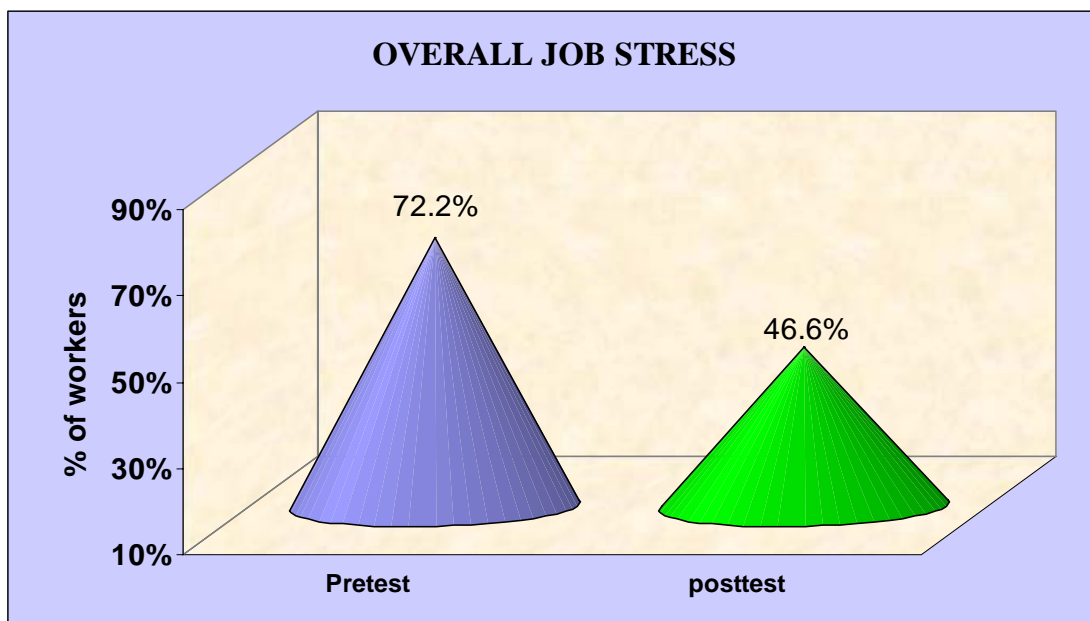
There is a significant reduction of job stress score after progressive muscle relaxation technique than before

SECTION-V

TO FIND OUT THE ASSOCIATION BETWEEN THE JOB STRESS AND SELECTED DEMOGRAPHIC VARIABLES

TABLE-9

Demographic variables		Level of stress						Significance
		Mild		**Moderate**		**Severe**		
		N	**%**	**N**	**%**	**N**	**%**	
Age	20 -25 yrs	2	10.00%	5	25.00%	13	65.00%	x^2=4.092 P=0.6643 Not significant
	26 -30 yrs	1	6.67%	4	26.67%	10	66.67%	
	31- 35 yrs	2	20.00%	3	30.00%	5	50.00%	
	36-40 yrs	0	0.00%	3	20.00%	12	80.00%	
Sex	Male	5	10.00%	13	26.00%	32	64.00%	x^2= 1.440 P= 0.4868 Not significant
	Female	0	0.00%	2	20.00%	8	80.00%	
Education Status	Illiterate	2	16.67%	7	58.33%	3	25.00%	**x^2=24.335 P=0.0005 Significant**
	Primary	1	4.00%	2	8.00%	22	88.00%	
	Secondary	0	0.00%	2	13.33%	13	86.67%	
	Degree	2	25.00%	4	50.00%	2	25.00%	
Monthly income	> Rs.5000/-	0	0.00%	8	26.67%	22	73.33%	**x^2=32.758 P=0.0001 Significant**
	Rs.5000/- to 10000/-	0	0.00%	3	15.00%	17	85.00%	
	<Rs.10000/-	15	75.00%	4	20.00%	1	5.00%	
Marital status	Unmarried	0	0.00%	4	13.33%	26	86.67%	**x^2=24.744 P=0.0004 Significant**
	Married	5	23.81%	11	52.38%	5	23.81%	
	Divorced	0	0.00%	0	0.00%	13	100.00%	
	Widow	0	0.00%	0	0.00%	1	100.00%	
Year of experience	<1 Year	0	0.00%	2	13.33%	13	86.67%	**x^2=20.866 P=0.0019 Significant**
	1-5 yrs	1	4.00%	7	28.00%	17	68.00%	
	6-7 yrs	2	13.33%	4	26.67%	9	60.00%	
	>10 yrs	3	60.00%	2	40.00%	0	0.00%	
Religion	Hindu	3	7.50%	13	32.50%	24	60.00%	x^2=4.438 P=0.3500 Not Significant
	Muslim	1	7.14%	1	7.14%	12	85.71%	
	Christian	1	16.67%	1	16.67%	4	66.67%	
Type of family	Joint	5	25.00%	4	20.00%	11	55.00%	**x^2=10.083 P=0.0390 Significant**
	Nuclear	0	0.00%	6	30.00%	14	70.00%	
	Extended	0	0.00%	5	50.00%	5	50.00%	
Residence	Town	1	5.00%	5	25.00%	14	70.00%	x^2=0.4500 P= 0.7985 Not Significant
	Village	4	10.00%	10	25.00%	26	65.00%	

There is significant association between level of job stress and demographic variables such as educational status, marital status, monthly income, years of experience, type of family. Values such as educational status (x^2=24.335 P=0.0005), marital status (x^2=24.744, P=0.0004), monthly income (x^2=32.758 P=0.0001), years of experience (x^2=20.866 P=0.0019), type of family (x^2=10.083 P=0.0390).

Figure 18: Pyramid diagram showing association between level of job stress and their educational status
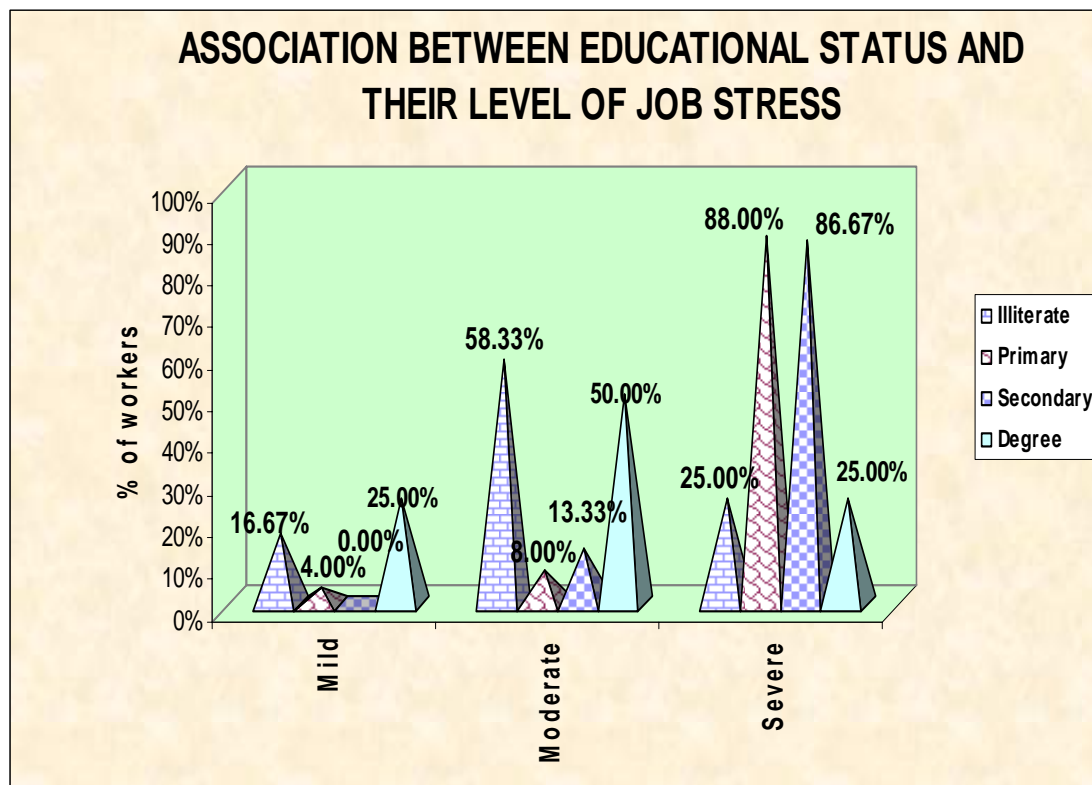
Figure 19: Pyramid diagram showing association between level of job stress and their martial status

ASSOCIATION BETWEEN MARTIAL STATUS AND
THEIR LEVEL OF JOB STRESS
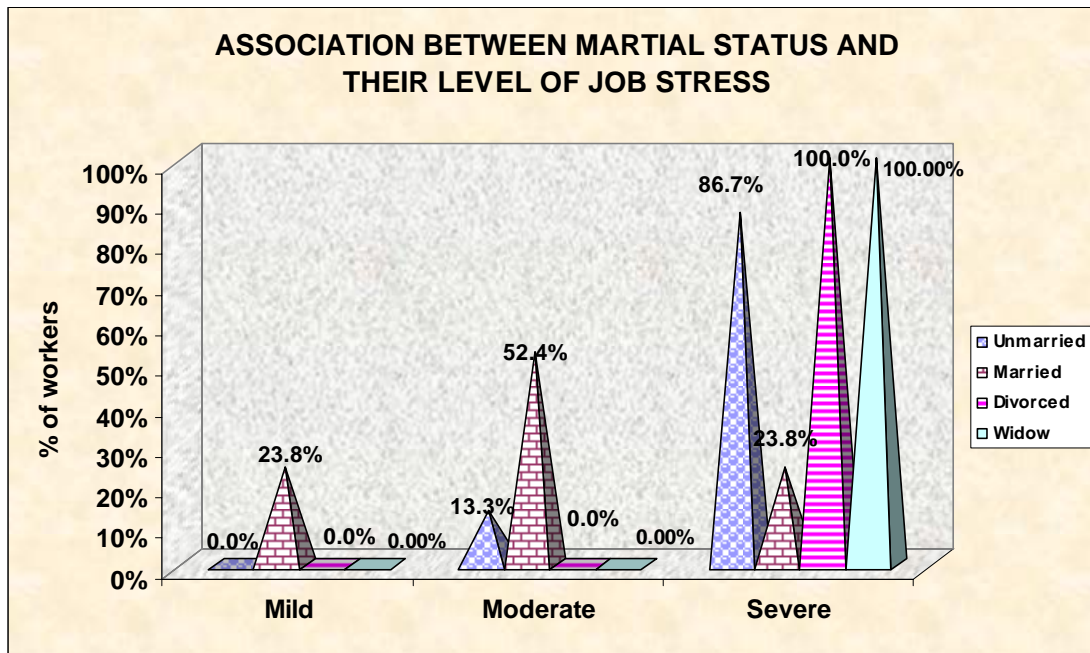
Figure 20: Cone diagram showing association between level of job stress and their monthly income

ASSOCIATION BETWEEN MONTHLY INCOME AND
THEIR LEVEL OF JOB STRESS

Figure 21: Bar diagram showing association between level of job stress and their years of experience
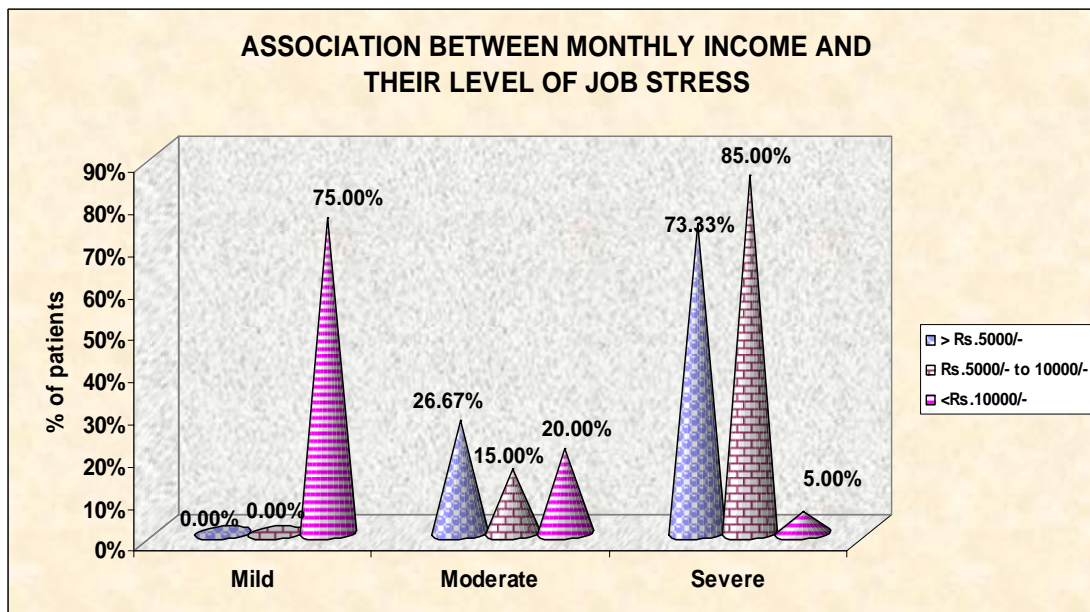

ASSOCIATION BETWEEN YEAR OF EXPERIENCE AND THEIR LEVEL OF JOB STRESS
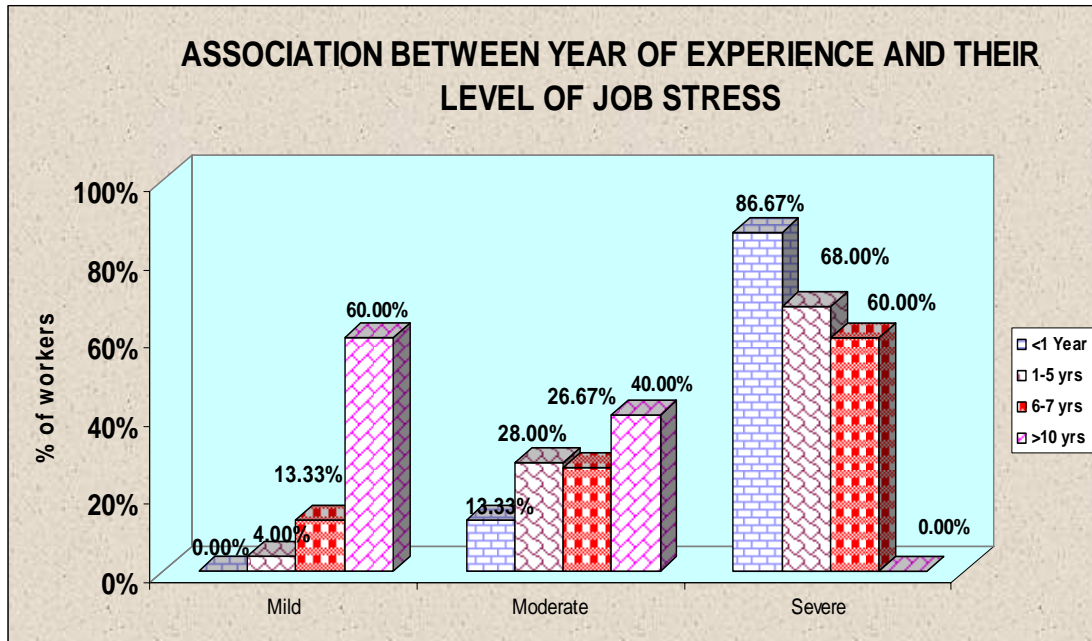
Figure 22: Cone diagram showing association between level of job stress and their type of family

ASSOCIATION BETWEEN TYPE OF FAMILY AND THEIR LEVEL OF JOB STRESS
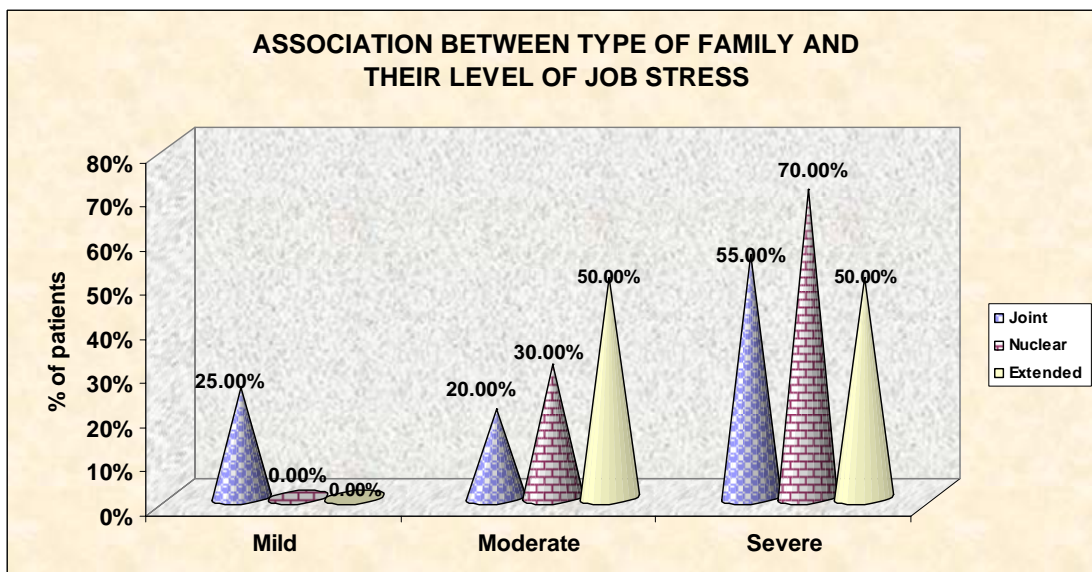
CHAPTER V

DISCUSSION

This chapter discusses the major findings of the research study and reviews that in relation to the finding from the results of the present study. For this study the data was obtained regarding the level of job stress among the workers, Sakthi sugars limited, Sakthinagar

STATEMENT OF THE PROBLEM:

"**A STUDY TO EVALUATE THE EFFECTIVENESS OF PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON JOB STRESS AMONG WORKERS IN SAKTHI SUGARS LIMITED, SAKTHINAGAR, ERODES DISTRICT.**"

TO ASSESS THE PRETEST AND POSTTEST LEVEL OF JOB STRESS AMONG THE WORKERS IN SAKTHI SUGARS LIMITED, SAKTHINAGAR.

The pretest mean job stress score related to cognition 7.35 (73.5%), related to emotional mean score was 9.38 (67%), related time mean score was 8.98 (74.83%), related to physical and physiological mean score was 17.1 (71.25%), social support mean score was 7.33 (73.3%) spiritual mean score was 6.05 (75.63%) activities mean score was 8.52 (71%) and finance mean score was 7.45 (74.5%).

The pretest overall stress score was mild (8%), moderate (25%), severe (67%) after the intervention post test stress level was reduced.

The posttest mean job stress score related to cognition 5.03 (50.3%), related to emotional mean score was 6.38 (45.57%), related time mean score was 6.05 (50.42%), related to physical and physiological mean score was 11.52 (48%), social support mean score was 4.47 (44.7%) spiritual mean score was 3.57 (44.63%) activities mean score was 5.25 (43.75%) and finance mean score was 4.35 (43.5%).

The posttest overall stress score was mild (30%), moderate (60%), severe (10%) after the intervention post test stress level was reduced.

Lyndsay swinton (2008) UK, stated that the study for the findings one in six consider their work, to be very or extremely stressful, stress in the second most commonly reported reason for work related health.

TO EVALUATE THE EFFECTIVENESS OF PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON JOB STRESS.

The computed "t" value on cognition aspect, t=20.11, emotional aspect, t=21.65, time aspect t=16.08, physical and physiological aspect t=11.83, social support aspect t=17.27, spiritual aspect t=20.01, activities aspect, t=17.74, financial aspect t=15.65.. These are all higher than the tabled value at 0.05 level of significance. Hence H1 (There is relationship between PMRT and reduction of job stress) was accepted

The total pretest mean score was 72.167 and posttest mean score was 46.617 and mean difference was 25.55, t=25.6742, p<0.05. It's showed that there was a significant difference between pretest and posttest mean score hence progressive muscle relaxation technique reduces job stress among the workers.

National Institute for Occupational Safety and Health(2009) in US stated that job burn out experienced by 25% to 40% of American workers is blamed on stress, depression only one types of stress reaction, is predicted to be the leading occupational disease of the 21st century, nearly 50% higher fir workers who report stress.

TO FIND OUT THE ASSOCIATION BETWEEN THE JOB STRESS AND SELECTED DEMOGRAPHIC VARIABLES

The computed 't' value (t=25.6742) and p<0.05 is greater than the tabled value. It shows significant association between the level of job stress and selected demographic variables. Such as educational status (x^2=24.335 P=0.0005), marital status (x^2=24.744, P=0.0004), monthly income (x^2=32.758 P=0.0001), years of experience (x^2=20.866 P=0.0019), type of family (x^2=10.083 P=0.0390).

CHAPTER-VI

SUMMARY, CONCLUSION AND RECOMMENDATIONS

INTRODUCTION

The primary goal of the study was to assess the stress level of workers, Sakthi Sugars Limited, Sakthinagar. Researcher developed a structured teaching programme and educated to the workers about the progressive muscle relaxation technique .then the stress level was assessed among the workers, Sakthi Sugars Limited, Sakthinagar and was associated with demographic variables.

OBJECTIVES

1. To assess the pretest and posttest level of job stress among the workers in Sakthi Sugars Limited, Sakthinagar.

2. To evaluate the effectiveness of progressive muscle relaxation technique on job stress.

3. To find out the association between job stress and selected demographic variables.

REVIEW OF LITERATURE

The conceptual framework adapted for this study is based on Roy's Adaptation model. In this study Review of literature is divided into following headings

1. Literature related to incidence, prevalence of job stress

2. Literature related to impact of job stress

3. Literature related to sources of job stress

4. Literature related to effectiveness of progressive muscle relaxation technique.

METHODOLOGY:

The research design adapted for this study was Quasi-experimental (pre-experimental) one pretest, posttest design and the sample consists of 60 workers from Sakthi Sugars Limited, Sakthinagar. The instrument used for the data collection was structured interview schedule.

The instrument was organized into two sections

Section-I

Demographic variables of workers, Sakthi Sugars Limited, Sakthinagar.

Section-II

Questionnaires regarding level of job stress among the workers, Sakthi Sugars Limited, Sakthinagar. It consists of 50 three-point closed ended questions.

The data collection was done and analyzed, interpreted on the basis of the objective of the study. The collected data was summarized &tabulated by utilizing descriptive statistics (percentage, mean, standard deviation) and inferential statistics (paired't' test) and chi-square test.

RESULTS:

The result of this study showed that the pretest level of job stress mean score{Mild stress(8%),moderate stress(25%),severe stress(67%)} was reduced in the post test mean score {mild(30%), moderate(60%), severe(10%)}.It states that PMRT has an impact on job stress. .

The computed 't" value 25.6742 was higher than the calculated value at 0.05 level of significance; hence H_1 (There is significant relationship between job stress and PMRT) was accepted.

There is significant association between level of job stress and demographic variables such as educational status, marital status, monthly income, years of experience, type of family.

The findings of the study support the need of awareness regarding PMRT among psychiatric nurses. The study was proved that the workers had a remarkable decrease of job stress after progressive muscle relaxation technique. Hence in future

there is a need to reduce their stress level through information, education & communication.

CONCLUSION:

The findings of the study proved the need of psychiatric nurse to conduct a training programme regarding job stress among the workers. The study revealed that the level of job stress score was high in pretest than the posttest, after PMRT .They concluded that need for providing information regarding job stress through the mental health services.

NURSING IMPLICATIONS

The present study was conducted to find out the job stress among the workers, following implications for Nursing practice, education, administration, research.

NURSING PRACTICE

Working in industry itself is a stressful and also affects the health &work performance. The present study would help to find out the different areas of stress.

Team oriented approaches plays a important role in employees well being. When working in multidisciplinary approaches have important implications regarding the development of workers performances, and need to be explored to enhance the life of workers.

It was found that workload was an important predictor of emotional exhaustion. When the work was distributed equally among the workers their stress level can be reduced.

Workers can be empowered by increasing access to information, support & resources, recognizing worker's contribution to organizational goals and providing opportunities for further education, training, communication, practice, role-playing and role-modeling can be used to teach cognitive empathy.

NURSING ADMINISTRATION

Nursing administrator could target specific source of stress identified in this study for example workload, distance from workplace, emergency duty etc and can implement the specific intervention .treating workers with more respect & providing realistic support can generally foster better and promote an organization climate of cooperation between the workers, superiors, managers.

In terms of intervention to enhance feeling of personal accomplishment, social attention should be arguably be given to those who have been in the post for longer perhaps through increasing responsibility, allocation of novel tasks or job rotation. It may be that for such individuals whose jobs have become to predictable on a day to day basis, but with little control over job related events. It would also appear that increasing predictability of job related events for example, providing more feedback to workers as regards the short and long term expectation of their job perhaps through regular appraisal and objective setting may reduce level of emotional exhaustion and depersonalization.

NURSING EDUCATION

It also found that especially on mental health nurse social support is lower, the degree of social support seems to be important. social support could be improved, for example, by creating social network and social resources by providing course on team building

Relaxation technique may give workers a better perspective on the emotional impact of dealing with death and dying. Along with other different stress management programme, skill training in conflict resolution and assertiveness etc. can be helpful to the workers for better job satisfaction and outcome.

NURSING RESEARCH

Nursing researcher should be aware about the need for the research in the field of stress, job satisfaction and various stress management programmes. This research may form some advancement for further research in the field.

RECOMMENDATIONS

Based on the findings of the study following recommendation are stated

♦ similar study can be conducted in large sample to generalize the findings

♦ a comparative study may be conducted between the workers of different settings

♦ a similar study can be undertaken with a control group design

♦ a similar study can be conducted in the different level of workers

SUGGESTIONS

1. Periodic assessment of the level of stress among the workers

2. Counseling program can be conducted in the industries

3. Demonstration class also can be arranged for the workers regarding relaxational techniques

4. Awareness programme regarding job stress and its management

CHAPTER VII

BIBLIOGRAPHY

BOOKS

1. Abdullah FG and Levine E (1979) **"BETTER PATIENT CARE THROUGH NURSING RESEARCH"**, New York collinear million publishing company, Pp.No: 699-720.

2. Ann H. (1989) "**NURSING THEORISTS AND THEIR WORK",** Philadelphia., C.V Mosby company ,Pp.No:328-329

3. Barbara (2002**) "PSYCHIATRIC MMENTAL HEALTH NURSING"** lippincott company, Pp.No: 210-222.

4. Basavanthappa B.T (1998) **"NURSING RESEARCH**", Mumbai, Jaypee brother's publication, Pp.No: 650-670.

5. Beck. Rawlins "**MENTAL HEALTH PSYCHIATRIC NURSING**" , Mosby publications, Pp.No:1120-1122.

6. Bimla Kapoor (2003) **"A TEXT BOOK OF PSYCHIATRIC NURSING",** Volume-II, Kumar Publications, Pp.No: 128-132.

7. Denice F.Polit and Hungler. P Bernadette (1998) **"NURSING RESEARCH PRINCIPLES AND METHOD**", JP Lippincott Company, New York, Pp.No: 115-176.

8. Doris. B. Payne, Patricia **A, "PSYCHIATRIC MENTAL HEALTH NURSING**", 2nd edition, Toppan company private limited, Singapore, Pp.No: 112-115.

9. Glen. O. Gobbard (1999) **"TREATMENTS OF PSYCHIATRIC DISORDERS**", second edition, Volume-I, Jaypee brother's ltd, New Delhi, Pp.No: 1421-1432.

10. Glencoe (2004) "**A GUIDE TO WELLNESS**" sixth edition, mosby publications, Pp.No:184-202

11. Lalitha (2007) **"TEXTBOOK OF PSYCHIATRIC NURSING''** second edition, V.M.G publishers, Pp.No:294-286.

12. Lippincott Williams (2008), "**FUNDAMENTALS OF NURSING**", sixth edition, volume-1, volters publications, Pp.No:1365-1409.

13. Little W.T et.al (1980) **"THE SHORTER OXFORD ENGLISH DICTIONARY".** USA., Claredon Press, Pp.No.: 100-107.

14. Mahajan B K .(1999) **"METHODS IN BIOSTATISTICS**". New Delhi,. Jaypee Brothers Medical Publishers, Pp.No.: 69-78

15. Nambi (2006) **"PSYCHIATRY FOR NURSES**", Jaypee brother's publication, New Delhi, India.Pp.No: 189-191.

16. Niraj Ahuja 92002), **"A SHORT TEXT BOOK OF PSYCHIATRY"**, fifth edition, New Delhi, Jaypee brother's publishing company, Pp.No:212-216.

17. Neeraj.K.P.(2006) **"ESSENTIALS OF MENTAL HEALTH AND PSYCHIATRIC NURSING''** Jaypee brothers publications, Pp.No:384-394.

18. Polden and Mantle J (1990) "**PHYSIOTHERAPY IN OBSTETRICS AND GYNECOLOGY**", London., Batter worth Heinemann, Pp.No.:1120-1226

19. Polit and Hungler (1999), **"NURSING RESEARCH AND BIOSTATISTICS",** 1st edition, Thiruchirpalli, Subain publications, Pp.No.:202-228.

20. Potter Perry (2004), "**FUNDAMENTALS OF NURSING**", sixth edition, Mosby publications, Pp.No.: 595-616.

21. Ruth. F.Craves (2002), **"ESSENTIALS OF MUSCLE RELAXATION",** third edition, Pp.No.:1295-1314,

22. Shives Louis rebraca (2000), **"BASIC CONCEPTS OF PSYCHIATRIC MENTAL HEALTH NURSING",** Mosby publications, Pp.No.:300-328

23. Sreevani (2007), **"A GUIDE TO MENTAL HEALTH AND PSYCHIATRIC NURSING**", New Delhi, Jaypee brothers and publishing company, Pp.No.:65-75

24. Stuart W. Gail (1999), **"PRINCIPLES AND PRACTICE OF PSYCHIATRIC NURSING**", 7th edition, Philadelphia, Mosby health science company, Pp.No.: 400-414.

25. Sunder Rao and Richard J (1998) "**AN INTRODUCTION TO BIOSTATISTICS**", 3rd Edition, practice hall of Indian private ltd. Pp.No.: 205-210.

JOURNALS

1. Burks N and Barelay M (1985) **"EVERYDAY PROBLEMS AND LIFE CHANGE EVENTS, ONGOING VERSUS ACUTE SOURCES OF STRESS**", Journal of Human Stress, Pg.No: 11, 27.

2. Bastin Jerome (2004), **"STRESS AND EUSTRESS"** journal of health action"**,** Pp.No.: 27-30.

3. Cohen CH, MC Gowan (1997) **"POSITIVE LIFE EVENTS AND SUPPORT THE RELATIONSHIP BETWEEN LIFE STRESS AND PSYCHOLOGICAL DISORDER**", American Journal of Community Psychiatry, Pg. No.: 13.

4. Everly D. Jocy (2000), **"PETFISH AND STRESS REDUCTION AMONG WORKERS**" Journal of psychosomatic research, Pp.No.: 15-17

5. Halliday and Mackwell (1998) ''**TECHNIQUES OF PMRT"** '', the Health Journal, Pp.No.: 5-7.

6. Holmos FH and Rahe RH (1967), **"THE JOB STRESS INVENTORY SCALE**", Journal of psychosomatic research, Pg. No.: 11, 12.

7. Jacobsan.E (1938), **"PROGRESSIVE RELAXATION"**, Indian Journal of Clinical Psychology, Pp.No.:57-58

8. Keegan. L (2003) **"THERAPIES TO REDUCE STRESS"** Nurse clinics of North America, Pg.No.: 15, 32.

9. Krishna KP (1982) **"OCCUPATIONAL STRESS AND THE MANAGEMENT OF VIOLENCE**", Indian Journal of clinical psychology, Pg.No.: 44,52.

10. Masuda M and Holmes TH (1978) **"LIFE EVENTS, PERCEPTION AND FREQUENCIES**", Indian journal of psychiatry, psychosomatic medicine, Pg.No.: 20, 36.

11. Newmen JE (1978) **"JOB STRESS, PERSONNEL PSYCHOLOGY",** Indian journal of psychiatry vol-31, Pp.No.: 65-69.

12. Patterson (2002) **"STRESS MANAGEMENT AND INTERVENTION IN OCCUPATIONAL STRESS**", Indian journal of psychiatry, Pp.No.:35-38.

13. Prema (2009), **"PROCEDURE AND MECHANISM OF PROGRESSIVE MUSCLE RELAXATION**", The Nightingale Nursing Times, volume-3, issue-10, Pp.No.:21-23

14. Stuart JC and Brown BM (1981) **"THE RELATIONSHIP OF STRESS AND COPING ABILITY AND INCIDENCE OF DISEASES AND ACCIDENTS"** Journal of Psychometric Research, Pg. No.: 25, 27.

15. Sivagami Ramanathan (2008) **"STRESS BURNOUT**" The Nightingale Nursing Times, Pp.No: 29-31

16. Siddique .M. (1981), **"EFFECT OF PMRT ON STRESS"**, Indian Journal of Clinical Psychology,Pp.No:57-58.

17. Chou (2009) **"SUPPORTS AND LIFE EVENTS",** Journal of Abnormal psychology, Pg.No.: 25, 32.

18. Whiteman Neal A (2001) **"STRESS, EFFECTS AND SOLUTIONS**". The Nightingale Nursing Times, Pp.No.: 32-34.

19. Wolfe.S. (1996), **"BEHAVIOUR THEREPY TECHNIQUE"**, Journal of psychology, Pg.No.: 17, 22.

WEBSITE

⇒   www.google.com

⇒   www.pubmed.com

⇒   www.rediffmail.com

⇒   www.yahoo.com

⇒   www.medicinenet.com

⇒   www.essortment.com

LETTER SEEKING PERMISSION TO CONDUCT PILOT STUDY
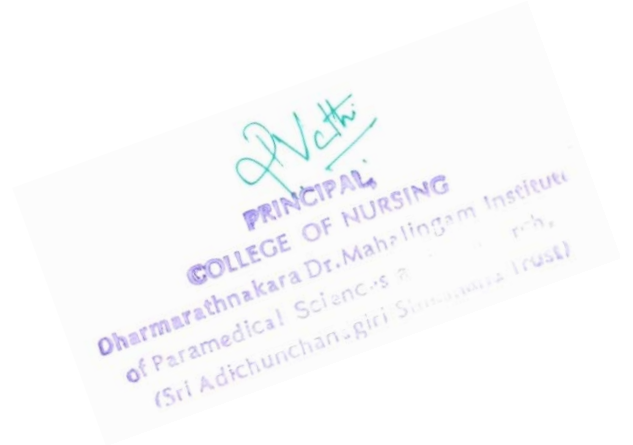
From

        Ms.R. Tamizhselvi M.Sc., (N) II Year
        (Speciality – Psychiatric / Mental Health Nursing),
        Dr.Mahalingam College of Nursing,
        Sakthi Nagar (Po),
        Bhavani (TK),
        Erode (DT),
        Tamilnadu.

To
        The General Manager,
        Sakthi Sugars Limited,
        Modakurichi,
        Erode District.

Through,
        The Principal,
        Dr.Mahalingam College of Nursing,
        Sakthi Nagar (Po),
        Bhavani (TK),
        Erode (DT).

Respected Sir /Madam,

        Sub: Request for to conduct Pilot study-reg.

        I am II year M.Sc., Nursing student of Dr.Mahalingam College of Nursing, Sakthi Nagar. As a partial fulfillment of Master of Science in Nursing, I have undertaken the following research study, which has to be submitted to The Tamilnadu Dr.M.G.R.Medical University, Chennai.

        "A study to evaluate the effectiveness of progressive muscle relaxation technique on job stress among workers in Sakthi Sugars Limited, Sakthinagar, Erode District".

Sakthi Sugars Limited

Admn/10-15/2009
1st November 2009

The Principal
Dr. Mahalingam College of Nursing
Sakthinagar 638 315

Sub: Final M.SC., Nursing student - Project work – Permission granted to conduct pilot study- Regarding.

Ref: Your Letter dt. 01/11/2009
–*–

With reference to your letter cited above. Permission is hereby accorded to Ms. R. Tamizhselvi, II M Sc Nursing student of your college to undergo project work in our organization from November 2009.

In this regard you may instruct the student to contact undersigned to receive further guidance.

Yours faithfully.
For SAKTHI SUGARS LIMITED

ASST. GENERAL MANAGER - HRD.

LETTER SEEKING PERMISSION TO CONDUCT STUDY

From

    Ms.R.Tamizhselvi, M.Sc.,(N) II Year,
    (Speciality – Psychiatric Nursing),
    Dr. Mahalingam College of Nursing,
    Sakthi Nagar (Po),
    Bhavani (TK), Erode (DT),
    Tamilnadu.

To

    Asst. General Manager - HRD,
    Sakthi Sugars Limited,
    Sakthi Nagar, Erode - 638315

Through,

    The Principal,
    Dr. Mahalingam College of Nursing,
    Sakthi Nagar (Po),
    Bhavani (TK), Erode (DT).
    Tamilnadu

PRINCIPAL,
COLLEGE OF NURSING
Dharmarathnakara Dr.Mahalingam Institute
of Paramedical Sciences and Research,
(Sri Adichunchanagiri Shikshana Trust)

Respected Sir / Madam,

    SUB: Permission to conduct study - Reg.

    - - - - -

    I am II year M.Sc., Nursing student of Dr. Mahalingam College of Nursing, Sakthi Nagar. As a partial fulfillment of Master of Science in Nursing, I have undertaken the following research study, which has to be submitted to The Tamilnadu Dr.M.G.R. medical University, Chennai.

RESEARCH STUDY:

    "A Study to evaluate the Effectiveness of Structured teaching Program on Progressive Muscle relaxation technique to reduce Job stress among workers in selected industry at Erode District".

I kindly request you to permit me to do reliability of the prepared tool to evaluate the Effectiveness of Structured teaching Program on Progressive Muscle relaxation technique to reduce Job stress among workers in selected industry at Erode District with effect from 11:11:2009 to 30:11:2009
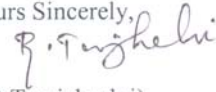
I kindly request you to permit me to conduct the proposed study and provide necessary facilities. Please do the needful.

Thanking you,

Date :

Place :

Yours Sincerely,

(R.Tamizhselvi)

Admn/20-32/2009
16th November 2009

The Principal
Dr. Mahalingam College of Nursing
Sakthinagar 638 315

Madam,

Sub: Final M.Sc., Nursing student – Project work - Permission
       granted – Regarding.
Ref: Your Letter dt. 10/11/2009
                  ***

With reference to your letter cited above, permission is hereby accorded to Miss. R. Tamizhselvi, II M Sc Nursing student of your college to undergo project work in our organization from November 2009.

In this regard, you may instruct the student to contact undersigned to receive further guidance.

Yours faithfully,
For SAKTHI SUGARS LIMITED

ASST. GENERAL MANAGER – HRD.

LETTER SEEKING EXPERT OPINION FOR TOOL VALIDATION

From

      Ms.R. Tamizhselvi M.Sc., (N) II Year
      (Speciality – Psychiatric / Mental Health Nursing),
      Dr.Mahalingam College of Nursing,
      Sakthi Nagar (Po),
      Bhavani (TK),
      Erode (DT),
      Tamilnadu.

To

Through,
      The Principal,
      Dr.Mahalingam College of Nursing,
      Sakthi Nagar (Po),
      Bhavani (TK),
      Erode (DT).
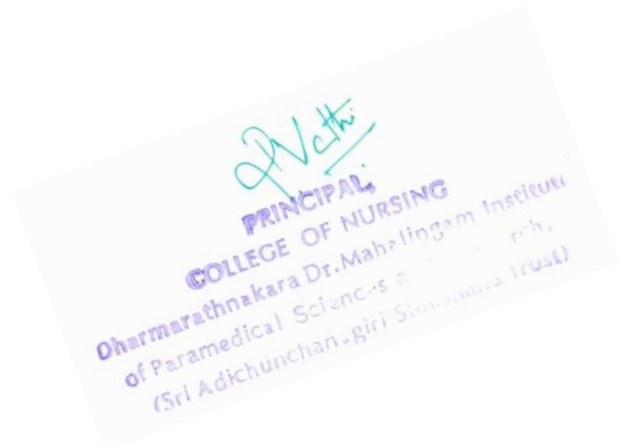
Respected Sir /Madam,

      Sub: Request for the validation the tool-reg.

      I am II year M.Sc., Nursing student of Dr.Mahalingam College of Nursing, Sakthi Nagar. As a partial fulfillment of Master of Science in Nursing, I have undertaken the following research study, which has to be submitted to The Tamilnadu Dr.M.G.R.Medical University, Chennai.

      "A study to evaluate the effectiveness of progressive muscle relaxation technique on job stress among workers in Sakthi Sugars Limited, Sakthinagar, Erode District".

CONTENT VALIDITY CERTIFICATE

This is to certify that the student Ms. R. Tamizhselvi is studying in Final M.Sc., (N) Post graduate Degree course of Dharmarathnakara Dr. Mahalingam Institute of Paramedical sciences and Research, Sakthi Nagar.

Topic Entitled:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF ON PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON JOB STRESS AMONG WORKERS IN SAKTHI SUGARS LIMITED, SAKTHINAGAR, ERODE DISTRICT".

His content for the study is validated and was found reliable.

Date :

Place :

Signature of guide with seal
PRINCIPAL
HARSHA COLLEGE OF NURSING
'Harsha Hospital Campus'
193/4, Sondekoppa Circle,
NH-4, Nelamangala,
BANGALORE - 562 123.

CONTENT VALIDITY CERTIFICATE

This is to certify that the student Ms. R. Tamizhselvi is studying in Final M.Sc., (N) Post graduate Degree course of Dharmarathnakara Dr. Mahalingam Institute of Paramedical sciences and Research, Sakthi Nagar.

Topic Entitled:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF ON PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON JOB STRESS AMONG WORKERS IN SAKTHI SUGARS LIMITED, SAKTHINAGAR, ERODE DISTRICT".

His content for the study is validated and was found reliable.

Date :

Place :

Signature of guide with seal 04/11/09

CONTENT VALIDITY CERTIFICATE

This is to certify that the student Ms. R. Tamizhselvi is studying in Final M.Sc., (N) Post graduate Degree course of Dharmarathnakara Dr. Mahalingam Institute of Paramedical sciences and Research, Sakthi Nagar.

Topic Entitled:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF ON PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON JOB STRESS AMONG WORKERS IN SAKTHI SUGARS LIMITED, SAKTHINAGAR, ERODE DISTRICT".

Her content for the study is validated and was found reliable.

Date :

Place :

Signature of guide with seal

CONTENT VALIDITY CERTIFICATE

This is to certify that the student Ms. R. Tamizhselvi is studying in Final M.Sc., (N) Post graduate Degree course of Dharmarathnakara Dr. Mahalingam Institute of Paramedical sciences and Research, Sakthi Nagar.
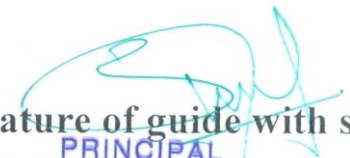
Topic Entitled:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON JOB STRESS AMONG WORKERS IN SAKTHI SUGARS LIMITED, SAKTHINAGAR, ERODE DISTRICT".

Her content for the study is validated and was found reliable.

Date :

Place :

Signature of guide with seal

Dr. N. Murugan
MBBS DCH
Reg. no. 66982
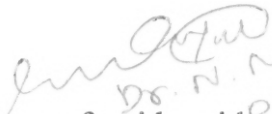
MEDICAL OFFICER
M KAILASAM HOSPITAL
SAKTHINAGAR - 638 315

ATHMA – THE MIND CENTRE

12-B, C-10th Cross (East), Thillai Nagar, Trichy - 18.
0431-2740452, Fax : 0431 - 2741529
E-mail : athma07@gmail.com   Web :www.aimss.in
Director : Dr. K. RAMAKRISHNAN MBBS DPM, FIPS, (DNB Psy)

To Whom So Ever It Concern

I Dr. Arunkumar MD DNB(Psychiatry) had reviewed the study protocol of Ms.R.Tamizhselvi   Msc (N) II year studying in Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences and Research ,Sakthi nagar.

"A study to evaluate the effectiveness of video assisted teaching programme on progressive muscle Relaxation Technique to reduce job stress among occupational workers in selected industry."

The study tool "JOB STRESS INVENTORY" is appropriate, and should be done as pre and post test analysis.

Her content for the study is validated and was found reliable.

I wish best of luck for her research and carrier.

Dr. N.ARUNKUMAR
M.B.B.S.,M.D.,DNB.,
Reg No: 82196
Consultant Neuro Psychiatrist
ATHMA- THE MIND CENTRE
12-B, 10th Cross East, Thillai Nagar
Tiruchirappalli- 620 018, Tamil Nadu.

Signature

KMCH SPECIALITY HOSPITAL

15, Palaniappa Street, Near G.H, Erode - 638 009.
✆ : 0424 - 2256456, 4031232 Fax : 2241363
Cell : 99522 75555, 99526 56666.

TRAINING CERTIFICATE IN BACK MASSAGE

KMCH HOSPITAL

DEPARTMENT OF PHYSIOTHERAPHY

16/10/2009

CERTIFICATE

TO WHOMSOEVER IT MAY CONCERN

This is certify that Ms. R. Tamizhselvi. II Year, M.Sc. Nursing student has undergone training programme in progressive muscle relaxation technique used for the workers in the department of physiotherapy at K.M.C.H. Hospital, from 01.10.09 to 15.10.09 for 2 hours / day, She can perform the techniques effectively for the workers

TOOL

SECTION – I

Instructions: Read each questions properly and put (√) on the column which one is suitable for you

DEMOGRAPHIC DATA
CODE NUMBER

1. Age
   a. 20 – 25 years   [   ]
   b. 26 – 30 yea   [   ]
   c. 31 – 35 years   [   ]
   d. 36 – 40 years   [   ]

2. Sex
   a. Male   [   ]
   b. Female   [   ]

3. Educational status
   a. Illiterate   [   ]
   b. Primary education   [   ]
   c. Secondary education   [   ]
   d. Graduate   [   ]

4. Marital Status
   a. Married   [   ]
   b. Un married   [   ]
   c. Divorced   [   ]
   d. Widow   [   ]

5. Monthly Income
   a. Below Rs.5000/-   [   ]
   b. Rs.5001 to 10,000/-   [   ]
   c. Above Rs.10,000/-   [   ]

6. Religion

    a. Hindu   [   ]

    b. Christian   [   ]

    c. Muslim   [   ]

    d. Other   [   ]

7. Area of Residence

    a. Town   [   ]

    b. Village   [   ]

8. Type of family

    a. Nuclear family   [   ]

    b. Joint family   [   ]

9. Years of Experience

    a. < 1 Year   [   ]

    b. 1 – 5 year   [   ]

    c. 6 -10 Years   [   ]

    d. > 10 years   [   ]

SECTION-II

Instructions: Read each questions properly and put (√) on the column which one is suitable for you

STRUCTURED QUESTIONNAIRE RELATED TO JOB STRESS

S. NO	ITEMS	Always Agree(0)	Sometimes Agree(1)	Strongly Disagree(2)
1	**RELATED TO COGNITION**			
1.1	I can perform well if any task is given to me.			
1.2	I can able to cope up with stressful situation			
1.3	I won't blame myself when something goes wrong			
1.4	I try my best when I face difficult tasks			
1.5	I need help to get the work done			
2	**RELATED TO EMOTIONAL**			
2.1	I wont loose temper when I am under pressure			
2.2	I won't get irritated easily			
2.3	I wont get anxious when my plans do not flow smoothly			
2.4	I don't like to be disturbed when I am busy with my work			
2.5	I wont get upset when someone argues with me			
2.6	I don't have anyone to tell my problem			
2.7	I cannot accept criticism about my work			
3	**RELATED TO TIME**			

3.1	I am able to manage time			
3.2	I plan my time according to priority			
3.3	I won't skip meals to complete my task			
3.4	I find myself with sufficient time to complete my work			
3.5	I always try to save time from my leisure time to complete my task			
3.6	I take adequate time for my recreational activities			
4	**RELATED TO PHYSICAL AND PHYSIOLOGICAL**			
4.1	I won't suffer from headache/acidity/tiredness			
4.2	I got adequate sleep			
4.3	I won't get sweat much			
4.4	I like to remain present from duty everyday			
4.5	I won't feel my muscle gets tensed while stressed			
4.6	I can't feel my heart pounding in my chest when I am tensed			
4.7	I don't feel I need rest			
4.8	I am not having trembling in hands & fingers			
4.9	I am not having difficulty in speaking when I am confused			
4.10	I don't feel my stomach sinking when I am tensed			
4.11	I don't feel my mouth getting dry when I am tensed			
4.12	I use relaxation techniques for my stress management			

5	**RELATED TO SOCIAL SUPPORT**			
5.1	I get support from my family			
5.2	Moving away from my family and friends is not very undesirable to me			
5.3	I can easily mix-up with others			
5.4	I usually get support from my colleagues			
5.5	Sometime I won't like to be alone			
6	**RELATED TO SPIRITUAL**			
6.1	I have faith in God			
6.2	I find time to pray			
6.3	I like participate in Religious program			
6.4	I follow a daily prayer routine			
7	**RELATED TO ACTIVITIES**			
7.1	I like to participate in extra-curricular activities			
7.2	I am able to perform well in my duty			
7.3	Thought of workload cause me worried			
7.4	I enjoy reading/recreational activities			
7.5	I feel my work is not too much			
7.6	I am not have fear of failure in work			
8	**RELATED TO FINANCE**			
8.1	I won't feel I am burden to my parents			
8.2	I am able to manage finance			
8.3	My dress code match with my peer group			

8.4	I have too little money for recreation			
8.5	My family is not worried about finances			

Gs;sptptu Ma;T

gFjp- 1

fPo;fhZk; tpguq;fspy; VjhtJ xd;wpid G+Hj;jp nra;aTk;.

1. taJ (tUlj;jpy;)

    m. 20 – 25   [ ]

    M. 26 – 30   [ ]

    ,. 31 – 35   [ ]

    <. 36 – 40   [ ]

2. ,dk;

    m. Mz;   [ ]

    M. ngz;   [ ]

3. fy;tpawpT

    m. gbg;gwptpd;ik   [ ]

    M. caHepiyf;fy;tp   [ ]

    ,. Nky;epiyf;fy;tp   [ ]

    <. gl;lg;gbg;G   [ ]

4 jpUkz epiy

    m. jpUkzkhdtH   [ ]

    M. jpUkzkhfhjtH   [ ]

    ,. tpthfuj;jhdtH   [ ]

<. tpjit [ ]

5. khjtUkhdk;

   m. &.5>000 f;Fk; FiwT [ ]

   M. &.5001 ypUe;J &.10000 tiu [ ]

   ,. 10>000 f;Fk; Nky; [ ]

6. kjk;

   m. ,e;J [ ]

   M. fpwp];J [ ]

   ,. K];yPk; [ ]

7. thOkplk;

   m. efuk; [ ]

   M. fpuhkk; [ ]

8. FLk;g epiy

   m. jdpf;FLk;gk; [ ]

   M. $l;Lf;FLk;gk; [ ]

   ,. nghpaFLk;gk; [ ]

9. Ntiy nra;j mDgtk;

   m. 1 tUlj;jpw;Fk; Nky; [ ]

   M. 1 – 5 tUlk; [ ]

   ,. 6 – 10 tUlk; [ ]

<. 10 tUlj;jpw;Fk; Nky;   [ ]

gFjp − 2:
Ntiyapd; NghJ Vw;gLk; kd mOj;jj;ij mstpLk; fUtp:

t.vz;	nghUs;	KOikahf xj;Jf; nfhs;fpNwd;	vg;NghjhtJ xj;Jf; nfhs;fpNwd;	typikahf xj;Jf; nfhs;fpNwd;
1.	**epidTfspd; mbg;gilapy;**			
1.1	vdf;F ve;j Ntiy nfhLj;jhYk; vd;dhy; ed;whf nra;a KbAk;.			
1.2	vd;dhy; kdmOj;jj;ij juf;$ba epiyia jhq;fpf; nfhs;s KbAk;.			
1.3	VNjDk; jtW ele;jhy; vd;id eh;Nd jtwf; nrhy;y khl;Nld;			
1.4	VNjDk; fbdkhd Ntiy NeHe;jhy; mij ehd; vdf;F Kbe;j msT vjpH nfhs;Ntd;.			
1.5	ehd; vd; Ntiyia Kbf;f cjtpa ehLNtd;			
2	**gjw;wj;jpd; mbg;gilapy;**			
2.1	ehd; kd mOj;jj;jpw;F NeUk; NghJ vd;Dila typkia ,of;f khl;Nld;.			
2.2	ehd; tpiuthf vhpr;ry; mila khl;Nld;.			
2.3	vd;Dila jpl;lk; epiw Ntwhtpl;lhy; ehd; mjw;fhf Nfhgg;glkhl;Nld;.			
2.4	ehd; Ntiyahf ,Uf;f;NghJ njhe;juT nra;tij tpUk;g khl;Nld;.			
2.5	ehd; ahNuDk; vd;dplk; thf;Fthjk; elj;jpdhy; ehd;			

	kdf;Fog;gk; milakhl;Nld;.			
2.6	ehd; vd; gpur;ridia $w vd;dplk; ahUk; ,y;iy.	113		
2.7	ehd; vd;id kw;wtHfs; Fiw $Wtij xj;Jf;nfhs;s khl;Nld;.			
3	**Neuj;jpd; mbg;gilapy;**			
3.1	vd;dhy; Neuj;ij rkhspf;f KbAk;			
3.2	ehd; vd;Dila Neuj;ij Kf;fpaj;Jtj;jpd; mbg;gilapy; jpl;lkpl KbAk;.			
3.3	ehd; vd;Dila Ntiyia Kbf;f rhg;gplhky; ,Uf;f khl;Nld;.			
3.4	ehd; vd; Ntiyia Kbf;f Njitahd Neuj;ij ehNd vLj;Jf;nfhs;Ntd;.			
3.5	ehd; vd; Ntiyia Kbf;f xa;T Neuj;jpypUe;J Neuj;ij vLj;Jf;nfhs;Ntd;.			
3.6	ehd; nghOJNghf;Ff;fhf Njitahd msT Neuj;ij vLj;Jf;nfhs;Ntd;.			
4	**cly; kw;Wk; cly;hPjpahd mbg;gilapy;**			
4.1	vdf;F mbf;fb> jiytyp> tapw;Wtypepr;ry; cly;NrhHT Vw;gLtjpy;iy.			
4.2	ehd; ed;whf cwq;FNtd;			
4.3	vdf;F rhjuzkhd mjpfkhd taHf;fhJ			
4.4	ehd; jpdrhp Ntiyf;F tUtij epidT+l;LNtd;			
4.5	ehd; kdmOj;jj;jpy; ,Uf;f;			

	NghJ vd;Dila jirfs; ,Wf;fkhf ,Ug;gjhf epidf;f khl;Nld;.			
4.6	ehd; gjl;lkhf ,Uf;Fk;NghJ vd;Dila ,jaj;Jbg;G mjpfkhf ,Ug;gjhf czu khl;Nld;.			
4.7	ehd; vdf;F xa;T Ntz;Lk; vd epidf khl;Nld;.			
4.8	vdf;F if kw;Wk; iftpuy;fspy; eLf;fk; ,Uf;fhJ.			
4.9	ehd; Fog;gj;jpy; ,Uf;Fk;NghJ vdf;F NgRtjw;F fbdkhf ,Uf;fhJ			
4.10	ehd; gjl;lkhf ,Uf;Fk;NghJ vd;Dila tapw;Wg;gFjpapy; vhpr;ryhf ,Ug;gjhf czu khl;Nld;.			
4.11	ehd; gjl;lkhf ,Uf;Fk;NghJ vd;Dila cjL twz;L Nghtjhf czu khl;Nld;.			
4.12	ehd; vd;Dila kd mOj;jj;jpy; ,Ue;J ntspg;gl kdjsHtiltjw;fhd EZf;fq;fis ifahSNtd;.			
5	**r%f cWJizapd; mbg;gilapy;**			
5.1	vd;Dila FLk;gj;jpdH vd;dplk; cWJizahf ,Ug;ghHfs;.			
5.2	vd;Dila FLk;gk; kw;Wk; ez;gHfsplkpUe;J ntsptUk; NghJ vdf;F ntWg;ghf czu khl;Nld;.			
5.3	ehd; ntFtpiuthf			

	kw;wtHfsplk; gofptpLNtd;.			
5.4	ehd; vd;Dila ez;gHfsplkpUe;J Njitahd msT cWJizia ngw;Wf;nfhs;Ntd;.	115		
5.5	rpyNeuq;fspy; ehd; jdpahf ,Ug;gij tpUk;gkhl;Nld;.			
6	flTs; gf;jpapd; mbg;gilapy;			
6.1	ehd; flTis ek;GfpNwd;.			
6.2	ehd; flTsplk; gpuhHj;jid nra;tjw;fhf Neuj;ij xJf;FNtd;.			
6.3	ehd; Nfhtpw;py; tpohf;fspy; fye;Jnfhs;s tpUk;GNtd;.			
6.4	ehd; jpdk; gpuhHj;jid nra;tij filgpbf;fpNwd;.			
7	**Ntiyspd; mbg;gilapy;:**			
7.1	ehd; kw;w Ntiyspy;; <LgLtij tpUk;GNtd;.			
7.2	ehd; vdJ Ntiy Neuj;jpy; vd;Dila Ntiyia jpwk;gl nra;Ntd;			
7.3	Ntiyg;gS mjpfkhd Neuj;jpy; ehd; mjw;fhf ftiyg;gl khl;Nld;			
7.4	ehd; Gj;jfq;fs; gbg;gJ kw;Wk; nghOJNghf;F nray;fis tpUk;GNtd;			
7.5	ehd; vdJ Ntiyfs; mjpfkhf ,Ug;gjhf czu khl;Nld;.			
7.6	ehd; Njhy;tpapia fz;L gag;glkhl;Nld;.			

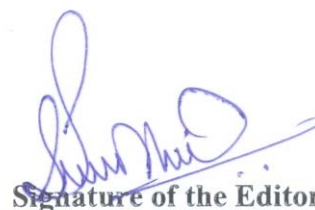| 8	**epjpapd; mbg;gilapy;**			
8.1	ehd; vdJ ngw;NwhHf;F ghukhf ,Ug;gjhf czukhl;Nld;.	116		
8.2	vd;dhy; epjpneUf;fbia rkhspf;f KbAk;			
8.3	vd;Dila cil nghUj;jk; vdJ ez;gHfs; cil nghUj;jk; rk;ge;jg;gl;ljhf ehd; czHNtd;.			
8.4	ehd; vdJ nghOJNghf;fpw;fhf Njitahd gzj;ij xJf;FNtd;.			
8.5	vd;Dila FLk;gj;jpdH gzj;ij gw;wp ftiyg;gLtjpy;iy.			

LIST OF EXPERTS

1. Prof Mrs.Lalitha M.Sc (N)

   HOD of psychiatric nursing

   Gokulum college of nursing

   Salem -636010

2. Prof Mrs. Naganithini M.Sc (N)

   HOD of psychiatric nursing

   Vinayaga missions college of nursing

   Salem

3. Mr.Samivel M.Sc (N),

   Principal

   Harsha college of nursing

   Harsha hospital campus

   Nh-4 ,nelamangala.

   Bangalore-562123.

4. Dr.N.Arunkumar, M.B.B.S., M.D., D.N.P,

   Regno.82196

   Consultant,neuro psychiatrist

   Athma-the mind centre

   Trichy

CERTIFICATE BY THE EDITOR

This is to certify that the dissertation entitled "a study to evaluate the effectiveness of progressive muscle relaxation technique on job stress among workers in Sakthi Sugars Limited, Sakthinagar, erode district" is a bonafide research work done by Ms.R. Tamizhselvi II Year M.Sc., (Nursing) student of Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences & Research, Sakthi Nagar, Bhavani Taluk, Erode District. Mrs.T.S.Sumithra Devi., M.A., (M.Phil) edited this manuscript on behalf of the partial fulfillment of the prerequisite for the degree of **Master of Science in Nursing** (Psychiatric / Mental Health Nursing).

Date:

Place: Sakthi Nagar

Signature of the Editor