

**"A CRITICAL ANALYSIS OF STRESS FACED BY
TEACHING PROFESSIONALS AT MANAGEMENT
INSTITUTES IN PUNE, WITH SPECIAL
REFERENCE TO ROLE STRESSORS
AND JOB SATISFACTION"**

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**A THESIS SUBMITTED TO
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MANAGEMENT
UNDER THE FACULTY OF MODERN SCIENCES
AND PROFESSIONAL SKILLS**

BY

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UNDER THE GUIDANCE OF

RESEARCH GUIDE

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JULY- 2011

CERTIFICATE

This is to certify that the thesis entitled "**A CRITICAL ANALYSIS OF STRESS FACED BY TEACHING PROFESSIONALS AT MANAGEMENT INSTITUTES IN PUNE WITH SPECIAL REFERENCE TO ROLE STRESSORS AND JOB SATISFACTION.**" which is being submitted here with for the award of the Degree of Vidyavachaspati (Ph.D.) in Management of Tilak Maharashtra University, Pune is the result of original research work completed by **Smt. Anita S. Kumar** under my supervision and guidance. To the best of my knowledge and belief the work incorporated in this thesis has not formed the basis for the award of any Degree or similar title of this or any other University or examining body upon her.

Place : Pune
Date : 29/07/2011

Prof. Dr. Sayalee Gankar
Research Guide

DECLARATION

I hereby declare that the thesis entitled "**A CRITICAL ANALYSIS OF STRESS FACED BY TEACHING PROFESSIONALS AT MANAGEMENT INSTITUTES IN PUNE WITH SPECIAL REFERENCE TO ROLE STRESSORS AND JOB SATISFACTION**" completed and written by me has not previously formed the basis for the award of any Degree or other similar title upon me of this or any other University or examining body.

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I owe this to my Parents

for bringing me in this beautiful world

and making me the person I am

I owe this to my best half Sasi

For all his goodness

I owe this to my daughter Shalini

For all her encouragement

I owe this to God for all the power to

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CHAPTER 1

INTRODUCTION

Increasing economy and the growing industry sector is fast catapulting India on the global map. With a fast growth in all areas of business, India is on its way to stardom and contributes to the Supernova of the well managed business.

The Indian economy has grown considerably, annually over the last few years and even higher growth rates are being projected in future. In recent years, organized retailing has gained momentum. Malls and large size department stores have become a fixture in the urban landscape across the country. Modern retail business can indeed be the catalyst in facilitating consumer spending with maximum value and profit. Thus growth in retail has tremendous potential of creating new jobs within the next few years.

Understanding these changes and challenges, since the past few years, the demand of management graduates and post graduates with career in Retail business and management has grown considerably. Similarly, other management programmes such as forestry and environment management, techno management course, agriculture business and construction management are highly involved in addressing the needs of all sunrise industry sectors.

What India really needs is quality managers and entrepreneurs.

1.1 BACKGROUND TO THE STUDY

Management education has become the most pervasive phenomenon in modern times. Various types of organisations such as industries, financial institutions and banks, health care centers, hospitals and clinics, public sector undertakings, service centers, social welfare agencies and educational institutions are all acquiring and implementing the knowledge and skills from management education to improve their performance.

Management education in the country has made phenomenal growth during the last two decades. The liberalization of the Indian economy during early 90's and the internet service led Globalization during the later part of the last decade has posed a large number of challenges that demand advanced managerial skills. The

mushrooming of management institutions offering graduate and post graduate level programmes are the result of the huge demand and supply gap that was created due to the rapid expansion of the economy.

The number of institutions that offer management courses have increased enormously. About thirty five years ago, there were only a few institutes that offered the management programmes. These were prestigious institutes which attracted the brightest students and trained them for high level managerial positions in both private and public sectors. Today there are many universities and colleges which offer varied management courses. This growth indicates a high demand for management education.

In India, the role of a manager has been changing at lightening speed. The expectations of corporate sector puts pressure on the management institutes to create talented workforce with knowledge of strategy implementation. It is expected that faculty members continuously enrich themselves in their learning experiences.

Pune is considered to be “The Oxford of the East’’. Since the last two decades IT industry has grown rapidly here. Many multinationals have invested in and chosen Pune as the next IT hub. Hence a large number of students and working professionals have settled in Pune. The tremendous growth in these sectors has resulted in the requirement of trained workforce in the industry. The management institutes in Pune have pioneered quality management education in the sunrise sectors in India. These Institutes work with motto of a dream, ‘To Lead’ and ‘To Succeed’ by providing professionally sound, sophisticated and dynamic leaders with a vision and endeavour to meet the challenges of the new millennium.

The impact of industrialization, urbanization, globalization and rapid technological changes has lead to the emergence of management institutes in Pune. The development of these institutes is not very old. About thirty five years back in (1974-75), IMDR i.e. Institute of Management Development and Research was the first management institute to start in Pune. IMDR was established in 1974 as a consultant unit of Deccan Education Society. It took over the MBA programme of MBA centre of Pune University and the DBM programme run in BMCC i.e. Brihan Maharashtra Commerce College (a sister institution) since 1968, later IMDR became an autonomous institution.

The Pune University provides MBA education by the department of “Management Science” that was set up in 1971 usually known as ‘PUMBA’. This institute is one of the first management institutes in the nation. It is a pioneer attempt by itself in the area of management education.

Established in 1978, Symbiosis Institute of Business Management (SIBM) Pune is in its 30th year of service to the student community. It remains the flagship brand of Symbiosis and is recognized as one of the best business schools in India. In 2002, it got the Deemed University Status and was renamed as Symbiosis International University (SIU). The three management institutes namely IMDR, PUMBA and SIBM form the landmarks in the historical development of management institutes in Pune. Since 1980, many more Management Institutes budded in and around Pune city. Today, there are more than 150 management Institutes in Pune, mostly private, offering management courses to students from various parts of the nation and other countries. Although most of these institutes have spacious surroundings, big buildings with corporate culture and modern amenities, yet the education or academic quality of some of these institutes is far from satisfactory. Most of these institutes do have good infrastructure, library and laboratory facilities, but they are seriously handicapped in faculty resources. The teaching faculties are the facilitators for knowledge and skill through interactive learning methods in management.

Fast changing educational process in twenty-first century has affected educational syllabus at all levels and the teachers who have to respond to both the demands of knowledge as well as the needs of society meaningfully, understand and cope with the trends of societal rejection of the educational system. Today there is too much knowledge. The increase in the body of knowledge in each management discipline poses an important challenge for a faculty member on how to encapsule such enhanced knowledge in a meaningful manner so that it can be shared and transmitted to students at different age groups and at different educational levels. A faculty member thus has to find the right type of knowledge mix to cater to the needs of students of the twenty-first century. Therefore, the role of a teaching Professional is in the process of change. The pressures related to human life are cropping up in day to day living and the social role of a faculty member within the management institution is facing a challenge. As a result, the changes and social pressures which are taking place have a direct bearing on the teaching faculties’ role, responsibilities and teaching

activities. The faculty members face this challenge everyday in discharging their duties effectively.

The management institutes require highly qualified faculty members having industrial experience. The faculty members play a number of roles such as fusing research with academics, teach to apply theoretical knowledge as well as the latest technology and techniques to real world case studies. A faculty member has to integrate skills from a variety of disciplines designed to develop competencies both in individuals and in groups to bridge the gap between theoretical knowledge and practice. They are also required to handle consultancy and research projects for corporate houses and thus develop a strong liaison with the experts in industry to have handful of experience on the given subject matter. The management teaching faculty members put in long working hours to provide assistance to the students for achieving their career aspirations. The faculty members take consistent efforts on their part to provide assistance in conferences, industrial visits, on the job training research projects, winter, summer and final placements of students throughout the year. It is a great challenge to the teaching professionals of management institutes to live with dynamism by coming up to people's expectations, fit in their time horizons and willingly accept their status quo. They may face tension, anxiety, fear, pressure, strain and 'stress' in their day to day life to be able to contribute effectively in the field of education. A few other factors such as job insecurity, increasing overload, accountability without adequate authority, inadequate facilities and lack of recognition may also contribute to stress in these teachers.

Further, management teaching professionals might also be subjected to face common stressors viz; work overload, time restraints, problems with working conditions, relationship with colleagues, lack of resources and alarming increase in physical demands of teaching. Insufficient money as salary and lack of respect in society, ultimately lowers down the psychological well being of teaching faculty members. It affects the teaching competencies on one side and develops 'stress' on the other.

1.2 INTRODUCTION TO STRESS

Although the phenomenon of stress exists since ancient times, conscious attempts to study the concept systematically have begun in the later half of the

twentieth century. Social and biological sciences have found it necessary and useful to investigate the effects of stress and psychological tension on the physical and mental well being of the people.

Initially stress was studied in terms of general adaptation syndrome concentrating mainly on physiological dimensions of stress. Now attention has also shifted to psychological and behavioural dimensions as stress is more than a simple cause effect reaction.

Stress is a common experience of people when any demands are placed on them by their work or personal environment. This is of course an inevitable part of life. Mild stress proves useful in overcoming periods of frustration and dull routine. However, too much stress affects the health and well being, every day performance and behaviour adversely. Day to day problems, work related pressures, conflict of interests between home and work place, unrealistic expectations of others – all lead to stressors which are the causes of stress. Stressors include physical stressors, environmental stressors, individual stressors, family stressors, inter personal stressors, career and job related stressors. These stressors need to be managed. Stress management is integral to good management practice. Stress has both positive and negative aspects. Both need to be managed for enhanced performance and benefits at work.

Job stress can become an important topic for study of understanding organizational behaviour since it may adversely affect the physical and mental health of the employees and their contribution to the efficiency and effectiveness of organisations.

In today's world, young teaching professionals are increasingly confronted with a problem of conflict between a career role and opting for an equally demanding role at home. There are stresses associated with both alternatives and with choosing to balance between them.

The problem of stress in teachers is an important aspect of the process of social change in India. The consequent outcome is that the modern men and women teachers live in two systems and need to perform both familial as well as professional roles. This in turn leads to a number of stresses amongst men and women teaching professionals.

Over the past 25 years, significant changes in male and female teachers' work patterns and roles have been observed. Although a significant proportion of men and women teachers are still in part time, low status jobs – opportunities for full time job have increased. Economic pressures and social and psychological needs to develop one's self identity are the motivators to pursue a more active role outside the home in full time careers in teaching.

As modern life is full of stress, constant stress experienced at work and at home may lead to various physiological and psychological problems. As a result, the whole group around them: may it be family, occupational or organisational group, it suffers. Organisational roles are critical in integrating teaching employees with their organisations. Researchers working on the increasing complexity of organisational roles recognize the potential of conflict and stress in these roles as teaching is a stressful activity.

Even though a number of researches have been carried out covering a wide cross section of population on stress but no researcher has yet made an attempt to study management teaching professionals as related to stress. The present study is an attempt to analyse the relationship between stress-effects as related to both work and family roles and job satisfaction in management teaching professionals.

1.3 JOB DESCRIPTION OF TEACHERS IN MANAGEMENT COLLEGES AND PROFESSIONAL INSTITUTES

Teachers at colleges and universities pass their knowledge and expertise to the next generation youth. They help their students to think critically as well as imaginatively; provide practical training and shape their students' goals, careers and lives. As subject experts in their fields, they also set standards for research, and scholarship.

Teachers work at three year undergraduate and two year postgraduate management colleges and professional institutes. Some teach part time in the evening and work for continuing education programs in addition to one year diploma programme in management. Most of the teaching faculty work in one department and specialize in particular disciplines related to management courses. They usually teach two to four courses each semester, combining lecture and discussion. Most of their

time is spent in reading students' papers, correcting answer papers of examinations and advising students. Some, teachers have administrative duties also such as being dean of students, course coordinator etc. Some teachers work part time as consultants to educational organizations, government agencies and corporations.

The management institutes have distinct types such as government, semi-government and private. Most of them are private institutes run by a director and dean of students. Instructors work at the lowest level, they almost always teach undergraduates. Assistant professors and associate professors are more experienced and may be active in administrative work too and set the requirements for their own courses. They teach graduate and sometimes postgraduate students too. Full professors with doctorate degree may serve as department heads as well as teach post graduate students.

College and university teachers must have master's degree or doctorate degree. Professional colleges and universities expect the teachers to complete their doctorate for promotion, or in some case to keep their jobs.

Teachers with high qualification and established reputations may work as visiting professors at other colleges. The faculty members are expected to publish articles and books from time to time related to their specialization or to conduct research which may take up much of their time.

Most of the teaching faculty members, spend from twelve to twenty hours in class each week with their schedules changing each semester. Work hours, faculty meetings, advising and class preparation, account for thirty to forty additional hours per week. The academic year generally runs from June-July to April. The teachers use summer months for research or other jobs such as summer placement of students guiding project work and undergoing faculty advancement schemes. They also have to maintain an excellent liaison with industries in corporate sector which facilitates easy internship and job placement for students. Due to these varied duties and responsibilities, a management faculty member is under considerable pressure throughout the year.

1.4 RATIONALE FOR THE STUDY

The phenomenon of stress is as old as the history of mankind or any other life form. The chief causes of stress in the first 50 years post independence in people were insecurity, lack of choice and lack of awareness about recourses among other factors.

Today, ironically stress is created by higher awareness and greater options creating disturbances in work life balance and related issues. Stress cuts across gender, age, profession, location or any other factor. Responses to stress are getting equally inexplicable and unpredictable. The interest of researchers and scientists in the issue of stress has been rising with the advancement of the present century which has been called the “Age of Anxiety and Stress.”

Stress is manifested in physiological, psychological, behavioural and organizational form. All these finally put impact on the workplace performance creating organizational effects like absenteeism, job turnover, poor organizational climate and reduced productivity. Domestic stress is seen in unpleasant consequences like higher divorce rates and broken families. Today, the impact of stress is felt not only by individuals but by organizations and society at large. Stress management, therefore, is a burning issue in the current scenario of insecurity and instability.

In recent years, teacher stress has become an issue of increasing public and professional concern. Since teaching profession is unique yet stressful, whether stress is being faced in teaching professionals of management institutes in Pune, needed to be explored.

Based on the review of literature, although common areas emerge in quantitative research as sources of stress for teachers in general, consideration has yet to be given to the individual teachers within the context of specific education systems and also to the influences which have impact on these systems.

An idea emerging from various models of stress reviewed, it was proposed to study the population sample of teaching professionals and their experience of stress in response to their roles in management institutes.

Review on researches points out that very few studies have been conducted on male and female differences in stress-effects with special reference to teaching professionals. In this context, this study will be an unique one.

As the emergence of management Institutes in Pune is a recent development, very few researchers have made an attempt to study these institutes with respect to psychological behavior of teaching faculty members in terms of “Stress Syndrome”. The research in the area of teacher stress revealed that little attempt has been made to explain its causes in general. Research has supported the view that “teaching is a stressful occupation” (Dworkin, Haney, Dworkin and Telschow 1990; Jackson, Schwab and Schuler 1986). “Teachers’ stress has increased and the relationship

between society and education has become complex” (Esteve and Fracchia 1986). As a result of present social change, the teaching professionals face increased stress due to corporate and community expectations to implement new curriculum and teaching practices, and in doing so it is pointed out that work role stress is a common stressor in these professionals. Research literature showed that teacher stress was reflected in lower job satisfaction. Moreover, the stress was caused not only by the immediate teaching environments but also by the institutional and organizational factors. Therefore, the researcher felt that it would be interesting to study the relationship between stress - effects in faculty members, their role stressors and job satisfaction .

A teaching professional’s life has two facets; Socio-personal life and vocational or professional life. On both the fronts, a faculty member has to play varied roles simultaneously. While playing these roles, the faculty members may be experiencing discords in family life due to poor time management, tainted relationships at the workplace and poor working conditions at the work place. This results in an inability to cope up with the dual demands of work and family and also to strike a balance between their work role and family role.

The researcher felt that it will be interesting to determine whether work role and family role situations were stressful or not stressful and whether the same situation was responded differently by male and female faculty members. In order to understand stress in teaching faculty of management institutes, the researcher sought to identify the major sources, the common role stressors and the stress consequences.

Another reason for researching into teacher stress was that occupational stress in teaching has been found resulting in both “mental and physical ill health ultimately having deleterious effect on teacher’s professional efficiency” (Camp 1985; Claxton 1989; Fletcher and Payne 1982; French 1988; Galloway et al. 1984; Kyriacou, C. and Pratt 1985). High stress resulted in lowering of intellectual ability of teaching professionals irrespective of one’s age, education and background (Greenberg 1980). While reporting on more physical stress symptoms, Bradfield and Fones (1985) in their study on special teacher stress said that the psychosomatic condition of a teacher directly affects his personal, social and intellectual behaviour along with the personality attributes. Therefore the investigator was inspired to know the changes in the psychological behaviour of management faculty members due to psychosomatic variation.

Further some studies on teacher's mental health reported that "stressful conditions of a teacher directly affected his/her personal, social, classroom and intellectual behaviour which has direct bearing on the institution, the students, the system of education, the community and society at large." Verma Romesh (1998)

The investigator further contended that the effect of stress on health and ways of coping with stress may be a matter of difference in the interpretation of stressful events. Despite geographic variations, management teaching urbanites in different management institutes may experience almost similar amounts of stress in their daily living. Performing similar roles in different management institutes may have similar characteristics which need to be identified as contributing to similar stress experience.

Even though the prevalence and sources of occupational stress among teaching professionals, has been an important area of research (Borg 1990; Coles and Walker 1989; Dworkin *et al.*1990; Fimian 1987; Kaiser and Polczynski 1982) and the researchers have identified stressors for groups of teachers in specific teaching contexts but there is notable absence of research about management teaching professionals in teaching setting in Indian context.

The researcher sought to identify the major sources of stress and conceptualized, three basic premises :

- Firstly, the effects of stress in teaching professionals are influenced by gender and service duration.
- Secondly, various personal factors, family factors and situational factors are responsible for stress.
- Thirdly, the stress-effects are associated with role stressors and job satisfaction in teaching faculty members.

Therefore, in the light of the above stated premises, as well as the previously stated background, a number of questions were evolved such as what are the effects of stress in management faculty members ? What are the causes of such stress experienced by them? Do work and family roles create stressful situations? What are the varied stressors at work leading to stress? In what way job satisfaction is related to stress? Is there a relationship between family role stressor and work role stressors and various effects of stress experienced?

In order to get answers to these queries, the significance of the problem under study was the need of the hour. It was imperative to understand the forces which were

responsible for disturbing the psychological behaviour of a faculty member on one side and the consequences of stress on the other side to avoid unwanted stress, for the progress of teaching learning process. Since, there are no studies on stress, its causes and, its relationship to role stressors and job satisfaction in management teaching professionals, it justifies the conduct of the present study with the inclusion of the above said variables.

There is a crying need for research into the social, behavioural and psychological aspects of teaching Professionals. In this context, the present study very aptly could prove to be useful in the Indian Context.

The concept of stress though recent in origin, has reached with astonishing rapidity to the zenith in popularity. This new less explored area created enthusiasm in the mind of the investigator to undertake the research study of the alarming problem.

1.5 CONCEPTUAL FRAME WORK

Stress is inevitable in human life. Working professionals do face stress at their workplace. The management faculty member experiences various effects of stress and the extent of stress varies due to many causative factors.

The conceptual framework to study the effects of stress in teaching professionals caused by various antecedent factors is shown in figure 1.

In order to procure a deeper and meaningful understanding of the effects of stress in management teaching professionals, an attempt was made to identify various possible variables which have their contribution towards it. The available literature and related researches on stress guided the investigator to organize the selected variables into causative relationship. These linkages have been illustrated in the conceptualized framework (figure 1).

The components of framework are

Antecedent factors

- 1. Individual factors**
 - a. Gender differences
 - b. Personal factors
 - c. Family factors.
- 2. Job related factors**
 - a. Role stressors
 - b. Job satisfaction

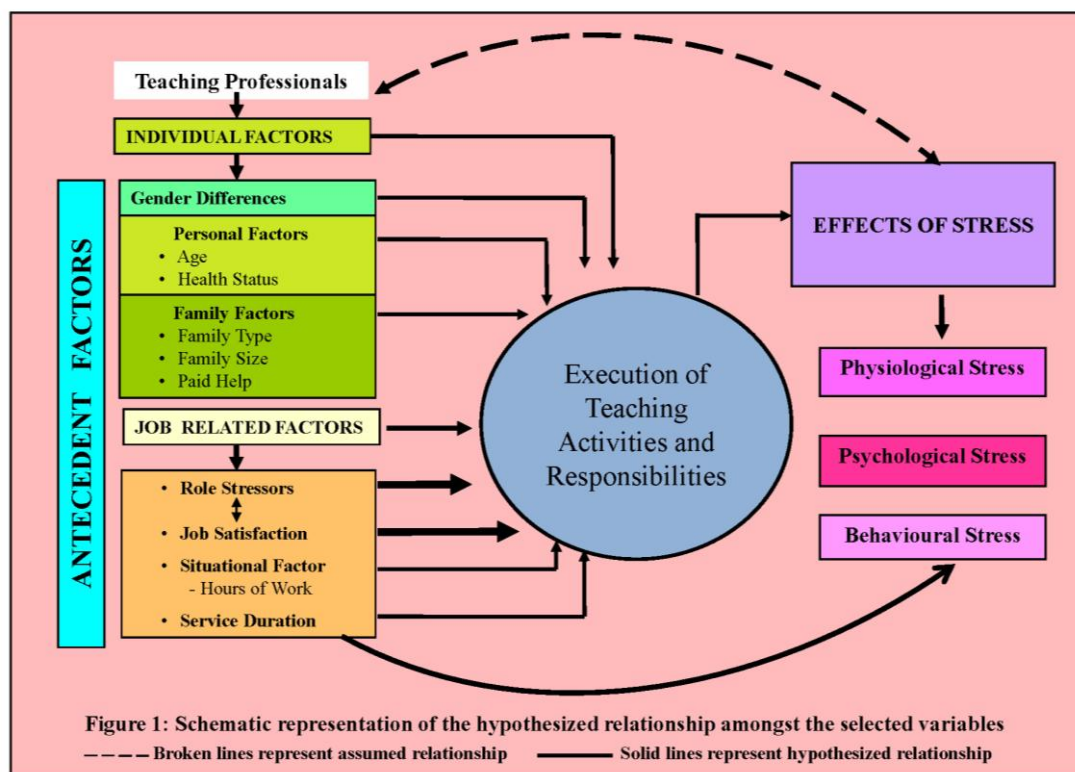
- c. Situational factors
- d. Service duration.

Outcomes

1. Stress-effects.

It is theorized that the stress in teaching professionals is caused by certain antecedent factors such as personal, family and situational factors. These factors related with the teaching profession will cause various effects of stress in faculty members which will lead to three outcomes of stress, namely physiological effects, psychological effects and behavioural effects. It is further proposed that the teaching professionals at management institutes experience stress arising out of their performance of various roles in executing teaching activities and responsibilities which influence their level of job satisfaction. It is also hypothesized that management teaching faculty members vary in the extent of stress-effects experienced with regard to gender and duration of service.

Conceptual framework (Figure: 1)



1.6 STATEMENT OF PROBLEM

To understand the reciprocal relationship between stress-effects and role stressors; stress-effects and job satisfaction, this study was planned. The Study should identify gender differences if any, in the stress-effects experienced by faculty members. Further, the antecedents or causal factors of stress should be explored. Family role stressors and work role stressors should be studied to understand the relationship between the stress-effects experienced by management teaching faculty members and the role stressors. Lastly, the extent of job satisfaction as related to role stressors should be measured.

Hence it was planned to make **“A critical analysis of stress faced by teaching professionals at Management Institutes in Pune with special reference to role stressors and job satisfaction”**.

1.7 SIGNIFICANCE OF THE STUDY

The teaching faculty members may experience role stress because of the multiple roles they play in society. The conflict between the urgent demands of work and pressures at home induce problems which lead to stress. The problem of balancing between organisation and family demands may all put a strain on the teaching faculty members at work, in the same way the stress at work may spill over and have negative impact on their family and personal life.

Much of the research into this area has focused on managerial and professional groups and tends to neglect occupations related to teaching professionals. Stress related studies pertaining to industrial settings are many and scattered, but very few attempts have been made to study stresses experienced by job category of a particular organisation; for e.g. teaching professionals or college teachers. Attempts have been made to trace the particular stresses which are dominant among working/nonworking employees, but no attempt has yet been made to study stress amongst teaching professionals of management institutes.

In this context, the proposed work would prove to be useful. As related to management faculty members, no study could be traced which has examined the relationship between role stress and job satisfaction in the Indian context. This study

would also be socially relevant to the present day problem of home and work role balance and the stresses arising from therein.

The study can bring forth the significance of stress management in teaching professionals to countercheck the stress-effects experienced by them in relation to their roles at work and in the family. Gender wise empirical data can be obtained on stress-effects namely physiological, psychological and behavioural and their relationship to job satisfaction in management faculty members through this research. Educational institutions, educational authorities and administrators can be greatly benefited by the findings of the present study. Efforts may be made by them to prevent stress-effects, role stress and lack of job satisfaction in their employees in light of the findings of this study.

The data obtained and inferences drawn from the present study can be used by the future researchers to draw guidelines and formulate principles for strengthening the balance between work and family roles to some extent. The study can suggest various measures to overcome stress. Such studies are essential to understand the dual role demands of teaching professionals as they are the knowledge givers to the society.

Based on the findings of this research, the occupational health status of teaching professionals can be better addressed by using various “coping strategies for stress management” both in government and private sector teaching institutes.

Keeping in view, the scientific development of knowledge and skills, it is essential that management teaching professionals possess sound physical, mental and psychological health with minimal stress, only then the system of education can prove to be useful for the furtherance of our society and mankind at large.



CHAPTER 2

REVIEW OF LITERATURE

The main objective of the present study was to study stress in management faculty members and its relationship to role stressors and job satisfaction. Relevant references from literature and research studies were collected from books, research articles and research papers from scientific journals. Various libraries in Pune and other cities were visited in course of collection of review and literature. Various internet websites were also used for retrieval of literature.

The literature and reports of researches relevant to the present investigation are presented in this chapter under the following heads

- 2.1 Stress and theoretical background.
- 2.2 Antecedents as correlates of stress and related studies.
- 2.3 Stress-effects and related studies.
- 2.4 Role stress and Role stressors.
 - a) Family role stressor and related studies.
 - b) Work role stressors and related studies.
- 2.5 Job Satisfaction and related studies.
- 2.6 Stress Management - coping strategies and related studies.
- 2.7 Stress in teaching Professionals and related studies.

2.1 STRESS AND THEORETICAL BACKGROUND

Stress has become a pervading feature of people's life in modern world. The modern world which is said to be a world of achievements is also a world of stress. Stress is everywhere, whether it is in the family, business organization, enterprise, institute or any other social or economic activity. Right from birth till death, an individual is invariably exposed to various stressful situations.

Despite tremendous advancements in science and technology, and remarkable growth of economy and sources of luxury, people all over the world seem to experience stress in various spheres of their lives. Consistently psychosomatic and psychological disorders are increasing, the feelings of frustration and dissatisfaction with life in general reflect the stress being experienced by people.

In the past also, the societies were not entirely free from stress. However the causes of stress in those societies were episodic in nature, low in severity and frequency. But during the last two decades the span of psychosocial stress has drastically increased. The basic reason being the changed physical and socio-cultural environment of the contemporary societies and life style of the people. Peoples' life has become more demanding, complicated, mechanical and dependent running by the clock. Ever increasing needs and aspirations, high competition, pressures of meeting deadlines, uncertainty of future and weak social support system have made the life of people stressful in modern societies.

The term 'Stress' is discussed not only in everyday conversations but has also become an issue to attract widespread media attention. Different people have different views about it as stress can be experienced from a variety of Sources.

Dr. Selye Hans said **“Without stress, there would be no life”** Olpin, Micheal and Helson Margie (2010, 2007).

Ancient Indian concept of stress

A number of concepts were developed by ancient Indian Scholars related to the phenomenon of stress even though the concept of stress in modern sense is not easily found in traditional texts of Indian culture and tradition. It is interesting to note that the body-mind relationship, a characteristic of modern stress studies, is emphasized in Ayurvedic Indian System of medicine.

Rao S.K.R. (1983) has traced the origin of stress in ancient Indian thought. It mentions three types of stresses: personal, situational and environmental. Personal stresses can again be of two types, namely physiological and psychological.

“Physiological stresses are born out of imbalances between physiologic constituents. Psychological stresses are caused by various emotional states of mind. Situational Stresses are caused by ‘unwholesome interpersonal transactions’, which may include conflicts, aggression and competition etc. “Environmental stresses are occasioned by natural calamities”.

The stress operates through different modes of stressors. The model proposed in Yoga Sutra is a comprehensive one incorporating cognitive structuring, affective or emotional stages and adaptive reactions. It presents the concept of “Kriya Yoga” which aims at reducing number and intensity of the stressors and facilitates conservation of mental energy devoid of tension defined as Samadhi Bhavana. The

system of Yoga is analytical and helps the individual in understanding his own stresses by leading him to the root causes of these stresses.

Positive role of stress: A new perspective

Present day researchers and practitioners visualize the phenomenon of stress in a new perspective. As Kets de Vries (1979) had noted, each individual needs a moderate amount of stress to be alert and capable of functioning effectively in an organization. Organizational excellence and individual success are achieved through well managed stresses.

Indian Scholars (Pestonjee, 1987 a, Mathew, 1985) in their conceptual papers agreed with this connotation. Pestonjee and Singh (1987) while studying stress and job satisfaction noted that managers and system analysts in private organizations scored higher on both stress and satisfaction as compared to their counterparts in public organizations.

Mathew (1985) in his conceptual paper on role stress of a creative manager studied the relationship between creativity and stressors. He noted that creativity and innovation in organizations have a top priority. Therefore stressors are associated with creative activities. Interaction among various subsystems of organizations such as person, task, role, behaviour setting, physical and Social environment are seen as causal factors of stress. A teacher's role in management institute is similar to that of a manager in an organization. Management teachers are also associated with many creative teaching learning activities.

It may be well at this point to review the concept and theory of stress and examine the stress potential with reference to the creative and non creative roles of a management faculty member through the execution of teaching learning activities.

The concept of stress was first introduced in life sciences by Selye Hans in his pioneering work in 1936. This concept is borrowed from natural sciences and is derived from the Latin word "Stringere" which means to draw tight. In psychophysiology, stress refers to some stimulus resulting in a delectable strain that cannot be accommodated by the organism and which ultimately results in impaired health or behaviour. In common parlance, however, the terms 'Stress' and 'Strain' are used synonymously in a nonscientific manner. The popularity of this concept was established in the physiological field where it was first introduced but the use of stress terminology continues to flourish in psychology and social sciences.

The term stress and research on its causes, consequences and management have reached the peak of popularity in modern times. The reactions to intense psychological and behavioural stress have become major concerns of psychological, psychiatric, medical and managerial investigations. However, the potential of the term stress for understanding and explaining individuals' behaviour and pathologies has yet not been fully realised by stress researchers.

The term stress is used to connote a variety of meanings both by the common man and the psychologists. Yet, it appears that the essential features of stress experience have not received the attention they deserve. What has hampered the adequate use of the concept of stress is the fact that different investigators have employed different referents and meanings for the term stress and thus have developed different models for it.

Definitions of Stress

Surveying definitions of stress, Cox (1978) has described three classes of definitions. Stress can be thought of as a response i.e. the stress response to an extreme stimulus; as a stimulus i.e. as the stressor it self and as an intervening variable. As commonly understood, it is the mismatch between personal resources and environmental demands that leads to the condition called 'Stress'.

Based on the findings from both research and practice a comprehensive definition of stress is "stress consists of any event in which environmental demands, internal demands or both, tax or exceed the adaptive resources of the individual, social system or tissue system" (Farmer, Monahan and Hekeler, 1987).

One useful definition of stress is "Stress is a demand made upon the adaptive capacities of the mind and body". David, F. (1989)

The most basic fact about stress is that, like feelings, stress is experienced. The feeling of stress is an act in which there is a reference, not a causal relation to an object that is intended or intentionally present.

In short, stress is a dynamic condition in which an individual is confronted with an opportunity, a demand or resource related to what the individual desires and for which the outcome is perceived to be both uncertain and important. Simplifying the definition of stress for the purpose of this research it may not be taken "as an adaptive response to an external situation that results in physical, psychological, and or behavioural deviations for organisational participants."

Stress Terminology

A stressor is any event or situation that is perceived by an individual as a threat causing the individual to either adapt or initiate the stress response. Therefore, a stressor is a stimulus and stress is a response. Stressor is the cause and stress is the effect. The effects of stress upon a person are cumulative and can cause serious harm if experienced over a long time.

Dr. Selye Hans (1979b) was the first to study the effects of stress. He suggested that stress had four basic variations

- | | | | |
|----|-------------|---|-------------|
| 1. | Good Stress | – | Eustress |
| 2. | Bad Stress | – | Distress |
| 3. | Overstress | – | Hyperstress |
| 4. | Understress | – | Hypostress |

1) **Good Stress – Eustress**

It is the positive, desirable stress that keeps life interesting and helps to motivate and inspire people. Eustress involves successfully managing stress even if the individual is dealing with a negative stressor. It implies that a certain amount of stress is useful, beneficial and even good for health. There is increased energy, high motivation, shared perceptions and the performance improves quantitatively as well as qualitatively. Moderate doses of eustress help to improve an individual's performance.

2) **Bad Stress Distress** Distress refers to the negative effects of stress that drains an individual out of his energy and goes beyond his capacities to cope. This is a situation of 'high stress' distress showing a drastic negative change in performance. The possibility of role overload may force the individual to commit errors, make him indecisive and cause irritation in him at the slightest pretext.

There may be a case of 'no stress' distress also. Role underutilization creating boredom, decreased motivation, absenteeism and apathy are all signs of 'no stress' distress. It is undesirable negative stress.

Over Stress - Hyperstress

It means too much stress. It can lead to physical and emotional breakdown. Work overload can be a common source of over stress.

Under Stress - Hypostress

Under stress refers to too little stress leading to boredom, lethargy and frustration. Work under load and no work at all may lead to hypostress in some situations.

According to another classification given by Selye Hans, stress can be acute and chronic in its effects.

Acute Stress

It is the result of short term stressors. It is usually quite intense initially and then disappears quickly. It can be exciting and stimulating in small doses, but too much leads to fatigue. People who experience this stress, tend to be over aroused, irritable, anxious and tense. Its symptoms include tension, headaches, migraines, digestive disorders, hypertension, chest pain and heart disease.

Chronic stress

It is a long term stress usually resulting from nagging problems. In case of chronic stress, a person's physical and mental resources are depleted. Chronic stress can lead to suicide, heart attack and violence. Long term chronic stress results in stress related disease and reduces the quality of life.

Taxonomy of Stress

The stresses of life may be divided into two categories.

1. **Isolated catastrophic events:** These include natural and man made disasters and major life events. The changes in circumstances may test the powers of adaptation of an individual.
2. **Work stress:** It may be caused due to disharmonious domestic circumstances, commuting and various other pressures of city life. Work stress may be related to stress in the office environment and nature of job. Work stress may become pressing to the extent that the individual lacks autonomy and sense of purpose in the tasks he performs along with boredom and monotony.

In order to understand the concept of stress well, it is necessary to browse through academic literature on theories of stress. Scientists and researchers have developed and described a number of theories from time to time.

Models of Stress

Models are validated theories. They present a holistic picture of the phenomenon under study. Thus a model of stress presents the image of stress phenomenon in totality, the casual factors, the symptoms, the process and the end result.

A wide variety of models of stress have been presented over the years by scientists. Depending upon a particular focus on aspect / aspects of stress, the researchers adopt these models for analyzing the aspects of stress attempting to understand the stress phenomenon.

A brief description of a few relevant models of stress is presented below

- 1) Stimulus-based model of stress, Beehr and Bhagat, (1985), Mc Lean, (1979), Selye, (1975).
- 2) Response – based model of stress, Beehr (1984, 1985), Caplan, Cobb, French, Harrison and Pinneau (1975).
- 3) Systems model of stress, Lumsden (1975).

1. Stimulus – based stress model

Stressful stimuli include highly persistent stimulation, fatigue or boredom. In this perspective stress has been treated as an independent variable. This model of stress is an engineering one in which “external stressor gives rise to stress reaction or strain within the individual” (Cox, 1978).

The stress as stimulus has triggered active research on relationship between stress and somatic illness. Holmes (1974) and Rahe (1968) examined in a series of studies whether changes in the life of person statistically correlate with illness. The common features of stressful stimuli are: undesirable, unpleasant, uncomfortable, threatening and demanding. These stimuli causing stressful situations may be more suitably called “stressors” instead of ‘stress’. The actual amount of stress felt is determined by the stressful situations in combination with other personal and situational variables.

2. Response – based model of stress

Theorists who define stress from a response perspective, see it as an imbalance between the requirements to make an adaptive response and the repertoire of the individual. The greater the perceived discrepancy between demand and

response capacity, the more stress will be felt by the individual. Stress has been used to refer as the response to stressor by Beehr (1984, 1985) Caplan, Cobb, French, and Harrison and Pinneau (1975). The response based perspective concerns with “response patterns which may be taken as evidence that the person is under pressure, from a disturbing environment”. The pattern of response is treated as stress. This approach views stress as the dependent variable i.e. a response to disturbing stimuli.

The stress response is seen in form of manifestation of stress. The response based model of stress explains stress response in form of manifestations of stress namely psychological, physiological and behavioural.

3. Systems model of stress

It was proposed by Lumsden in (1975). It considers all the salient features of different models and calls for a systems analysis of stress. Stress as a system is thought of open system that is constantly interacting with the environment. Stressors, appraisal and coping are related to each other and occur in cyclical fashion. When the stressor encroaches upon the person, the process of appraisal begins followed by coping process. “Various mediator factors enter into the stressor – coping relationship such as person variables namely age, sex, birth order, marital status of the person and child rearing practices.” (Dodge and Martin 1970).

Sources of Stress

Sources of stress come from a variety of areas such as families friends and the work environment inclusive of the person himself/herself. Stress can emanate from a combination of these sources. Pestonjee (1992) has identified three important sectors of life from which stress may originate namely job and organization, social sector and intra psychic sector.

Sources of stress can also be categorized differently. Brown (1984) has listed five categories as follows:

- 1) Customary anticipated life events (any major change in life) for example marriage, divorce, children leaving home, retirement etc.
- 2) Unexpected life events (any major life event which occurs suddenly) for example, major accident, sudden loss of job, terminal illness etc.

- 3) Progressive, accumulating situational events: (any continuously recurring problems in life's activities) like daily hassles, job and family stress, school stress etc.
- 4) Personality glitches: (any personal traits that create social problems) such as poor communication, self-esteem, insecurity, lack of confidence, poor decision making and fear of failure.
- 5) Value dependent traits: (circumstances generating thought, feeling and conflict) for instance revolutions, broken homes, moral dilemmas, peer pressure etc.

Sources of Occupational Stress

Although occupational stress initially arises from constituent factors of job and its psycho-physical environment, these factors are not inherently stressors. In fact, the personal characteristics of an employee, cognitive appraisal of the job factors and resources determine, the extent of stress experienced from a job factor or situation.

Thus the potency of the job factors or situations for causing stress can only be hypothetically predicated but it is difficult to categorize or generalize any work setting variable as a universal stressor.

However, some job factors or work conditions are likely to cause stress to majority of the workers which may vary from worker to worker. The pressures caused by the job factors are mediated by the personal characteristics of the worker. Hence, all the sources of occupational stress can be broadly classified in two categories.

1. Individual variables
2. Work setting variables
 - a. Work stresses
 - b. Non-work stresses

1. Individual Variables

An employer's age, sex, health, status, experience and socio cultural back ground have been found to influence the experience of occupational stress. "Employees responses to work demands and pressures are largely influenced by

personality characteristics, psychological and behavioural patterns, coping skills, cognitive patterns” Jagdish and Singh (1997)

The feelings and demotions of employees associated with anxiety can cause stress, enhancing its severity by influencing their cognitive appraisals.

Srivastava and Krishna (1992) noted that “employees with external locus of control experience higher degree of occupational stress and lower job, satisfaction”.

Employees’ job attributions also determine the extent of stress they experience in their job life. Gupta (1999) noted that employees attributing their efforts, to the nature of job activities, work conditions and managerial policy for their success or failure in job life experienced higher role stress as compared to those who attributed to chance or luck for their achievements and failures at work.

2. Work Setting Variables

a) Work Stresses

i) Job role : It is a major source of satisfaction as well as stress for the employees. Certain characteristics of job role have been noted as prominent source of occupational stress. Researchers have applied “role theory” to understand stress problems at work and examined how role pressures contribute to occupational stress. Ivancevich and Matteson (1980) noted that role pressure occurs when the employees’ expectations conflict with demands of the organization. Kahn and his associates (1964) have investigated and discussed the stresses arising from two major roles i.e. role ambiguity and role conflict. Role overload and role under load have also been noted as occupational stressors.

Pareek (1981) on the basis of theoretical speculation and statistical analysis has **identified ten situations of role stress namely :** Inter role distance (IRD), Role stagnation (RS), Role expectation conflict (REC), Role erosion (RE), Role overload (RO), Role isolation (RI), Personal inadequacy (PIN), Self role distance (SRD), Role ambiguity (RA) and Resource inadequacy (RIN).

ii) Job characteristics and Attributes

Characteristic of the job is a very common source of employee’s satisfaction and stress. The nature of job itself such as repetitive work can become a source of stress to the worker. The other attributes of job may refer to autonomy at work, use of knowledge and abilities, social interaction and power. If the jobs lack opportunities to satisfy these needs, they become stressful to their doers.

iii) Physical work conditions and technology

Qualities of physical work environment and technology as a factor can cause stress in work setting. The physical qualities of work environment such as noise, lighting, temperature, crowded work place can cause direct sensory and physical stress and indirect psychological stress through their potentiality for causing negative health consequences.

iv) Performance feedback and reward system

This factor enhances employee's motivation and performance but causes dissatisfaction and stress if it is inadequate or absent. If the workers feel they are not being timely rewarded for their performance, they are likely to encounter stress. The rewards include monetary benefits, recognition, appreciation, privilege and promotion.

v) Interpersonal relations at work

“The quality of interpersonal relationship at work plays a dominant role in determining employees' job behaviour and job stress”. (Payne, 1980), Kets de Vries (1984) reported that at least three types of interpersonal relationships have been studied, viz, relationships with: coworkers, within work groups and superiors. Good relations form the social support and buffer the job stress where as poor relations at work is a threat for the employees. Relationship with superiors is equally important in determining the amount of job stress.

vi) Organization structure and climate

It is generally observed that a structure of organization which allows more decision making power to employees produces less stress. Ivancevich and Donnelly (1975) in their study noted that employees in nonhierarchical organization reported less job stress and more job satisfaction.

Mc Grath (1976) suggested six sources of occupational stress as follows

- (i) Task-based stress
- (ii) Role- based stress
- (iii) Stress intrinsic to behaviour setting
- (iv) Stress arising from physical environment
- (v) Stress arising from social environment
- (vi) Stress within the person system.

Cooper and Marshall (1976, 1978) have described the following seven categories of sources of managerial stress

- (i) Factors intrinsic to the job: work load, working conditions, time pressure, too many decisions to make etc.
- (ii) Career development: promotion, job security, ambition, fear of redundancy etc.
- (iii) Role in the organization: Stresses out of various roles in the organization such as role ambiguity role conflict and responsibility for people.
- (iv) Relationships at work: relations with boss, colleagues and subordinates, trust and support, difficulties in delegating duties and responsibilities.
- (v) Organizational structure and climate; consultation, communication, behaviour and participation in decision making.
- (vi) Extra organizational sources: family problems, conflict of personal belief with that of organization, conflict of work and family demands, marriage patterns, relocation and mobility.
- (vii) Characteristics of the individual: Type A personality, competitiveness, self esteem, coping ability to stress situation.

Parasuraman and Alluto (1981) reported that job demands, constraints and job related events were not stressful in themselves but were capable of producing psychological stress depending on personal attributes and other coexisting factors.

Srivastava and Singh (1981) identified twelve factors which caused occupational stress such as Role overload, Role ambiguity, Role conflict, group pressures, low profitability, under participation, low status, responsibility for people, intrinsic impoverishment, strenuous work, poor peer relations and powerlessness.

b) Non Work Stresses

Besides the stressors prevailing in work setting, a number of non-work or off the job factors are the indirect sources of occupational stress. Models of work and non work stress (Bhagat et al. 1985) posed that “the total amount of stress and strain experienced by a person is a function of both work and no-work stresses”. Non work domain includes family, leisure or recreational, community, social or religious roles.

The non work stressors are not left behind when we enter the work place. There are three main work and non work stressors

Time based conflicts

Strain based conflicts

Role behaviour based conflicts

Time based conflicts : It is the challenge of balancing the time demanded by work, with family and other non work activities. It includes the number of hours at work (paid employment), amount of travel time, inflexible work schedule and rotating shift schedule if any. Time based conflict is more acute for women than men as women have to spend more number of hours at home on household chores and child care activities than men.

Strain based conflicts : It occurs when stress from one domain spills over to the other. Death of spouse, financial problems and other non work stressors produce tension and fatigue that influences employee's ability to fulfill work obligations. Similarly, stress at work spills over to an employee's personal life and often becomes a foundation for stressful relations with family and friends. Mc Shane and Glinow Von (2001) in their study said that women managers experienced more work family stress caused by strain based conflicts than by any other work family stressors. Research indicates that fathers who experienced work stress engaged in dysfunctional parenting behaviours.

Role behaviour conflicts : It occurs when people are expected to enact different work and non work roles. People, who act logically and impersonally at work may have difficulty in playing a more compassionate role in their personal lives.

Several studies have attempted to identify which jobs have more stressors than others. Teaching is a medium stress occupation. Task characteristics and job environments differ considerably for the same job in different organizations and societies. For example, a teacher's job may be less stressful in a management institute of a small town than in a large city where hierarchy is more formal with corporate culture.

Also a major stressor to one person is insignificant to another. The faculty member in one management institute may experience higher stress than the individual faculty member in another management institute. There will be differences in stress levels experienced by faculty members in their jobs both from work and non work activities.

However, despite the inclusion of non work factors as potential stressors, only a few empirical studies have investigated the relationship of non work stressors with job stressors (Cooper and Marshall 1976, 1978; Ivancevich and Matteson, 1980).

Researchers have noted that “life stresses were associated with decreased satisfaction and increased job stress, job alienation and turn over”. (Bhagat et al. 1985 and Sarason and Johnson 1979).

Hendrix et al. (1985), found that family relationship had indirect effect on job stress through their impact on life stress. Crouter (1984) noted in a study that female employees with young children experienced negative spill over from family responsibility to work by way of tiredness, absenteeism, inefficiency and inability to accept new responsibilities at work.

Cooper and Davidson (1987) reported work-family interface to be a major source of stress for professionals and females. In a study Shrivastava and Krishna (1991) observed that females in “dual career couples” with part time jobs experienced lesser role stress and maintained better health as compared to those who were in full time employment.

Finally, the sources of stress need to be viewed in light of the social systems to which all individuals belong (Pestonjee 1987 a). There are two such systems namely: the primary system, such as family and religious, regional and linguistic groups; and the secondary system which includes neighborhood, schools, Colleges, technical institutes and work organizations. Pestonjee stated that “As the functional requirements and role expectations from both these systems differ, the demands made on the individual in one system have their effects on his / her performance in the other. More over resources from one system also should be invested in the other system to take care of the problems arising in it”.

The review regarding stress and theoretical background revealed that various authors have pointed out the four variants of stress namely Eustress, Distress, Hyperstress and Hypostress. The three models of stress namely stimulus based response based and systems models of stress seem relevant to the present study. The effects of stress are the manifestations of stress such as physiological, psychological and behavioural. Even though stress-effects have become major concerns of psychological, medical and management investigators, the potential of understanding stress in teaching professionals has yet not been realised.

Different authors have categorized various sources of stress. The sources of occupational stress consisted of individual variables and work setting variables. The individual variables included personal profile and the work setting variables included work and non work stressors. Work stressors included job role, job characteristics, work environment, and interpersonal relations at work. The non work stressors were related to time, strain and role behaviour based conflicts. Since a teacher's job is similar to that of a manager, it seems that it would be useful to explore these variables in the present study.

2.2 ANTECEDENTS AS CORRELATES OF STRESS AND RELATED STUDIES

In this subsection, all such studies have been included which either attempt to establish association or seek to find out the causal relationship of the phenomenon of stress with other variables.

Studies which concentrate on person related and family – related variables as determinants of stress have been included. The studies which seek to establish job or organization related variables as determinants of stress and also the studies which deal with the issue of stress from a broader perspective viewed, in relation to both organization as well as person related variables have been reported here.

Antecedents are the causal factors of stress. Although some of the factors are reviewed separately in the following discussion, the interactive quality cannot be overlooked.

a. Demographic variables as correlates of stress

Beehr and Newman (1978) included demographic, physical condition and life stage characteristics of the individual as moderators of stress response. Some were internal factors as age, sex, race, education and some others were external such as diet, social setting and climate.

Bhandarker and Singh (1986) examined the entire stress cycle i.e. “the sources of stress, consequences and moderators to delineate important contributors of stress for evolving stress reduction strategies”. They included various categories of variables in their study. Amongst the independent variables individual demographic variables such as age, education, family size, parental back ground,

marital status and children were studied. The sample consisted of 300 top, middle and junior level managers from both private and public sector from the southern region of India. Multiple regression analysis revealed that job pressure from private sector contributes most dominantly to stress followed by belief in chance, drug intake age and family size at junior management level. In case of public sector, job pressure was followed by belief in chance, education, drug intake, age and family size. It was inferred that among all contributory factors, the external control was the most dominant followed by job pressures, drug intake and individual demographics.

The background variables studied by Sen (1981) in relation to role stress were age, sex, education, income, family type, marital status, residence, distance from residence to place of work and previous job experience. Some of the conclusions drawn by Sen were that role stagnation decreases as people advance in age, and age is negatively related with role stress. Women experience more role stress as compared to men. Role stress is inversely related to income; the higher the income, the less is the level of reported role stress. Sen has inferred that “persons with higher incomes hold correspondingly better assignments with higher status, esteem and satisfaction of self-actualization needs”. Unmarried persons experience more stress than married persons. This may be due to their lack of security need resulting in higher self esteem, autonomy and self actualization needs. Urban background persons experience more stress due to fast life of a city dweller as compared to people in rural areas who have a feeling of self contentment. The difficulties of commuting produce more stress for people who live far away from their work place as compared to people who live closer to their place of work. No significant differences were found with respect to family background and type.

Family size was found to be positively associated with role stagnation and role isolation and negatively with role erosion. The former two may be attributed to “advancing age, growing family size and increasing responsibilities and at the same time limited promotion prospects leading to a feeling of exclusion and loss of linkages”.

A report by Political and Economic risk consultancy (PERC), Hongkong(The Times of India, 8 December,1997) revealed that stress levels in Asia have been on the rise since the year 1997. Even India is not an exception, ranking only after Vietnam, South Korea, Thailand, Hongkong, The Philippines, China, Indonesia, Singapore and Japan. The report further adds that “the single factor most often cited

as being the biggest cause of stress was difficulties balancing professional life with social and family life”.

In a study by Cox et al. (1978) matched 100 teachers with 100 semi-professionals for age, sex and marital status and when they were asked to comment on the major sources of stress in their lives, 79 percent of Teachers referred to “work” as compared with 38 percent of non teachers.

Beena and Poduval (1991) studied gender differences in relation to work stress with age as an independent variable. The sample consisted of 80 first – level executives of a large industrial organization. The findings of the study indicated that stress experience of the executives increased with advancing age. Sex was also found to be a major factor affecting the stress condition.

Pareek Udai (1993) related age to life stresses by commenting that “young people between 20 and 30 years of age reported twice as much stress when compared to older people”.

In another study Ahmad and Khanna (1992) investigated the relationship between job stress, job satisfaction and job involvement among 50 middle level Hotel managers aged 22-36 years. The analysis of data revealed a significant negative relationship between job stress and job satisfaction irrespective of the subjects sex, marital status, education and experience. Occupational stress was reported to be negatively correlated with job involvement. The high job involvement group was more satisfied with their job than the low job involvement group.

Pandey (1997) conducted a study to determine the relationship between personal demographics and organizational role stress. The study was conducted on 61 personnel of Indian railways aged between 28-58 years. Role stresses were measured by ORS scale (Pareek 1983c). The analysis revealed a positive but non significant relationship of age with all dimensions of role stress except role ambiguity. Education showed positive but non significant correlation with all dimensions of role stress. Experience was reported to be positively and significantly correlated all dimensions of role stresses except role overload, resource inadequacy and role isolation.

Aditya and Sen (1993) attempted to study nature and extent of stressors faced by male and female executives in their job situation. A group of 160 middle level executives consisting of 80 male (aged 28-50 years) and 80 female (aged 27-50 years) were the sample of the study. The data analysis revealed that male executives

faced greater stress than female executives and the two groups differed maximally in terms of their roles, future prospects, human relations at work, femininity and masculinity dimensions.

Surti (1982) studied the psychological correlates of role stress in 360 working women belonging to different professional groups. An attempt was made to determine the extent to which demographic, personality and organizational factors contributed to various role stresses. No significant differences were observed in any type of role stress with age, birth order, educational level, family related variables, promotion, length of service, experience in organization, distance of work place and mode of conveyance.

Similar findings were noted in a study by Srivastava K. and Srivastava A.K. (1985) on a group of 185 couples. Another study was conducted abroad by Pratt (1978). His study involved 124 teachers working in primary schools in large industrial city in north of England. Teachers were interviewed and asked to explain stressful experiences related to teaching. Findings showed that the states of mental health and well being of 20 percent of the teachers in this survey were at risk, and hence it was suggested that support services should be provided. One feature of particular interest in this study was the lack of correspondence between perceived stress and biographical variables of age, sex, length of service and posts of responsibility. Similar findings were reported by Kyriacou and Sutcliffe (1977, 1978a, 1978b, 1979a, 1979b) with teachers in comprehensive schools in England.

Kyriacou and Sutcliffe (1978a) defined teacher stress in terms of feelings of depression which arose from teachers job. A random sample of 257 teachers from 16 medium size mixed comprehensive schools in England was drawn. Analysis of variance showed no significant differences in any of the biographical categories and self reported stress except a few differences which are as follows

- Males found administrative and paper work more stressful than females.
- Females reported greater stress related to lack of facilities and pupils' behavior.
- Younger and less experienced teachers found certain jobs more stressful.
- Teacher with longer teaching experience reported stress in connection with administrative work, too much paper work and class size too large.
- Teachers found most of the activities stressful as compared to "Heads of departments" except in respect of administrative and paperwork.

- Sex differences were discovered only in three of stress symptoms namely Headache, tearfulness and exhaustion which were more frequently referred to by women teachers.

b. Service duration

One of the major consequences of stress related to teaching is anxiety. It appears to lessen with increased length of service Parsons (1973). The reason seems to contrast with the notion that a teacher becomes more anxious as he becomes more experienced. The teacher stress may not decrease with advancing years but the types of stressors are very likely to change.

Gupta and Pratap (1987) conducted a study to determine the role of service length on organizational role stress amongst 200 executives of BHEL i.e. Bharat Heavy electrical LTD, a public sector undertaking. The sample was divided into three categories on the basis of their length of service: those with less than 5 years of service, with 5 to 10 years of service and with more than 10 years of service. The findings were as follows

- a linear increase was observed in the extent of organisational role stress as a function of service length.
- Executives with longer service length (5 to 10 years and 10 or more years) obtained higher stress scores than the group with service length upto 5 years.
- a linear increase was also observed in role overload as a function of service length.

c. Travel time

Many individuals are faced with pressures associated with a long journey at the start and finish of each working day, others engage in travel as a part of their job. Traffic jams, delays in public transport and need to travel in all weather conditions can be an added strain and challenge to face. If the travel time is long, the pressured individual is forced to spend less time on family and social activities. Travel time was a significant stressor reported by managers in the construction industry (Sutherland and Davidson, 1989b; Langford 1988) “The burden of guilt increases if fatigue and exhaustion prevent the individual from satisfactory interaction with family and friends. Thus, the stress associated with travel related to the job tends to be additive

in that it exacerbates other stressor sources” (i.e. it is part of the stress chain) (Kelly and Cooper 1981).

d. Working hours

The effects of long working hours can be traced from backwards during First World War. In Armament factories the longer working shifts were found to yield lower hourly output and in some cases, the magnitude of decrement was sufficiently great to result in an overall reduction in daily output.

Similar effects were observed during normal peace time conditions. “Excessive overtime characteristically results in both a reduction in hourly output and an increase in sickness rate” (Grandjean 1988). The inference to be drawn is that “faced with excessive working hours, people pace themselves to last out the work hours and periodically “gosick” to recuperate from cumulative states of fatigue”.

Laporte (1966) noted that the concept of “active rest” has been found to be beneficial in mental work related stress. In many Universities, a ten minute rest pause between lectures is considered to be a good practice. Perhaps this implies that University lectures and repetitive industrial work have similar psychological characteristics.

Todd Carlos, R. (October 4, 2008) in his article after video conference in nationwide class on management said that “working overtime or for longer schedules is by far the single biggest cause of stress and stress related ailments and a silent killer”. It is surely dangerous and hazardous to health and physical well being. Work hours have an indirect impact on physical and mental health of person. Longer working hours means lower productivity as it tends to cause concentration lapses.

In this modern day highly competitive world, working long hours has become a trend. Long work hours puts off sexual intimacy between partners as one of them is always working leading to frustration and depression. Meeting friends, socializing, community service, personal health, fitness and hobbies are all put in the background because of excessive working hours. Inadequate sleep in order to put in those extra hours of work leads to irritability and anger outbursts. Excess work hours also mean erratic food habits, disrupted digestion aggravating health issues.

Since employees are the backbone of a company and institution their health and physical well being are of great importance. Working for long hours results in a tired brain, low concentration and eventually poor productivity.

At the University of Arkansas, researcher Ganster Dan and Bates Collette (2003) conducted a study using the data from 1997 National study of the changing work force (NSCW) on 2, 842 respondents who were at least 18 years old and worked for pay but were not self employed. They found that “it is not how long you work, it is how you are working that causes stress”. Increased time at work, overtime or the work schedule were said to have an impact on general well being, work family conflict, job stress and job-satisfaction. The control variables included gender, age, race, education, total family income, occupation hours / salary, length of time and union membership. Lead author Major Virginia Smith (2002) in her study on work time, work interference and psychological distress, gathered data from 510 employees of a fortune 500 company and found a significant relationship between family demands and work time. She concluded that “long hours at work increased work family conflict and this conflict was in turn related to depression and other stress related health problems”.

e. Paid help

The increase in the participation of women in the labour force of most industrialized societies has drawn the attention of scholars to house work (Harmon 1981; Coverman 1985). What is evident in these studies are the changes in marital roles. Even though women have become co-providers, husbands have not equally shared household work. The research on housework in dual earner families’ western societies mainly concentrated on time budgets i.e. amount of time each spouse spends on domestic work either on daily or weekly basis (Coverman and Sheley 1986); and (Shamir, B. 1986b). Most of these studies concluded that there is little change over the years in the amount of time husbands in dual-earner families spent on domestic tasks.

Indian studies of dual-earner families (Rani, 1976; Caplan, 1985; Savara, 1986; Sharma, U. 1986; Devi 1987), however have examined housework in context of role conflict and the fatigue experienced by employed wives. All these studies have used qualitative data to indicate that husbands do not assist their wives. It was found that families depended on kin or neighbours for childcare. Paid domestic help is sought by most of the working couples but it is usually unreliable. Consequently most Indian wives continue to engage in longer hours of domestic work in addition to the time spent on the job. Very few researchers have provided quantified evidence

comparing the patterns of house work among working women to establish magnitude of role-overload experienced by them.

Ramanamma and Bambawale (1987) in their study of women industrial workers in Bombay and Pune noted that apart from eight hours of work in a factory, some of the respondents spent about an hour or two on commuting and an extra one to three hours on housework. Married women sought to find domestic help so that they could relieve themselves of the hardship of housework.

Among the Indian urban middle classes, cleaning, especially washing dishes sweeping and mopping of floors is normally delegated to servants. Domestic servants are of great help to Indian working women in relieving them from the physiological and psychological stresses arising out of performing the house work untimely before or after their work hours.

Ramu G. N. (1989) studied and made a comparative analysis of dual and single earner families. The division of domestic labour among 245 respondents at each earner group was studied by the amount of time they spent on selected tasks. It was found that only few couples were dependent on part time help by domestic servants. Due to high wages and an extremely competitive domestic labour market only 24 percent to 42 percent of working wives could manage to employ help fulltime maid servant. More dual than single earner families were able to hire full time maids. An analysis suggests a direct relationship between income and maid servant. The wives in the group of single earner facilities with no domestic servants tended to do all the housework by themselves in addition to their full time jobs. The dual earner wives reported experiencing fatigue because of the demands of their dual role.

Devi Lalitha U.(1982) in her study found that although it cannot be insisted that the paid help received in household management by women is the result of their employment outside alone but it is indicative of the enhanced role of women in the family with reduced stress levels.

Pot, A.M., Zarit S.H., Twisk J.W. and Townsend A.L. (2005) conducted a study on paid home help in Netherlands. This study examined the associations between transitions in paid homecare and stress appraisals and psychological well being of the family caregivers of dementia relatives. The sample consisted of 264 care givers who completed 3 interviews during one year. Longitudinal analyses showed that the onset of paid home care was associated with increased feeling of

worry and strain a worsening in positive effects. Ending paid home care was strongly associated with a decrease in depressive symptoms whereas sustained use of paid home care was related to reduce overload.

f. Health

Recently occupational stress has been seen as a contributory factor to health cost of individuals in companies. Studies of stress-related illnesses show, that stress is imposing a high cost on both productivity and health.

Health is more than the absence of disease. It embraces the concept of quality of life and a state of complete physical mental and social well being (WHO 1984). Ahmed *et al.* (1979) suggested that wellness and illness should take account the roles that the individual is expected to play i.e. able to function effectively in both familial and occupational roles. Therefore health is viewed as a desirable state of well being in order to fulfill role obligations.

It is accepted that “physical health and mental health are intricately interwoven and so health is dependent on how people think feel and act” (Thoresen and Eagleston, 1985). Improved health status is linked to changes in personal lifestyle practices that are known as risk factors for disease. As Knowles (1977) declared; “over 99 percent of people are born healthy and made sick as a result of personal misbehaviour and environmental conditions”.

If stress causes illness, psychology therapy should improve the patients physical condition. For example relaxation techniques seem to produce improvements in hypertension, headache, insomnia though not necessarily a complete cure. Stress may influence health behaviour indirectly (Stephoe and Wardle 1996) which raises or lowers the likelihood of illness. Conversely stress may get reduced by health promoting behaviours such as choosing a health diet, adequate sleep and exercising. Stress may influence behaviour directly such as approaching a general practitioner with a health problem and compliance with treatment régimes.

Negative health consequences of stress are probably experienced more frequently in the work atmosphere than anywhere else. Job stress can push a person beyond his ability to adapt successfully and then physical and mental health dysfunction occurs.

An extensive body of research has found job stress responsible for psychosomatic health outcomes and other health related outcomes such as tension,

anxiety and job dissatisfaction as indicators of personal functioning (Quick *et al.* 1992; Sagar 1994 and Travers and Cooper, 1993). However these reviews were mainly confined to western studies and indicate paucity of such empirical studies in real work organization especially among Indian employees. Hence one comprehensive Indian study, Singh and Srivastava (1996) studied the impact of three role stresses namely role overload, role ambiguity, role conflict along with overall job stress on physical health outcomes and pathogenic health habits of 200 male managers of Diesel, locomotion works, Varanasi. The authors concluded that high levels of job stress can facilitate tendency to drink excessively, smoke heavily and do less physical activity. These finding clearly indicate that when individuals perceive their jobs to be physically and psychologically threatening, it is very likely that their health would be adversely affected.

Theorell and Rahe (1971) and French and Caplan (1970) studied employees who worked overtime and spent more time doing work at home. They summarized their research findings by suggesting that both quantitative and qualitative work overload produces at least nine different symptoms namely psychological and physical strain, job dissatisfaction, job tension, lower self esteem, threat embarrassment, high cholesterol, increased heart rate, skin resistance and more smoking.

Bhandarker and Singh (1986) reported correlational data and highlighted the impact of personal health habits on stress reduction. The analysis revealed that sports, breathing exercises and belief in external control were negatively and significantly related with stress variables.

In a study on executive stress Malhotra (1996) reported that unreasonable performance pressures and demanding life styles of an executive often causes health problems such as hypertension, migraine, high blood pressure, insomnia, ulcers and cardiovascular diseases. The author analyzed the impact of techniques such as meditation, yoga, aerobics etc for a stress free culture.

Research has also explored the relationships between health behaviours and work experience such as alcohol consumption. (Head *et al.* 2004) and exercise and tobacco use (Johansson *et al.* 1991).

Research on work and health examines the impact of three distinct factors in relation to employee health.

1. Physical aspects of the working environment.

2. Sociological considerations defined by objective measures (e.g. shift work, working hours), and social aspects (e.g. social status, economic security).
3. Psychological aspects (e.g. perceived control, decision attitude), psychosocial aspects (e.g. relationship with colleague's managers, integration within the work place).

Majority of the research has been carried out within the above categories, but a more multidisciplinary approach would be helpful. Although past research has focused primarily upon physical working conditions, more recent research has looked at psychosocial factors and the impact of such factors upon health.

In a study, the impact of workplace social support spanned a 24 hour period encompassing work time, leisure time, and sleep (Unden *et al.* 1991). This relationship was apparent among both men and women across a range of occupational groups and was independent of physical strain. It was negatively associated with women and not men. (Greenglass and Burke, 1988). They suggested such a "gender distinction may reflect the tendency of women to utilize social support more effectively than men".

Research indicates that work related stress apart from being associated with increased alcohol, tobacco and drug use, is also associated with inadequate sleep or exercise, and consumption of a poor diet (Cohen and Williamson, 1988). In a study it was found that employees in high strain jobs did significantly less exercise than employees in low strain jobs despite no disparity in each group's intention to exercise (Payne *et al.* 2002). The authors concluded that "work demands may prevent individual's implementation of their intentions to engage in health enhancing behaviour". Some authors have also studied role stresses and their relationship to health outcomes.

Mental health has been studied in relation to the stress generated from role overload. Axelrod and Gavin (1977), Martin (1984) and Cooper and Roden (1985) had noted that quantitative and qualitative work overload was a major cause of poor psychological health of the employees.

Jagdish (1983) observed an inverse relationship between role overload stress and psychological well being of a sample of technical supervisors.

Axelrod and Gavin (1977) reported that employees who perceived work environment as having good organizational structure, minimum interference in work

procedure, equitable reward system and an atmosphere of trust and consideration, scored higher on measures of sound mental health. On the other hand, job stresses such as under utilization of skills, job insecurity, variation in work load and lack of participation were noted to produce high anxiety, irritation and depression in employees.

Another study by Judge and Watanabe (1993) Showed that “individuals who were satisfied with their lives were more likely to be satisfied with their jobs because of positive disposition towards life influences, their recall of past job events and interpretation of job conditions”.

In a study by Hendrix *et al.* (1985), it was reported that home and family relationships affected job stress indirectly through their effects on life stress. Holahan and Moos (1985) demonstrated that “those who adapted to life stress with little physical or psychological stress were more easy going and less inclined to use avoidance coping strategy than those individuals who became ill under stress”. Singh and Srivastava (1996) have studied the role of both individual and situational factors in stress and health relationship and found significant results.

This section of review of literature showed an emergence of person related and family related variables which may be associated with stress. These were gender, age, health, family type, family size, paid help, length of service travel time and hours of work at the workplace. Occupational stress, specifically role stress seems to have a definite strong link with the health aspects of employees.

2.3 STRESS - EFFECTS AND RELATED STUDIES SOME CONCERNS

While the contexts and sources of stress have been studied by different disciplines at different levels, its analysis remained a major concern of psychologists. As a result, in the last few decades, the nature and dynamics of stress and its effects on health have received considerable attention by psychologists around the globe.

Traditionally, the empirical Study of stress has been undertaken with biological (physical) and psychological frameworks with little attention for integration of the two. Recent analyses of stress phenomena are gradually moving towards identification of the mediators and moderators of coping and health related

outcomes. It has now become clear that stress cannot be viewed as some exogenous stimulus or response of the body, rather it is product of dynamic mismatch between the individual and his environment. Many behavioural characteristics define the structure of any environmental encounter and thus personal conditioning variables become important.

The consequences or manifestations of stress are the stress-effects. A contemporary approach to understand the manifestations of stress is the assumption that stress is a subjective experience and that the outcomes or symptoms of distress (bad stress) may be physical, psychological, and or behavioural. The effects of stress need to be considered in terms of costs to the individual, the work environment and society. It is the dysfunctional effects of high levels of stress that should be and are a major concern for contemporary society in general and for effective use of human resource in particular. The problems due to high levels of stress can be exhibited physically, psychologically and behaviourally by an individual.

This section presents a review of stress-effects identified with occupational and role related stress. The three effects of stress namely physiological, psychological and behavioural may have an impact on the performance of tasks by an individual at the work place and in the family.

Researches in organisational stress have dominantly focused on emotional behavioural and health outcomes of stress experienced at work. Cooper and Marshall in (1976, 1978) and Ivancevich and Matteson in (1980) stated that “prolonged severe stress affects the person at psychological as well as physiological levels. Stress at mid level may arouse the individual for improved performance and problem solving but starts hampering performance when its intensity reaches a disruptive level which varies with the characteristics of the person and the task being performed”.

In their 1979 article, on the basis of their study Beehr and Newman in (1978) identified psychological health consequences, physical health consequences and behavioural consequences under the heading of “Human consequences facet”. Since that time, most major reviews have classified consequences of job related stress under three headings namely psychological, physiological and behavioural. Just as earlier researchers searched for general or more specific response to stress, the effects of work stress have been influenced by a stress response that is “being under stress.”

Stress-Effects

Stress is not automatically bad for individual employees or their organizational performance. Stress has both desirable and undesirable effects. It is functional as it acts as a stimulant, but prolonged stress becomes dysfunctional. Individual reactions to stress situations also differ. The stress-effects in the two genders may also be different. Males are more vulnerable at an earlier age to fatal health problems such as cardiovascular disorders, where as women report more non-fatal but long term and disabling health problems. The most serious effects of stress relate to performance. It is said that moderate levels of stress stimulate the body and increase its ability to react thereby enabling the individuals to perform better. But too much stress places unattainable demands or constraints on the individual which results in lower performance.

The effects of stress can be grouped into three major areas: physiological, psychological and behavioural. These effects of stress affect an individual and ultimately impinges upon organizational performance.

1. Physiological effects of stress

Most of the early concern with stress was directed at physiological symptoms. The specialists in health and medical sciences and the researchers have concluded that physiological stress could create changes in metabolism, increased heart and breathing rates, increased blood pressure and bring on headaches and induce heart attacks. The link between stress and a particular physiological symptom is not clear.

The physiological stress-effects may result in the following symptoms physical ailments, digestive problems, sleep trouble, erratic breathing, muscular problems, headaches and other aches, frequent urination, cardiovascular troubles, severe symptoms including ulcer, heart attacks, arthritis and even cancer, susceptibility to allergies, fatigue, rapid gain or loss of weight. These illnesses or symptoms cause serious physiological impairments. In fact, they may also affect mental health of a person.

2. Psychological effects of stress

Not much attention has been given to the impact of stress on mental health especially within the medical community. According to Mishra (1994) the state of psychological equilibrium or balance is termed as psychological well being, psychological health or mental health. Imbalance in it results into tension and frustration. The simplest and most obvious psychological effect of job related stress is job dissatisfaction. But stress shows itself in other psychological states also for instance, tension, anxiety, irritability, boredom and procrastination. These types of psychological problems from stress in turn are especially relevant to poor job performance, lower self-esteem, resentment of supervision, inability to concentrate, make poor decisions and job dissatisfaction. These outcomes of stress can have a direct cost effect on the organization. This indicates that when people are placed in jobs that make multiple and conflicting demands in their duties, authority and responsibilities, both stress and dissatisfaction are increased. These effects of stress can be very dysfunctional for the organization. A general feeling of exhaustion can develop when a person simultaneously experiences too much pressure to perform and is less satisfied. The psychological symptoms of stress-effects are as follows

Chronic anxiety or restlessness, anger, depression, nervousness, irritability, shouting-high pitch voice, tension, frustration, boredom, no enthusiasm, fear of uncertainty, fussiness, dissatisfaction, worry, fatigue, exhaustion, feeling of failure, insecurity, inability to cope, feelings of isolation, withdrawal, alienation, self pity, confusion about roles and duties, inflexibility, moody, impulsiveness, impatience, feeling of unwanted, inability to concentrate, lack of decision making ability, guilt feeling and memory lapse.

c. Behavioural effects of stress

Behaviours associated with effects of stress are those specific actions that are performed in relation to how the individual is feeling. They are extremely helpful in understanding specific behaviours as they relate to stress reactions rather than dealing with behaviour as a whole.

Changes in behaviour that accompany exposure to stress include “impulsive behaviour, excitability, emotional outburst, excessive eating or loss of appetite, drug taking, drinking and smoking, absence from work and unstable employment

history". (Cox 1985 a, b). Some of these behaviours might also have direct and indirect consequences on the health and well being of the individual.

Unlike the psychological problems resulting from stress, the behavioural problems are often not attributed to stress by coworkers or supervisors and generate little sympathy. But also, like the psychological and physical symptoms of stress, the behavioural problems can be controlled, more effectively managed and even prevented by individual and the organization. Stress-effects can result in a number of behavioural symptoms which are as follows

Forgetfulness, accident proneness, inability to take decision, declined job performance, increased job dissatisfaction, increased absence, work alcoholism, lack of trust, lack of concern for organization, refusal to talk or discuss, social isolation, increased criticism, jealousy, nail biting, hair pulling, lip smacking, teeth grinding, finger tapping, knee joggling, compulsive eating, compulsive chewing, over eating or under eating, intake of alcohol, drugs, anger, unprovoked shouting and gossip.

The effects of stress can be grouped into two categories: **feelings** and **body symptoms**. Body symptoms indicate the physiological stress-effects. Feelings denote emotions which lead to psychological stress-effects. Both feelings and emotions find expression in an individual's behaviour. Behavioural stress-effects can be noted through an individual's specific behaviour, in relation to his present environment.

An individual under stress may or may not manifest all these stress-effects. The longer the period over which the person remains stressed, the more prolonged would be negative effects of stress .

Stress may also lead to health impairing habits or behaviours. The stress of illness may cause illness behaviour, which influences the course of a disease. Therefore, the way, in which a patient perceives and copes with the stress of illness is the mechanism that influences the disease.

According to Srivastava (1999), the behavioural symptoms of job stress are classified in two categories

- 1) Symptoms which belong to the employees such as avoidance of work, intake of alcohol, drugs, over and under eating, aggression towards co workers or family members and interpersonal problems in general.

- 2) Symptoms related to the organization such as absenteeism, accident proneness, decrease in work efficiency and leaving the job.

Models

1. The Bounce Model

Pestonjee D. M. (1983) developed a model to explain how individuals cope with stress reactions. It is called the “bounce model” because behavioural decompensation taking place due to stress i.e. either Eustress or distress or hypostress or hyperstress tends to get reflected in interpersonal and other reactions. “The reactions are received and analysed in the environment from where bounce back signals are given to the individual to bring about a change either at the organismic level or at the response level”.

2. The stress-behaviour model

This model was developed by Farmer, Monahan and Hekeler in 1987. The stress behaviour model can be seen as a cycle of stress-reaction behaviour. Its components are source, effect, behaviour and health. Positive behaviours yield a health perspective that will put impact on the entire process itself. Thus health behaviours can and will alter both stress sources and effects.

Sources of stress come from a variety of areas including the person, his Families, friends and work environment. Frequently stress comes from a combination of these factors. This model can be seen as a cycle of stress- reaction behaviour.

Effects of stress generally involve feelings or emotions that an individual experiences as a reaction to stress and stressful situations. The feelings are generally placed under the category of depression or anxiety. These feelings range from feeling ‘keyed up’ to feeling hopeless and frustrated. Once again, the reactions to stress may be directed towards the individual himself, his family, friends or his occupation. Although these often appear in combination, it is helpful to think about reactions to stress singularly, rather than as a whole. The model mentions about effects of stress in physical terms, the psychological reactions to them and the behaviours associated with them.

Not all stress and subsequent behaviour need to be negative. Some may be positive and useful, just as others may be negative or harmful.

Assessment of Stress-Effects

Researchers have used several tools and instruments for the measurement and assessment of stress-effects in professionals as well as non professionals from time to time.

“Since stress is said to cause illness, self reported measures of health and illness have been used as measures of stress” (Dua 1994).

Stress has been assessed through presence or absence and frequency of stressors. These may lead to physiological changes or illness, psychological health problems and behavioural changes which the individuals express through their feelings.

Stress is often assessed through its psychological effects. Thus State Trait Anxiety Inventory STAI (Spielberger *et al.*, 1983) and Profile of mood states (Mc Nair, Lorr and Dopperman 1971) have been often used as measures of stress. Stress has also been assessed through personality tests, to measure “type- A” behaviour. (Friedman and Booth-Kewley 1987).

Behaviour theorists argue that behaviour is externally determined whereas cognitive theorists argue that cognitive or internal variables are the major determinants of behaviour, and thus they need to be tested.

Literature shows that there are general specific instruments to measure the physical and psychological aspects of stress separately or in combination. But, there are hardly any instruments to measure all three aspects of stress-effects namely physiological, psychological and behavioural together. Very few tests or scales have been developed or constructed to assess all the three aspects of stress-effects as experienced by an individual through the use of one single test.

One such “stress test” was developed by Prabhu G.G. in the year 1991-92. It assesses physiological, behavioural and psychological stresses through various symptoms for all three stress-effects.

The test retest reliability has been tested and is found to be 0.76. This test is highly correlated with Charles D. Spielberger’s State Trait Anxiety Inventory, STAI. The scale of State Trait Anxiety Inventory is a well known measure of stress. Since this test and State Trait Anxiety Inventory STAI are highly correlated, this could be taken as a validity measure of this stress test. The correlation coefficient is 0.64. Due to its usefulness, this test was later translated into Marathi. It was a forward backward translation for establishing the validity of this test. The statistical measure

used was Alpha Coefficient. This test can be used in training and research. This test is also useful in identifying A and B type personalities. Initially, Dr. S. W. Deshpande, former Head, Department of psychology, Pune University has used this test on a sample of 200 officers between the age range of 25-35. Later, both English and Marathi version of this test have been used several times by researchers and post graduate students on varied sample for data collection.

The Marathi version of this test is being used in the doctoral work in the Universities of Maharashtra.

Related Studies

Stress-effects on individual's health may be of short term or long term nature "Elevation in blood pressure has been observed in cases of anger and anxiety, stressful interviews, loss of job and natural disasters" (Kasl and Cobb, 1970). The authors further observed that prolonged rise in blood pressure were found in those who face stress for long periods.

"Frequent adjustment to changes in life because of the occurrence of life events increases the proneness to diseases as a result of lowering of resistance to diseases" (Holmes and Masuda 1974). Similarly greater number of hassles of daily living also contributed to stress experiences. (Kanner et al. 1981).

Along with changes or events, whether environmental and or personal, what is commonly found is "the individual's life style which includes eating habits, exercise, drinking habits, ways of coping with life, use of drugs and tobacco." (Haggerty, 1977).

Frankenhaeuser and Odman (1983) in their research aimed at understanding the causes of stress defining the contributory, work and organizational factors and identifying factors protecting people from harmful effects of stress. Another important aspect of this research was the gender related differences in stress levels and stress perception. Lundberg, Mardberg and Frankenhaeuser in (1994) said that one of the most striking differences in men and women shown in this research is the ability to relax while coming home from work. "At about five O'clock in the afternoon, stress hormones and blood pressure go down in men while they go up in the women". This is particular true for female professionals.

Rahe and his associates (1964); Rahe (1968) and Holmes and Rahe (1967) examined whether changes in individual life, which require them to make behavioural adjustments, statistically correlate with the onset of illness. The

physiological studies indicate that “naturally occurring and experimentally induced stress evokes significant alterations in the functioning of most bodily tissues, organs and systems. These changes in turn lead to lowering of the body’s resistance to diseases by suppressing the immune system”. “The greater the magnitude of such life events, the greater is the risk of acquiring illness of a serious nature” which has been reported by a number of investigators (Rahe et al., 1964; Holmes and Rahe., 1967; Maddi et al., 1987 and Lai 1995).

Substantial amount of research has been done by psychologists to examine health (Somatic) outcomes of occupational stress. Majority of these investigations have revealed positive relationship between job related stress and a variety of somatic symptoms and disorders. In view of the severity of stress-outcomes, Holt (1982) has classified them in two categories

- (i) Physiological strains, relatively minor side effects of occupational stress.
- (ii) Illness and mortality impairing effects of occupational stress on health causing illness.

Stress researchers have associated work overload, job dissatisfaction, job insecurity, role conflict, interpersonal strains and a variety of other work stresses with classic symptoms of stress such as headaches, heartburn and generalised fatigue (Quick and Quick, 1984). “Although genetic, biological and many other factors influence the appearance and course of these conditions, job stress plays a role in hardening the appearance of diseases”. Researchers like Holmes and Rahe (1967) and Grant et al. (1974) have established the point that “there exists a positive relationship between stressful life events, subsequent illnesses and fatigue”. The author concluded that stress generated by computerization led to alienation and had an adverse effect on health.

Pestonjee D. M. and Pareek Udai (1992) investigated occupational stress in academic and non-academic staff working at the University of New England in Australia. One of the aims of the project was to determine the relationship between occupational stress and non work stress and physical health, emotional health and job satisfaction. More than 1,000 staff members of the university, responded by completing the questionnaires. Overall, approximately, 25 percent of staff experienced low job stress, 60 percent experienced medium job stress and 15 percent of staff experienced high job stress. Analysis showed that males experienced higher

workload stress than females and females reported more stress due to work politics than males. In general, younger staff, reported more occupational stress than older staff. Younger staff reported more stress due to job significance, work politics and work conditions than older staff; older staff however reported more stress due to work overload and university reorganization than younger staff. In general lower level staff were more stressed than those employed at higher levels. The relationship between stress, health and job satisfaction variables was also determined. Results revealed that both high job stress and high non work stress were associated with job dissatisfaction, high psychological distress, high negative affect, high anxiety, more absence from work, more visits to doctors, poor physical health and higher incidence of illness. Generally, the relationship between stress and emotional health measures was stronger than the relationship between stress and physical health measures. By and Large, the relationship between job stress and health measures was maintained even after controlling for the effect of non-work stress.

Mohan (1993) pointed out that “maladjustment of a teacher’s behaviour involves multi dimensional factors viz.; physiological, psychological and environmental”. The study further reported that in all sorts of maladjustment of teachers’ behaviour, there is a common element of abnormality in behaviour. This element of abnormality of emotional response may be stimulated by bodily conditions, by current circumstances, by formal events preserved in fantasy that never corresponded to any external event.

Researches linking psycho-physiology and personality indicated that stress in ones’ life results in the development of psycho-somatic disease viz. hypertension. Hypertension among the individuals directly affects their behaviour. It is imperative that a hypertensive teacher would also be affected as a result and may not be able to render effective teaching. Skinner (1958)-commented that “It is extremely important that a teacher possesses adequate adjustment to the mental health hazard inherent in teaching. The occupational hazards of teaching include personality maladjustment, ill health and a warped outlook on teaching and life.” Kornhauser (1965) drew the attention of psychologists towards the stress prevailing in work environment and its impairing effect on mental health of employees.

French and Caplan (1970), out of their study, noted that role ambiguity was significantly correlated with the feeling of job related threat, and mental and physical health of the employees. In another study, role conflict was observed to be

positively correlated with threat and high anxiety. Rizzo and his associates (1970) noted a positive relationship between role stress and anxiety, tension and fatigue. In a study of working women, Hall and Gorden (1973) found that role conflict led to the feeling of unhappiness. Stress caused from role conflict was reported to be positively correlated with threat, anxiety and tension Brief and Aldag (1976). In further studies, Beehr (1976) found that role ambiguity was correlated with low self-esteem. A positive relationship of role conflict with anxiety, depression and irritation among managers was documented by Axelrod and Gavin (1979). In their study, Morris and Koch (1979) reported that role stresses were associated with psychiatric complaints. Out of his study in middle managers, Orpen Christopher (1982) noted a significant positive correlation between role conflict and physical and psychological strains leading to deterioration in psychological health.

Srivastava and Singh (1988) noted positive relationship between role stress and ill-health. The study also revealed that approach coping strategies accentuated the adverse effects of role stress on mental health to a noticeable extent. Jagdish and Srivastava (1989) reported that stress arising from role conflict was most intensively correlated (negatively) with psychological well being of the supervisory personnel. In her extensive study, Benerjee (1989) noted a negative relationship between role stress and mental health of employees in service organization. The investigation also documented that the stress resulted from inter-role distance caused maximum variance in psychological health of the non-manufacturing employees whereas; the stress arising from self-role distance predicated maximum variance in psychological well being of the employees belonging to manufacturing organizations.

Employees' mental health has also been studied in relation to the stress generated from role overload. Out of their investigation French, Tuper, and Mueller (1965) concluded that qualitative work overload experienced by the university professors was significantly correlated with low self-esteem. Terryberry, S. in (1968) reported that "overload in most systems leads to breakdown, whether we deal with single biological cell or individuals in an organization". Axelrod and Gavin (1977) have noted that work overload produces high anxiety and irritation among the focal employees. Martin (1984) in his investigation concluded that role overload predicated acute and chronic mental problems. Rod and Herbert (1984) reported role overload to have a "replicable positive relationship with mental health problems".

Besides the role stress, the effect of stress arising from several other organizational and occupational variables on employees' mental health has also been examined by the stress researchers.

Quinn, Seashore, and Mangion (1971) reported that close supervision and lack of autonomy at work was positively related to employee's poor mental health. Agervold (1985) found that there was a strong link between stressful physical work environment and health problems. It was also noted that mental exhaustion increased with a greater work pace and greater work difficulty.

Furham and Schaeffer,(1984) examined the consequences of person-environment (P-E) incongruence at work. The stress arising from misfit between the employees and his job demands has been reported to cause deterioration in their mental health and observed positive relationship between P-E misfit and psychological strain and somatic complaints French et al. (1982).

In their extensive study House and his associates (1979) found that perceived job stress was consistently correlated with self-reported angina, ulcer and neurotic symptoms and with hypertension and other heart disease risk factors. Kobasa (1982) noted significant relationship between experienced job stress and complaints of strain symptomology. Syrotuik and D'Arcy (1984) analyzed health-related consequences of occupational stress. The study revealed that occupational stress was related to job strains, general ill-health, and alcohol consumption. In a study on the sample of school teachers Galloway (1984) found high correlation between occupational stress and mental ill-health. Revieki and May (1985) reported that occupational stress exerted a direct effect on depression of the employees.

The review of literature regarding stress-effects in teachers and other professional groups dwelled into major areas of stress-effects namely physiological, psychological and behavioural.

Two models included in the review namely "the bounce model" and "the stress behaviour model." may be helpful in planning the present investigation. The reports of research studies focused on work stress, role stress with varied symptoms of physical and mental health of employees.

There are hardly any studies which may be helpful in understanding behaviour of employees in a specific profession. No study could be traced which studied all three stress-effects together on employees of a particular profession.

Hence it was decided to study all three stress-effects in the present sample of teaching professionals.

2.4 ROLE STRESS AND ROLE STRESSORS

As teaching organizations become more complex, the potential for stress in teaching faculty member increases. The stressors which are responsible for inducing stress in terms of physiological, behavioural and psychological stress in teaching faculty members need to be analyzed and measured.

Role can be defined “as a set of functions which an individual performs in response to the expectations of the significant members of social system and his own expectations about the position that he occupies in it”. Pareek (2010)

Within the organization, certain behaviours and demands are associated with the role fulfilled. However, dysfunction may occur at two different levels which can be major sources of work stress namely role conflict (Kahn *et al.* 1964) that is conflicting job demands and role ambiguity which means lack of clarity about the task. It was suggested (Rizzo *et al.* 1970) that these two role stresses are related to job dissatisfaction and inappropriate organizational behaviour.

Responsibility can also be identified as a potential stressor associated with one’s role in the organization. However, lack of responsibility may also be stressful if the individual perceives this as work under load and too little responsibility may also be a source of managerial stress Payne (1980). Poor working relationship among co-workers in an organization is also a source of stress. “The interpersonal demands and social pressures which arise from social system relationship at work may be potential sources of stress.” (Quick and Quick , 1984).

Ivancevich and Matteson, (1980) stated that “career stress category of potential stressors include job insecurity, over promotion, under promotion and thwarted ambition”. Individuals suffering from career stress often show job dissatisfaction burnout, poor work performance and unsatisfactory interpersonal relationship at work.

Occupational stress leads to role stress. There are two role systems namely role space and role set. The concept of role and the two role systems have a built in potential for stress.

As defined by Pareek Udai and Purohit, S. in (1997, 2002, 2010) role space is the dynamic relationship against the various roles occupied by an individual and his self. Any conflicts amongst the three variables namely the self, the role under question and the other roles occupied lead to role space conflicts or stress.

A brief description of role space stress which may take the following forms as given by Pareek in (2010) is given below.

1. Self Role Distance (SRD)

When expectations from one's role go against his concept, he feels this kind of stress. This is essentially a conflict arising out of incongruence between personal attributes of an employee and the requirement of his job role.

2. Intra - Role Conflict (IRC)

When certain incompatibility is seen between the expectations of a role it results into intra role conflict. For example a professor may see incompatibility between expectations of teaching students and of doing research. Even though the two expectations are not inherently conflicting, but the individual may perceive these as incompatible.

3. Role Stagnation (RS)

This kind of stress is the result of gap between demand outgrow of previous role to occupy new roles effectively. With the advance of an individual, his role also grows and changes. With this change in role, the need for taking his new role becomes crucial. This is the problem of role growth. This becomes an acute problem especially when an individual enters new role after occupying a role for a long period.

4. Inter Role Distance (IRD)

Individual occupies more than one role at a time. His occupational role may come into conflict with family or social roles. These conflicts among different roles represent Inter-role distance. IRD which is also called as Family Role Factor. It has the dominant theme of conflict between organizational role and family role. It can be of two types: IRD (F) and IRD (S) one concerned with conflict with family roles, and the other with social roles.

Further Pareek Udai and Purohit, S. in (1997, 2002, 2010) also defines and explains various forms of role set stress as follows: The conflicts which arise as a result of incompatibility amongst expectation by self and by the "significant" others

are referred to as role set conflicts or stress. Role sets are the sub systems in an organization which include seven different role set conflicts as follows.

1. Role Ambiguity (RA)

It arises when the individual is not clear about various expectations people have from his role. Role ambiguity may also be due to lack of information regarding role and its enactment to the role occupant.

2. Role Expectation Conflict (REC)

This type of stress arises when two or more members of one's role set impose opposing expectations on the role occupant and he is ambivalent as to whom to please. Stress is also created if the same member holds opposing expectations toward the focal person.

3. Role Overload (RO)

When the role occupant feels that there are too many expectations from the significant members in his role set, he experiences role overload. There are two aspects of this stress: quantitative and qualitative. The former refers to having "too much to do" while the latter refers to "too difficult to do".

4. Role Erosion (RE)

This type of role stress is the function of the role occupant's feeling that some functions which would properly be the part of his role are transferred to or being performed by some other person. This can also happen when the functions are performed by the role occupant but the credit goes to someone else.

5. Resource Inadequacy (RIN)

This type of role stress is evident when the role occupant feels that he is not provided with adequate resources for smoothly performing the functions expected from this role.

6. Personal Inadequacy (PIN)

Role stress also arises when role occupant feels that he does not have the necessary skills and training for effectively performing the function expected from his role. This is bound to happen when proper placements are not made and the organizations do not impart periodic training to enable the employees to cope up with the fast changes both within and outside the organization.

7. Role Isolation (RI)

This situation of role stress arises from psychological distance between the occupant's role and other roles in the same role set. The main criteria of role

isolation is frequency of interaction with other roles in the role set. In the absence of strong linkage, the stress of role isolation may be high. The gap between the desired and the existing linkage would indicate the degree of role isolation.

According to Pareek, in relation to the organisational roles, the following ten role stresses are worth considering

- i. Inter Role Distance (IRD)
- ii. Role Stagnation (RS)
- iii. Role Expectation Conflict (REC)
- iv. Role Erosion (RE)
- v. Role Overload (RO)
- vi. Role Isolation (RI)
- vii. Personal Inadequacy (PIN)
- viii. Self Role Distance (SRD)
- ix. Role Ambiguity (RA)
- x. Resource Inadequacy (RIN)

Both groups of role stress namely role space and role set can cause conflicts and stress as they are the causal factors of stress or the stressors. Thus it is more suitable to call them as stressors for the present research.

Hence all the above ten role stressors broadly fall into two categories namely work role stressors and family role stressor. Only one role stressor Inter role distance (IRD) is considered as family role stressor and all the other nine role stressors are considered as work role stressors. Thus two types of stressors can be measured in each of the two major life roles, family and work roles.

The organizational Role Stress Scale (ORS Scale) by Pareek Udai (1983c) and revised in (1993) can be used to measure these role stressors. The ORS Scale has high reliability and validity and detailed norms have been worked out for different types of organizations.

According to Pareek Udai (1983b), the ORS Scale can be used for several purposes. It can be used to investigate the nature and dynamics of role stress in various organizations and to develop interventions for the use of individuals, groups and organizations. This instrument gives data about the number of different role stresses experienced by a respondent. A detailed analysis of stresses on which a respondent has high scores can be done and some plans can be worked out to manage and reduce these stresses.

The ORS Scale by Pareek Udai (1993) is certainly one of the best instruments available today for measuring a wide variety of role stresses.

a. Family role stressor and related studies

This unit brings forward the focus on the nature and management of stress that crosses work and family roles. For some time researchers and practitioners have recognized the fluid boundaries between work and family life, an idea more recently expressed in the concept of spillover. The spillover concept therefore includes stress and coping processes flowing across individuals and social roles. It includes family stressors in daily life and the social contexts in which individuals find themselves.

Stress occurs within roles, forming natural boundaries. The occurrence of stress in one role has implications on stress in other roles. At the same time, stressors may accumulate within a role. Stress in work and family roles derives from a number of separate, and only sometimes overlapping causes.

A model of stress between work and family

This working model was proposed by Eckenrode, J. and Gore, S. in the year (1990). “Stress in the workplace affects the family and vice versa, the extent of which varies as a function of multiple factors related to the structure of the family and workplace, the nature of stressors, and those situational factors that moderate the stress transmission process”. The nature of the work place and the characteristics of the family determine the structure of the boundary that exists between these two worlds.

Work family boundaries are important because concrete activities are important to maintain them, for example day care facilities at the work site or use of phones for family related calls.

This model incorporates four sets of variables: (1) Stressors, both ongoing and eventful; (2) coping resources and strategies; (3) health related outcomes; and (4) Characteristics of the participants that may modify the stress and coping process e.g. gender.

Three sets of related but conceptually distinct processes also are considered (1) transmission process that involves carryover of stressors from one role to the other or one person to the other.

(2) stress mediating process within the family and the work place where stress impacts on a family members or worker's well-being.

(3) stress moderating process reflects the presence of conditions that may prevent stress from crossing over from one role to the next, from one person to the next. Stress may flow across work family boundary in both directions and have positive as well as negative influence in terms of well being of the employee and his/her family. Stress in one role area may increase stress in the other. On the other hand, low levels of conflict with corresponding high levels of social support from the spouse may act to buffer the mental health effects of work stress.

At the level of coping with stress, effective coping behaviour and processes in one role setting may be dysfunctional in the other and that effects of coping in one domain may display positive or negative spillover into another. Work family stress may vary for men and women but are equally pertinent to both the sexes. Stressful job conditions, including work overload, job conflict and ambiguity clearly influence the transmission of stress from work to family, for women as well as men. Likewise, juggling work and family responsibilities is becoming an issue for an increasing number of men, even if the role of men assuming instrumental roles in the family has not kept pace with the increasing rate of employment among women.

There is evidence that work-job interference is experienced as a greater problem for women than men (Voydanoff and Donnelly, 1985). "For men, employment is the critical work related issue having a negative impact on the family, whereas for women, employment is problematic" (Splitz, 1988).

Related Studies

More efforts are required on part of the researchers to understand the process that connects work and family settings. More concentration on psychological concepts such as stress has become a thrust area for research in the recent times.

Bidyadhar Shwetaleena and Sahoo Fakir M. (1997) examined the "psychosocial factors of work-family linkage," 200 professionals inclusive of male and female participated in the study. Participants were married and working and were categorized into four quasi-experimental groups. As one group had to be dropped finally only three groups were examined. Results revealed that clarity of division of duties were differently utilized. The criteria of harmony was strongly intercorrelated and negatively associated with conflict factors. Certain socio-

demographic variables such as person related measures, family related measures and organizational related measures emerged as significant. Person-related measures included income, age and educational level of participants. The family-related measures considered were family type, age, education and income of spouse, number of children and total number of earning members in the family. Organizational variables included type and size of organization, and work experience. Significant positive correlations were found between work and family involvement and child related support, emotional support from spouse.

Results indicated that the crossover effect of a spouse's work-family conflict was positively related to withdrawal behaviours to some extent. About 40 percent of the crossover effects were detected at the correlational level for the withdrawal outcomes. Hill, Yang, Hawkins and Ferris (2004) conducted a cross cultural test of the "work family interface" in 48 countries. This study tested a cross-cultural model of the work-family interface. The study supports a "transportable" rather than a "culturally specific" or "gender specific" work-family interface model. Job flexibility was related to reduced work-family conflict and enhanced work family fit. Work - family fit was related to increased job satisfaction. Findings suggest that investment by multinational companies in job-flexibility initiatives may represent a dual agenda way to benefit men, women and businesses in diverse cultures.

Vodydanoff Patricia (2004) studied "the effects of work demands and resources on work-to-family conflict and facilitation." The analysis was based on data from 1938 employed adults living with a family member who were interviewed for the 1997 national study of the changing workforce. The results supported that time and strain based work demands show relatively strong positive relationships to work-to-family conflict, whereas enabling resources and psychological rewards show relatively strong positive relationships to work-to-family facilitation. The availability of time based family support policies and work-family organizational support was negatively related to conflict and positively related to facilitation.

Another study was conducted in (2004) by K. M. Nomaguchi and S. M. Bianchi on exercise time." The authors studied the gender differences in the effects of marriage, parenthood and employment using data from a supplement to the 1995 National Health interview survey. They examined the relationship among three major work and family roles-marriage, parenthood and employment, and time spent on exercise among American men and women ages 18 to 64 (N=13, 496). It was

found that work and family roles curtail time for exercise. Married adults spent less time on exercising than unmarried adults. Having children under age five was negatively associated with exercising although number of children was not related to time spent on exercising. Long hours of employment was also related to less time spent on exercising, although the effect was small. Women as compared to men spent less time on exercising. But the negative association of work and family roles especially the role of spouse with time for exercise was greater for men than for women.

Sekaran (1985) in his study on husbands and wives in dual career families had commented that “the spillover between work role and family role has distinct gender commutations. Husbands are more likely to bring work home as compared to their wives and vice versa”.

Similarly Rosen (1985) commented on women’s role in career and family in her work on “Marriage is back in style with a difference”. She pointed out that “even though women think that their careers are just as important as their husbands and expect equal partnerships in marriage, including the sharing of responsibilities for child care and housework, reality does not often match their lofty expectations and hence tension mounts in the family. Wives may therefore, feel that they are operating under severe constraints while their spouses enjoy all the freedom to concentrate upon their work and also leisure”.

Shahnawaz M. G. and Ali Nasir (2007) explored “work family conflict and its relationship with organizational commitment among dual career women” in two different organizations. “Time based conflict” was found more in dual career women of multi national company than their counter-parts in Government organizations although the difference was not significant. “Strain based conflict” and work family conflict were significantly higher in dual career women of Government organization than multinational company. The result was surprising because workload and pressure has been found more in multinational companies.

Shrimali V. and Sen Ruchira (2009) investigated the “relative factors of stress among IT professionals and gender differences of wellness among them.”

Findings indicated that personal and professional stressors exerted cumulative effect on the individuals.

b. Work role stressors and related studies

For the past few decades studies on organizational role stress have focused attention on the causal factors, stress manifestations and coping strategies among managerial personnel. The other groups of professionals such as teaching professionals who also play managerial roles at work have not been researched upon.

Ahmed, S, Bharadwaj, A and Narula S. (1985), conducted a study of stress among executives from public sector and private sector. The variable measured was role stress using ORS scale, Pareek, (1994). The main findings revealed that out of 10 dimensions of role stress, significant differences were obtained in three dimensions namely Role isolation, Role ambiguity and Self-role distance. Public sector executives experienced slightly higher stress than their counterparts in the private sector, age, education, income, marital status and experience of executives were found to be unrelated with role stress in both the groups.

It was observed by Pestonjee (1987b) that the Inter-role distance and Role erosion had contributed significantly to managerial stress. Further, Role ambiguity and Personal inadequacy were the least contributors to managerial stress.

Gupta, N. K. and Pratap S. (1987) studied organizational role stress, trait anxiety and coping strategies in Public Sector executives. Executives were subdivided into three categories based on their length of service namely: those with 5 or less than 5 years, with 5 to 10 yrs. of service and with more than 10 yrs. of service. Findings showed a linear increase in role stress as a function of service length. Role stress and trait anxiety were unrelated to each other. Role stagnation and Role overload negatively related to role stress. Doctors experienced more stress than lecturers. Female doctors and lecturers experienced more stress than male doctors and lecturers. "Self role distance" and "Role stagnation" and "Role overload" seemed to affect doctors' needs but not of lecturers' needs. Role ambiguity and Resource inadequacy appeared to equally affect the doctor and lecturers' needs. Role erosion affected lecturer's needs more than the doctors. Both doctors and lecturers experienced least role stress and achieved full gratification of their needs.

Rajagopalan M. and Khandelwal P. (1988) studied role stress and coping styles of Public sector managers. The sample consisted of 120 executives and the variables measured were role stress and coping styles. The main findings indicated

that the total role stress was positively correlated with avoidance and negatively correlated with approach coping styles. Role expectation conflict, Role erosion and Self role distance were not found to be correlated with coping styles.

Menon and Akhilesh (1994) studied functionally dependent stress among managers and found that role ambiguity had significantly contributed to managerial stress. Kumar Satish in (1997) found out the relationship between organizational role stress and length of service. Data were collected from 252 public sector executives. The results indicated that role stress is not significantly related with length of service. However, Role stagnation and Role overload and Role isolation increased with service length. Several other studies have also studied the relationship between role stress and length of service (Sen, 1981; Surti, 1982 and Gupta, 1988). Sen and Surti found no significant relationship between role stress and length of service.

In (1997), Zafar M Syed and. Rao S. B Nageshwara studied the impact of organizational role stress on job involvement of managers in public sector organizations. The sample consisted of 130 managers from junior, middle and senior level in the age group of 26 years to 56 years with 5 to 30 years of experience. Results indicated that all three levels of managers were negatively influenced by Role stagnation, Role overload and Role isolation. Role stagnation was found to be maximum among executives with 5 to 10 years of experience. Middle level manager experienced high level of Role stagnation and Role isolation stresses. For senior managers none of the role stresses showed impact on their job involvement. Overall analysis indicated that Personal inadequacy, Role stagnation, Role overload and Role isolation were the sources of disturbance to junior and middle level managers. Pestonjee (1999) studied role of service length effect on organizational role stress and coping strategies. Results revealed significant and negative relationship between service length and stress experienced.

Tang, Tung, Schwarzer and Schmitz (2001) studied mental health outcomes of job stress among Chinese teachers: role of stress resource factors and burnout. The study examined the mental health outcomes of job stress among 269 Chinese teachers in Hong Kong. Results showed that stress resource factors were negatively related to burnout which had direct impact on negative mental health.

Gupta and Kulkarni (2001) tested two concepts: first more dissatisfied employees experience greater role stress and second lesser job involved employees

experience greater role stress. Analysis confirmed that more dissatisfied employees and less job involved employees experienced greater role stress.

Koteswari (2004) studied the influence of gender and length of service on stress and coping of employees of different organizations and revealed that stress levels go down as experience on the job increases. No gender difference was found for the same.

Koteswari and Allam (2005) conducted a study on job stress among managers. The study examined the job stress levels of managers working in various organizations. It also found out the effect of age and length of service on job stress. The results revealed that most of the managers experienced high level of job stress. Younger managers with low experience faced more job stress. This study indicated that length of service had no effect on stress experienced.

Khetrupal and Kochar (2006) studied role stress in women and found that 40 percent of the women were under moderately low level of stress followed by 36 percent, who reported moderately high level of stress. Bhattacharya Sunetra and Basu Jayanti (2007) studied distress, wellness and organizational role stress in IT companies. The effect of age and sex as well as the predictability of various variables from stressful life events and coping resources were also examined. About 101 professionals inclusive of both men and women were studied as sample. Results revealed that women experienced greater wellness and older personnel experienced more distress. Distress could not be predicted from the life events and coping resources taken together. Wellness and organizational role stress could be predicated from these two variables. Organizational role stress and distress were positively related and distress and wellness were negatively related.

On the basis of above review, it can be said that role stressors were the potential sources of stress in various occupational groups especially managers. The various research studies highlighted on the relationship of work role stress to personal variables, length of service, coping strategies and styles, health outcomes and job satisfaction or dissatisfaction. In addition, the family role stress was studied in relation to work family spill over, work family conflict and facilitation.

2.5 JOB SATISFACTION AND RELATED STUDIES

The term job satisfaction describes a positive feeling about a job, resulting from an evaluation of its characteristics. A person with a high level of job

satisfaction holds positive feelings about his or her job, while a dissatisfied person holds negative feelings. Organizational behaviour researchers have given high importance to job satisfaction. Through their research in organizational behaviour Robbins, Judge and Sanghi (2009) revealed that satisfaction levels vary a lot, depending on which facet of job satisfaction is being talked about. People are, on an average satisfied with their overall job, with work itself and with their supervisors and co-workers. However they tend to be less satisfied with their pay, with promotion opportunities, and job in general.

As job satisfaction is a global concept, similar factors cause and result from job satisfaction across cultures. For example pay is positively but relatively weakly related to job satisfaction. Satisfied employees are more likely to be satisfied citizens and hold a more positive attitude towards life in general and thus create a society of more psychologically healthy people.

For management, job satisfaction is important. A satisfied work force translates into higher productivity due to fewer disruptions caused by absenteeism and results into lower medical and life insurance costs. Additionally, it is beneficial for the society too. Satisfaction on the job carries over to the employee's off the job-hours. So the goal of high job satisfactions can be achieved by providing both a good pay and social responsibility.

However, job satisfaction as related to performance does not hold consistency in various segments of the work force. People differ in terms of importance that they place on work in their lives. For some, the job is their central life interest but for others, their primary interest is off their job. Non job oriented people such as average workers tend not to be emotionally involved with their work. This indifference allows them to accept even frustrating conditions at work more willingly. On the other hand job satisfaction might be important to professionals such as lawyers, surgeons, college lecturers and teachers since their progress and performance enhancement depends on it.

Sources of Job Satisfaction

A comprehensive approach requires that many additional factors be included before a complete understanding of job satisfaction can be obtained. Such factors as employee's age, sex, health, temperament, desires and levels of aspiration should be

considered. Further, the family relationships, social status, recreational outlets, activity in organizations – labour, political or purely social, contribute ultimately to job satisfaction. In fact, out of the major job satisfaction facets, enjoying the work is almost always the one most strongly correlated with high levels of overall job satisfaction. “Interesting jobs that provide training, variety, independence and control, satisfy most employees”, (Barling J., Kelloway E. K and Iverson R. D. 2003). In other words, most people prefer work that is challenging and stimulating, over the work that is repetitive and routine.

Ghanekar Anjali (1995), in her book “Organisational behaviour” concepts and cases, has stated that job satisfaction is derived from and is caused by many inter-related factors which form three basic categories as follows

- i) Personal factors such as sex, number of dependents, age, time on the job, intelligence, education and personality.
- ii) Factors inherent of the job such as type of work, skills required, location and size of organisation.
- iii) Factors controllable by management: These factors include job security, adequate pay, fringe benefits, opportunity for advancement, working conditions, coworkers, responsibility, supervision, communication and information. Of these, Job security and timely communication are the most important factors. In recent years employees have been desiring much more information about the job and the company and want permanent steady work.

Measurement of Job Satisfaction

There are several techniques for measuring Job satisfaction for instance, inference prediction from behavioural data, interviews, questionnaires and scales. Of these techniques, interviews have been frequently used to measure job attitudes and satisfaction. However, since interviews do not have high reliability, questionnaires and scales have been used either in combination with interviews or independently to get increased reliability and objectivity. Job satisfaction scales are the more recent tools to be used in the measurement of job satisfaction, for instance occupational stress indicator OSI: Cooper and Williams (1987, 1988). They all tend to involve scales which explore pay, work activities, working conditions, career prospects, relationships with superiors and relationships with colleagues. These various scales fall into two categories

- 1) Tailor made scales which are constructed for a particular project or setting.
- 2) Standardised scales which are developed to establish group norms on the scales and to ensure reliability and validity of the measuring instrument.

One such standardised measure is “Job Satisfaction Scale”. This scale was constructed and developed by Dr. Murali D. and Kulkarni M.S. in 1997. This scale was developed with an aim to measure the Job Satisfaction of employees. It was developed by Professor Murali and her coworker at Marathwada Agricultural University, Parbhani.

As satisfaction is subjective and cannot be easily measured, Prof. Dr. Murali felt the need to develop a measuring tool for it. The satisfaction scale was constructed by applying the Likert’s technique of summated rating method (Edwards 1969). Initially sixty statements were collected based on literature and after discussion with subject matter specialists. The statements were divided equally under the categories of work autonomy, occupational status, work schedule, and work environment as per the classification given by Burgo and Culver (1989). These statements were approximately half positive and half negative and were randomly listed. These sets of statements were put on a five point psychological continuum to indicate level of agreement. It was administered to a group of 70 randomly selected working women. The subjects were arranged in ascending order based on the mean score. Top 25 percent of subjects with highest score (high group) and 25 percent of the subjects with lowest score (low group) were used as criteria for group formation.

Individual statement ‘t’ values were calculated using Edward’s formula (1969). Statements were then ranked and the ones with largest ‘t’ values were selected for the final scale. The final scale consists of forty statements arranged under the categories of work autonomy, occupational status, work schedule and work environment. The statements are not equally distributed under the four categories as only those statements which have high ‘t’ values are included in the scale. The statements are approximately half favourable and other half unfavourable. As the scale items were selected in consultation with experts in the field, the scale is supposed to have content validity. Criterion validity was not calculated for the scale.

Reliability of the scale was assessed by split half method. From the reliability of the half test, the correlation of the whole test was then estimated by the Spearman Brown Prophecy formula (Garette and Woodworth 1981). The reliability coefficient of the scale was 0.68 indicating a high internal consistency of the scale.

This scale was first used in one of the M.Sc. Thesis in 1998 at Parbhani. The study was on Job Satisfaction of working women. Since then, this scale has been used several times for M.Sc. and doctoral research work. This scale has been tested on a large sample of different professions.

Related Studies

The relationship between stress and job satisfaction has been studied in a variety of professions. In most studies it is described as how people feel about their jobs and its different aspects. “It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs” Spector (1997). However a more direct description is provided by Saiyadain (2007) who defined job satisfaction as “the end state of feeling, the feeling that is experienced after task accomplished. This feeling could be negative or positive depending on the outcome of the task undertaken”.

Studies conducted in Asia-Pacific region have found compensation and benefits to be a major source of complaint among employees. In Watson Wyatt’s (2006), first Work India Survey covering 515 companies across eleven Asian countries, only 30 percent responded favourably to their compensation and benefits. The workplace criteria were compensation and benefits, supervision, teamwork, communication, work environment and job satisfaction.

Caplan *et al.* (1975) suggested that “stress is any characteristic of job environment”. One study indicated that job stress and job satisfaction are inversely related (Sullivan and Bhagat 1992). “Stress is believed to cause depression, irritation, anxiety, fatigue and thus lower self esteem and reduce job satisfaction” (Manivannan *et al.* 2007). Job satisfaction or job dissatisfaction is often included in stress research as a consequence of stress and a negative relationship between stress and job satisfaction is frequently reported.

There have been studies on different professionals on their experience of job satisfaction and role stress. Solaiman *et al.* (2007) studied organizational role stress among medical school faculty members in Iran and found that role stress was experienced comparatively in high degree among faculty members with reduced job satisfaction. Chandraiah *et al.* (2003) studied the effect of occupational stress on job satisfaction among 105 managers of different age groups and found a positive relationship between role stress and job satisfaction among older managers.

Pestonjec and Mishra (1999), examined role stress and job satisfaction amongst junior and senior doctors and found that job satisfaction variables correlated negatively with all dimensions of role stress in case of both the groups.

As far as teaching profession is concerned, Singh (2007) studied the effects of stress on job satisfaction and work values among female teachers of secondary schools and found that stressed and dissatisfied teachers had less attachment with their institution and less dedication to their profession. In the US context, Langford (1987) examined the relationship between stress and job satisfaction amongst boarding academy teachers and found that stress was a significant determinant of teacher job satisfaction. Similar findings on primary head teachers were reported by Chaplain (2001).

Sen Kakoli (2008), in her study examined the relationship between job stress and job satisfaction amongst teachers and managers. Data were collected from 31 teachers teaching in primary and secondary schools and 34 managers working in service sector. The respondents were asked to indicate their gender, age, years of education, years of experience, marital status and number of children. The results of 't' score showed that there was no significant difference in the job satisfaction score of teachers and managers. The results suggest that there were more females in teaching profession as compared to managerial positions. The average age of teachers was slightly higher as compared to managers. Similarly, average years of education were also higher for teachers than for managers. However, no significant difference existed with marital status and number of years of experience of teachers and managers. Results showed that teachers experience low job satisfaction as they face more job stress while in case of managers the two did not seem to associate. There were some similarities in the managers and teachers job in the sense that both managers and teachers need to plan, direct, supervise and guide their subordinates and students respectively. It also seems that women take up teaching job more than they take up managerial jobs.

As far as teachers are concerned the results suggest that the greater the job satisfaction, lower the stress. Perhaps the variables leading to stress at job for teachers could be poor results of students, student indiscipline, management related issues which have an adverse relationship with the job satisfaction experienced. Variables leading to job satisfaction could be ease of job, comfortable working environment, peer relationship and lack of internal competition. As teachers are

responsible for shaping the careers of their students, it gives them long term satisfaction.

Kumar (1989) studied the relationship between role stress, role satisfaction role efficacy using a sample of 292 lower and middle level executives from different functional areas of an oil company. The ORS scale and Role efficacy scale were administered to respondents. The major findings revealed that Role stagnation, Personal inadequacy and Self role distance were significantly higher among lower level executives. Unmarried executives experienced higher role stress as compared to married executives. Executives married to working women experienced higher role stress as compared to executives married to housewives. They also scored higher on Role expectation conflict and Role overload.

In another study, Luhadia (1991) investigated the relationship between role stress and job satisfaction. The sample consisted of 100 geological officers from higher, middle and junior level. The ORS scale and S-D employee's inventory were administered as tools to respondents. The findings reported that Role inadequacy caused maximum role stress in higher level officers whereas Role erosion caused maximum stress for middle and junior level officers. Job satisfaction was found to be negatively correlated with role stress. Higher, the stress, lower the job satisfaction among different levels of officers. Role stagnation caused minimum stress in higher level officers and also influenced job satisfaction on the whole. Job satisfaction and role stress were correlated negatively and significantly in higher level officers.

A large number of studies have dealt, with the effects of different Personal as well as Organizational variables on role stress and job satisfaction. During the 1980s much research in the field of organizational stress and job satisfaction indentified various organizational, extra organizational and individual sources of stress at work and their relationship to job satisfaction. Every organization has a different set of stressors. It is clear that there are not many studies, which explore and establish the relationship of role stress with job satisfaction and other variables in a particular type of organization.

A number of studies were carried out on job satisfaction of women. One such study by Lakshmi S.M. Rama and Devi M. Sarada on "Relative magnitude of role satisfaction and role stress of women in different occupations" was carried out in 2005 at Hyderabad. The author stated that due to dual role performance working women experience satisfaction and stress at every stage of family life cycle. "The

role stress and role satisfaction of working women both at home and at workplace are multidimensional and differ from individual to individual". The total sample comprised of 120 working women in which 60 professionals (30 lawyers and 30 engineers) and 60 clerks were included. The results of the study revealed that among all the three categories, the relative magnitude of role stress was higher than role satisfaction. The relativity of satisfaction and stress was equal in marital life of lawyers. In case of engineers, the relativity of stress was more than satisfaction. Similarly the relativity of stress was higher than satisfaction in case of clerks. The relativity of stress was more than satisfaction in family life of lawyers, engineers and clerks.

The relativity of satisfaction and stress was equal in recreational life of lawyers as they were able to allot time for recreational activities leading to satisfaction. In case of engineers and clerks, the relativity of stress was more than satisfaction as they had less time available for recreational activities. The relativity of stress and satisfaction in social life of lawyers was equal as they maintained social contact with friends, relatives and neighbours leading to social life satisfaction. But the relativity of stress was more in case of engineers and clerks. Due to role overload, job strain and job responsibilities they could not allot any time for social activities. The relativity of stress was higher than job satisfaction with regard to job life of lawyers, engineers and clerks. This was due to perceived role stress at work or due to their low satisfaction levels in marital, family and recreational life. These research findings also revealed that satisfaction with family and social life had positive influence on overall job satisfaction. With regard to satisfaction, it may be stated that people who experience stress, find job dissatisfying. Even though low to moderate stress can lead to better performance, excessively high stress can lower the performance. Stress always has negative impact on satisfaction.

Studies regarding satisfaction of those in jobs and the factors affecting their satisfaction could be of value in improving the job conditions and hence the job productivity. (Saraswati,1974).

Job satisfaction is an interesting but complex phenomenon which has received much attention in the past and deserves to receive more in the future. By measuring job satisfaction periodically in organizations and institutes, it is possible to understand better, the extent to which organizations and institutes are meeting employee's needs and expectations.

The literature reviewed gave an insight into the meaning, sources, causal factors, and measurement of job satisfaction in teachers and various other professions. Most of the studies, reviewed showed a relationship between role stress and job satisfaction.

2.6 STRESS MANAGEMENT COPING STRATEGIES AND RELATED STUDIES

“Outer Circumstances and events don’t create stress. It is our response to them which creates stress.” Nuernberger Phil (1990)

Stress is a fact of life and individuals react to stress in different ways. Some individuals deal with stressors in a positive way with a proper understanding of the phenomenon and its effect. Taking appropriate action to optimise, reduce or prevent stress may be beneficial both for the individual and organization.

Stress management is a means to enhance coping with external stressors and their internal consequences. Stress management has three broad options – prevent or control, escape from it, or learn to adopt to it (handle its symptoms). As prevention is better than cure, steps should be taken to prevent the occurrence of stress rather than treat its harmful effects or bear a heavy cost when the damage is already done. Effective stress management can be done at the individual level and at the organizational level in many different ways. Stress management can be divided into two phases: the first is coping with stress and the second is counteracting the stress with the help of relaxation response.

“Preventive programmes which emphasize individual training in stress management are among the most frequently offered health promotion services at work site” (Donaldson, 1993 and Invancavich et al. 1990). Such interventions have been directed towards the development of individual coping strategies leading to stress management .

Preventive Stress Management has three stages: primary, secondary and tertiary.

- 1) **Primary Prevention** is intended to reduce, modify or eliminate the stressors. It is largely an organizational matter as it can change and shape the demands it places on people at work.
- 2) **Secondary Prevention** is intended to modify or alter the individual’s or organization’s response to stressor. People must learn to manage the

inevitable, unalterable work stressors so as to avert distress and strain while promoting health and well being.

- 3) **Tertiary Prevention** is intended to heal the individual or organizational symptoms of distress and strain. These Symptoms may range from early warning symptoms such as headaches or absenteeism to more severe forms of distress such as hypertension, work stoppages and strikes. Tertiary prevention is therapeutic aimed at arresting distress and healing the individual, the organization or both.

A review by Murphy (1984) looked at worksite stress management programmes utilizing muscle relaxation, biofeedback, meditation, cognitive restructuring, behavioural skills training and combination of these methods. He concluded that these techniques offer promise in helping workers cope with stress.

Coping is a core concept in stress literature and a variety of coping measures have been used. Surprisingly research on stress and coping has ignored gender related differences in the appraisal of stressful events. An analysis of particular “coping strategies used by men and women across occupations with similar stressors and context is important because the degree to which stressful events result in distress or negative outcomes is related to the coping strategies one uses” Sharma and Acharya (1989) and Srivastava and Singh (1988). Moreover “an understanding of the personal and work environmental contexts of coping is required before an attempt is made to modify coping responses” (Long, 1990).

Coping Strategies

Individuals and Organizations cannot remain in a continuous state of tension. “The term ‘Coping’ is used to denote the way of dealing with Stress, or the effort to master the conditions of harm, threat, challenges when a routine or automatic response is not readily available” (Lazarus 1974a)

These are two approaches by which people cope with stress

- (1) **Passive approach:** When people either suffer or deny the experienced stress or put the blame on others it is called passive approach. It is the reactive strategy or dysfunctional style of coping.
- (2) **Active approach:** It occurs when people face the experienced realities of stress and clarify the problems through negotiations and discussions with other members. This is proactive strategy or functional style of coping. The

active approaches are more approved by Social Scientists as they are supposed to be more effective and healthy when compared to passive approaches or dysfunctional styles (Pareek, 1983b)

There are basically two ways to manage stress

- a) At individual level
- b) At Organizational level

At individual level, again there are two ways of dealing with stress

- (1) By drug therapy
- (2) By non drug treatment

In Drug therapy, individuals use drugs continuously to cope with stress related ailments such as headaches, backaches etc. In non-drug treatment the coping is more advantageous and much safer, for example exercise, yoga relaxation response, such as acupuncture, zen or meditation, hobby, practice relaxation techniques, rearrange schedules etc.

Tubesing and Tubesing (1982) have suggested that stress management approaches should cover all aspects of human experience. They have grouped the coping techniques with life stress into four major categories namely personal management skills, relationship skills, outlook skills and stamina skills. According to these authors, relaxation skills are important for management of stress. In general, “relaxation skills helps one to develop the art of cruising in neutral”. Several relaxation techniques are mentioned by Davis *et al.* (1980) and Mc Kay *et al.* (1981). All these techniques bring out the physiological changes in individuals when state of consciousness is altered through non-drug means. Proper use of massage- hot and cold are refreshing and relaxing for counteracting the physical stress response when used with physical exercise.

Beyond all these measures an individual is required to develop a stress management philosophy for his / her own self through a mental approach which includes positive attitude and optimistic outlook. Developing a sense of humour is an excellent means of effective stress management. Agarwal Rita (2001) said “it is important to listen to your body. Chronic fatigue, tense muscles, depression and lethargy are some of the symptoms that give the message: It is time to take off the pressure.”

Various investigators have pursued two different approaches to the study of coping. On one hand some researchers have emphasized general coping traits, styles

or dispositions (Goldstein, 1973), while on the other hand (Cohen and Lazarus, 1973) have preferred to study the active ongoing strategies in a particular stress situation.

Maddi and Kobasa (1984) talked about two forms of coping- Transformational and Regressive. Transformational coping involves altering the events so that they are less stressful. This can be done through interaction with events, optimistic thinking and acting towards them decisively and change them in a less stressful direction. Regressive approach includes a strategy where one thinks about the events pessimistically and acts evasively to avoid contact with them.

Lazarus (1975) suggested a classification of coping processes which emphasizes two major categories: direct actions and palliative modes namely direct action coping and palliative coping. Social and emotional support available to the person helps him / her to effectively cope with stress.

The most functional style of coping with stress is one in which the individual shares stress with another person and jointly finds ways of managing it. Researchers Sharma S. and Acharya, T. (1989) commented on the paucity of meaningful research on coping strategies to deal with stress in different occupational groups.

a. Individual stress coping strategies

Some specific techniques that individuals can use for coping with stress include the following

- **Physical Exercise :** Physical exercise is necessary to keep the body healthy both physically and mentally and is the best antidote for stress. Emotional strength is a by-product of regular exercise, and self confidence is a natural consequence. Regular and regulated physical exercise includes walking, jogging, swimming, aerobics, riding bicycle, playing outdoor games etc. Physical fitness helps the body to cope better with stress, whereas relaxation techniques are useful for the mind.

Physical exercise is said to offer the best cure to work related stress. In Japan, provisions for physical exercises at the workplace are made compulsory with every break, in tune with biological rhythms, whereas in India, natural cycles of activity that is work and rest are completely ignored.

- **Relaxation Practices**

- a) **Yoga :** Yoga is a holistic science concerned with all aspects of human functioning. It involves various body postures and breathing exercises.

- b) **Relaxation** : Relaxation removes fatigue and drives attention away from work or a stressful situation. It is useful in managing a prolonged stressful situation more effectively. Different people respond differently to relaxation activities.
- c) **Meditation** : “Meditation is of far greater importance than medication for whatever afflicts mankind today.” (Bhamgara,1997). It is a mental relaxation technique which has proved to be of immense value to relieve stress and re-energize the body, reduce psychological problems such as anxiety and depression and lead to better emotional and physical health. Practicing meditation results in tranquility and peace of mind. It helps in lowering the pulse and heart rate, induces a more objective thinking process with an unbroken and maintained concentration. The commonly practiced techniques of meditation are yoga and relaxation response.
- d) **Biofeedback** : Biofeedback is a specific relaxation technique which is now being used for treating psychosomatic disorders like hypertension, tension, headaches, migraine headaches, backache, depression etc. Sophisticated biofeedback instruments have been developed that constantly inform the user about the changes which are characteristic of stress within his/her body for example, the intensity of muscle tension, skin temperature, heart rate, blood pressure etc.
- **Recreation and Leisure time activities**: Recreation provides an opportunity to let oneself go, become inhibited thus reducing tension and stress. There are various forms of recreation like music, entertainment, painting, movies, parties, gardening, dancing etc. “Recreational pursuits are important to the prevention of the damaging effects of stress” (Husain,1998) . Leisure time can be used for doing some activities which give pleasure and help in building connections with others. Hobbies can easily be pursued in leisure time.
 - **Diet** : These days dietary practices are being used to improve a person’s overall health making him/her less vulnerable to stress. One’s lifestyle, occupation, climatic conditions and body constitution should determine both the quantity and quality of one’s diet. A proper diet can prevent stress caused by unhealthy dietary habits.
 - **Sleep** : Human errors caused by drowsiness and sleepiness may lead to accidents and tragedies. “Drowsiness is an urgent warning that should not be

ignored” (Castleman,1997). A good night sleep helps to restore physical resources and increases the stress tolerance level. A person with large sleep debt is more vulnerable to infections and other illnesses. An increased need for sleep is the body’s mechanism for producing the desired recovery. Adults require at least 7 to 8 hours of sleep daily even though individual differences in sleep patterns and sleep needs vary.

- **Time management** : Time management is important for people who maintain a busy schedule. They need to prioritise their activities to avoid stress from time pressure and overtime work. Time management helps to balance work and leisure time activities. Working late may also alleviate stress. Working professionals who are dedicated to work are often “overworked” which has an adverse impact on their mental and physical wellbeing. Premature ageing is also seen as a consequence of overwork.

- **Behavioural Self Control** : Individuals can manage their own behaviour to reduce stress and can avoid people and situations that they know will put them under stress. It is a type of self-cure technique. Even “Cognitive therapy” may be used to alter an individual’s self-defeating thoughts that unnecessarily cause a strain by making him conscious of the effects of his thoughts on his physiological and emotional response.

- **Networking or Social Support** : Social psychology research has indicated that people benefit from social support. Networking requires forming associations with trusted, empathetic people who may be family members, neighbours or co workers and colleagues who are good listeners and confidence builders. These people provide support whenever needed and help an individual overcome stressful situations.

This kind of socio-emotional support received from personal relationships is necessary not only outside the work place but also within the workplace.

b. Organizational stress coping strategies

Some organizations are low-stress causing whereas other organizations are high-stress ones that may place their employees’ health at risk. Organizational stress-coping strategies focus on people’s demands and ways to reduce distress at work. These strategies are to be designed by management to eliminate or control organizational level stressors in order to prevent or reduce job stress for individual

employees. The organizational stressors may be in form of overall policies, structures, physical conditions and processes or functions. In developing organizational stress coping strategies each of these areas should receive attention and each of the specific stressor is to be worked on to eliminate or reduce job stress.

Most organizational stress prevention is primary intervention Sharma . R.A. (2000) has suggested some preventive strategies such as personnel selection and placement, skills training, job redesign, role negotiation, increased participation and personal control, team building and cohesive workgroups, improved communication and career counseling.

Pareek (1994) has suggested organizational intervention as the “OCTAPACE” culture. It includes

O - Openness	T - Trust
C - Collaboration	A - Autonomy
P - Proaction	C - Confrontation
A - Authencity.	E- Efficiency

All these aspects promote the fulfillment of individual needs, improve problem solving and facilitate change. Pestonjee D.M. (1987a) has suggested some organizational interventions for counteracting stress such as undertaking stress audit, use scientific inputs, check with company doctors and spread the message.

Murphy (1988) has suggested three different forms of stress management techniques namely stress management training programmes, employee assistance programme, stress reduction / intervention programmes.

Srivastava A. K. (1997) has also suggested some organizational interventions which can be helpful in preventing the undesirable consequences of stress as follows

- a) Prevention of stress through organizational interventions at management level such as selection of suitable personnel, job designing and training, adequate work conditions, effective supervision and incentive system, effective communication system, participative management etc.
- b) Minimizing the frequency and intensity of stressful situation is integral to the job at the organizational level.
- c) Moderating the intensity of integral job stressors and their consequent strains through the effect of other variables of positive values such as extra wages,

social support, non-financial incentives, generating team feeling, participative decision making etc.

There might be many other coping strategies which employees may be using to deal with their job stress in accordance with nature of stress situation, available physical resources, and their own personal resources and characteristics. But generalization cannot be made about the extent of effectiveness of various coping strategies. The effectiveness of the coping strategy depends upon the nature of the stress situation and several other co-existing situational variables. Folkman and Lazarus in 1980, concluded that effectiveness of coping strategies depends upon controllability of the situation. More than one mode of coping can be adopted to deal with a situation of stress at work. The employee may use cognitive as well as combative (action oriented) strategies at the same time. It is also possible that the employee adopts the approach mode of coping for one part of the situation and avoidance coping strategy for the remaining part of the situation. Nevertheless, “the absence of a coping strategy may lead to ineffectiveness” (Hall,1972).

Related Studies

The empirical study of coping with stress has drawn the attention of Indian researchers only recently. Some of these studies are briefly presented here

Srivastava and Singh (1988) explored the moderating effect of coping strategies on the relationship of organizational role stress and mental health. They noted the positive relationship between role stress and ill health and found that approach coping strategies accentuates the adverse effects of role stress on mental health to a noticeable extent.

A number of researchers such as Folkman et al. (1986) and Latack (1986) have identified and suggested various types and categories of coping strategies. But there is no clear consensus as to which of the various coping modes is the most effective.

Latack (1986) also examined the relationship of coping strategies with job stress arising from Role expectation conflicts, Role ambiguity and Role overload to their job satisfaction and severity of stress symptoms. The results indicated that “control” coping strategies were correlated positively with job satisfaction and negatively with anxiety and psychosomatic symptoms. “The Escape” coping

strategies were negatively correlated with job satisfaction and positively with stress symptoms.

Singh and Pandey (1985) examined coping with problems in economic, family, personal and social aspects of life in a sample of university students. Using an open ended measure, they identified five dimensions of coping namely appraisal focused coping, emotion focused coping, problem focused coping, secondary coping and collective coping. The use of coping dimensions varied with nature of problems faced by the individual.

Another important study of coping has been reported by Singh (1990) in relation to stressors of executives. This study employed a measure of coping strategies involving four factors, namely, active problem solving, non - directional work approach, constructive deferred problem solving, and information seeking. He found that high level executives experienced lesser stress and strain, utilized better coping strategies and enjoyed more positive outcomes. Also, a combination of coping strategies forming a condition of passive coping was related to high stress condition.

Ganguly (1988) explored the stressful experiences in family and work domains and the ways in which people coped with them. A sample of 120 adult males was drawn from a large organization located in Bhopal. Forty participants were selected from each of the three cadres namely manager, supervisor and artisan. Age and tenure of service were found to be greater in case of supervisors followed by managers and artisans. Size of the family was negatively correlated to the hierarchal position.

The contribution of different variables in predicting the three coping strategies namely active behavioural coping, active cognitive coping and avoidance coping is as follows

- a) In case of active behavioural coping, tenure emerged as the most important predictor followed by age, family work spill and family size for artisans.
- b) In case of active cognitive coping for the supervisors, tenure emerged as the most important variable, followed by job stress, work involvement, family stress, family to work spill, family size and work to family spill.

In case of avoidance coping, perceived control was the most prominent variable which was negatively related to avoidance strategy followed by family involvement, job stress and tenure in case of managers. For the other two coping

strategies namely active behavioral and active cognitive coping perceived, control and work involvement were prominent followed by support, control, appraisal, age, tenure and family to work spill in case of managers.

Gupta and Murthy (1984) studied role conflict and coping strategies among Indian woman. The coping strategy which was most popular amongst the respondents was “personal role redefinition”. This strategy was significantly associated with low role conflict and high satisfaction with coping. Reactive role behaviour methods were associated with high role conflict and low satisfaction with coping. The findings indicated that “Adjustment” and “Compromise” were the most commonly used and successful methods of coping.

Kaur and Murthy (1986) studied two coping strategies of managerial personnel at organization levels in public sector. The results indicated a significant difference in the coping strategies adopted by individuals working at different organizational levels. Approach strategies at senior level and avoidance strategies at junior level were predominant. The defensive style was used maximum by Junior Level management personnel, impulsive by middle management personnel and introgressive by top management personnel. There was a positive and significant relationship between role stress and avoidance strategies, between role stress and externality, between externality and avoidance strategies. Organizational role stress was negatively and significantly associated with approach strategies.

Pareek (1993) distinguished between effective and ineffective coping strategies. Studies on the subject revealed that approach style had strong relationship with internality, optimism, role efficacy, job satisfaction and effective role behaviour in organizations. Two contrasting approaches “avoidance and “approach” were considered for some of the role stresses. Findings of the study summarized stated that, effective management of stress involves directing stress for productive purposes, preparing role occupants to understand the nature of stress, helping them to understand their strengths and use styles and equipping them to develop approach strategies for coping with stress.

A number of researches have been conducted on coping strategies as moderators between organisational role stress and mental health of employees by Srivastava A.K. and Singh H. S. (1988) and Srivastava A.K. (1991a). Findings in general revealed that role stresses correlated positively and significantly with mental health dimensions. The approach coping strategies had a buffering effect whereas

the avoidance coping strategies extended the intensified effect on the positive relationship between the variables. According to the authors, “the different effects of coping strategies may be due to the distinct features associated with these strategies and the personal characteristics of the individual adopting these strategies”.

Several studies have been conducted by researchers on relaxation practices from time to time. Yoga seems to have potentiality to influence health practices. Yoga practices were studied by Sachdeva (1994) and Rao P.V.K. (1995). Findings from these studies on Yoga revealed that “long term practitioners of Yoga had acquired remarkable voluntary control over their autonomic processes which helped them in coping with psychological stress”.

The review regarding stress management through coping strategies brought to the realisation that various authors have categorised and discussed coping strategies from their own view point both at individual level as well as organisational level. The effectiveness of various coping strategies cannot be generalised. They need to be adopted as per the nature of stress situation, type of profession and several other situational variables. Various relaxation practices seem to have potential to influence the health practices of professionals.

Formulating the base of this review, some of the coping strategies may be used as interventions to counteract stress in professionals both at individual and organizational levels in the present study.

2.7 STRESS IN TEACHING PROFESSIONALS AND RELATED STUDIES

The profession of teaching in modern age is not so simple as it was in old days. The old values to respect the teacher has been replaced by commercial attitudes, as a result of which a teacher has to face varied unexpected behavioural situations. The priority agenda today is to prepare teachers for tomorrow enabling them to meet the changes ahead. Dr. Chaurasia, Rohidekar, Singh and Dev Raj (1998) in their book stated that “teaching personnel - in general education and those in teacher education must be allowed to concentrate on the primary functions of teaching as pertinent to their role and level. Remaining with crucial care we should provide an enhanced basis for excellence in teacher education”.

In India, even though teachers work with commitment, they do not get the status they deserve and facilities they require. They work with low salaries, poor

working conditions, heavy class loads, difficult students or clients, repetitive tasks and little opportunity for career advancement. Teachers are required to take periodic “refresher” courses, seek additional professional qualification for higher pay or advanced certification. Expert or experienced teachers do the same work that is performed by a faculty member who is newly appointed or a teaching faculty member with one or two years of experience. Very rarely do highly experienced or expert teaching professionals receive special recognition or honorific titles. Not surprisingly then, “a substantial number of teachers eventually leave the profession and those who remain are subject to boredom, stress and burnout” (Kyriacou and Sutcliffe, 1977).

Teaching is not only hardwork, but it can be full of stress. “The daily interaction with students and co-workers, incessant and fragmented demands of teaching, inadequate administrative support, poor working condition, lack of participation in decision making, burden of paper work and lack of resources have all been identified as factors that can cause stress among teachers” (Hammond and Onikama, 1997).

Teacher stress is defined by Kyriacou (1987) as “the experience by a teacher of unpleasant emotions, such as tension, frustration, anxiety, anger and depression resulting from aspects of work as a teacher”.

The phenomenon of work stress of teachers has been receiving increased global attention and concern in recent years. Teacher stress has become a major problem not only in India but also overseas which revealed that the phenomenon of stress (problem of teachers) was widespread and was not restricted to a particular country.

The International Labour Organization (ILO) has expressed its concern about teacher stress and has reported that “battle fatigue” which has its origin in stress, is being experienced by almost 25 percent of the teaching profession in Britain, America and Sweden, and is causing serious health problems. The ILO has identified a number of likely stressors which include large classes, long working hours, low salaries of teachers, poor job prospects, job insecurity and violence of various types. There is evidence to suggest that the profession is losing a high proportion of young, well trained dedicated teachers as a result of stress.

Role incompatibility is the fundamental source of stress in teaching professionals. The teacher assumes various roles in exercising this profession. One

set of role conflicts with another set of roles (Edgerton, 1977), and these conflicts are highly responsible for high levels of absenteeism among teachers. Faced with conflict, the teaching faculty members can either adapt or cope in order to minimize stress. Unfortunately, many of them adapt a maladaptive role and experience lack of satisfaction with the job and display symptoms of anxiety, depression and psychosomatic disorders.

Like wise, stress in teachers can be related to the amount of teaching experience they have had, though it never decreases overtime (Fuller, 1969). It was noted that stress was a function of teaching experience. Fuller claimed that the teachers' concerns follow a three-stage developmental sequence: younger teachers are concerned about self, more experienced teachers become concerned with the problems of the job, while the concerns of the older teachers are with the students' needs.

A national study of stress among university faculty members was carried out by Gmelch W.H., Lovrich N.P. and Wilke, P.K. (1984). They Surveyed 1920 faculty members from 80 randomly selected doctoral degree granting institutions of higher education (40 public and 40 private) nationwide. When faculty stressors were compared across academic disciplines, more similarities than differences were found. Of the three major faculty functions, teaching, research and service – teaching was the most stressful. In general faculty members reported that 60 percent of the total stress in their lives came from their work. Ten stressors were found to be the most troublesome namely high self-expectations, securing financial support for research, insufficient time to work in one's own field, low pay, striving for publication, overload, job demands, interference with personal activities, lack of progress in career and interruptions in work and meetings. Majority of these stressors related to limited time and limited resources. However, much of the faculty stress experienced might have been alleviated by a reappraisal of institutional and individual capacities.

The moderating effects of cognitive failure on the relationship between work stress and personal strain was examined among nurses and college lecturers by Orpen Christopher in 1996. The study included 136 registered nurses and 121 college lecturers, representing persons in "highstress" and "lowstress" jobs respectively French *et al.* (1982) and Schuler and Von Sell (1981) in their study measured job stress by 10 items from Role ambiguity and conflict scales by House,

Rizzo and Lirtzman (1970). Two aspects of personal strain furnished the dependent variable in the study namely work related emotional stress and somatic symptoms of stress. Findings from the earlier above study indicated that, nurses experienced much more work stress than lecturers without being more liable to cognitive failure. Broadbent in (1982) reported similar findings and commented that it is an individual difference in trait variable.

Dr. Giri Uday and Rao Nageswara (2007) conducted an analytical probe into the level and extent of stress creators in teaching profession. A selected sample of 200 secondary school teachers were studied. The results showed the following findings

- Sex, locality and age played an important role in causing stress among the sample. Female teachers were more stressful than male teachers. Rural teachers were more stressful than Urban counterparts. Teachers below 40 years of age group were more stressful than the ones above 40 years of age.
- Teachers with below 15 years of teaching experience were found to be more stressful than teachers with above 15 years of experience in teaching.
- Designation had no impact on stress
- Educational and professional qualification caused stress among the sample. Very strangely post graduate and M.Ed trained teachers were more stressful than graduate and B.Ed trained teachers.
- Type of Institutions had an impact on causing stress. Teachers working with residential schools were more stressful than the ones working in non residential schools.

Another study on work stress of teachers from primary and secondary schools in Hong Kong was conducted in 2009 by Chan Alan H. S., Chen K. and Chong Elaine Y.L.. The study was developed to investigate the occupational health problems among teachers of primary and secondary schools in Hong Kong. A random sample of 6000 teachers was generated from the database of Hong Kong professional teaching union members. The results indicated that on comparison between one year and five years ago, 91.6 percent and 97.3 percent of the responding teachers reported an increase of perceived stress level respectively. Heavy workload, time pressure, education reforms, external school review, pursuing further education, managing student's behavior and learning were the most frequently reported sources of work stress. The four most frequently reported stress

management activities were sleeping, talking to neighbours and friends, self-relaxing and watching television while the least frequently reported activity was doing more exercises or sports. Both male and female teachers in Hong Kong secured to experience the same level of perceived stress. The independent variables included were gender, age, marital status, number of children, educational level, teaching training and experience, and working mode. The life style and choice of stress management activities of male teachers seemed healthier or better than those of female teachers.

Fimian Michael J. and Blanton Linda. P. (1987) conducted a study on stress, burnout and role problems among teacher trainees and first year teachers in North Carolina, USA. The sample totaled to 413 pre-professional trainees and first year special education teachers. The results showed that the first year teachers and the trainees experienced fewer stress factors than did the teachers with more experience. Professional distress and personal stressors combined with discipline and motivation to form classroom stress. The fatigue component was combined with emotional manifestations. It was also apparent that burnout and role problems evidenced by less experienced teachers and trainees was almost identical to those reported by more experienced teachers. Those trainees and inexperienced teachers who encountered role problems to the greatest extent were also the teachers under the most stress, most often under stress and were at greatest risk of burnout.

A number of studies have also been carried out on stress among teachers in India. A few of these studies have been included in this review.

Fernandes and Murthy (1989) carried out a study on job-related stress and burnout in middle and secondary school teachers. The study was undertaken to explore the prevalence of stress and burnout in teachers teaching in Bangalore city schools. It was hypothesized that stress experienced on the job would be a cause burnout and that higher age group and married teachers would be more vulnerable to burnout. A sample of 50 female middle and secondary school teachers was drawn from seven schools of Bangalore east region. There were 41 married, 9 single teachers belonging to the age group of 22-59 years and class II of the socio economic status. It was found that 76 percent of the total sample faced stress on the job though the degree of stress experienced differed. The stressors included pupil misbehavior, time pressures, poor working conditions and poor school ethos.

Coefficients of correlation between stress and burnout revealed that stress was significantly correlated with emotional exhaustion.

Jamuna, D. and Ushasree S. (1990) conducted a study to examine role conflict and job stress among special and general school teachers. The sample comprised of 40 special school teachers both male and female of Tirumala Tirupati Devasthanam's (TTD) school for deaf and dumb and a random sample of 60 teachers (both male and female) from TTD's high school. All teachers were in 35-40 years of age group. Teachers role conflict inventory and teachers burn out scale were used to assess role conflict and job stress. No sex differences were found among teachers from special schools on role conflict and job stress. However, women teachers in general schools were found to experience greater role conflict and poor attitude towards their students and were less satisfied with their careers as compared to their male counterparts. Both male and female teachers from special schools were found to experience greater role conflict and job stress compared to their counterparts in general schools.

Jamuna and Ushasree (1990) carried out another study to examine burnout among teachers working in private and public schools in Tirupati. 120 women teachers in the age groups of 30-40 and 40-50 years both from private and public schools (N=60 each) were included for the study. The teacher's burnout scale was used to assess burnout. The results indicated that women in lower age group exhibited a higher degree of burnout. A significant difference was observed between private and public school teachers related to career satisfaction, perceived administrative support and coping with job related stress.

Vadra P. and Akhtar Sultan (1989) conducted a study on university teachers (N = 120) to determine the stress emanating from home and family situations. "Social family role stress" scale developed by them was used. Male teachers experienced more social family role stress as compared to female teachers and married experienced more stress than unmarried teachers. This study showed that extra organizational stressors were as potent as factors relating to work situation.

A comparative study of extra organizational stress among women teachers and nursing staff was also carried out by Akhtar Sultan and Vadra, Preeti in (1990). Researchers have pointed out that role stress emanating from social and family situations influences the degree of stress experienced at the work place (Bhagat, 1983; Vadra and Akhtar, 1989). A sample of 60 women teachers and 50 nursing

staff was taken. The results indicated that for women teachers, job tenure emerged as the significant predictor of social and family stress while for nurses the number of dependents contributed significantly to the prediction of social and family role stress.

Biswas and De (1993) studied role of organizational climate on professional stress experienced by 34 male teachers working in an open climate and 34 male teachers working in a paternal climate. The data analysis revealed that teachers working in an open climate experienced less composite professional stress, powerlessness and social isolation than the teachers working in a paternal climate. It was also found that the teachers in an open climate had less negative orientation and affection towards different aspects of their job and professional lives.

In another study, Sultana (1995) investigated the level of organizational role stress among male and female teachers of professional and non professional courses. A group of 50 male and female teachers each from professional and non professional courses were compared on role stress. The ORS scale (Pareek 1983 c) was used to assess the individual role stress variables as well as the total stress. The main findings of the study were as follows

- a) Significant differences were found between professional male and female teachers on the dimensions of inter Role distance, Role stagnation, Role expectation conflict, Role erosion, Role overload and Role ambiguity.
- b) Significant differences were found between non professional male and female teachers on the dimensions of Role expectation conflict, Role isolation, Personal adequacy, Self role distance and Role ambiguity.
- c) There was significant difference between professional and non professional male teachers on the role stress dimensions of Role stagnation, Role expectation conflict and Role isolation.
- d) There were also significant differences between professional and non professional female teachers on the role stress dimensions of Inter role distance, Role stagnation and Role over load.

Another study related to teachers was conducted by Mishra R. in (1996). The study compared the levels of occupational stress and job satisfaction among male and female teachers of higher educational institutions. The sample comprised of 80 (40 males and 40 females) degree college teachers. Two psychometric instruments

namely the stress scale and job satisfaction scale were administered to the sample population. The conclusions obtained were

- a) Significant differences were observed gender wise in the areas of private life, work overload, under load, role conflict and interpersonal stress. Female teachers experienced more stress in these areas as compared to male teachers.
- b) No significant differences were found between the two groups in the environmental structure of institution and personal areas.
- c) Gender wise significant differences were observed on overall stress and overall job satisfaction.
- d) Stress was found to be correlated negatively and significantly with job satisfaction in both the groups.
- e) Male teachers obtained maximum scores on under load stress whereas female teachers obtained maximum scores on overload stress.

Daga (1997) conducted a study to examine the influence of social family role stress and social support on quality of life among working women from three occupational groups of clerks, doctors and teachers. The total sample included 300 working women, 100 from each occupational group. The quality of life scale and social family role stress scale were administered to the respondents. The main findings of the study were

- a) Quality of life was negatively and significantly correlated with social family role stress among all three groups.
- b) Quality of life was positively and significantly associated with social support among teachers and clerks.
- c) Social family role stress and social support were positively significantly related to each other in all three groups.
- d) Significant differences were observed in all three groups on the relationship scores of quality of life and social family role stress.
- e) Quality of life was a significant predictor of social family role stress and social support among all three groups.

Mathur S. (1997) studied the psychological and organizational correlates of role stress in 400 working women from different professional groups such as doctors, school teachers, college teachers and bank employees. ORS scale (Pareek 1983c) was one of the five psychometric instruments used in the study. The salient

findings showed that college teachers experienced minimum role stress in comparison to other three groups. Role efficacy was found to be inversely associated with most of the dimensions of role stress. Job satisfaction was reported to be negatively and significantly associated with all dimensions of role stress except Role expectation conflict, Role overload and Role ambiguity.

In another study Pareek and Mehta (1997) compared three groups of working women namely gazette officers, bank employees and school teachers on all types of role stresses experienced by them. A total of 150 working women (50 from each group) from Jaipur city constituted the sample. The ORS scale (Pareek 1983c) was used to measure all types of role stresses. The main findings pointed out that school teachers were found to be lower on all kinds of role stresses in comparison to both gazette officers and bank employees.

Thakaran (1992) hypothesized that professional women and non professional working women will differ in their job related stress and level of job satisfaction. A sample of 90 technocrat working women (doctors, engineers and lawyers) were compared with 90 non-technocrat working women (clerks, officers and teachers) on these variables. The operational stress indicator (OSI) developed by Cooper (1980) was administered to measure occupational stress and job satisfaction.

The findings, revealed that the relationship between occupational stress and job satisfaction was found to be significantly associated with the professional qualifications of the women. Professional working women experienced greater work related stress than the non-professional ones.

Surti (1982) studied the psychological correlates of role stress in different professions of working women such as researchers, doctors, nurses, social workers, school teachers, university and college teachers, gazette officers, bank employees and women entrepreneurs. The sample comprised of 360 working women. An attempt was made to determine the extent to which demographic, personality and organizational factors contributed to role stresses. The analysis revealed the typical stress experienced by a particular professional group and a rationale for this was sought.

Self role distance was experienced mostly by bankers and least by university and college teachers. Role overload was experienced to a higher extent in more or less the same intensity by all professional groups except university and college teachers. University and college teachers experienced least role stress. The

researcher expressed that these jobs are considered socially prestigious, working hours are short, vacations are frequent and pay scales are reasonable. Due to these reasons, women in these professions are able to fulfill the demands of various roles and may not experience conflict because of the multiple roles they play in society.

From the literature reviewed on stress in teaching professionals, it is clear that teaching professionals do face role stress at their work place. The literature reviewed gave an insight into the various correlates of role stress in teachers and other professionals and their association with job satisfaction and psychosomatic disorders. Job related role stress emerged as the potent source of stress followed by social family role stress. Demographic variables and teaching experience were some of the other correlates of role stress studied. There is a need to recognise the multiple roles played by a teaching faculty member at the workplace. No study could be traced which investigated the stress causes and practices in these professionals. Also no study was found which focused its attention entirely on the knowledge of stress-effects and the coping strategies adopted by teachers.

The extensive review of relevant literature made it clear that the teaching profession is uniquely stressful because the working environment in which teachers work leads to facing pressures, stress and strain. It was recognised that prolonged occupational stress in teaching professionals results in ill health. There is a need to conserve sound physical and mental health of teaching faculty members. The sources of occupational stress among teachers have been an important area of research. Efforts are being made to study role stressors and job satisfaction and the variables influencing it. The assessment and impact of stress-effects in teaching faculty members is an emerging field of research. A very few studies have been conducted in this area in India and in foreign countries. Since management institutes are a recent development in the field of management education, stress in teaching faculty members working in management institutes remains an unexplored area. Therefore a need was felt to find out stress-effects in management teaching faculty members and the present investigation was carried out.



CHAPTER 3

METHODOLOGY

The Present research was undertaken with the aim to study effects of stress in teaching professionals working with management institutes in Pune. The review of literature was started from January 2009 which helped to decide on the focus of the study, questions related with the stress concepts to be studied and various variables to be included in undertaking this research study. The study's main emphasis was on effects of stress as related to family role stressor and work role stressors and job satisfaction. The study also focused upon identifying the antecedent factors of stress in management faculty members. Research questions were mainly concerned with the relationship between the selected independent and dependent variables. The total duration of this research project was two years from July 2009 to July 2011.

This chapter deals with the methodology steps adopted for the present investigation. It presents the detailed sequential procedure adopted for carrying out the present study under various subheads as given below

- 3.1 Research design.
- 3.2 Objectives.
- 3.3 Assumptions.
- 3.4 Hypotheses.
- 3.5 Variables under study.
- 3.6 Delimitations.
- 3.7 Justification for selection of variables.
- 3.8 Operational Definitions of variables.
- 3.9 Data collection procedure.
- 3.10 Tools used for measurement of the variables.
- 3.11 Pilot study.
- 3.12 Selection of the sample.
- 3.13 Analysis of data.

3.1 RESEARCH DESIGN

According to Kothari (2004), descriptive research studies are concerned with describing the characteristics of a particular individual or a group with specific predictions, comparisons and narration of facts. Since the present study compared the effects of stress as experienced by male and female management teaching professionals describing their characteristics in details in line with the objectives of the study, it can be appropriately referred to as descriptive research design. It took into account various aspects of stress as a phenomenon to be studied.

As the present study focused on a probe into stress arising due to various personal, family and job related factors among teaching professionals of management institutes, the descriptive research design was chosen as the most suitable one for this study.

3.2 OBJECTIVES OF THE STUDY

The present study was formulated with the following objectives

1. To identify the effects of stress experienced by male and female management faculty members.
2. To know the causes or antecedent factors of stress among management faculty members.
3. To measure the extent of job satisfaction related to family role stressor and work role stressors.
4. To understand the relationship between stress-effects and job satisfaction.
5. To study the relationship between stress-effects and role stressors in male and female faculty members.

3.3 ASSUMPTIONS OF THE STUDY

- 1) Management teaching faculty members experience stress at the workplace.
- 2) Gender wise difference in the stress experienced by faculty members can be identified.
- 3) Service wise variation in the stress experienced by faculty members can be identified.

3.4 HYPOTHESES

H1 The extent of stress-effects experienced by male and female faculty members will differ.

H1_a Male and female faculty members will differ in the extent of physiological stress-effects experienced by them.

H1_b Male and female faculty members will differ in the extent of psychological stress-effects experienced by them.

H1_c Male and female faculty members will differ in the extent of behavioural stress-effects experienced by them.

H2 The span of service duration will influence the extent of stress-effects experienced by faculty members.

H2_a As the number of years of service duration increases, the extent of physiological stress-effects experienced by faculty members will increase.

H2_b As the number of years of service duration increases, the extent of psychological stress-effects experienced by faculty members will decrease.

H2_c As the number of years of service duration increases, the extent of behavioural stress-effects experienced by faculty members will decrease.

H3 The extent of stress-effects felt by faculty members will differ by antecedent factors: personal factors, family factors and situational factor.

H3_a There will be difference in the felt stress-effects of faculty members by personal factors.

- i) Age
- ii) Health Status

H3_b There will be difference in the felt stress-effects of faculty members by family factors.

- i) Family type
- ii) Family size
- iii) Paid help

H3_c There will be difference in the felt stress-effects of faculty members by situational factor.

- i) Hours of work.

H4 The extent of job satisfaction among faculty members will be influenced by the type of role stressors.

H4_a The extent of job satisfaction among faculty members will be influenced by family role stressor.

H4_b The extent of job satisfaction among faculty members will be influenced by work role stressors.

H5 There will be association between the extent of stress-effects felt by faculty members and the job satisfaction derived on each aspect of job.

H5_a The extent of stress-effects experienced by faculty members will be associated with satisfaction from each of the job aspects

- i) Work autonomy
- ii) Occupational status
- iii) Work Schedule
- iv) Work environment

H6 The influence of family role stressor and work role stressors on the faculty members will differ by

H6_a Gender

H6_b Service duration

H7 There will be relationship between each type of role stressor and stress-effects experienced by faculty members.

H7_a There will be relationship between each type of role stressor and physiological stress-effects experienced by faculty members.

H7_b There will be relationship between each type of role stressor and psychological stress-effects experienced by faculty members.

H7_c There will be relationship between each type of role stressor and behavioural stress-effects experienced by faculty members.

3.5 VARIABLES UNDER STUDY

The stress arising out of execution of teaching activities and responsibilities in management teaching professionals depends on a number of factors which directly or indirectly affect the extent of stress-effects experienced by faculty members.

Based on the framework, the following two sets of variables were selected for this study.

I. Independent Variables: Independent variables were classified into two categories, namely

A. Individual factors

B. Job related factors

A. Individual factors

1. Gender

2. Personal factors

i. Age

ii. Health status

3. Family factors

i. Family type

ii. Family Size

iii. Paid help

B. Job related factors

1. Situational Factor

i. Hours of Work

2. Service Duration

3. Role Stressors

4. Job Satisfaction

II Dependent Variables

A. Effects of Stress

1. Physiological stress-effects

2. Psychological stress-effects

3. Behavioural stress-effects

The extent of stress-effects experienced by male and female management teaching faculty members was considered as dependent variable separately as it was caused by certain other variables.

Using the basis of “stimulus based stress model” by (Beehr, 1984, 1985; Beehr and Bhagat 1985; Mclean 1979; Selye,1975), the various role stresses faced by teaching professionals at management institutes i.e. at their work place, were considered as independent variables or causal factors of stress and termed as “role stressors” instead of role stresses. These stressors act as stimuli in the work place environment for teaching faculty.

Keeping in mind, the guidelines of “response based model of stress” by Beehr (1984, 1985) and Caplan, Cobb, French, Harrison and Pinneau (1975) and the results from its findings, the present investigation chose to consider stress as a dependent variable which denotes its consequences or manifestations in form of physiological, psychological and behavioural stresses termed as “stress-effects”.

3.6 DELIMITATIONS OF THE STUDY

The study was limited to

1. Teaching professionals working at various management Institutes in Pune city.
2. Teaching faculty members who are in service at present inclusive of part time visiting faculty.

3.7 JUSTIFICATION FOR SELECTION OF VARIABLES

After carrying out an elaborate review of literature on occupational stress and its sources, it was thought appropriate to include the most emerging work setting variables namely work role, family role, job characteristics, organizational climate, interpersonal relations at work and job satisfaction. These may have a significant influence on employee performance and health. Literature review revealed that job satisfaction variable correlated negatively with all role stresses hence it was decided that the relationship between role stress and job satisfaction of management teaching faculty members also needed to be explored.

In the course of identifying sources of stress many studies in review of literature have investigated the impact of certain demographic variables on perceived stress of teachers. Thus the antecedents of stress or the “stressors” which may affect management faculty members are summarized as below.

1. Individual factors : (a) Personal factors such as gender, age and health status
(b) Family factors inclusive of family type, size and paid help employed. (c) Situational factors namely working hours and service duration.
2. Job related factors : (a) Role Stressors (b) Job Satisfaction.

1. **Gender** : It was considered to be an important variable as it may influence the family role, the work role and the stresses arising from these roles. It may also influence the level of job satisfaction in teaching faculty members gender wise.

A few studies have shown that women experience more role stress as compared to men (Sen 1981). It suggested that there may be differences in the stress-effects felt by male and female teachers in their role performance at work and at home. Therefore gender was included as an independent variable in the present study.

2. **Age** : Since stress issues and problems are being realised and pointed out recently amongst management teaching professionals, it was assumed that young faculty members may be more prone to stress and may exhibit more concern for the teaching activities and responsibilities in their behaviour, than the older faculty members. Bhandarker and Singh (1986) examined the stressor-stress causation with overall prediction of stress as well as relative contribution of each independent variable such as age to it. Age was negatively related to role stress (Sen 1981). Young people between 20 and 30 years of age have been found to report twice as much stress when compared to older people. (Pareek Udai 1987). The data on the relationship of age of management teaching faculty members to extent of stress-effects experienced by them was lacking. Thus, it was thought appropriate to study age as one of the independent variables.
3. **Health Status** : The relationship between health and stress is one of the most controversial topics. Stress often accompanies illness and it is widely believed that stress may play a part in illness related conditions. There are a variety of

mechanisms through which stress might influence health (Cohen and Williamson 1991). Psychological functioning has some direct effect on physiology, alternatively effects may be indirect, in that stress may influence health behaviours (Steptoe and Wardle 1996) which raises or lowers the chances of illness. Stress may also get reduced due to health promoting behaviours such as choosing a healthy diet and exercising. Stress may also get influenced by behaviours directly related to medicine and compliance with treatment regimes. For these various reasons, research on stress and health is difficult, yet determining whether stress is actually a cause of illness in management teaching faculty members was required to be investigated. The researcher wondered whether a casual link can be established between the health status of the faculty members and stress. Hence health status, was considered as an important independent variable for this study.

4. **Family Type :** The type of family might have a definite influence on the extent of stress experienced by faculty members from the family role affecting teaching activities and responsibilities at work. Sen (1981) studied the background variables such as family type in relation to role stress in management employees.

As family type could be a source of generating stress in management faculty members too, it was included as an independent variable for this study.

5. **Family Size :** It was envisaged that the family size may affect the activities of a teaching professional at home and at work. Larger families may demand more time to be spent on carrying out household responsibilities which might affect their work role and performance at the work place leading to stress. Bhandarker and Singh (1986) examined family size as an independent variable and its relative contribution to overall stress in management employees of public and private sectors. Family size was found to be positively associated with certain role stressors and negatively with the other stressors. Sen (1981) stated that “Growing family size and increasing responsibilities with limited promotion prospects might lead to a feeling of exclusion and loss of linkages”. Hence family size was included as an independent variable.
6. **Paid Help :** In Indian families, mostly women do most of the domestic work. In present times men too share household responsibilities. Employed paid help might give a lot of relief from household chores and help in saving time

and energy on part of the faculty members. Are teaching professionals without paid help facing more stress than the ones with paid help?

In order to get an answer to this query, this factor was found to be of crucial value and was chosen as an independent variable.

7. **Hours of Work :** The only situational factor which was considered important as an independent variable for this study was 'Hours of Work' at the work place. Some teaching professionals may put in long working hours to cope up with demanding circumstances at work which might provide opportunities for material success or for personal growth and learning. However, it may be leading to stress which have harmful consequences to a greater or lesser degree. Mughal, Walsh and Wilding (1996) showed that "anxious sales executives worked longer hours and closed more sales". In order to establish a relationship between hours of work and stress in management professionals, this factor was considered important for this study.
8. **Service Duration :** It was assumed that the span of service duration might influence the stress-effects experienced by teaching faculty members. Also, there might be gender differences in the stress-effects felt by faculty members with respect to their service duration. Gupta and Pratap (1987) determined the role of service length on organizational role stress amongst executives of BHEL, a public sector undertaking. "A Linear increase was observed in the extent of organizational role stress as a function of service length". Thus it was thought appropriate to study this independent variable for this study.
9. **Role Stressors :** Ten role stresses by Pareek Udai (1983c) are termed as role stressors in the present study. They have been studied from time to time by different researchers on different samples of people. Bhatnagar and Bose (1985) studied role stressors among branch managers of a banking organization. Rajgopalan and Khandelwal (1988) studied role stressors with approach coping styles among engineer executives. Srivastava (1991 a) correlated various dimensions of role stress with mental health. As teaching professionals in management institutes also play various roles, there may be stress arising from these roles. In order to find out if the management teaching faculty members experience stress arising from these role stressors both family role stressor and work role stressors, it was necessary to include it as one of the most important independent variable.

- 10. Job Satisfaction :** Contentment within the work place has consistently been linked with improved health (Karasek and Theorell 1990; Stokols, 1992; Warr, 1994). There is much research to suggest that satisfied and healthy employees are likely to be more productive and less stressed than their less satisfied and less healthy counterparts. It is therefore in the interest of management institutes as employers to ensure that their work environment is the one in which employee satisfaction is optimized. The barriers to job satisfaction and healthy environment may relate to the role and the individual reactions to them are seen in form of stress.

In order to know the association if any, between job satisfaction and stress-effects in teaching faculty members, it was taken up as an important variable.

- 11. Stress-effects :** The manifestations of stress are considered as the stress-effects. The three stress-effects namely physiological, psychological and behavioural are the dependent variables in this study.

The statements based on various symptoms of stress enabled to differentiate between these three stress-effects. These are considered as the consequences of stress. Bhandarker and Singh (1986) examined the entire stress cycle including the consequences of stress as dependent variables in management personnel from both public and private sectors from southern regions of India.

The outcomes of stress in form of the above stated three stress-effects have been studied from time to time by different researchers especially in the field of psychology. Management teaching professionals may also experience these stress-effects in various forms. In this context, it was essential to study stress and its effects as a dependent variable.

3.8 OPERATIONAL DEFINITIONS OF VARIABLES

Certain terms which were operationally defined for measurement of variables of this research are stated below

Stress

Stress refers to an individual's reaction to a disturbing factor in the environment. It results in physiological, psychological and behavioural deviations for

individuals in an organization. It may manifest itself in both a positive and a negative way. Eustress is positive stress and Distress is negative stress. In the present study stress refers to three effects of stress namely physiological, psychological and behavioural stress.

Physiological stress

It refers to the impact that stress has on physical health of a person. The problems due to high effects of stress are exhibited physically by the individual such as fatigue, headache, backache, stomachache neck and shoulder stiffness and increased blood pressure.

Psychological stress

It is the impact of stress on mental health of a person. Psychological problems resulting from stress are important in day to day job performance. Stress which displays psychological symptoms such as worrying, depression, impatience, frustration, loneliness, powerlessness and inflexibility are included in the present study.

Behavioural stress

The stress-effects which may influence the behaviour of a person directly are considered here. Behaviour related stress symptoms in faculty members included crying, forgetfulness, bossiness, unprovoked shouting, blaming others, compulsive eating and chewing, agitation, anger, gossip and teeth grinding.

All the three effects of stress will be measured on a five point nominal scale to show the frequency of stress experienced.

Stressors

A stressor is the stimulus that induces stress. Stressors generate from various sources of stress.

In the present study, stressors refer to 'Individual Stressors' and 'Job related Stressors'. Individual stressors consist of personal, family and situational factors causing stress. Job related stressors indicate role stressors and job satisfaction.

Role Stressors

Role is a position that an individual occupies in a social system. The concept of role is central to that of a teaching organization. Role has built in potential for conflict and stress.

Role stressors are the causes of role based stress. Role stressors as referred to in the study are the ten role stresses given by Pareek Udai (1983c) namely Inter Role

Distance (IRD), Self Role Distance (SRD), Role Isolation (RI), Role ambiguity (RA), Role expectation conflict (REC), Resource inadequacy (RI), Personal inadequacy (PIN), Role stagnation (RS), Role erosion (RE) and Role overload (RO).

Family Role Stressor

It arises due to conflict between organizational role and other roles. The individual is not able to divide the time between work demands and family demands. For the present study, Inter Role Distance (IRD) is considered to be the family role stressor, “This factor has a dominant theme of conflict between the organizational role and the family role”. This factor may be thus called as family factor. Inter Role Distance (IRD) can be of two types. Family IRD (F) and Social IRD (S). One is concerned with conflict with family roles and the other with social roles, Pareek Udai (2010). The present study concerns itself only with conflicts arising out of family roles and hence family IRD (F) alone is taken into consideration.

All the role stressors will be measured by a standardized scale i.e. Organisational role stress (ORS) scale by Pareek Udai (1983c).

Work Role Stressors

These are the causes of role related stress experienced by teaching faculty members at their work place. All role stressors mentioned above except Inter Role Distance (IRD) are considered to be the work role stressors for the present study.

Personal factors

These refer to the personal characteristics of an individual namely gender, age, health status, educational qualification, hobbies, health practices, sleep hours and exercise regime. Gender, age and health status are the three important personal factors which will be considered in the present study.

Family factors

These include type of family and household, size of family, total family income, paid help, spouse's education and occupation and number of dependents. The family factors considered important and hence included in the study are family type, family size, and paid help.

Situational factors

The only situational factor which might be linked with stress and hence included in the study is “Hours of work”. Hours of work refer to the number of hours spent at the work place.

Job Satisfaction

Job satisfaction is described as how people feel about their job and its different aspects. It depicts the state of mind of an employee at a particular point of time i.e. whether the employee is satisfied with his job or not. A person with a high level of job satisfaction holds positive feelings about his or her job while a dissatisfied person holds negative feelings. It is a subjective term and cannot be easily measured. Hence a tool is required to measure the level of job satisfaction.

For this study job satisfaction is considered from four aspects of job namely work autonomy, occupational status, work schedule and work environment. The job satisfaction will be measured on a five point scale ranging from strongly agree to strongly disagree.

Work autonomy

It focuses on type of work, relationships at work and talents and skills related to work in teaching professionals.

Occupational status

It includes positive and negative aspects based on personal status, facilities received, financial security and standard of living fulfilling the economic necessities.

Work Schedule

It refers to time utilization for family and household responsibilities. It refers to the satisfaction as affected in the ability or disability to carry out the family and household responsibilities.

Work Environment

It consists of the positive and negative aspects as related to the type of work, physical environment of the work place and facilities provided at the work place.

For the present study, the job satisfaction on all the four aspects of job will be measured on a five point scale ranging from strongly agree to strongly disagree.

Service duration

It denotes the number of years of experience of job at the work place.

Age

It refers to the age group of respondents for both male and female. Three age groups namely young, middle and old age are formulated for the present study.

Health status

It provides information on the present health condition of the respondents i.e. whether the health condition is good, average or poor and the precautions taken to maintain good health.

Family type

It includes joint, nuclear, extended and single parent type of families.

Family size

It consists of respondents along with their spouses (if married), and the number of dependents. Dependents include children, parents, in laws, brother, sisters, grandparents and other relatives.

Paid Help

Paid help refers to employed paid help for sharing household jobs of cooking, cleaning, childcare and running errands.

Hours of work

These refer to the number of hours spent at the workplace, Specifically it refers to the number of hours spent by teaching faculty members at the management institutes where they work.

Management teaching faculty/ Professionals

Teachers who teach management courses at the graduate, post graduate and or diploma level in a management institute, are called management teaching faculty members or professionals for the present study.

Management institutes

Government, semi government or private institutes which run management courses of any type at U.G., P.G. and/or diploma level are referred to as management institutes in the study. Management courses may include Business management, Hotel management, Health science management, Agriculture management, Computer and related courses, Aviation management and other management courses.

3.9 DATA COLLECTION PROCEDURE

A questionnaire survey method was adopted to build up data for the present study. Questionnaire was used as an instrument for gathering data so that a large number of respondents could be contacted within a short period of time and the respondents could be given enough time to fill it up. Since the present investigation tried to find out effects of stress in faculty members, there were chances that the

respondents would not give true information in presence of the investigator. Hence the questionnaire was thought to be the most appropriate tool for the present study.

The questionnaire was constructed keeping in view the objectives of the study. The general form of the questionnaire was structured. The questions were definite, concrete and predetermined. The questions were in typed form with replies in hand written form. Except a few, most of the questions were closed end type. For some questions especially personal information and family background questions, fixed alternative questions were given which made the questionnaire easy to understand and less time consuming. An exhaustive review of literature assisted and enabled the researcher to develop this questionnaire. The entire questionnaire was skillfully structured so that the teaching professionals had no hesitation in revealing on the necessary information. It had four distinct sections.

Section I

It comprised of questions to elicit background information of the respondents, and included the personal profile, family profile and the job profile of the faculty members (appendix A).

The personal profile of the respondents included gender and age, educational qualification, marital status, occupation, sleep time, hobbies, exercise regime, overall health status, illnesses – their duration and treatment, health checkups and medical expenses.

The family profile of faculty members encompassed type of family and household, family size, family income, contributors to family income, paid help, spouses education and occupation, number of dependents and health practices.

The job profile of the respondents included designation at work, service duration, subjects taught with area of specialization, type of institute, work hours and travel time.

Section II

It comprised of Organisational role stress i.e. (ORS) scale to examine the ten role stressors as major contributors of stress in respondents. The scale contained 50 statements aiming to measure levels of stress arising out of each of the role stressor.

Section III

It contained the stress test which consisted of a total of 24 statements for identifying the stress-effects namely physiological, psychological and behavioural. Each stress effect was identified separately through symptoms listed in the statements belonging to each category of stress effect.

Section IV

It consisted of Job Satisfaction scale to measure the extent of Job Satisfaction level in teaching faculty members with respect to their role at work and in family. It contained 40 statements pertaining to four aspects of job namely work autonomy occupational status, work schedule and work environment.

A systematic procedure was followed to collect data from the faculty members. Teaching faculty members with teaching experience ranging from less than 1 year to 15 years or more, were chosen for the study. Participants were teaching in Management institutes located in Pune limits. The teaching faculty members were engaged in teaching various management courses in these institutes at the graduate and post graduate level and diploma level. Five hundred and three (503) questionnaires were distributed in 65 Management Institutes. A total of 328 teaching faculty members completed the questionnaires representing a 63 percent response rate. One hundred and sixty four of the teaching professionals were males (50 percent) and one hundred and sixty four were females (50 percent). Finally in all 59 management institutes participated in data collection. A schematic plan for the procedure to collect data from the faculty members was developed in advance. The researcher obtained prior permission from the Principal or Director of each Institute to collect the data. The researcher attended prefixed meetings, gave her introduction to the teachers and asked them if they would be willing to spend about 30 minutes in completing a survey questionnaire regarding their experiences of stress in the organization. The faculty members were asked to read a short explanation of the research and give their consent if they wished to participate in the research. The researcher gave a further explanation of the purpose of the study and requested them to be a part of this study. It was further explained that they were required to answer all the questions and the importance of their cooperation for the successful completion of the study. They were told that their participation was completely voluntary and the information collected from them will be confidential and will be used only as data for

research. Each set of questionnaire was stapled and each section in the set was given the same random identification number in case a participant's data set was separated.

Participants were asked to complete a short demographic questionnaire as well as questionnaires regarding their role stress, stress-effects and job satisfaction within a week. The respondents were again reassured that the information provided by them will be kept confidential and they were also encouraged to be open and truthful in providing information.

As per the time schedule given by the Institute head and respondents, the researcher made the follow up calls and checks before the return of the questionnaires. At the given time and day of the week, the researcher brought back the structured questionnaires after checking them for completeness and correctness of the data gathered. A casual discussion was carried out by the researcher with the respondents in addition to providing help to those who had a difficulty in filling up the questionnaire by facilitating repetition and explanation of the question. Once faculty members completed the survey questionnaires they were thanked for their participation and were asked to give a feedback if they wished to do so. The 328 valid questionnaires were then ready for data processing. The data collection period fell between April, 2010 to August, 2010.

3.10 TOOLS USED FOR MEASUREMENT OF THE VARIABLES

Out of the various standardized instruments available for research, three most suitable scales were considered and used in the present study based on their consistent and extensive use in research and training.

They are as follows

1. Organisational Role Stress (ORS) Scale (appendix A)
2. Stress test (appendix A)
3. Job satisfaction scale (appendix A)

1. Organisational Role Stress (ORS) Scale

Pareek Udai (1981) on the basis of theoretical speculation and statistical analysis has identified ten situations of role stress. This scale was developed by Pareek in 1983. Pareek Udai, (1983 c) gives an index of individual's perceived role stress on the following ten dimensions:

- 1) Inter Role Distance (IRD)
- 2) Role Stagnation (RS)
- 3) Role Expectation Conflict (REC)
- 4) Role Erosion (RE)
- 5) Role Overload (RO)
- 6) Role Isolation (RI)
- 7) Personal Inadequacy (PIN)
- 8) Self Role Distance (SRD)
- 9) Role Ambiguity (RA)
- 10) Resource Inadequacy (RIN)

The 'ORS' Scale measures the above ten types of role stresses. It is a psychometric instrument. ORS is a five point scale (0 to 4) containing five items for each of the ten role stresses and a total of 50 statements. Thus the total scores on each role stress ranges from 0 to 20. Responses are to be given on an answer sheet. The ORS Scale is appended to (appendix A). The 'ORS' scale was obtained from a book. The reference is as follows

Pareek Udai and Purohit Surabhi, (1997, 2002 , 2010) "Training Instruments in HRD and OD", third edition, Tata McGraw Hill publishing company Limited, New Delhi, P-544-551.

Scoring Procedure :

The score sheet was used for scoring. To get the total scores for each role stress the ratings given by each respondent were totaled horizontally (for 5 items)

These scores were then categorized into three levels of role stresses namely low, median and high. Based on median and quartile deviations, the standard norms were suggested for low, median and high levels of the ten role stresses by Pareek Udai (1982a) and Khanna (1986) for managers and the same were used for this study.

These norms were used for analysing the data on each respondent's score on all the ten role stresses. Scoring was done gender wise to enable the researcher to find out gender differences if any.

2. Stress test

This test was constructed and developed by Dr. Prabhu G. G. of NIMHANS, Bangalore. This test was used for the present study to measure the level of stress-effects in teaching faculty members (appendix A). This test was constructed in the

year 1991-92. The test consists of 24 statements on a five point rating scale (1 to 5) as follows.

Frequency of experience	Points
Never experience	1
Rarely Experience	2
Sometimes experience	3
Often Experience	4
Always Experience	5

This test assesses the physiological, psychological and behavioural dimensions of stress. The physiological symptoms also are an indicator of proneness to stress. A combined measure of physiological, psychological and behavioural symptoms indicate severity of stress.

This stress test was obtained personally from Dr. Deshpande S. W., retired former head, department of psychology, University of Pune, Pune.

Scoring procedure

The obtained responses were measured on a five point rating scale in terms of never experience, rarely experience, sometimes experience, often experience and always experience. Answers were given scores as follows:

- I** Scores on items 1 to 6 were counted and totaled indicating the total score for physiological stress-effects.
- II** Scores for items 7 to 17 were counted and totaled indicating the total score for behavioural stress-effects.
- III** Scores on items 18 to 24 were counted and totaled indicating the total score for psychological stress-effects.

Total scores of all the respondents on each of the statements under each stress effect, were calculated. Then Mean (M) and Standard deviation (SD) were calculated for each stress effect category to form a basis for level of stress effect as follows

- i) Low level : Scores below **Mean - 1 SD**
- ii) Medium level: Scores between **Mean - 1 SD and Mean + 1 SD**.
- iii) High level : Scores above **Mean + 1 SD**

Low level was indicated by ratings of never and rarely experience.

Medium level was indicated by ratings of sometimes experience.

High level was indicated by ratings of often and always experience, on the five point psychological continuum.

3. Job Satisfaction Scale

This scale was used in the study to measure the level of job satisfaction in teaching professionals (Appendix A). This scale was developed by Dr. Murali D. and Kulkarni M.S., M.A.U. Parbhani. Job satisfaction scale was obtained from Indian journal of applied psychology, 1997, volume 34, No.2, P 17-21. Written permission was taken from the author to use this scale for this research.

Scoring procedure

The scale consists of 40 statements out of which 20 statements are positive and 20 are negative statements. The statements in the scale are rated on five point psychological continuum ranging as strongly agree, agree, uncertain, disagree and strongly disagree which were scored from 5 to 1 respectively. Reverse Scoring of 1 to 5 was done for negative statements. The 40 statements are included under four heads namely work autonomy, occupational status, work schedule and work environment as Classified by Burgo and Culver (1989). The scores of all the subjects on all the statements under each category were added and Mean (M) and Standard deviation (SD) were calculated for each of the four job aspects. Mean and standard deviation were used as the basis to formulate levels of job satisfaction as follows

- i) Low level : Scores below **Mean - 1 SD**
- ii) Moderate level : Scores between **Mean - 1 SD and Mean + 1 SD**
- iii) High level : Scores above **Mean + 1 SD**

Low level of job satisfaction was indicated by ratings of strongly disagree and disagree.

Moderate level of job satisfaction was indicated by ratings of uncertain.

High level of job satisfaction was indicated by ratings of strongly agree and agree on the five point continuum scale.

3.11 PILOT STUDY

Although all the three scales used for the present study were standardized ones and have been used in research before, yet they were required to be tested in the field on the sample group of teaching professionals before their final application in the

main data collection. These tools were pretested along with demographic questionnaire with an aim to

- Get first hand experience with the respondents.
- Get an idea about the approximate time taken to fill up the questionnaire.
- Identity the most appropriate procedure to administer the questionnaires quickly with minimum risk of losing them.
- Identity points which were the probability of misinterpretation on part of the researcher and the respondents.
- Make necessary modification in the demographic questionnaire and finalise the same.

The questionnaire was tested on a sample of 30 management teaching professionals from three management institutes namely, MIT, Paud Road, INDSEARCH, Law College Road and IMED, Paud Road, Pune. The faculty members inclusive of both male and female were chosen from each of these institutes based on the following criteria

- 1) Any management institute teaching graduate and post graduate courses related to management.
- 2) The service duration of the faculty members should fall into any of the three following service categories :
 1. Less than one year to 7 years. (Short service duration)
 2. 8 years to 14 years. (Medium service duration)
 3. 15 years and above years. (Long service duration)
- 3) Faculty members who were willing to participate in the study.

The sample selected for pilot study was not a part of the final sample but had characteristics similar to the main sample of the study. Initially a few questions were included in the questionnaire on the provisions made by the management institutes for “stress management programmes” for teachers and the organizational coping strategies offered by the institutes. Since no information was received from the respondents on this issue and on oral enquiry, the institute heads said that they did not have any such provisions for teachers at present and would like to have suggestions for the same. Hence the questions related to this issue were deleted before finalising the questionnaire.

A few questions of the questionnaire which were not clearly understood by respondents, were deleted and replaced with simpler modified questions. The data collected were scored, coded and subjected to simple statistics in order to identify and foresee the practical difficulties in the final data processing and analysis. On the basis of findings received through pilot study, the questionnaire tool was revised and finalised with minor changes.

3.12 SELECTION OF THE SAMPLE

Locale of the Study

The present study was conducted in Pune city. After receiving information from internet sources, a list of management institutes in Pune and around Pune was prepared (Appendix B).

Those management institutes which are located within the periphery of Pune limits only were considered for the present study. Pune emerges as one of cities in India having the largest number of management institutes. The center part of Pune is more concentrated with the management institutes such as Pune city, Kothrud, Paud Road, Law College Road, Deccan, Shivajinagar etc. as compared to the out-skirts of Pune where these institutes are spread out. Thus, in order to get maximum representation of the sample, at least one management institute from prominent well known areas was approached and covered.

Due to the vast expansion of Pune City in recent years, practical inconvenience in data collection and time restrictions, those management institutes which are located on the outer periphery of Pune were not considered for the present study.

A total of thirty two (32) localities in Pune formed the locale of the study. In all, fifty nine (59) management institutes located in 32 localities were finally covered for data collection. The thirty two localities included in the present study were Akurdi, Chinchwad, Tathewade, Hinjewadi, Wakad, Balewadi, Lavelle, Narhe, Pashan, Aundh, Pune university, Shivajinagar, Senapati Bapat Road, Model Colony, Fergusson College Road, Deccan Gymkhana, Tilak road, Sadashiv Peth, Ambegaon near Katraj, Vadgaon Budruk, Hadapsar, Camp, Station Road, Babviewadi, Hingane Warje, Warje Malwadi, Kothrud, Paud Road, Karve Road, Erandwane and Law college road (Figure -2).

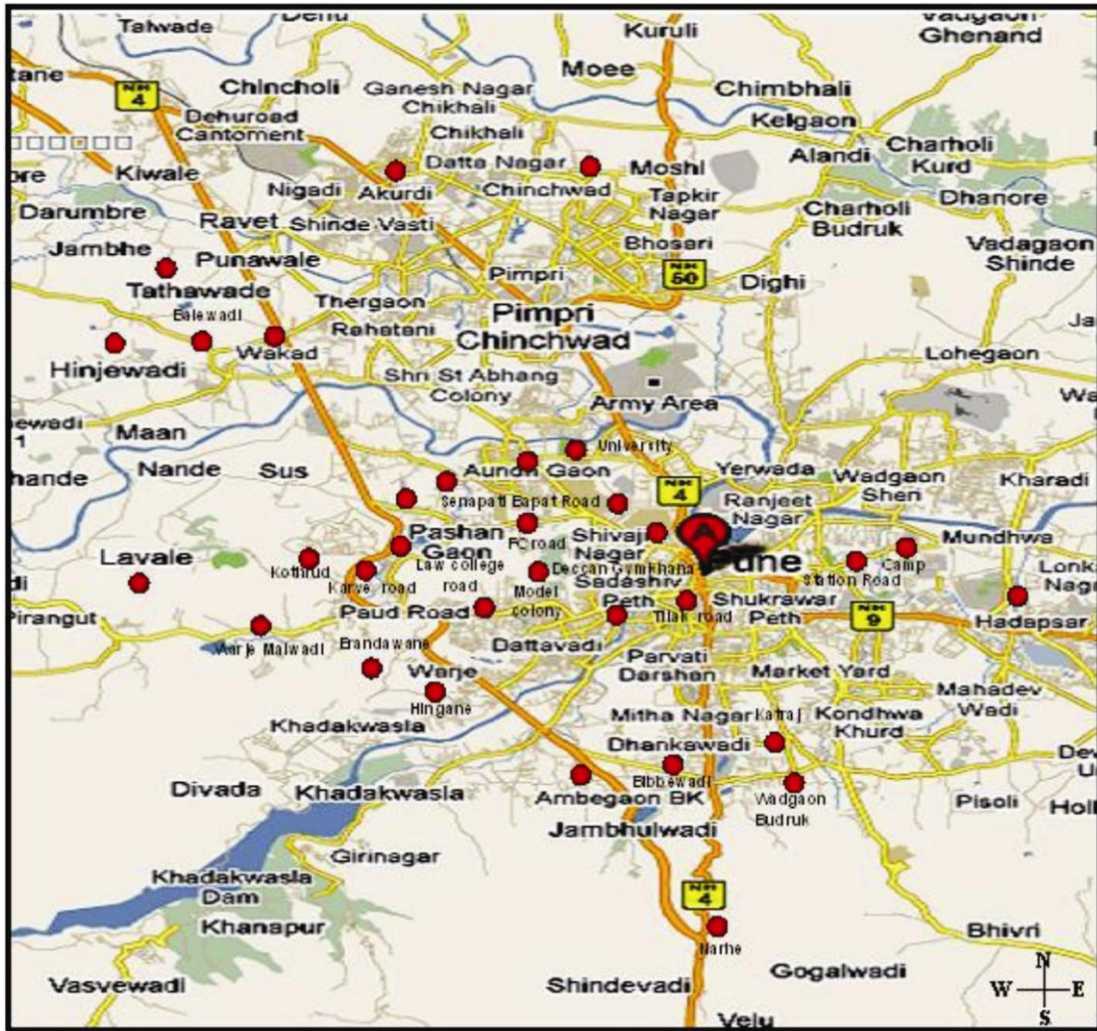


FIGURE 2

**Outline map of Pune showing the locale of the study
Sample Selection**

The present investigation was carried out in Pune city mainly due to the nature of the problem under investigation. Since a large number of management institutes are located in and around Pune city, many students and teaching professionals have come and settled down in Pune from all over India and outside India to be associated with management courses run by these institutes. Hence it was thought appropriate to conduct this research study in Pune city.

Teaching professional working at management institutes in Pune constituted the sample of the study. The respondents were chosen by purposive sampling technique.

Selection criteria

The sample was selected on the basis of

- 1) Any management institute whether Government, semi government or private that teaches undergraduate, post graduates and diploma courses related to various types of professional management. These courses included Business management, Hotel management, Aviation management, Agricultural management, Health Science management and other management courses.
- 2) The faculty members were included from both the genders i.e. male and female.
- 3) The service duration fell into any of the three service categories as follows
 - i) Less than one year to 7 years. (Short service duration)
 - ii) 8 years to 14 years. (Medium service duration)
 - iii) 15 years and above years. (Long service duration)
- 4) The faculty members who were willing to participate and would give genuine answers were chosen for the study.

3.13 ANALYSIS OF DATA

Categorization of the data

For the purpose of analysis, the variables of the study were categorized in a structured fashion. The categories crafted for the various variables are given below

1. **Age group :**
 - i. Young : 21 to 40
 - (in years) ii. Middle : 41 to 60
 - iii. Old : above 60
2. **Educational qualification:**
 - i. Bachelor degree with or without Diploma / Certificate.
 - ii. Master degree with or without Diploma / Certificate.
 - iii. Ph.D degree
3. **Post :**
 - i. Lecturer
 - ii. Professor
 - iii. Reader
 - iv. Director / Dean
4. **Marital status :**
 - i. Unmarried
 - ii. Married
 - iii. Widower / Widow

5. **Occupation :**
 - i. Teaching
 - ii. Administration
 - iii. Consultancy, Counseling
 - iv. Industrial Work
6. **Sleep time :**
 - i. Less than 7 hours
 - ii. 7 to 8 hours
 - iii. More than 8 hours.
7. **Hobbies :**
 - i. Fine arts
 - ii. Reading / Writing
 - iii. Listening, / Practicing Music
 - iv. Sports, Games
 - v. Entertainment
 - vi. Travelling
 - vii. Watching television.
 - viii. Reading with other hobbies.
 - ix. Miscellaneous or combination of 2-3 hobbies.
8. **Exercise regime :**
 - i. Walking, running, jogging
 - ii. Yoga, Pranayam
 - iii. Gymnasium
 - iv. Cycling
 - v. Relaxation activities
 - vi. Swimming, hydro therapy
 - vii. Walking, running, jogging, relaxation.
 - viii. Swimming, cycling
 - ix. Yoga and gymnasium.
 - x. Floor exercise and dance
 - xi. Yoga and swimming
 - xii. Gymnasium and meditation
 - xiii. Yoga, walking and relaxation.
 - xiv. Others - Aerobics, music therapy and laughter club.
9. **Overall health status:**
 - i. Good
 - ii. Average
 - iii. Poor

10. **Illness suffered:**
- i. Chronic
 - ii. Mild
 - iii. No illness
11. **Duration of illness (Years) :**
- i. No illness
 - ii. Less than 1 year
 - iii. 1 to 10 years
 - iv. 11 to 20 years
12. **Type of treatment of illness :**
- i. Regular : < 1 year
1 to 10 years
11 to 20 years
 - ii. Periodical : < 1 year
 - iii. Special : 1 to 5 years
> 10 years
 - iv. Other : 1 to 5 years
 - v. No treatment
13. **Health checkup visits:**
- i. Quarterly
 - ii. Half yearly
 - iii. Yearly
14. **Type of family and household :**
- i. Joint family staying under one roof
 - ii. Joint family staying under separate roof
(Separate Kitchen)
 - iii. Nuclear family staying under one roof.
 - iv. Nuclear family staying under separate roof.
 - v. Extended family staying under one roof.
 - vi. Single parent family staying under one roof.
15. **Family size**
- | | | |
|----------------------------------------------------------------------------------------------|---|-----------------|
| <ol style="list-style-type: none"> i. Staying alone ii. 2 -3 members | } | Small families |
| <ol style="list-style-type: none"> iii. 4 members iv. 5 members | } | Medium families |
| <ol style="list-style-type: none"> v. > 5 members | } | Large families |

16. **Total Family Income : (Monthly in Rs.)**
- i. 10,000 to 30,000
 - ii. upto 50,000
 - iii. upto 70,000
 - iv. > 70,000
17. **Number of contributors to family income :**
- i. No contributor
 - ii. 1 to 2
 - iii. 3 to 5
 - iv. > 5
18. **Number of dependents :**
- i. No dependents
 - ii. 1-2
 - iii. 3-4
 - iv. > 4
19. **Type of dependent members :**
- i. Parent/ Parents
 - ii. In-law/ In- laws
 - iii. Brother
 - iv. Sister
 - v. Children
 - vi. Spouse
 - vii. Uncle
 - viii. Aunt
 - ix. In-laws / Parents / Children / siblings
 - x. Other relatives
 - xi. No dependents
20. **Number of years of teaching experience or service duration :**
- i. Less than 1 year to 7 years. (Short)
 - ii. 8 years to 14 years (Medium)
 - iii. 15 years and above years (Long)
21. **Type of experience :**
- i. Teaching
 - ii. Administration
 - iii. Other such as Industry, Research.
22. **Hours spent at work per day :**
- i. 5 to 6 hours
 - ii. 7 to 8 hours
 - iii. More than 8 hours.

23. **Travel time to work per day** :
- i. Less than 2 hours.
 - ii. 2 to 3 hours
 - iii. 4 hours
 - iv. More than 4 hours
24. Norms for Role stressors: Based on median and quartile deviation as suggested by (Pareek Udai 1982a, Khanna 1986) for managers were used in the present study. The following three categories namely low, median and high helped in measuring the level of stress on each of the role stressors in teaching professionals.

Role Stressors	Levels of stress		
	Low	Median	High
1. Family Role Stressor : (IRD) Inter role Distance	2	5	8
2. Work role stressors :			
Role stagnation (RS)	2	5	8
Role expectation (REC) conflict	2	4	7
Role erosion (RE)	7	9	12
Role Over Load (RO)	1	3	6
Role isolation (RI)	3	6	9
Personal inadequacy (PIN)	2	4	8
Self role distance (SRD)	3	5	9
Role ambiguity (RA)	1	3	7
Resource inadequacy (RIN)	2	5	8

25. Stress-effects : On the basis of review of literature stress was classified into three stress-effects namely physiological, psychological and behavioural stress-effects based on their symptoms. Mean (M) and standard deviation (SD) were calculated for all three stress-effects which were used as a basis to formulate the categories for level of stress-effects namely Low, Medium and High as suggested by Prabhu G. G. (1991-92) in the “stress test”. These categories are as follows.

Levels of stress-effects →			Low	Medium	High
Stress-effects ↓	Mean	SD	Mean-1 SD	Mean	Mean+1 SD
Physiological stress-effects	12.56	4.03	8.53	12.56	16.6
Psychological stress-effects	18.28	6.36	11.92	18.28	24.65
Behavioural stress-effects	14.35	5.26	9.09	14.35	19.61
Overall Stress-effects	45.2	13.59	31.61	45.2	58.79

26. Job satisfaction :Job satisfaction scale by Murali D. and Kulkarni M. S. (1997) contained four aspects of job satisfaction namely work autonomy, occupational status, work schedule and work environment. As suggested in the scale three levels were formulated namely high, moderate and low to measure the extent of job satisfaction in respondents Mean (M) and Standard deviation (S.D.) were calculated and were used as a basis to formulate these levels of job satisfaction.

Levels of job satisfaction →			Low	Moderate	High
Job aspects ↓	Mean	SD	Mean-1 SD	Mean	Mean+1 SD
Work autonomy	38.09	5.51	32.58	38.09	43.61
Occupational status	48.20	7.93	40.27	48.20	56.13
Work schedule	42.85	8.42	34.43	42.85	51.27
Work environment	19.16	3.49	15.67	19.16	22.66
Total job satisfaction	148.30	20.81	127.49	148.30	169.11

After the data were classified, coding was done and scores were given. The data were then tabulated and graphs were prepared to represent the various categories. The frequency and percentage distribution of male and female faculty members were shown category wise in form of tables and graphs. Graphs highlighted the male and female differences on the data.

Statistical Analysis

The data were completely analysed using SPSS i.e. the statistical package for social sciences, 11.0 package. Data were analysed employing descriptive as well as relational statistics.

Descriptive Statistics

The data were presented in frequencies, percentages, mean and standard deviation for analysing the following information :

- i. **Personal profile** of respondents inclusive of gender, age, marital status, educational qualification, occupational status, sleep time, Hobbies, exercise, regime, overall health status, illness suffered, duration and treatment of illness, health check up visits and medical expenses.
- ii. **Job profile** of respondents inclusive of designation at work, number of years of experience at the present work place, area of specialization, subjects taught at the undergraduate and post graduate level, type of institute, work time and travel time spent to work place and back.
- iii. **Family profile** included type of family and household, size of family, total family income, contributors to family income, paid help employed, spouse's education and occupation, number of dependents and their relationship to respondents and health practices of respondents.
- iv. Data related to extent of stress (level) experienced by respondents on ten role stressors by gender.
- v. Data on three stress-effects experienced by respondents.
- vi. Data on job satisfaction of faculty members.

Relational Statistics

Statistical analysis was carried out to test the relationship between selected variables and the hypotheses postulated for the study. All the independent variables that were assumed to have any bearing on the dependent variable i.e. stress-effects experienced by faculty members, were studied.

- 1 (i) 't' test was computed to find out the differences in male and female faculty members in relation to the extent of stress-effects namely physiological, psychological and behavioural experienced by them.
- (ii) 't' test was also computed to know the difference in the extent of stress-effects of teaching faculty members by family factor namely "paid help".
- (iii) 't' test was further computed to show the difference in the influence of family role stressor and work role stressors on the faculty members by gender.
2. Pearson Product Moment Correlations were computed to find out the relationship between

- (i) Span of service duration and stress-effects in teaching faculty members.
 - (ii) Extent of stress-effects and job satisfaction of teaching faculty members on all the four aspects of job namely work autonomy, occupational status, work schedule and work environment.
 - (iii) Ten role stressors and three stress-effects in teaching faculty members. Ten role stressors were Family role stressor namely Inter role distance (IRD), Work role stressors were namely Role stagnation (RS), Role expectation conflict (REC), Role erosion (RE) Role Overload (RO), Role isolation (RI), Personal inadequacy (Pin) Self role distance (SRD), Role ambiguity (RS) and Resource inadequacy (RIN). The three stress-effects were physiological stress-effects, psychological stress-effects and behavioural stress-effects.
3. Analysis of variance were computed to study the differences among
- (i) The extent of stress-effects felt by teaching faculty members by selected antecedent factors namely personal factors, family factors and situational factors.

The selected personal factors included Age and health status of respondents. The family factors included family type, family size and paid help. The only situational factor included was hours of work. Three identified groups were formulated for each of the factors mentioned above to facilitate the calculation of 'F' values.

- (ii) The extent of job satisfaction of teaching faculty members by role stressors.
- (iii) The influence of family role stressor and work role stressors on teaching faculty members by service duration.

Wherever 'F' values were found to be significant, Bonferroni procedure of post-Hoc comparisons was applied.

Thus the steps and procedures described in this chapter were followed in carrying out the present research.



CHAPTER 4

FINDINGS AND DISCUSSION

This chapter is comprised of findings of the present study as obtained by analysis of the data collected. The male and female management faculty members were the key respondents of the present study. The data were collected from 328 faculty members from selected management institutes through questionnaires. The data gathered from the said respondents were tabulated, illustrated, described and discussed in the ensuing pages. In order to provide meaningful interpretation to the study, the data have been presented under five different sections. Each section is further divided into subsections for a systematic presentation of data.

SECTION I

4.1 BACKGROUND INFORMATION

The background information encompasses the personal profile, job profile and family profile of respondents.

Personal profile of respondents

The personal profile of the respondents included gender and age, educational qualification, marital status, occupational status, sleep time, hobbies, exercise regime, overall health status, illness suffered, duration and treatment of illness, health check up visits and medical expenses.

Gender and age: Almost three-fourth of the respondents belonged to young age group and one-fourth belonged to middle age group (Table 1). With reference to male female differences, almost 86 percent of the females belonged to young age group whereas 58 percent of males were young. There were very few respondents in the older age group. The mean age of male group was more than the female group.

Table 1
Distribution of respondents by gender and age

Age Groups (Years)	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Young 21 to 40	95	57.93	141	85.98	236	71.95
Middle 41 to 60	60	36.59	22	13.41	82	25.00
Old Above 60	9	5.49	1	0.61	10	3.05
Total	164	100.00	164	100.00	328	100.00
Mean	39.90		33.51		36.71	
SD	10.57		7.27		9.61	

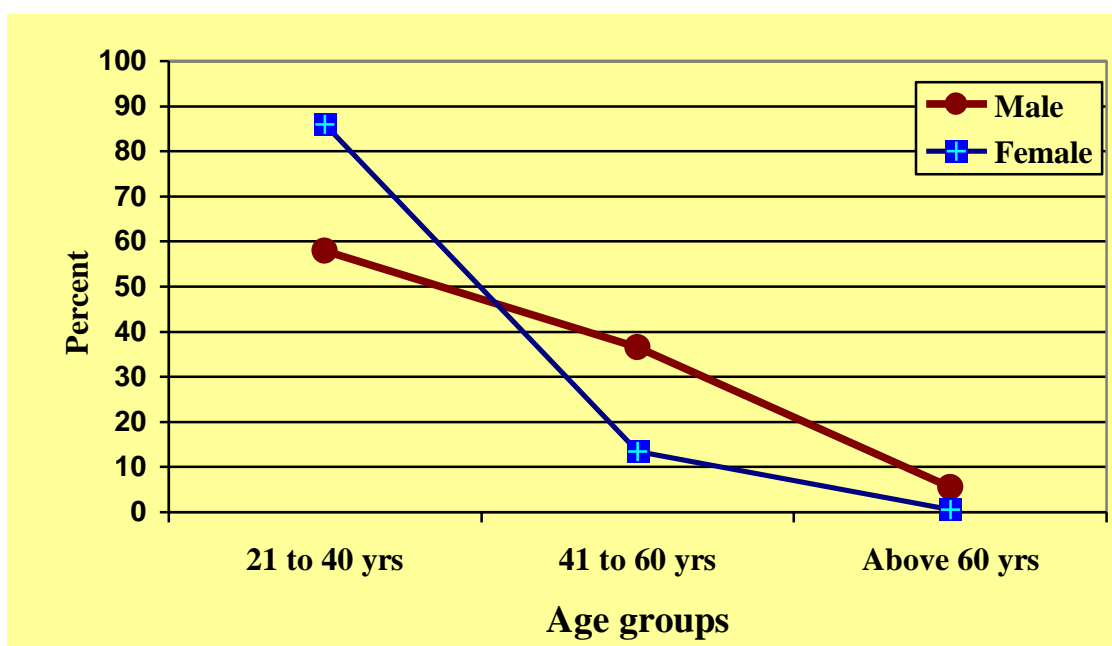


Figure 3
Distribution of respondents by Gender and Age

Marital status: More than three fourth of the respondents were married (Table-2). A little less than one-fourth of the faculty members were unmarried. Only one female respondent was a widow.

Table 2
Distribution of respondents by marital status

Marital Status	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Unmarried	37	22.56	35	21.34	72	21.95
Married	127	77.44	128	78.05	255	77.74
Widower/ widow	-	-	1	0.61	1	0.30
Total	164	100.00	164	100.00	328	100.00

Educational status: Overall about 79.57 percent of faculty members held master's degree with or without diploma or certificate and only 8.54 percent held bachelor's degree with or without diploma / certificate (Table-3). About 11.89 percent faculty members inclusive of both male and female were highly qualified with doctoral degree.

About 56 percent of the respondents occupied post of lecturers. Among these about 50 percent of the lecturers had master's degree with or without diploma or certificate. Only 2.44 percent held doctoral degree. The rest of 4.27 percent respondents were graduates with or without diploma or certificate. In all about 36 percent of the respondents belonged to the category of professors. Among them 7.62 percent were Ph.D., 2.44 percent were with bachelor's degree with or without diploma or certificate and 26 percent had master's degree with or without diploma or certificate. Only 4.27 percent of respondents worked in the capacity of director or dean. Out of a total of 14 respondents, 11 were male and only three were females in this category. Females did not occupy the post on a permanent basis.

Amongst male faculty members six had doctoral degree, four had master's degree with or without diploma or certificate and only one was with a bachelor's degree with or without diploma / certificate. Amongst female faculty members all three had master's degree with or without diploma or certificate. In the category of twelve readers, four were males and eight were females. None of them had a doctoral degree. Out of the total of 328 respondents, seven had master's degree with or without diploma or certificate and five had a bachelor's degree with or without diploma or certificate.

Table 3
Distribution of respondents by educational qualification

Post	Qualification	Male N=164		Female N=164		Total N=328	
		f	%	f	%	f	%
Lecturer	Ph.D. degree	5	3.05	3	1.83	8	2.44
	Master's degree with or without Diploma / Certificate	62	37.80	100	60.98	162	49.39
	Bachelor's degree with or without Diploma / Certificate	7	4.27	7	4.27	14	4.27
	Total	74	45.12	110	67.07	184	56.10
Professor	Ph.D. degree	20	12.20	5	3.05	25	7.62
	Master's degree with or without Diploma / Certificate	47	28.66	38	23.17	85	25.91
	Bachelor's degree with or without Diploma / Certificate	8	4.88	-	-	8	2.44
	Total	75	45.73	43	26.22	118	35.98
Director/Dean	Ph.D. degree	6	3.66	-	-	6	1.83
	Master's degree with or without Diploma / Certificate	4	2.44	3	1.83	7	2.13
	Bachelor's degree with or without Diploma / Certificate	1	0.61	-	-	1	0.30
	Total	11	6.71	3	-	14	4.27
Readers	Ph.D. degree	-	-	-	-	-	-
	Master's degree with or without Diploma / Certificate	2	1.22	5	3.05	7	2.13
	Bachelor's degree with or without Diploma / Certificate	2	1.22	3	1.83	5	1.52
	Total	4	2.44	8	4.88	12	3.66
Total	Ph.D. degree	31	18.90	8	4.88	39	11.89
	Master's degree with or without Diploma / Certificate	115	70.12	146	89.02	261	79.57
	Bachelor's degree with or without Diploma / Certificate	18	10.98	10	6.10	28	8.54
	Total	164	100.00	164	100.00	328	100.00

Table 4
Distribution of respondents by occupation

Occupation	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Teaching	159	96.95	162	98.78	321	97.87
Administration	-	-	1	0.61	1	0.30
Consultancy, Counseling	2	1.22	1	0.61	3	0.91
Industrial Work	1	0.61	-	-	1	0.30
Other	2	1.22	-	-	2	0.61
Total	164	100.0	164	100.0	328	100.0

Occupational status: Majority of the respondents were engaged in teaching (Table-4). Apart from Teaching, very few male respondents also carried out additional duties of consulting, counseling, coordination with corporate sector and industry for Internship and placement of students. Also other duties such as coordination of courses were carried out by a few. The female faculty members apart from teaching, were found to be engaged in only administrative duties, consultancy and counseling to students.

Along with work time, adequate sleep and rest are needed for good mental health.

Table 5
Distribution of respondents by sleep time

Sleep Time (Hrs.)	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
<7	63	38.41	65	39.63	128	39.02
7 to 8	91	55.49	95	57.93	186	56.71
>8	10	6.10	4	2.44	14	4.27
Total	164	100.00	164	100.00	328	100.00
Mean	7.06		7.07		7.06	
SD	1.27		0.89		1.09	

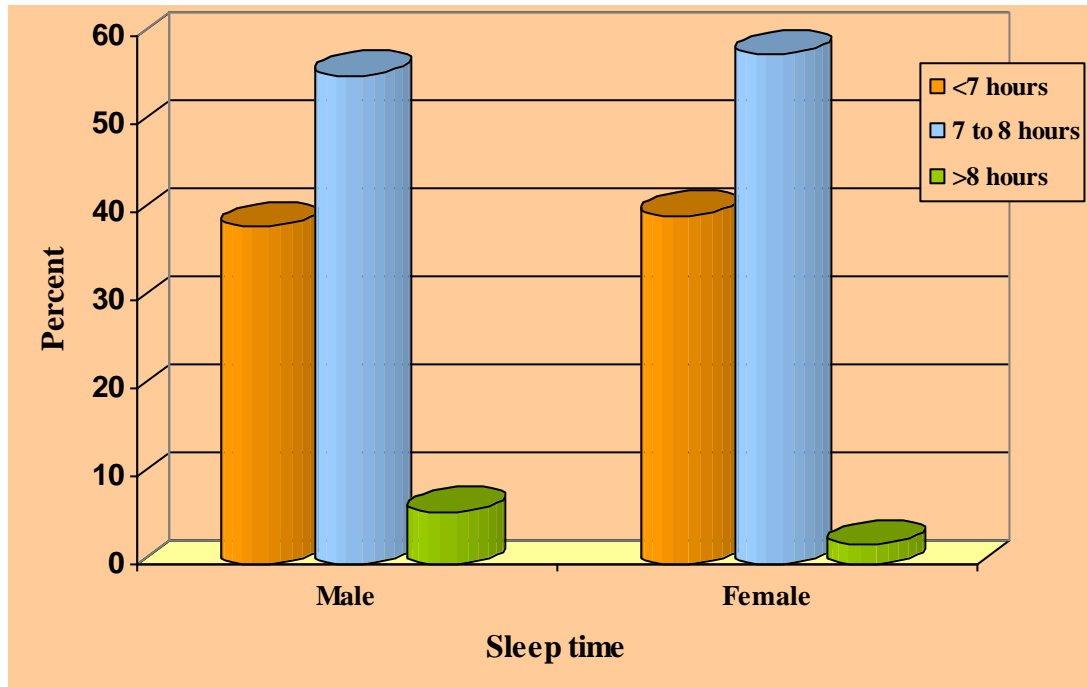


Figure 4

Distribution of respondents by sleep time

Sleep time: Only 4.27 of the respondents found time of eight hours for sleep (Table-5). About 57 percent of faculty members slept for 7 to 8 hours and 39.02 percent could only sleep for less than seven hours. The mean sleep time for both male and female respondents was almost the same. Although 6.10 percent of male respondents could sleep for more than eight hours where as only 2.44 percent of female respondents could sleep for more than eight or more hours.

Hobbies: A little less than one-third of the respondents were engaged in a combination of two to three hobbies (Table-6). Approximately 22.26 percent of the respondents were fond of reading along with listening to music, watching television, traveling, sports and fine arts. In all 20.43 percent of the teaching faculty members were engaged in literary activities. Listening to music or practicing music was a favorite pastime to 8.54 percent of the respondents. Seven percent respondents had no hobbies at all. About 2.0 to 4.0 percent of faculty members were engaged in leisure time activities such as watching television, traveling to destinations, fine arts such as drawing, sketching, painting dance drama, craft embroidery and fashion designing.

Table 6
Distribution of respondents by their hobbies

Hobbies	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Fine arts	1	.61	10	6.10	11	3.35
Reading/ Writing	32	19.51	35	21.34	67	20.43
Listening/ Practicing music	14	8.54	14	8.54	28	8.54
Sports/ Games	11	6.71	1	0.61	12	3.66
Entertainment	1	0.61	-	-	1	0.30
Traveling	5	3.05	2	1.22	7	2.13
Watching television	4	2.44	1	.61	5	1.52
Reading with other hobbies	29	17.68	44	26.83	73	22.26
Combination of 2-3 hobbies/ Miscellaneous	58	35.37	43	26.22	101	30.79
Nil	9	5.49	14	8.54	23	7.01
Total	164	100.00	164	100.00	328	100.00

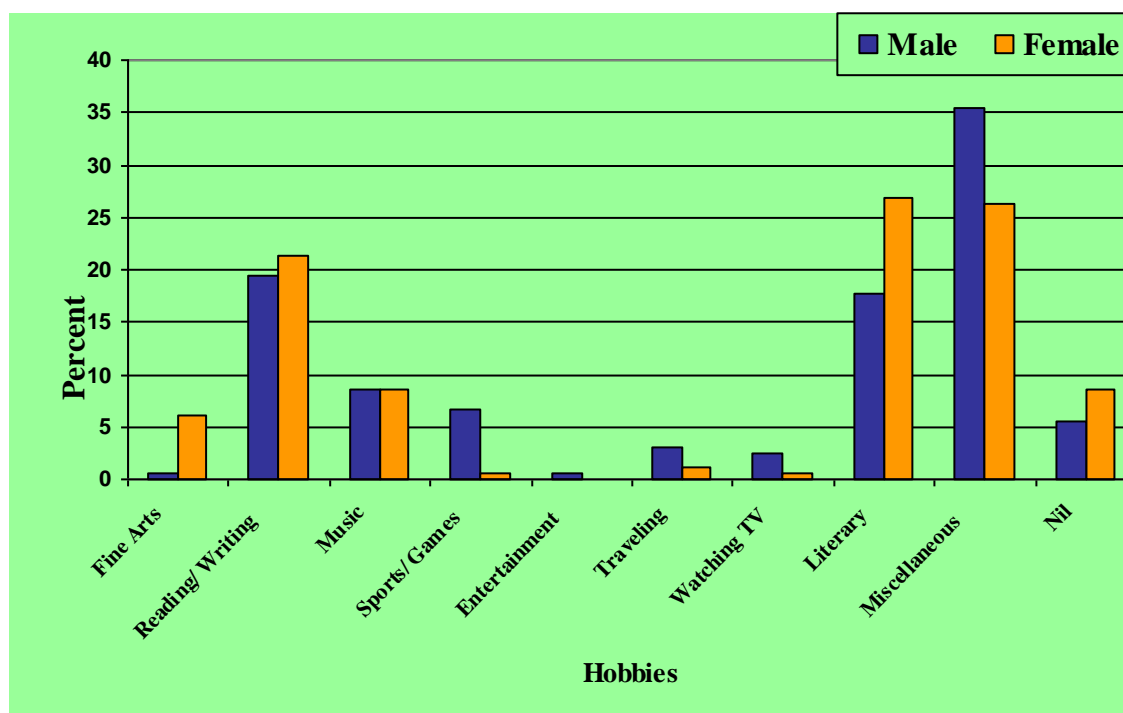


Figure 5
Distribution of respondents by their hobbies

Sports and games were also favourite activities of some of these respondents. Only one male respondent was found to be interested in outings and entertainment as a past time hobby. A marked difference in male and female respondents was noted in relation to their engagement in a combination of two to three hobbies and literary activities.

Exercise regime: A little more than one-third of the respondents practiced walking, running and jogging on a regular basis (Table-7). About one-third of the respondents were engaged in swimming and cycling. About 7.62 percent faculty members practiced yoga and pranayam, while 5.18 percent engaged themselves in walking, running, jogging and relaxation activities all together. The female faculty members did not engage themselves in cycling, aerobics and music therapy and laughter club activities. Similarly male faculty members were not found to be engaged in yoga, gym and meditation activities. About 10 percent of the male faculty members carried out swimming and cycling exercises more than the female faculty members. Similarly 10 percent female faculty members carried out walking, running and jogging activities more than the male faculty members.

Table 7
Distribution of respondents by exercise regime

Exercise regime	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Walking, Running, Jogging	54	32.93	70	42.68	124	37.80
Yoga, Pranayam	8	4.88	17	10.37	25	7.62
Gym	7	4.27	1	0.61	8	2.44
Cycling	1	0.61	-	-	1	0.30
Relaxation activities	2	1.22	6	3.66	8	2.44
Swimming, Hydrotherapy	3	1.83	1	0.61	4	1.22
Walking, Running, Jogging, Relaxation	8	4.88	9	5.49	17	5.18
Swimming, Cycling	63	38.41	48	29.27	111	33.84
Yoga and Gym	-	-	2	1.22	2	0.61
Floor Exercise and Dance	2	1.22	4	2.44	6	1.83
Yoga and Swimming	1	0.61	1	0.61	2	0.61
Gym and Meditation	-	-	2	1.22	2	0.61
Yoga, Walking Relaxation	3	1.83	3	1.83	6	1.83
Other- Aerobics, music therapy, laughter club	12	7.32	-	-	12	3.66
Total	164	100.00	164	100.00	328	100.00

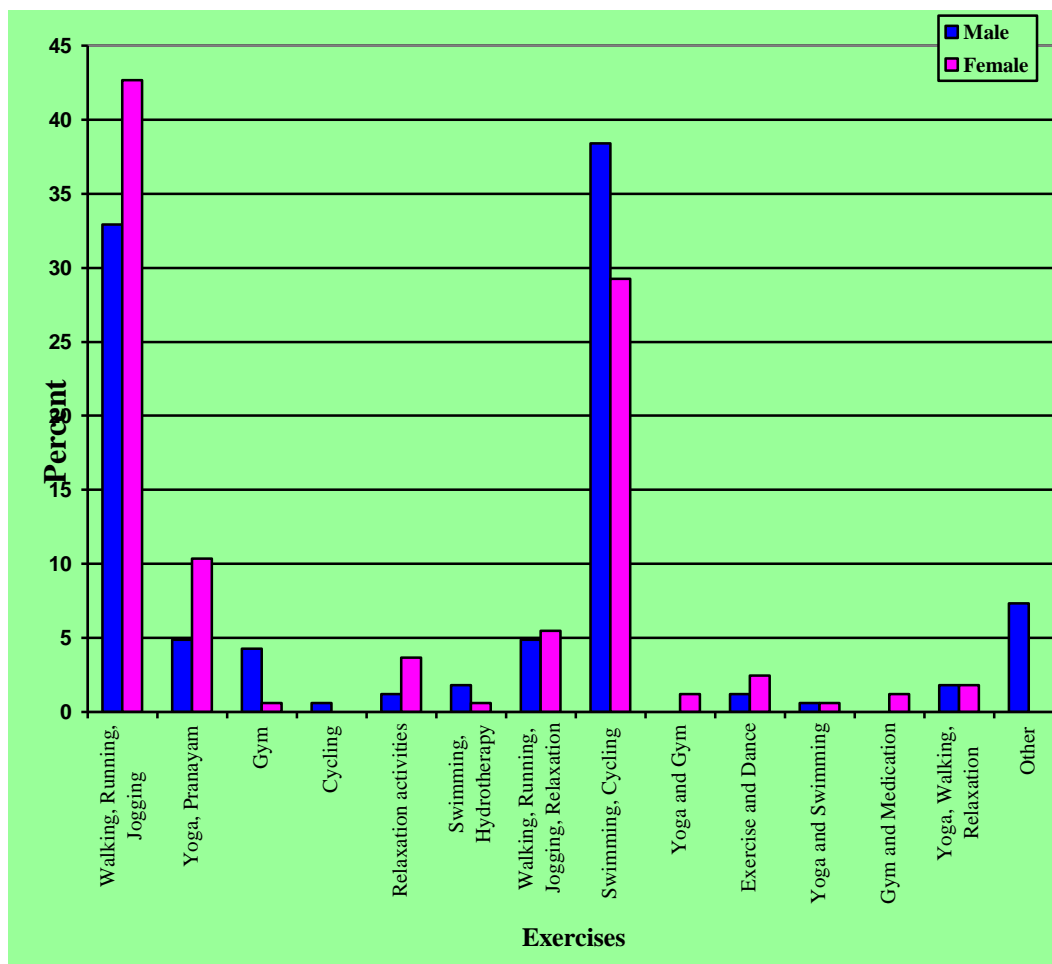


Figure 6

Distribution of respondents by exercise regime

Overall health status and illness suffered: Nearly three fourth of the respondents maintained good health with no illness suffered (Table-8). About 7.62 percent of the faculty members suffered from chronic illness and only 4.57 percent had mild illness. Amongst those respondents who had average health status, 9.45 percent reported to have no illness at all. Around three percent had mild and chronic illness each in this group. Only one male respondent reported to suffer from chronic illness of long duration which was more than ten years reflecting poor health status. In general the faculty members maintained good health.

Table 8

Distribution of respondents by overall health status and illness suffered

Health Status	Illness Suffered	Male N=164		Female N=164		Total N=328	
		f	%	f	%	f	%
Good	Chronic	10	6.10	15	9.15	25	7.62
	Mild	10	6.10	5	3.05	15	4.57
	No Illness	116	70.73	118	71.95	234	71.34
Average	Chronic	8	4.88	3	1.83	11	3.35
	Mild	5	3.05	5	3.05	10	3.05
	No Illness	13	7.93	18	10.98	31	9.45
Poor	Chronic	1	0.61	-	-	1	0.30
	Mild	-	-	-	-	-	-
	No Illness	1	0.61	-	-	1	0.30
	Total	164	100.00	164	100.00	328	100.00

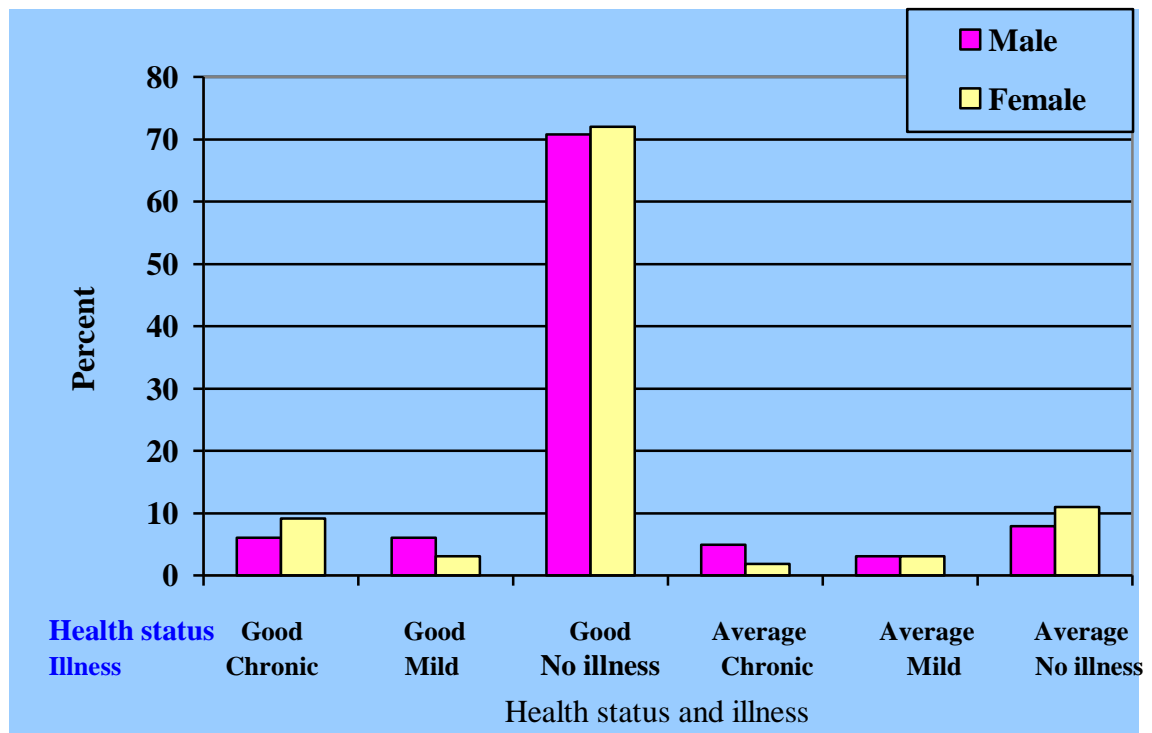


Figure 7

Distribution of respondents by overall health status and illness suffered

Health practices of respondents included maintenance of regular meal timings, consumption of nutritious food and following of health awareness programme for self, spouse and children.

Table 9
Distribution of respondents by health practices

Health practices	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
<u>Maintain Regular Meal Timings</u>						
Yes	111	67.68	121	73.78	232	70.73
No	31	18.90	14	8.54	45	13.72
Sometimes	22	13.41	29	17.68	51	15.55
Total	164	100.00	164	100.00	328	100.00
<u>Take Nutritious Food</u>						
Yes	117	71.34	126	76.83	243	74.09
No	26	15.85	9	5.49	35	10.67
Sometimes	21	12.80	29	17.68	50	15.24
Total	164	100.00	164	100.00	328	100.00
<u>Follow Health Awareness Programme</u>						
Self						
Yes	124	75.61	124	75.61	248	75.60
No	40	24.39	40	24.39	80	24.39
Total	164	100.00			328	100.00
Spouse						
Yes	98	59.76	94	57.32	192	58.54
No	66	40.15	70	42.69	136	41.46
Total	164	100.00	164	100.00	328	100.00
Children						
Yes	83	50.61	69	42.07	152	46.34
No	81	49.39	95	57.93	176	53.66
Total	164	100.00	164	100.00	328	100.00

Health Practices- Food Habits and Nutrition: About 70.73 percent of the faculty members were found to be regular in their meal timings (Table-9). Nearly 13.72 percent of the respondents could not eat their meals at a fixed time and 15.55 percent fluctuated in eating meals regularly at a fixed time. About 74.09 percent faculty members reported that they ate nutritious food while 15.24 percent said that they sometimes ate nutritious food and 10.67 percent reported that they did not eat nutritious meals.

Three fourths of the faculty members were aware about quality of their health and followed health awareness programme while the remaining one-fourth were not health conscious nor did they follow health awareness programme. In all 58.54 percent respondents said that they were aware about their spouses health and 46.34 percent of the faculty members were concerned about their children's health and followed health awareness programme for their spouses and children.

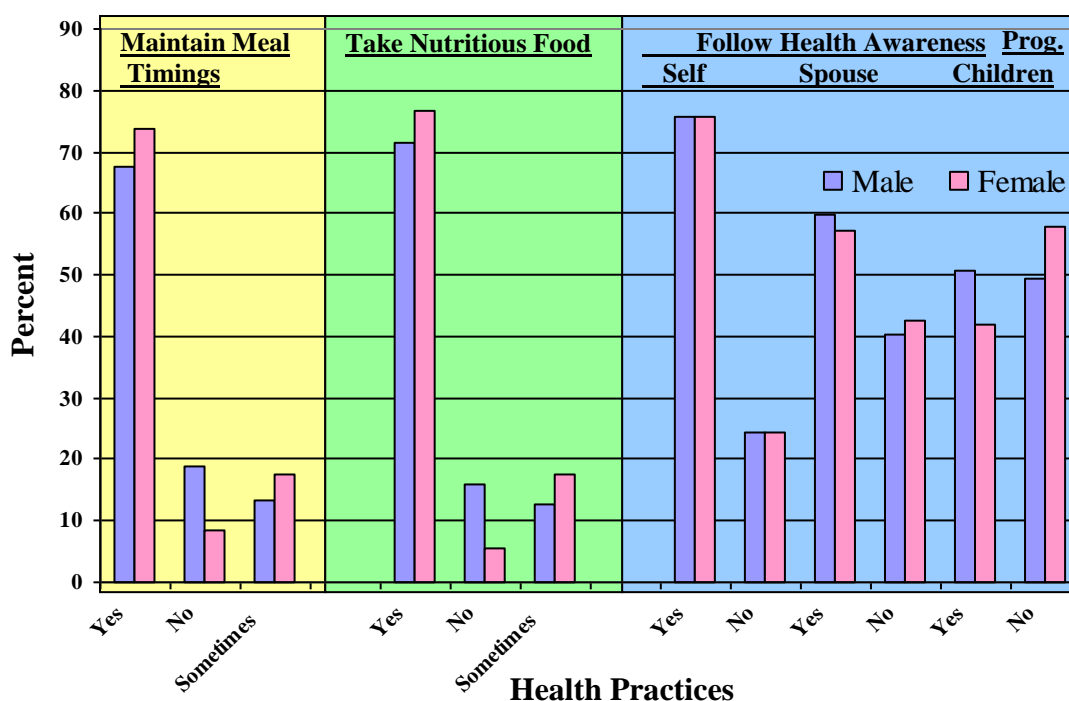


Figure 8
Distribution of respondents by health practices

Duration of illness: About four-fifths (81.71 percent) of the faculty members did not show any incidence of illness (Table-10). About thirteen percent of the respondents suffered from illnesses with one to ten years of duration. Only 1.52 percent had illness from eleven to twenty years. About three percent had illness for

less than one year. More women than men suffered from illness ranging between one to ten years.

Table 10
Distribution of respondents by duration of illness

Duration of Illness	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Years						
Nil	135	82.32	133	81.10	268	81.71
<1	8	4.88	4	2.44	12	3.66
1 to 10	18	10.98	25	15.24	43	13.11
11 to 20	3	1.63	2	1.22	5	1.52
Total	164	100.00	164	100.00	328	100.00
Mean	4.90		4.26		4.57	
SD	4.47		4.68		4.56	

Table 11
Distribution of respondents by type of treatment of illness

Type of Treatment	Years	Male N=164		Female N=164		Total N=328	
		f	%	f	%	f	%
Regular	11 to 20 Yrs	3	1.83	1	0.61	4	1.22
	1 to 10 Yrs	8	4.88	17	10.37	25	7.62
	<1 Yrs	6	3.66	2	1.22	8	2.44
Periodical	<1 Yrs	11	6.71	5	3.05	16	4.88
Special	>10 Yrs	-	-	1	0.61	1	0.30
	1 to 5 Yrs	-	-	2	1.22	2	0.61
Other	1 to 5 Yrs	2	1.22	-	-	2	0.61
No Treatment	-	134	81.71	136	82.93	270	82.32
Total		164	100.00	164	100.00	328	100.00

Treatment of illness: Majority of the faculty members that is 82.32 percent did not take any treatment for illness at all (Table-11). Only seven percent took treatment from last ten or less number of years. Nearly five percent of the faculty members took periodical treatment of illness for less than one year. Very few respondents reported to be taking special treatment of illness.

Table 12

Distribution of respondents by health check up visits and medical expenses

Health Check up Visits	Medical Expenses	Male N=164		Female N=164		Total N=328	
		f	%	f	%	f	%
Quarterly	Yes	125	76.22	114	69.51	239	72.87
	No	2	1.22	7	4.27	9	2.74
Half yearly	Yes	24	14.63	19	11.59	43	13.11
	No	11	6.71	24	14.63	35	10.67
Yearly	Yes	2	1.22	-	-	2	0.61
	No	-	-	-	-	-	-
Total		164	100.00	164	100	328	100

Health check up visits: A little over 72 percent of the respondents went for health check ups quarterly and incurred medical expenses on the same (Table-12). About 2.74% of the faculty members found it difficult to pay for these expenses. About 10.67 percent of the faculty members found it difficult to pay for medical expenses even half yearly. Only two of the male respondents paid and went for medical checkup on an yearly basis. None of the female respondents either paid for or went for yearly medical check ups.

Job profile of respondents

The job profile of the respondent faculty members includes their designation at work, number of years of experience at the present work place, area of specialization, subjects taught at the undergraduate and the postgraduate level, type of institute they work in, work timings, time spent at work and travel time spent to work place and back.

Table 13
Distribution of respondents by designation at work

Designation at Work	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Jr. or Sr. Lecturer/ Lecturer	73	44.51	107	65.24	180	54.88
Assistant Professor	17	10.37	28	17.07	45	13.72
Associate Professor	10	6.10	4	2.44	14	4.27
Professor	45	27.44	11	6.71	56	17.07
Principal	1	0.61	-	-	1	.30
Head Coordinator/ Head Academic/ Head Placement	2	1.22	3	1.83	5	1.52
Dean or Director	8	4.88	-	-	8	2.44
Counselor	-	-	1	0.61	1	.30
Coordinator	3	1.83	5	3.05	8	2.44
Lecturer & Coordinator/ Professor & Coordinator	2	1.22	3	1.83	5	1.52
Other	3	1.83	2	1.22	5	1.52
Total	164	Total	164	100.00	328	100.0

Designation at work: A little more than one-half of the total number of respondents were either Junior or Senior lecturers (Table-13). A little more than one-sixth of the faculty members were holding the designation of professors. About 14 percent of the faculty members were assistant professors where as only 4.7 percent

were designated as associate professors. A very small percentage of faculty members ranging from 0.30 to 2.44 percent had designations of Principal, counselor, coordinator, dean and director. None of the male faculty members worked in the capacity of a counselor. Similarly none of the female faculty members worked on the post of dean or director.

Table 14
Distribution of respondents by number of years of experience

Years of Experience (Service duration)	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Teaching work						
Less than 1 to 7 yrs (Short)	99	53.80	127	69.02	226	68.90
8-14 Yrs (Medium)	33	17.93	21	11.41	54	16.46
15 & Above Yrs (Long)	29	15.76	14	7.61	43	13.11
Sub-total	161	87.50	162	88.04	323	98.47
Administration work						
Less than 1 to 7 yrs (Short)	-	-	1	0.54	1	0.30
8-14 Yrs (Medium)	-	-	-	-	-	-
15 & Above Yrs (Long)	-	-	-	-	-	-
Sub-total	-	-	1	0.54	1	0.30
Other work such as Industry, Research						
Less than 1 to 7 yrs (Short)	-	-	1	0.54	1	0.30
8-14 Yrs (Medium)	-	-	-	-	-	-
15 & Above Yrs (Long)	3	1.63	-	-	3	1.63
Sub-total	3	1.63	1	0.54	4	1.22
Total	164	100.00	164	100.00	328	100.00
Mean	7.15		4.88		6.01	
SD	5.93		4.88		5.54	

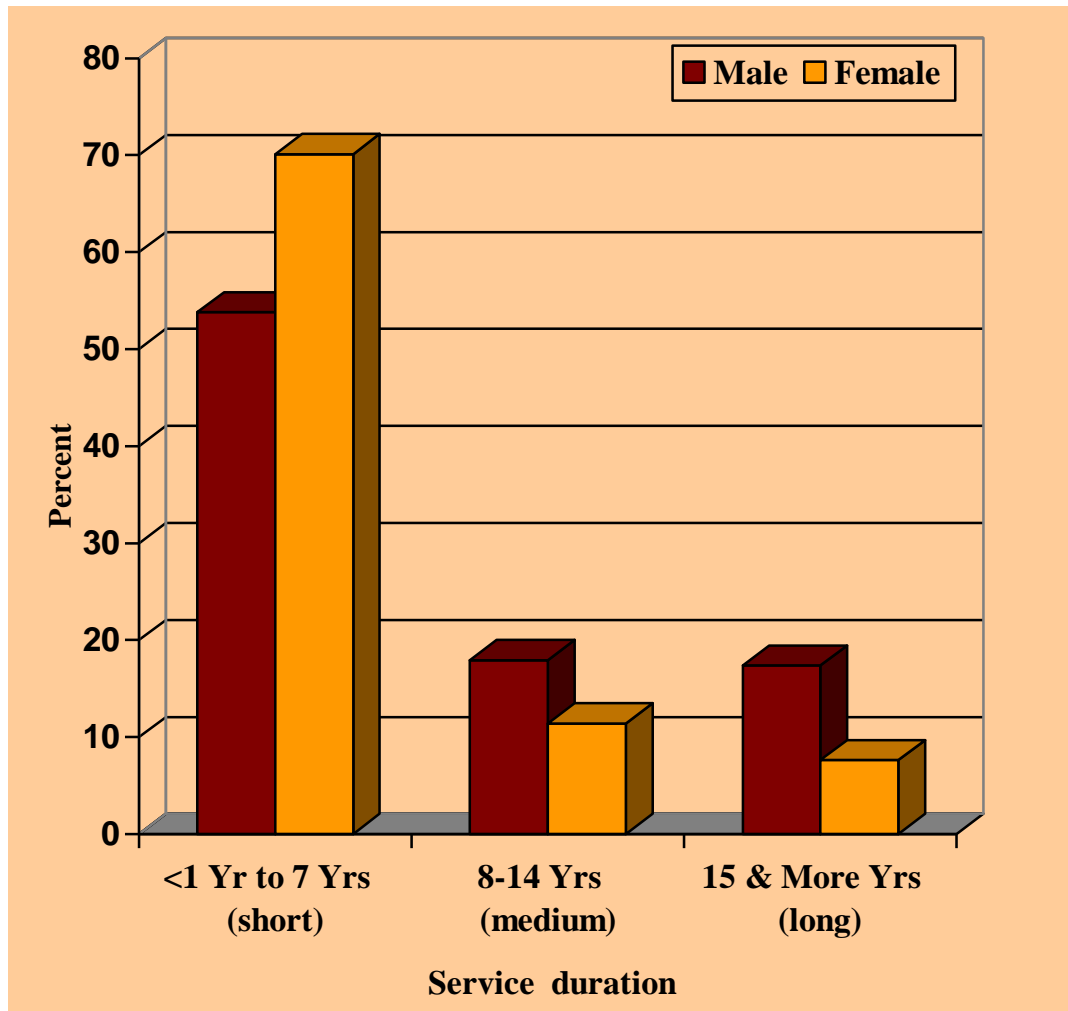


Figure 9
Distribution of Respondents by Service duration

Service Duration: It was based on years of work experience. It had three categories namely short service duration (less than 1 year to 7 years of experience), medium service duration (8 to 14 years of experience) and long service duration (15 years or more years of experience). About 70 percent of the faculty members had the teaching experience up to seven years (Table-14). About 16.46 percent had eight to fourteen years of experience and only 13.11 percent of the faculty members had 15 years or more years of teaching experience. Apart from teaching only one female faculty member had experience up to seven years in the area of administration. Concerning industrial work and research work, apart from teaching, three male respondents had rich experience of 15 years or more. Only one female faculty member worked in this area with an experience of seven years or less. On an average the male faculty members had more experience than the female faculty members.

Table 15**Distribution of respondents by area of specialization**

Area of Specialization	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
General Management, Business, Construction, Marketing, Human Resource Operation, Production	78	47.55	71	43.19	149	45.43
Finance- Accounts, Economics	40	24.39	32	19.51	72	21.95
Computer Science/ Computer Management	16	9.76	34	20.73	50	15.24
Food Industrial Management , Culinary Management	2	1.22	3	1.83	5	1.53
Hospitality Management	-	-	5	3.05	5	1.53
Science- Physics, Chemistry, Biology	6	3.66	5	3.05	11	3.35
Agriculture Business Management	9	5.49	-	-	9	2.74
Other Management Courses	13	7.93	14	8.54	27	8.23
Total	164	100.00	164	100.00	328	100.00

Specialization: About 45 percent of the respondents had specialized in the various areas of management (Table-15). Twenty two percent of the faculty members had specialized in Finance, Accounts and Economics. Faculty members, who specialized in Computer science and management were 15.24 percent. A small percentage of faculty members ranging from 1.53 to 3.35 percent specialized in Culinary and Food industrial management, Hospitality, Agriculture management and Science subjects. Apart from these areas of specializations, eight percent specialized in other areas such as Aviation management, Biotechnology and Post harvest technology. There were no male respondents with Hospitality management specialization and no female faculty members with Agriculture, Business management specialization.

Table 16

Distribution of respondents by subjects taught by them at under graduate and post graduate levels

Subject Group	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Entrepreneurship development, Human resource management, Marketing personnel, Construction, retail management	61	37.20	51	31.10	112	34.15
Hospitality management, Aviation, Travel and tourism and Hotel management	1	0.61	8	4.88	9	2.74
Computer science and related subjects	15	9.15	37	22.56	52	15.85
Agriculture business management, post harvest technology, plant pathology and related subjects	11	6.71	2	1.22	13	3.96
Food industry and culinary management	1	0.61	3	1.83	4	1.22
Finance, accounts, banking, economics and costing	39	23.78	24	14.63	63	19.21
Science and related subjects	3	1.83	1	0.61	4	1.22
Business management, communication, consumer and industrial relations	5	3.05	8	4.88	13	3.96
Retail, Advertising, Sales promotion	2	1.22	2	1.22	4	1.22
Miscellaneous subjects	26	15.85	28	17.07	54	16.46
Total	164	100.00	164	100.00	328	100.00

Subjects taught: The faculty members working with management institutes were required to teach either one or more than one subject from a respective subject group (Table- 16). A little more than one-third of the respondents were engaged in teaching Entrepreneurship development and all management related subjects. Nearly one-fifth of the respondents taught finance, accounts, economics, banking and costing subjects. Almost one-sixth of the respondents taught varied subjects in combination from different discipline groups given in the table. About 15.85 percent of the

respondents taught computer science and its related subjects. Respondents ranging from 1.22 percent to 3.96 percent taught food industry, culinary management, science subjects, hospitality aviation, travel, tourism, retail, advertising, sales promotion, agriculture based subjects, business management, communication, consumer and industrial relations subjects. Only one male faculty member was engaged in teaching hospitality and food industry based subjects. Similarly two female faculty members taught agriculture based subjects and science subjects in management institutes.

Table 17

Distribution of respondents by type of management institute and its timings

Type of Management Institute	Work Timings	Male N=164		Female N=164		Total N=328	
		f	%	f	%	f	%
Government	Rigid	11	6.71	2	1.22	13	3.96
	Flexible	10	6.10	3	1.83	13	3.96
Semi - Government	Rigid	8	4.88	7	4.27	15	4.57
	Flexible	29	17.68	9	5.49	38	11.59
Private	Rigid	59	35.98	84	51.22	143	43.60
	Flexible	47	28.66	59	35.98	106	32.32
	Total	164	100.00	164	100.00	328	100.00

Type of management institute: Out of the three types of management institutes, where the faculty members worked, 75.92 percent respondents worked in private institutes (Table-17). Of these, 43.60 percent maintained rigid work hours whereas others followed flexible timings. In government and semi-government institutes, the faculty members maintained more flexible work timings. Overall it is commented that private institutes followed corporate work culture with fixed or rigid work schedule.

Table 18

Distribution of respondents by time spent at work

Hours Spent at Work (per day)	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
5 to 6	29	17.68	31	18.90	60	18.29
7 to 8	99	60.37	95	57.93	194	59.15
>8	36	21.95	38	23.17	74	22.56
Total	164	100.00	164	100.00	328	100.00
Mean	7.68		7.45		7.57	
SD	1.59		1.52		1.56	

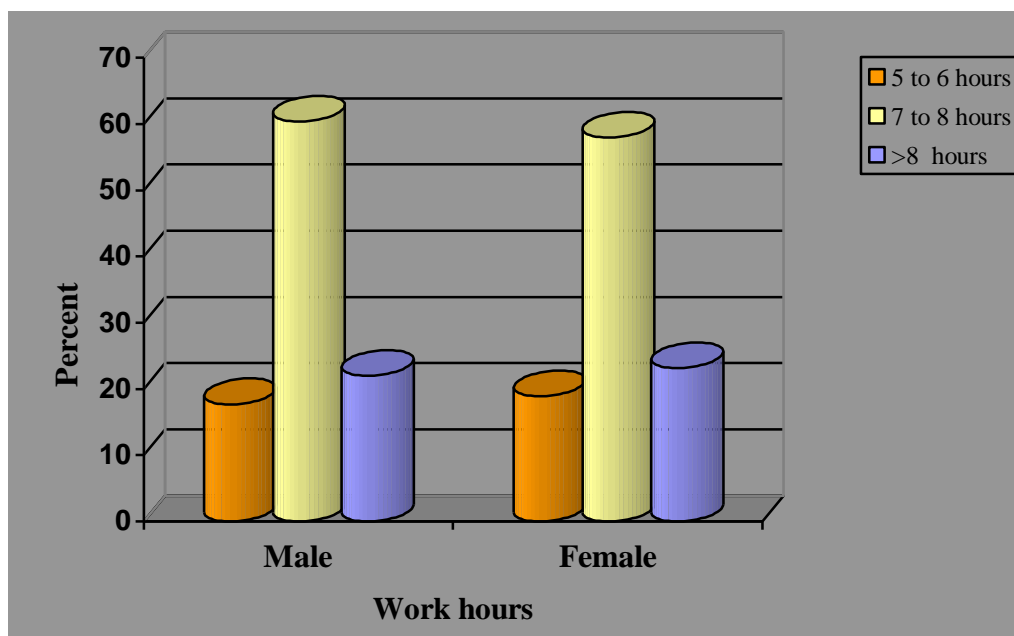


Figure 10

Distribution of respondents by time spent at work

Work time: About 60 percent of the respondents spent 7-8 hrs at the work place (Table-18). Nearly 23 percent spent more than 8 hrs working at the institute. Almost 18 percent chose to work from 1-6 hrs at work. Although there was not much difference in the mean working hours spent at the work place by male and female

respondents, yet the mean time spent at work place by male respondents was slightly more than the female faculty members. The mean time spent at the work place per day was 7.57hrs.

Table 19
Distribution of respondents by travel time

Travel Time (Hrs. per day)	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
< 2	67	40.85	84	51.22	151	46.04
2 to 3	96	58.54	74	45.12	170	51.83
4	1	.61	2	1.22	3	.91
>4	-	-	4	2.44	4	1.22
Total	164	100.00	164	100.00	328	100.00
Mean	7.68		7.45		7.57	
SD	1.59		1.52		1.56	

Travel time: More than 50 percent of the respondents spent more than two to three hours in traveling to and fro to workplace everyday (Table- 19). About 46 percent of the faculty members spent less than two hours everyday on traveling. The mean hours spent on traveling by male and female respondents were almost the same.

Family profile of Respondents

The family profile of respondents consisted of type of family and household, size of family, total family income, contributors to family income, paid help employed to carry out household jobs, spouses education and occupation, number of dependents and their relationship with the respondents.

Table 20
Distribution of respondents by type of family and household

Type of Family and Household	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Joint family staying under one roof	41	25.00	44	26.83	85	25.91
Joint family staying under separate roof (separate kitchen)	2	1.22	8	4.88	10	3.05
Nuclear family staying under one roof	103	62.80	96	58.54	199	60.67
Nuclear family staying under separate roof	12	7.32	13	7.93	25	7.62
Extended family staying under one roof	3	1.83	2	1.22	5	1.52
Single parent family staying under one roof	3	1.83	1	0.61	4	1.22
Total	164	100.00	164	100.00	328	100.00

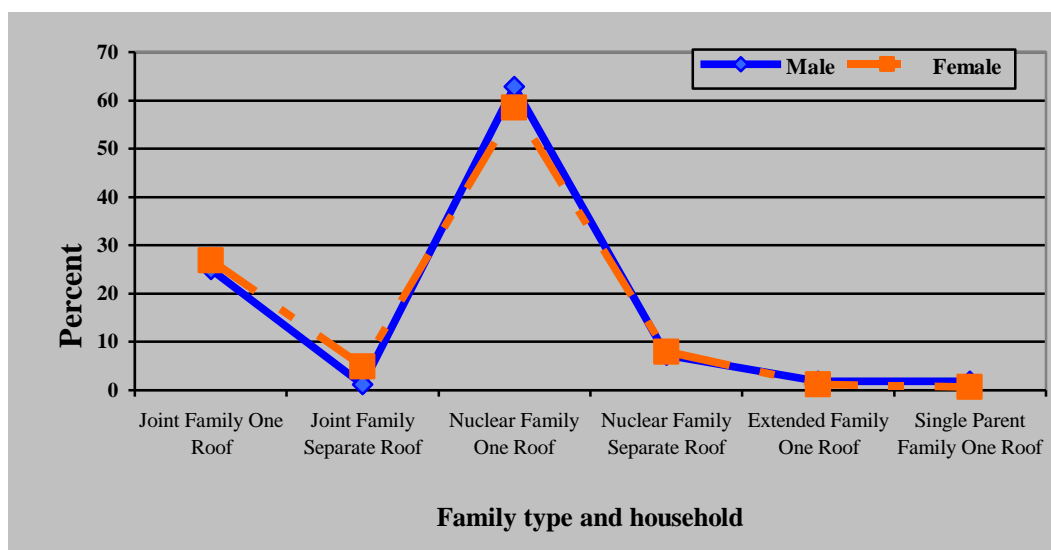


Figure 11
Distribution of respondents by type of family and household

Type of family and household: More than one-half of the respondents i.e. 60.67 percent belonged to nuclear family and were staying under one roof (Table-20). About one-fourth of the respondents stayed under one roof in joint family. Only 7.62 percent of the faculty members who belonged to nuclear family stayed under separate roof. There were very few respondents who although belonged to joint family, stayed under separate roof.

Table 21
Distribution of respondents by size of family

Family Size	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Staying Alone	19	11.59	54	32.93	73	22.26
2-3 members	56	34.15	69	42.07	125	38.11
4 members	30	18.29	12	7.32	42	12.8
5 members	19	11.59	23	14.02	42	12.8
>5 members	40	24.39	6	3.66	46	14
Total	164	100.00	164	100.00	328	100.00
Mean	4.01		2.70		3.35	
SD	2.02		1.59		1.93	

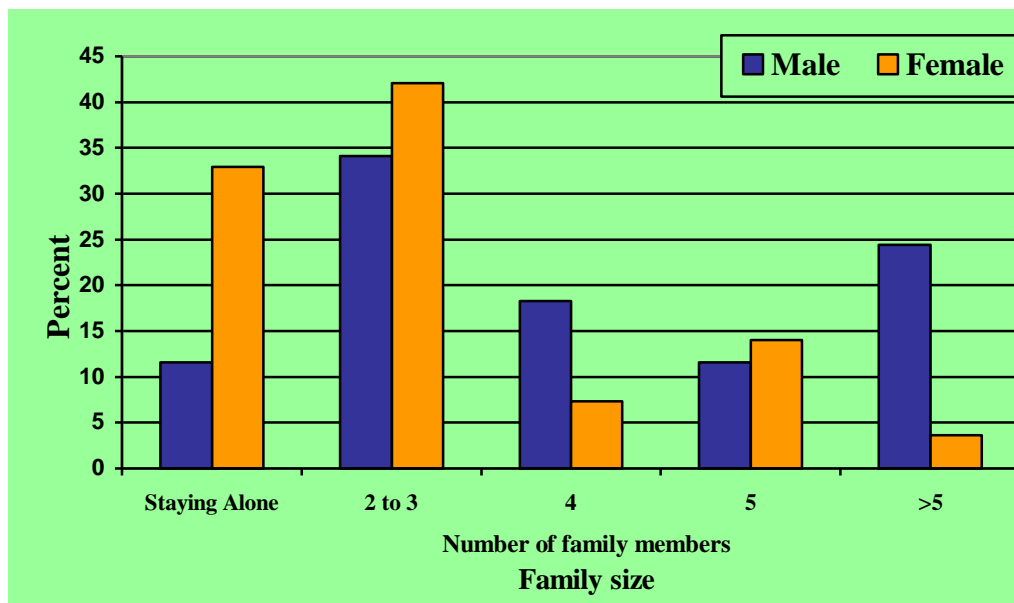


Figure 12
Distribution of respondents by size of family

Family size: More than one-third of the faculty members had small size families with two to three members (Table-21). About 22.26 percent respondents stayed alone either because they were single or were separated from their families. About one-fourth of the respondents had medium size families with four to five members. Only 14 percent of the faculty members had families with more than five members staying with them. The mean size of family in case of male respondents was much bigger than the female respondents.

Table 22
Distribution of respondents by total monthly family income

Total Monthly Family Income (Rs)	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
10000 to 30000	40	24.39	45	27.44	85	25.91
Up to 50,000	38	23.17	26	15.85	64	19.51
Up to 70,000	59	35.98	41	25.00	100	30.49
>70,000	27	16.46	52	31.71	79	24.09
Total	164	100.00	164	100.00	328	100.00
Mean	53,454.27		62,341.46		57,897.87	
SD	34,704.39		54,016.20		45,547.51	

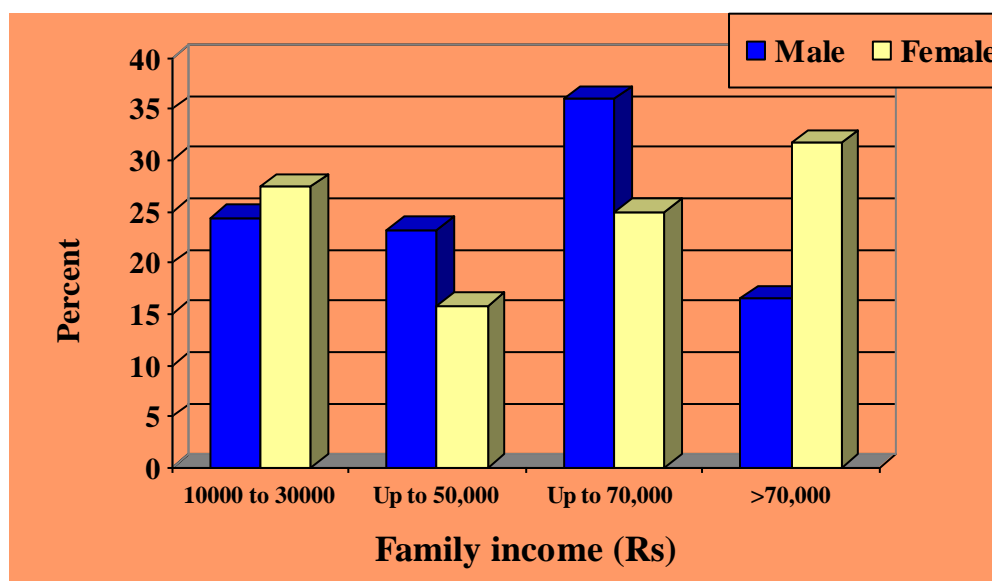


Figure 13
Distribution of respondents by total monthly family income

Family income: The total monthly income of respondents ranged between Rs. 10000 to Rs 70000 or more (Table-22). Mean total income was Rs. 57,897.87. The females had average income more than the male respondents.

Table 23

Distribution of respondents by number of contributors to family income

Contributors to Family Income	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Nil	13	7.93	16	9.76	29	8.84
1 to 2	124	75.61	126	76.83	250	76.22
3 to 5	27	16.46	21	12.80	48	14.63
>5	-	-	1	.61	1	.30
Total	164	100.00	164	100.00	328	100.00
Mean	1.87		2.14		2.00	
SD	0.79		0.68		0.75	

Table 24

Distribution of respondents by employed paid help to carry out household jobs

Employed Paid Help	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Cooking	1	0.61	5	3.05	6	1.83
Cleaning	57	34.76	60	36.59	117	35.67
Childcare	2	1.22	1	0.61	3	0.91
Running Errands	0	0.00	1	0.61	1	0.30
Cooking, Cleaning	42	25.61	39	23.78	81	24.70
Cooking, Childcare	1	0.61	0	0.00	1	0.30
Cleaning & Child Care	1	0.61	9	5.49	10	3.05
Cooking, Running Errands	0	0.00	1	0.61	1	0.30
Cooking, Cleaning, Childcare	13	7.93	13	7.93	26	7.93
Cleaning, Running Errands	1	0.61	2	1.22	3	0.91
No Help	46	28.05	33	20.12	79	24.09
Total	164	100.00	164	100.00	328	100.00

Contributors to family income: About 76 percent of the respondents had only 1 to 2 contributors to their total family income (Table-23). Nearly 15 percent respondents received contribution from 3 to 5 contributors. Only one female respondent had more than five contributors to her family income. About 8.84 percent respondents did not have any contributors. The total mean number of contributors to family income in case of female respondents was more than the male respondents.

Paid help: More than 35 percent of the faculty members had paid help to do their cleaning jobs at home (Table-24). About 24 percent of the faculty members had help for cooking and cleaning jobs.

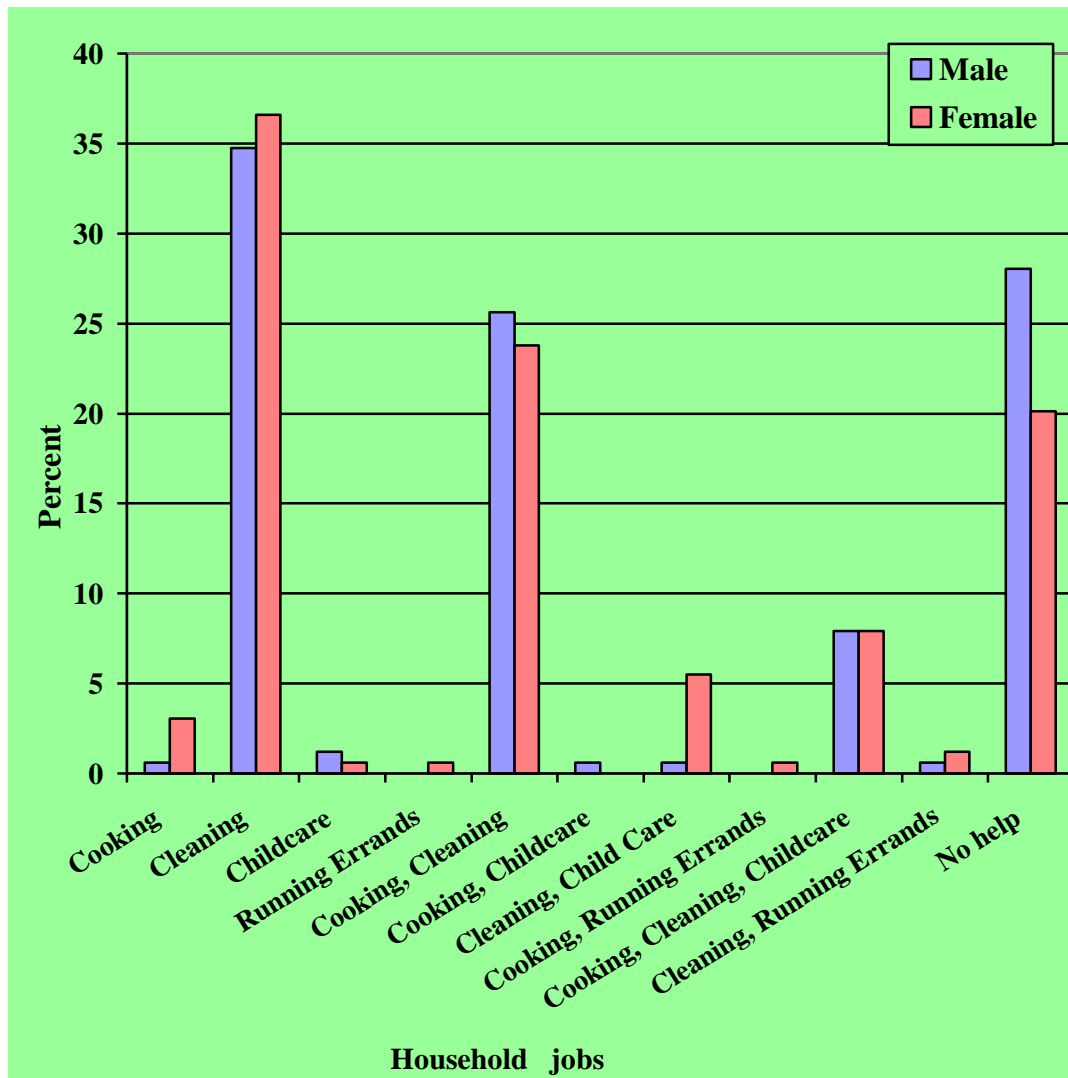


Figure 14

Distribution of respondents by employed paid help to carry out household jobs

A little less than one-fourth of the respondents did not employ paid help at all and carried out all the household jobs by themselves. Very few respondents i.e. about 8 percent had help for cooking, cleaning and child care jobs. Only 3 percent of faculty members employed help for cleaning and child care jobs. About 5 to 6 percent of faculty members employed paid help for childcare and running errands along with cooking and cleaning jobs.

Table 25

Distribution of respondents by spouse's educational qualification

Spouse's Educational Qualification	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Doctoral degree	6	3.66	15	9.15	21	6.40
Post graduate degree	66	40.24	64	39.02	130	39.63
Graduate degree	39	23.78	34	20.73	73	24.95
Diploma	3	1.83	3	1.83	6	1.83
Graduate with diploma / certificate	1	0.61	6	3.66	7	2.13
< Graduate	10	6.10	7	4.27	17	5.18
Post-graduate with diploma / certificate	2	1.22	-	-	2	0.61
Not Applicable (no spouse)	37	22.56	35	21.34	72	21.06
Total	164	100.00	164	100.00	328	100.00

Spouse's qualifications: Almost 40 percent of the respondents had spouses with post-graduate degree (Table-25). About 25 percent spouses held graduate degree, 6.40 percent had doctoral degree and a little over 5 percent were not even graduates. More than two percent were graduates with diploma or certificate and a little less than two percent were only diploma holders. Only two of the female spouses held post graduate degree along with Diploma or Certificate.

Spouse's occupation: A little over 50 percent of the respondents' spouses were employed in service (Table-26). About 16 percent of the spouses were not employed any where. About 22 percent of the spouses of both male and female

respondents were not occupied because either the respondents were not married or separated, divorced or spouses had died. Also some of the spouses were not working.

Table 26
Distribution of respondents by spouse's occupation

Spouse's Occupation	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Employed	68	41.46	99	60.37	167	50.91
Un employed	48	29.26	4	2.44	52	15.85
Social service	1	0.61	-	-	1	0.30
Consultant/ Freelance/ Business/ Self Employed	7	4.27	14	8.54	21	6.40
Any Other	3	1.83	12	7.31	15	4.57
Not applicable (no spouse)	37	22.56	35	21.34	72	21.95
Total	164	100.00	164	100.00	328	100.00

Only 4.57 percent of the spouses were occupied as agents namely, LIC agents, marketing, property agents, and as scientists. Only one spouse was found to be engaged in social service. About 6.40 percent of the spouses were also found to be engaged in consultancy, freelance jobs and their own business.

Table 27
Distribution of respondents by number of dependents

Number of Dependents	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Nil	25	15.24	75	45.73	100	30.49
1-2	92	56.10	69	42.07	161	49.09
3-4	42	25.61	19	11.59	61	18.59
>4	5	3.05	1	0.61	6	1.83
Total	164	100.00	164	100.00	328	100.00
Mean	2.45		2.70		3.89	
SD	0.78		0.62		1.08	

Type of dependent members: In the total sample of 328 respondents, about 50 percent had one to two dependents (Table-27). Almost 30.49 percent respondents had no dependents at all. About 19 percent had three to four dependents and only 1.83 percent respondents had more than four dependents. On an average, there were about four dependents.

Table 28
Distribution of respondents by relationship with dependents

Relationship with Dependents	Male N=164		Female N=164		Total N=328	
	f	%	f	%	f	%
Parent/s	29	17.68	16	9.76	45	13.72
In-law/s	8	4.88	16	9.76	24	7.32
Brother	-	-	1	0.61	1	0.30
Sister	1	0.61	-	-	1	0.30
Children	28	17.07	39	23.78	67	20.43
Uncle	9	5.49	1	0.61	10	3.05
Aunt	2	1.22	9	5.49	11	3.35
Spouse	38	23.17	5	3.05	43	13.11
In-laws &/ Parents &/ Children &/ Siblings	-	-	1	0.61	1	0.30
Other Relatives	24	14.63	1	0.61	25	7.62
No Dependents	25	15.24	75	45.73	100	30.49
Total	164.00	100.00	164	100.00	328	100.00

Relationship with dependents: A little less than one-third of the faculty members had no dependents at all (Table-28). In about 13 percent of respondents each, spouse or parents were dependents. A little over 20 percent respondents had children who were dependents and 7.32 percent of faculty members had in-laws staying with them who were dependents. Also about 7.62 percent respondents had other relatives such as grandparents staying with them as dependents. Very few respondents had uncle and aunts as dependents.

SECTION – II

4.2 ROLE STRESSORS

The findings pertaining to role stressors of the teaching faculty members in relation to the stress experienced by them have been presented in section II. Ten role stressors were studied as family role stressor and work role stressors through the administration of ORS scale (Pareek Udai 1983 C).

Role can be defined as a set of functions which an individual performs in response to the expectations of the significant members of a social system and his own expectations about the position that he occupies in it. In this context the faculty members along with their work, perform roles as expected by their authority of management institutes. In playing these roles, there are bound to be conflicts leading to stress due to various role stressors, namely Inter role distance- IRD, Role stagnation- RS, Role expectation conflict- REC, Role erosion- RE, Role overload- RO, Role isolation- RI, Personal inadequacy- PIN, Self-role distance- SRD, Role ambiguity- RA, Resource inadequacy- RIN which are briefly described as follows.

There are both male and female faculty members teaching at management institutes. The faculty members have to play the organizational role, where a female faculty member plays her familial role as a wife and mother and a male faculty member has to play the role of a husband and father.

The familial demands may be incompatible with the organizational demands leading to stress. Such Inter role distance (IRD) conflicts may be frequent as the faculty members is required to perform multiple roles in group. Role stagnation (RS) is the problem of role growth. A faculty member who is occupied in a specific role for a long time, when enters a new changed role, feels less secure. Outgrowing the previous role and taking charge of the new role produces stress. The teaching professionals may experience stress arising out of Role expectation conflict (REC) stressor due to the conflicting expectations from the boss, subordinates, peers or clients. Role erosion (RE) is likely to be experienced by the faculty members in an organization that is redefining its role and creating new roles.

The feeling that the new roles are less important than the previous ones creates stress of role erosion stressor. Most faculty member role occupants may experience Role overload (RO) as there are too many expectations from authorities within a time frame and deadlines to finish the amount of work during the academic year. This causes stress arising out of role overload stressor. The faculty members may feel that certain roles are psychologically closer to them while others are at a greater distance. The gap between these roles may lead to Role isolation (RI) stress or the teaching faculty members who are assigned new roles without adequate orientation or preparation may suffer from feelings of Personal inadequacy (PIN). This stress may come due to lack of time, knowledge and skills or training.

Self role distance (SRD) stress arises out of the conflict between self concept and role expectations perceived. The faculty members may thus feel stressed. The faculty members may face Role ambiguity (RA) stress due to lack of information available, for teaching activities or due to lack of understanding in relation to activities, responsibilities, priorities, norms or general expectations. Management faculty members may often experience the Resource inadequacy (RIN) stress as the resources such as information, people, material, finance or facilities are not available to them to perform their role effectively.

The findings related to the above ten role stressors are presented in the following tables and text. The respondents had expressed their frequency and percentage of occurrence of stress based on the statements about role stressors (Appendix C, Tables- 46 to 55).

Organisational role stress (ORS) scale consisting of 50 statements was used to measure the ten role stressors. Scoring was done on five statements for each of the ten role stressors where scores ranged between 0-20. A total of 50 statements were scored for ten role stressors and mean and standard deviations were computed for each of the ten role stressors.

Overall, the total mean score on all the ten role stressors = 50.70 (SD = 31.78), in men respondents the mean score = 53.79 (SD = 31.49) and in women respondents the mean score = 47.62 (SD = 31.86) (Table – 29).

Among the ten role stressors, only one role stressor namely, **Inter role distance (IRD)** was the **family role stressor** (Table – 29). The total mean score of respondents on Inter role distance stress = 5.37 (SD = 4.04). No gender difference was found in the mean scores of this role stressor.

The remaining nine role stressors were considered as **work role stressors**. The first role stressor on work role stressors was **Role stagnation (RS)** where the total mean score = 5.37 (SD = 3.99) (Table – 29). In male faculty members the mean score = 5.12 (SD= 3.54) and in female faculty members the mean score = 5.62 (SD = 4.39). This indicated slightly higher stress in women than men faculty members on this role stressor.

Table 29
Mean scores on role stressors of faculty members by gender

Role stressors	Male N=164		Female N=164		Total N=328	
	Mean	SD	Mean	SD	Mean	SD
<u>Family role stressor :</u> Inter role distance (IRD)	5.37	4.08	5.37	4.01	5.37	4.04
<u>Work role stressors:</u>						
Role stagnation (RS)	5.12	3.54	5.62	4.39	5.37	3.99
Role expectation conflict (REC)	4.98	3.58	3.96	3.61	4.47	3.62
Role erosion (RE)	6.33	3.54	6.01	3.65	6.17	3.59
Role overload (RO)	5.35	3.95	4.69	4.00	5.02	3.98
Role isolation (RI)	5.06	3.77	4.80	4.00	4.93	3.88
Personal inadequacy (PIN)	5.21	3.98	4.27	3.61	4.74	3.82
Self-role distance (SRD)	5.63	3.92	4.35	3.78	4.99	3.90
Role ambiguity (RA)	4.80	4.13	3.91	3.98	4.36	4.07
Resource inadequacy (RIN)	5.82	4.09	4.62	4.24	5.22	4.20
Overall work role stressors	53.79	31.49	47.62	31.86	50.70	31.78

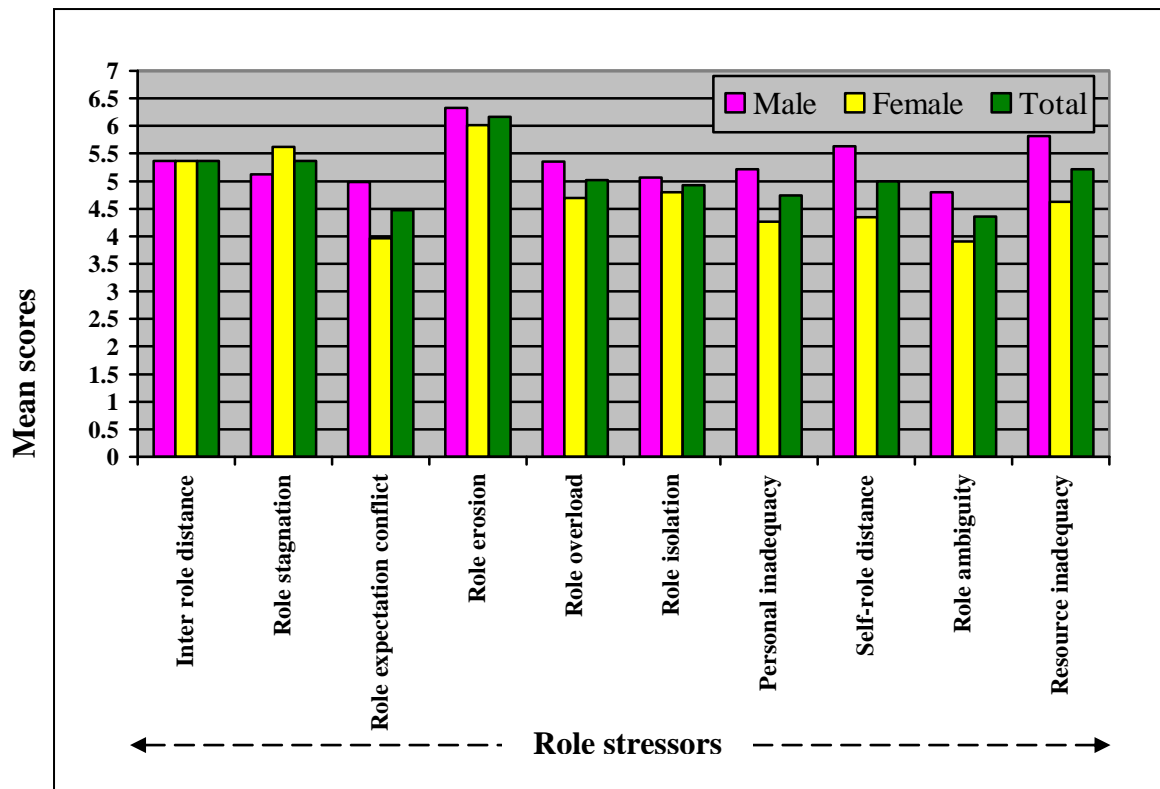


Figure- 15

Mean scores on role stressors of faculty members by gender

On **Role expectation conflict** stressor, the total mean score was 4.47 (SD = 3.62). The mean score for male faculty members = 4.98 (SD = 3.58) was higher than the mean score of female faculty members = 3.96 (SD= 3.61) (Table – 29). The stress on Role expectation conflict stressor may have been more in male faculty members as compared to the female faculty members.

On **Role erosion** stressor, the total mean score was 6.17 (SD= 3.59) (Table – 29). The mean score of male respondents = 6.33 (SD= 3.54) and the mean score of female respondents= 6.01 (SD = 3.65). Male faculty members might be experiencing higher Role erosion stress as compared to females.

For **Role overload**, the total mean score of respondents was 5.02 (SD = 3.98) (Table – 29). The mean score of male faculty members was 5.35 (SD=3.95) and the mean score of female faculty members was 4.69 (SD = 4.00). Male faculty members felt more overloaded with work and hence the stress might be higher in them when compared to the female faculty members.

On **Role isolation** stressor the total mean score of respondents was 4.93 (SD = 3.088) (Table – 29). The mean score of male faculty members was higher than the

female faculty members. In males, the mean score = 5.06 (SD = 3.77) and in females the mean score was 4.80 (SD = 4.00). It can be pointed out that may be the male teaching faculty members experienced more stress arising out of Role isolation than the female faculty members.

On **Personal inadequacy** stressor the mean score was 4.74 (SD= 3.82) (Table – 29). The mean score of female faculty members = 4.27 (SD = 3.61) and the mean score of male faculty members = 5.21 (SD= 3.98). Men respondents seemed to feel more stressed out than the women respondents on this role stressor also as the mean score in men is higher than the women faculty members.

On **Self role distance** stressor the mean score was 4.99 (SD = 3.90) (Table – 29). The mean score of male respondents = 5.63 (SD = 3.92) and the mean score in female respondents = 4.35 (SD = 3.78). As the mean scores of men were higher than women faculty members, once again men may be experiencing more stress than women on this role stressor.

Role ambiguity had the total mean score = 4.36 (SD = 4.07) (Table – 29). In male faculty members the mean score = 4.80 (SD – 4.13) and in female faculty members the mean score was = 3.91 (SD = 3.98). The mean score on role ambiguity is higher in male respondents than in female respondents. This shows that in male respondent group, the ambiguity related to their roles may be more and hence the stress felt was also more as compared to the female respondent group.

On **Resource inadequacy** role stressor, the total mean score = 5.22 (SD = 4.20) (Table – 29). In male faculty members the mean score = 5.82 (SD = 4.09) and in females the mean score = 4.62 (SD = 4.24). The mean score in men faculty members was found to be higher than the women. May be due to lack of resources at work, men faculty members felt stressed out more than the women faculty members.

The extent of role stress was judged in terms of three levels namely low, median and high in male and female faculty members (Table- 30).

Table 30

Extent of stress experienced by respondents on each of the role stressor by gender

Role stressors		Male N=164			Female N=164			Total N=328		
		Low	Median	High	Low	Median	High	Low	Median	High
Family role stressor: Inter role distance (IRD)	f	48	44	72	47	46	71	95	90	143
	%	29.27	26.83	43.90	28.66	28.05	43.29	28.96	27.44	43.60
Work role stressors Role stagnation (RS)	f	47	42	75	44	47	73	91	89	148
	%	28.66	25.61	45.73	26.83	28.66	44.51	27.74	27.13	45.12
Role expectation conflict (REC)	f	55	25	84	72	30	62	127	55	146
	%	33.54	15.24	51.22	43.90	18.29	37.80	38.72	16.77	44.51
Role erosion (RE)	f	105	23	36	113	22	29	218	45	65
	%	64.02	14.02	21.95	68.90	13.41	17.68	66.46	13.72	19.82
Role overload (RO)	f	31	30	103	43	27	94	74	57	197
	%	18.90	18.29	62.80	26.22	16.46	57.32	22.56	17.38	60.06
Role isolation (RI)	f	61	48	55	74	36	54	135	84	109
	%	37.20	29.27	33.54	45.12	22.95	32.93	41.26	25.61	33.23
Personal inadequacy (PIN)	f	55	20	89	63	32	69	118	52	158
	%	33.54	12.20	54.27	38.41	19.51	42.07	35.98	15.85	48.17
Self-role distance (SRD)	f	54	29	81	79	33	52	133	62	133
	%	32.93	17.68	49.39	48.17	20.12	31.71	40.55	18.90	40.55
Role ambiguity (RA)	f	49	26	89	63	30	71	112	56	160
	%	29.88	15.85	54.27	38.41	18.29	43.29	34.15	17.07	48.78
Resource inadequacy (RIN)	f	48	29	87	66	38	60	114	67	147
	%	29.27	17.68	53.05	40.24	23.17	36.59	34.76	20.43	44.82

The following graphs show the difference in the levels of stress experienced by respondents by gender on each of the “Role stressors” based on table 30.

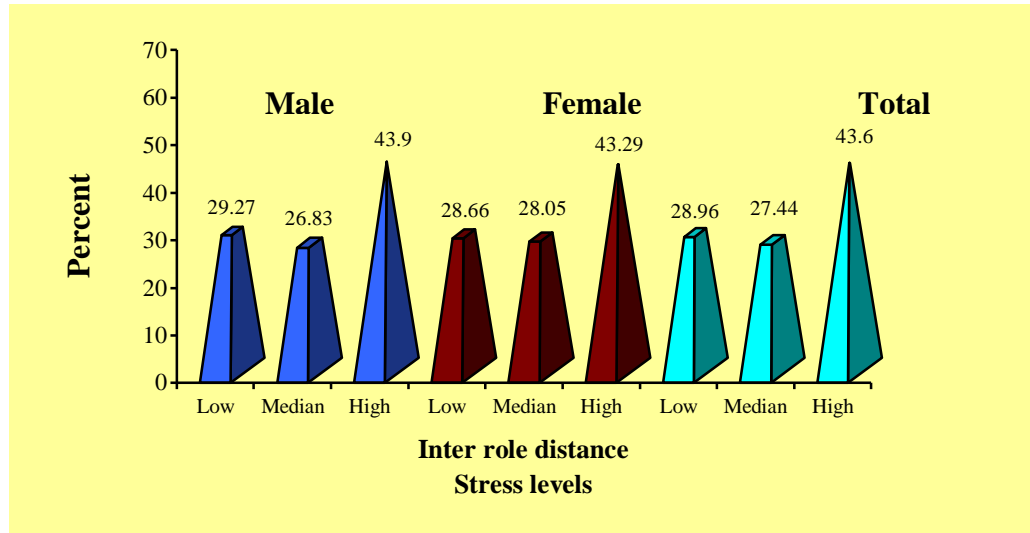


Figure-16

Stress levels in faculty members by gender on work role stressor Inter Role Distance- IRD

Less than 50.0 percent of the faculty members were found to experience ‘high’ stress arising out of **Inter role distance** stressor (Table- 30). Around one-fourth of them felt ‘low’ stress and another one-fourth of them felt ‘median’ stress from this role stressor. Not much of gender differences were visible in the levels of stress on this role stressor. It seems that in this sample of management teaching faculty members the stress arising out of familial demands, roles and conflicts is missing.

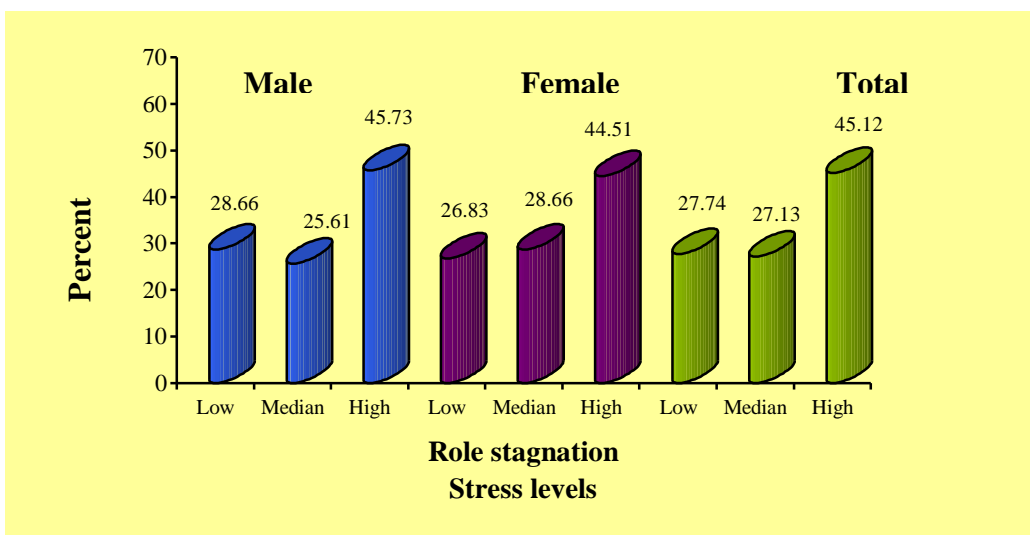


Figure-17

Stress levels in faculty members by gender on work role stressor Role Stagnation- RS

As ‘high’ as 45.12 percent of respondents felt stressed due to **Role stagnation**, a problem of role growth (Table- 30). About one-fourth of the respondents had ‘median’ stress and another one-fourth of them were ‘low’ stressed on this stressor. There were no noticeable differences in the stress levels of male and female respondents.

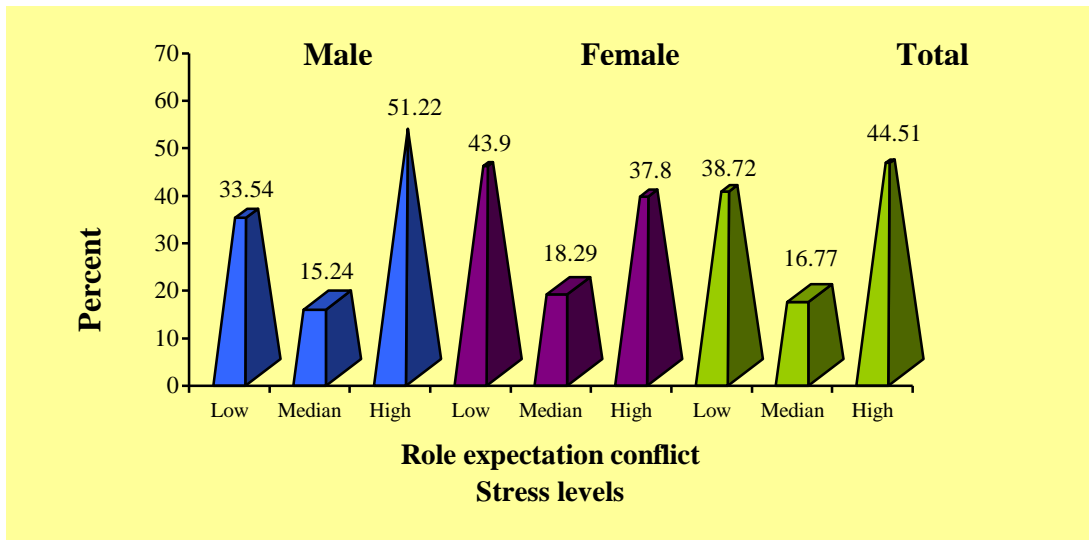


Figure-18

Stress levels in faculty members by gender on work role stressor Role Expectation Conflict- REC

About 44.51 percent of the faculty members received ‘high’ stress arising out of **Role expectation conflicts** (Table- 30). About 17.0 percent of them experienced ‘median’ stress and 39.0 percent of the faculty members felt ‘low’ stress due to this role stressor. Around 13.0 percent more of male respondents than female respondents experienced ‘high’ stress on this role stressor. About 10.0 percent more of women respondents than men received this stress at a ‘low’ level. There was not much of a difference in the ‘median’ stress level received by both the genders. In case of male group, the conflicting expectations may be more from the boss, subordinates, peers or clients responsible for high stress in them as compared with the female group.

As ‘high’ as 66.46 percent of the faculty members experienced ‘low’ stress level on **Role erosion** stressor (Table- 30). About 14 percent of them received ‘median’ stress and the remaining 20 percent of them received ‘high’ stress from this stressor. Between the male and female group of respondents, the male group felt

about 5 percent more stress at ‘high’ level from this work role stressor. Similarly 5 percent more of women faculty members felt the stress arising out of this stressor at ‘low’ level than the men faculty members. **Role erosion** as a stressor appears to generate ‘low’ levels of stress in both male and female faculty members on the whole.

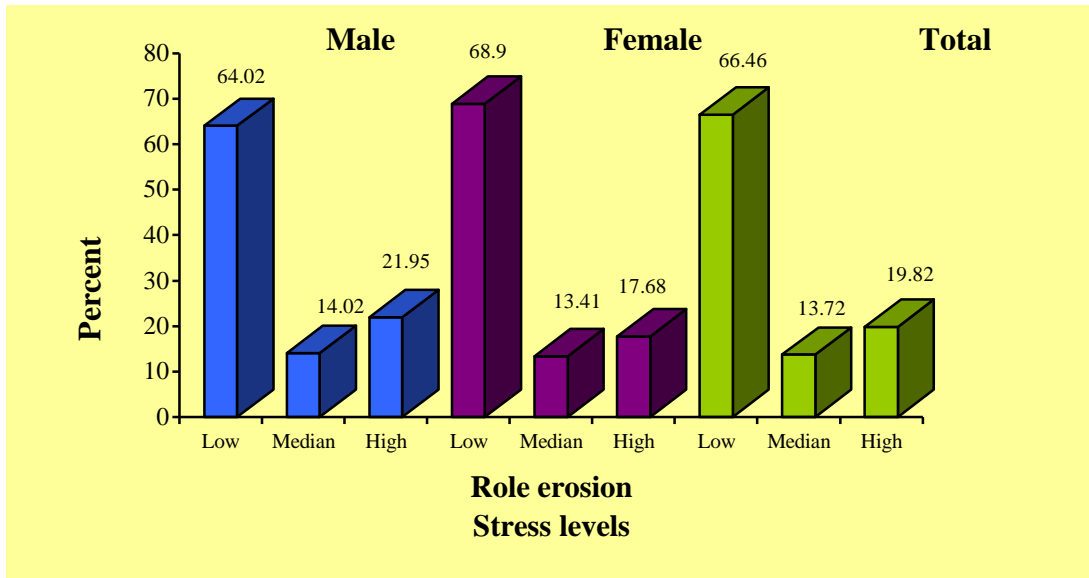


Figure-19

Stress levels in faculty members by gender on work role stressor **Role Erosion-RE**

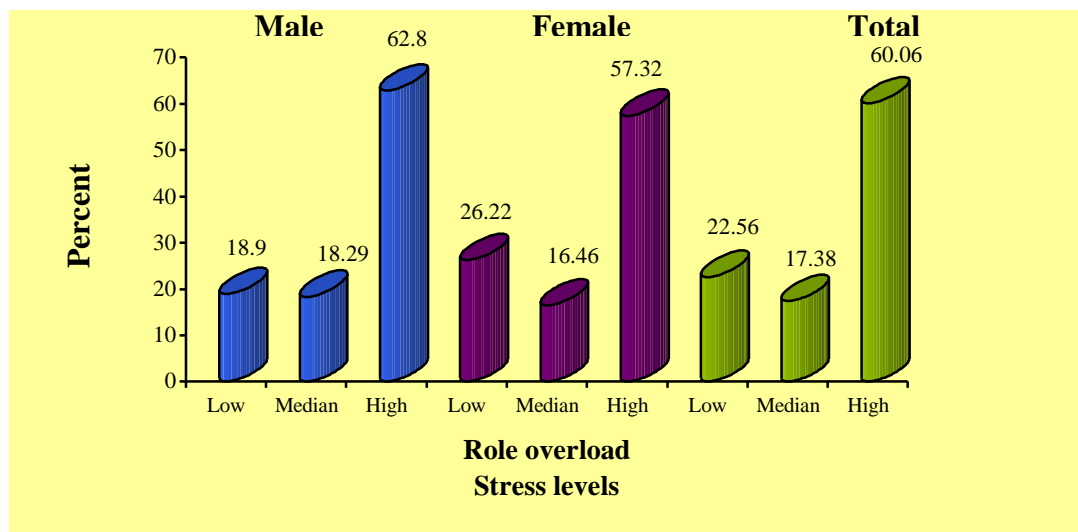


Figure- 20

Stress levels in faculty members by gender on work role stressor **Role Overload-RO**

About 60.06 percent of respondents received ‘high’ levels of stress due to **Role overload** stressor (Table- 30). Out of remaining 40 percent of the faculty members, 17.38 percent experienced median and 22.56 percent felt ‘low’ stress on this stressor. Around 5 to 6 percent more of male than female faculty members were found to receive ‘high’ level of stress from this stressor. The ‘median’ level of stress experienced by both male and female faculty members was almost the same. About 7 percent more of female faculty members than males felt ‘low’ level of stress from this stressor. Its quite likely that more men faculty members felt overloaded at the workplace as they shouldered more academic, administration and job related responsibilities than the women group of faculty members which gave them ‘high’ level of stress.

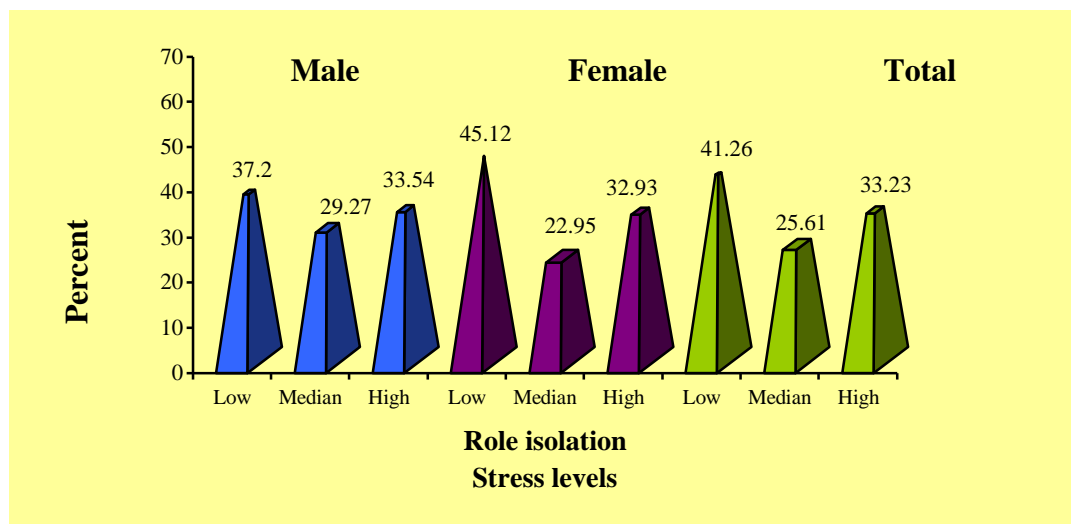


Figure- 21

Stress levels in faculty members by gender on work role stressor Role Isolation-RI

About 41 percent of the faculty members experienced ‘low’ level of stress on **Role isolation** stressor (Table- 30). One-fourth of them received ‘median’ stress and one-third of them felt ‘high’ level of stress on role isolation stressor. No gender difference was found on the ‘high’ level of stress score on this stressor. Although women (8 percent) more than men faculty members experienced ‘low’ stress due to this stressor, similarly about 6 percent more of men than women respondents received stress at ‘median’ level from this stressor. The teaching faculty members at their institutes may have maintained close interaction with superiors and colleagues and

strong linkages with their clients due to which the role isolation was found to be ‘low’ in its overall effect.

Around 50 percent of the respondents experienced ‘high’ level of stress from **Personal inadequacy** stressor (Table- 30). About 16 percent of them had ‘median’ stress and 36 percent of them had ‘low’ stress levels on this stressor. The level of stress arising from personal inadequacy stressor was substantially (12 percent) more ‘high’ in male faculty members than in the female faculty members. On the other hand, women experienced 7 percent more stress at ‘median’ level and around 6 percent more stress at ‘low’ level than men faculty members. It is possible that more men than women at management institutes were given newer challenging roles, were asked to teach subjects in which they had not specialized or did not have the required knowledge, skills or training. This may have led to more stress in them than women on this role stressor.

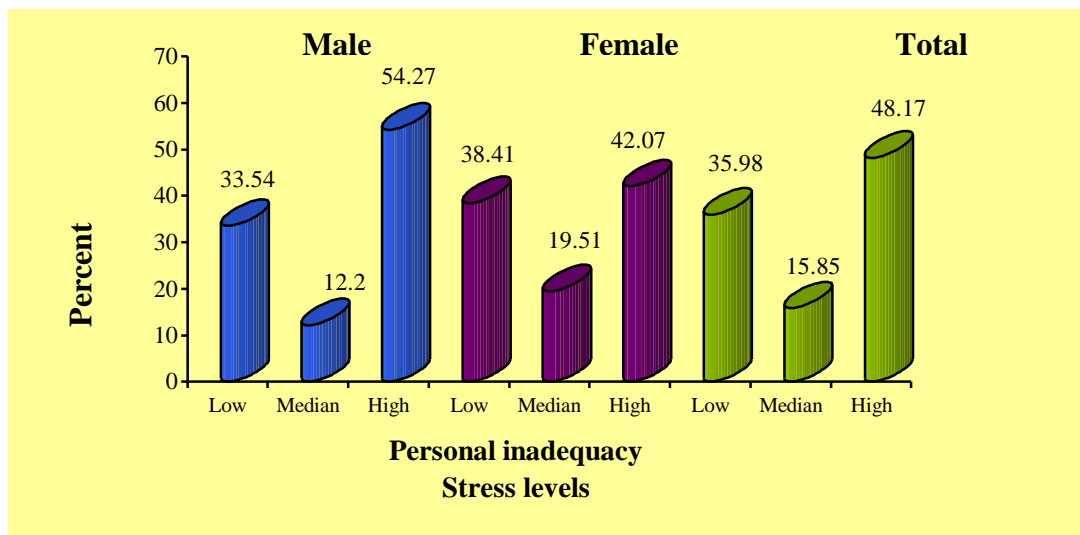


Figure- 22

Stress levels in faculty members by gender on work role stressor Personal Inadequacy- PIN

About 40.5 percent of the respondents experienced ‘high’ stress level and the same percentage experienced ‘low’ level of stress on **Self role distance** stressor (Table- 30). Only 19 percent of the respondents felt ‘median’ level of stress on this stressor.

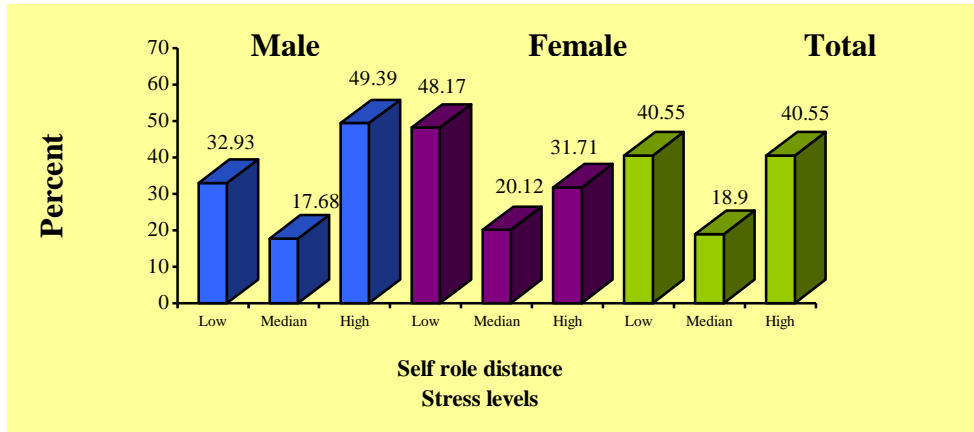


Figure- 23

Stress levels in faculty members by gender on work role stressor Self-Role Distance- SRD

A noticeable difference of 18 percent more was seen in ‘high’ stress level of males than the female faculty members. Similarly a difference of 16 percent more in females than males was seen on ‘low’ stress levels of this stressor. The ‘median’ stress level experienced by both the genders was almost the same. The reason for this stress being ‘high’ in men more than women faculty members may be that conflicts arose between their own concepts and the expectations from the role in which they operated.

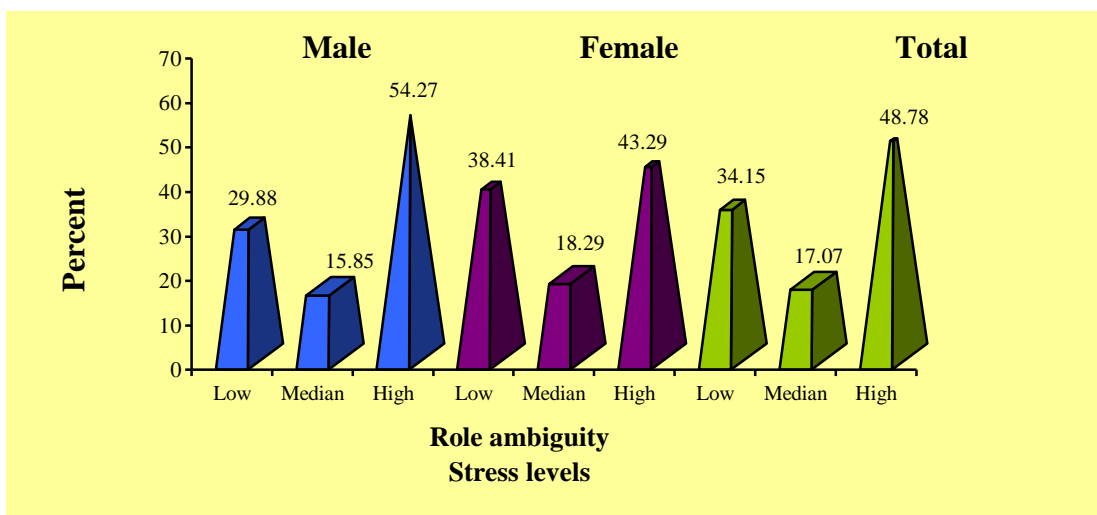


Figure- 24

Stress levels in faculty members by gender on work role stressor Role Ambiguity- RA

About one-half of the respondents felt ‘high’ on **Role ambiguity** stress level (Table- 30). Out of the remaining, 34.15 percent felt ‘low’ level of stress on this stressor and only 17 percent of them experienced ‘median’ level stress on role ambiguity. About 11 percent more of male faculty members than the female faculty members felt ‘high’ stress level and 9 percent more of females as compared to males felt ‘low’ stress level on this stressor. However, no prominent difference was seen in male and female faculty members on ‘median’ stress level on this stressor. The management institutes which are new, undergoing expansion or have not given job descriptions of the various roles in which the faculty members have to operate may be generating this stress.

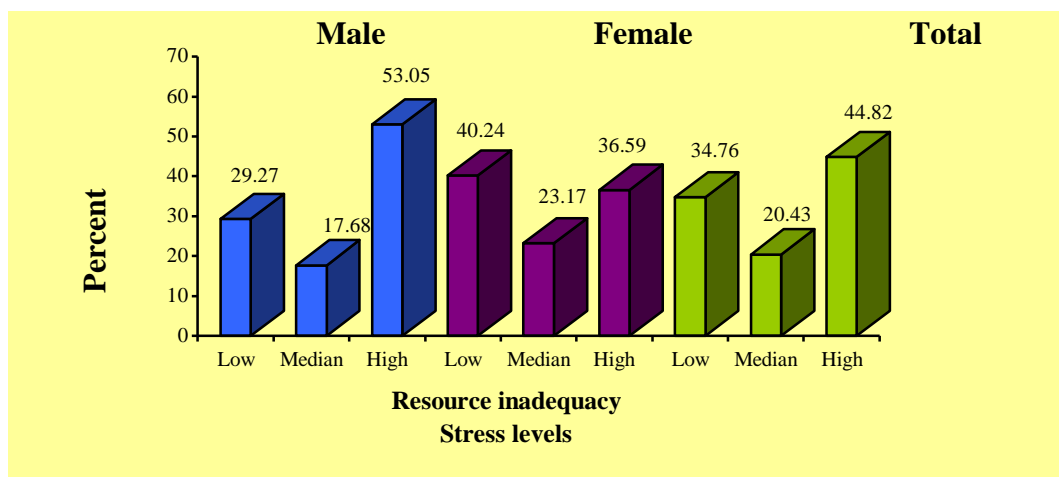


Figure- 25

Stress levels in faculty members by gender on work role stressor Resource Inadequacy- RIN

About 45 percent of the respondents experienced ‘high’ level of stress on **Resource inadequacy** stressor (Table- 30). About 20.43 percent felt ‘median’ stress level and 34.76 percent felt ‘low’ stress level arising herein. About 17 percent more male respondents than females experienced this stress on ‘high’ level. 11 percent more women than men faculty members felt this stress on a ‘low’ level and about 6 percent more females than, male faculty members felt ‘median’ level of stress on this stressor. It seems that the respondents felt inadequately equipped with resources at their work places due to which they found it difficult to perform their roles effectively. This may have led them to ‘high’ levels of this stress. On the other hand, those faculty members who had better facilities and resources may have experienced ‘low’ levels of this stress.

On the whole, it might be said that, on all the work role stressors, men faculty members experienced more stress as compared to the women faculty members. On family role stressor (IRD) although, the stress experienced by both the genders was almost the same.

SECTION – III

4.3 STRESS-EFFECTS

The stress faced by teaching faculty members in performing their jobs is denoted by stress-effects. The stress-effects were differentiated in terms of physiological, psychological and behavioural stress-effects. A stress test scale was used to measure these three stress-effects which consisted of 24 statements. The statements based on various symptoms of stress enabled to differentiate between the three stress-effects. The extent of each effect was measured in high, medium and low levels in faculty members.

The **Physiological stress-effects** included symptoms such as headache, stomach aches or tension in the stomach, backaches, stiffness in the neck and shoulder, increased blood pressure and fatigue (tiredness).

The **Psychological stress-effects** were expressed using symptoms such as crying, forgetfulness, unprovoked shouting, blaming others, bossiness, compulsive chewing, compulsive eating, agitation, anger, gossiping and teeth grinding.

The **Behavioural stress-effects** were identified by including symptoms such as worrying, depression, impatience, frustration, loneliness, powerfulness and inflexibility.

The frequency and percentage of occurrence of stress-effects experienced by respondents were found out based on the symptoms of physiological, psychological and behavioural stress (Appendix C, Tables- 56 to 58).

The mean scores of each of the stress-effects were computed (Table- 31).

The overall mean score on all the three stress-effects for both genders = 45.20 (SD =13.59) (Table-31). For males the overall mean stress score was 43.36 (SD = 13.63) and for females the overall mean stress score was 47.04 (SD = 13.34) The mean values on all the three stress-effects indicate that there is a possibility of women faculty members experiencing more stress on all the three stress-effects than the men faculty members at large.

Table 31

Mean scores of stress-effects in faculty members by gender

Stress-effects	Male N=164		Female N=164		Total N=328	
	Mean	SD	Mean	SD	Mean	SD
Physiological Stress	12.02	3.86	13.11	4.15	12.56	4.04
Psychological stress	17.66	6.33	18.90	6.35	18.28	6.36
Behavioural stress	13.68	5.25	15.02	5.21	14.35	5.26
Overall stress	43.36	13.63	47.04	13.34	45.20	13.59

The analysis of statements showed various ranges of scores. The scoring range was 6 to 30 for six statements on physiological stress-effects. The total mean score in both genders were 12.56 (SD = 4.04) (Table- 31). In male faculty members the mean score = 12.02 (SD = 3.86) and in the female faculty members mean score = 13.11 (SD = 4.15) showed that the mean score was slightly higher in females than in males on physiological stress level. This might indicate that women teaching faculty members experienced more physiological stress-effects than men faculty members.

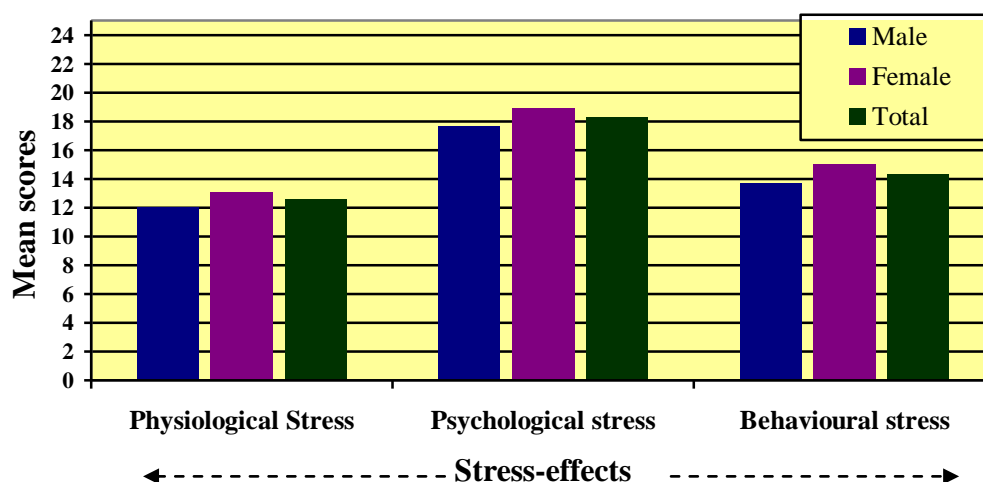


Figure- 26

Mean scores of stress-effects in faculty members by gender

The scoring range for seven statements was 7 to 35 on psychological stress-effects. The total mean score obtained for both the genders = 18.28 (SD = 6.36) (Table-31). In men faculty members the mean score was 17.66 (SD = 6.33) and in women it was 18.90 (SD = 6.35). Once again women faculty members showed higher stress mean score on psychological stress level. This may point out towards female gender experiencing more stress than male in form of psychological stress-effects.

The scores on eleven statements on behavioural stress-effects ranged between 11 to 55. The total mean scores for both the genders = 14.35 (SD = 5.26) (Table-31). The mean score in female faculty members = 15.02 (SD = 5.21) is slightly higher than in the male faculty members i.e. mean score = 13.68 (SD = 5.25). Very little difference in the mean scores of both the genders on this stress level were noticed.

Table 32

Levels of stress-effects experienced by respondents by gender

Stress → levels ↓		Male N=164			Female N=164			Total N=328		
		Low	Medium	High	Low	Medium	High	Low	Medium	High
Physiological stress	f	31	111	22	24	109	31	55	220	53
	%	18.90	67.68	13.41	14.63	66.46	18.90	16.77	67.07	16.16
Psychological stress	f	48	93	23	29	101	34	77	194	57
	%	29.27	56.71	14.02	17.68	61.59	20.73	23.48	59.15	17.38
Behavioural stress	f	32	102	30	18	109	37	50	211	67
	%	19.51	62.20	18.29	10.98	66.46	22.56	15.24	64.33	20.43
Overall stress	f	36	100	28	16	118	30	52	218	58
	%	21.95	60.98	17.07	9.76	71.95	18.29	15.85	66.46	17.68

Levels of overall stress-effects in faculty members by gender: In this context, it may be stated that 66.0 percent of the teaching faculty members on the whole suffered from ‘medium’ level physiological, psychological and behavioural effects of stress (Table-32). Only about 18.0 percent of them suffered from ‘high’ level effects of overall stress and about 16 percent of them had ‘low’ level symptoms of overall stress. On gender comparison, 10 percent more of female respondents (72 percent) than men respondents (61.0 percent) suffered from ‘medium’ level overall stress-effects. About 12.0 percent more of men faculty members than women faculty

members experienced low level effects of overall stress. However, there was not much of gender difference in ‘high’ level effects of (men 17.07 and women 18.29 percent) overall stress experienced by faculty members.

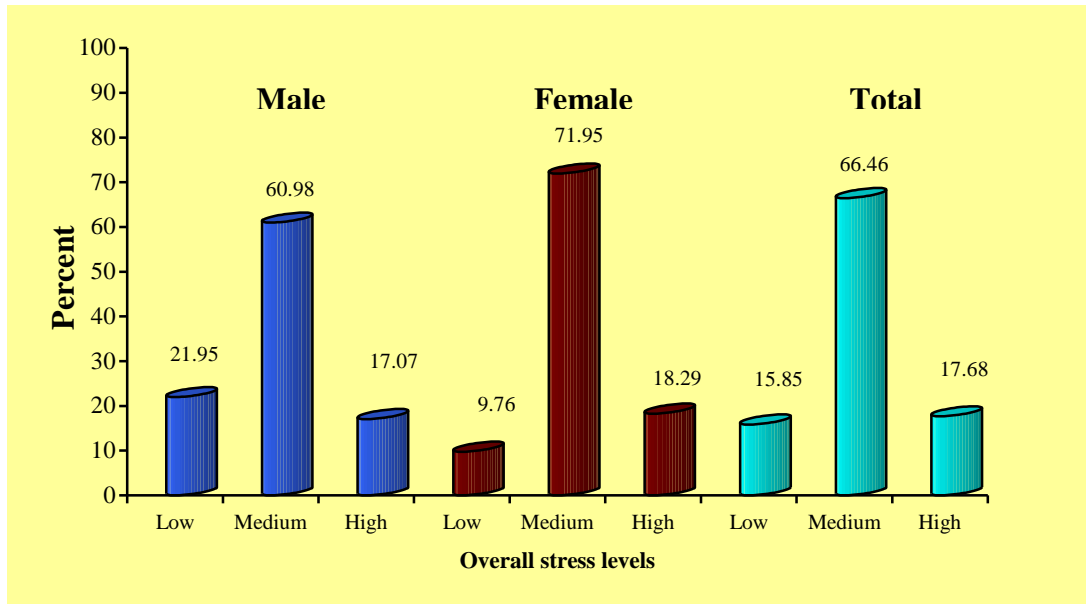


Figure- 27

Levels of overall stress-effects in faculty members by gender

Levels of physiological stress-effects in faculty members by gender: A total of 67.07 percent of respondents were found to experience ‘medium’ effects of **physiological stress** (Table- 32). Out of the remaining 33.0 percent of respondents, one-half of the respondents experienced ‘low’ level effects of physiological stress and the other half felt ‘high’ level effects of the stress.

There were no gender differences in the ‘medium’ level effects of physiological stress experienced by faculty members. The effects of the stress at ‘high’ level were found to be higher in females than male faculty members, although 4.0 percent more of male than female faculty members felt ‘low’ level effects of this stress.

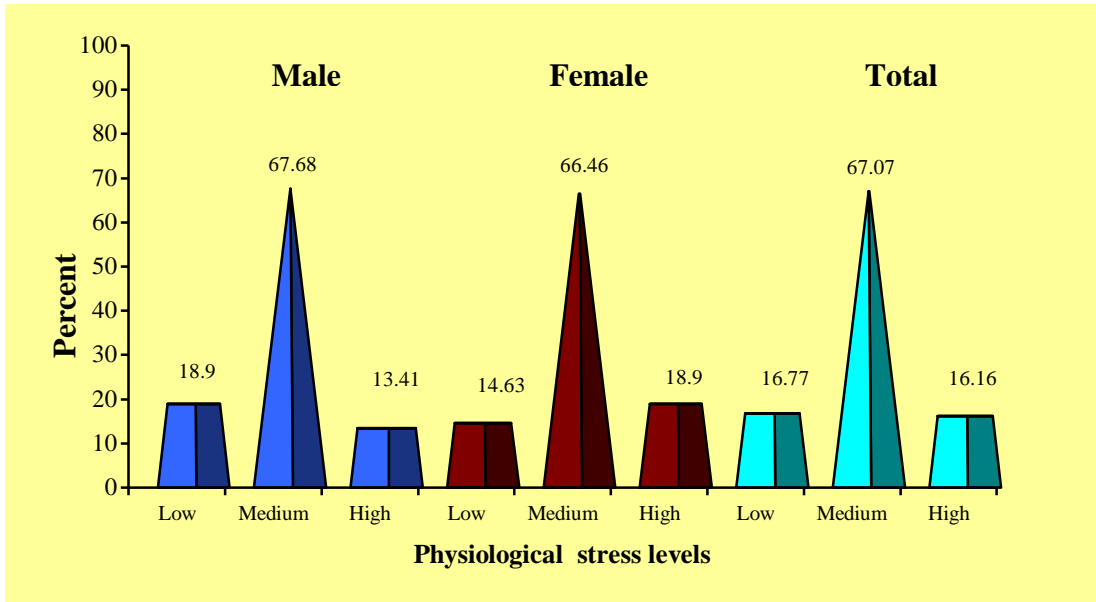


Figure- 28
Levels of physiological stress-effects in faculty members by gender

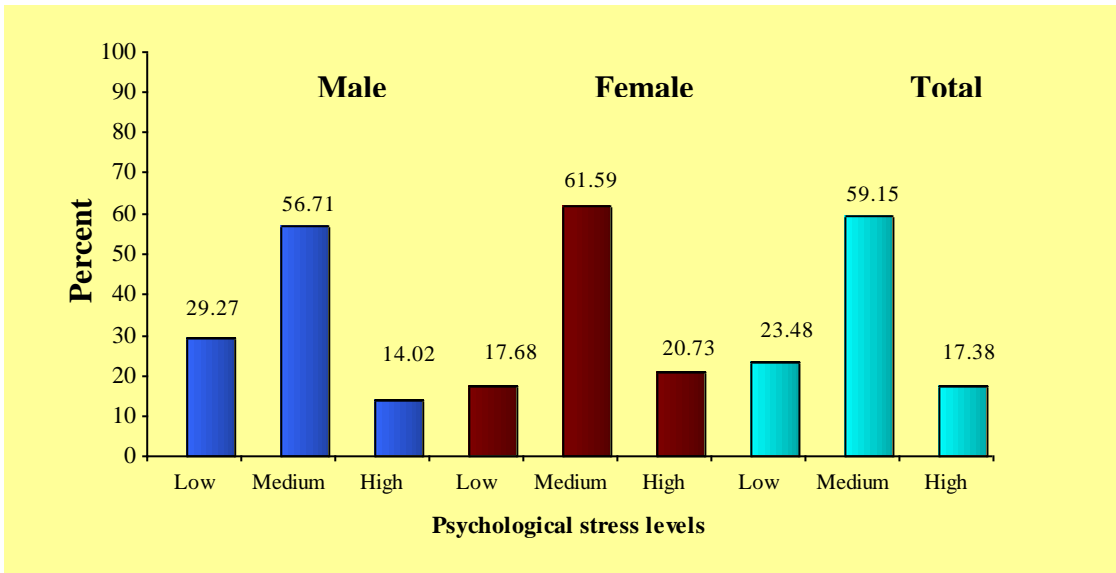


Figure- 29
Levels of psychological stress-effects in faculty members by gender

Levels of psychological stress-effects in faculty members by gender: Only a little more than one-half of the respondents faced the ‘medium’ level consequences of **psychological stress** on them (Table-32). About 23.0 percent of faculty members experienced ‘low’ level and 17.0 percent faculty members felt ‘high’ level of effects

of this stress. Only 5 percent more of women faculty members than men faculty members were found to have ‘medium’ level of psychological stress. On the contrary, 12 percent more of men than the women faculty members were with ‘low’ level of stress. About 6.0 percent more women (20.73 percent) than men (14.02 percent) faculty members felt ‘high’ level of effects of this stress. Hence, it can be said that women were more prone to psychological stress-effects than men.

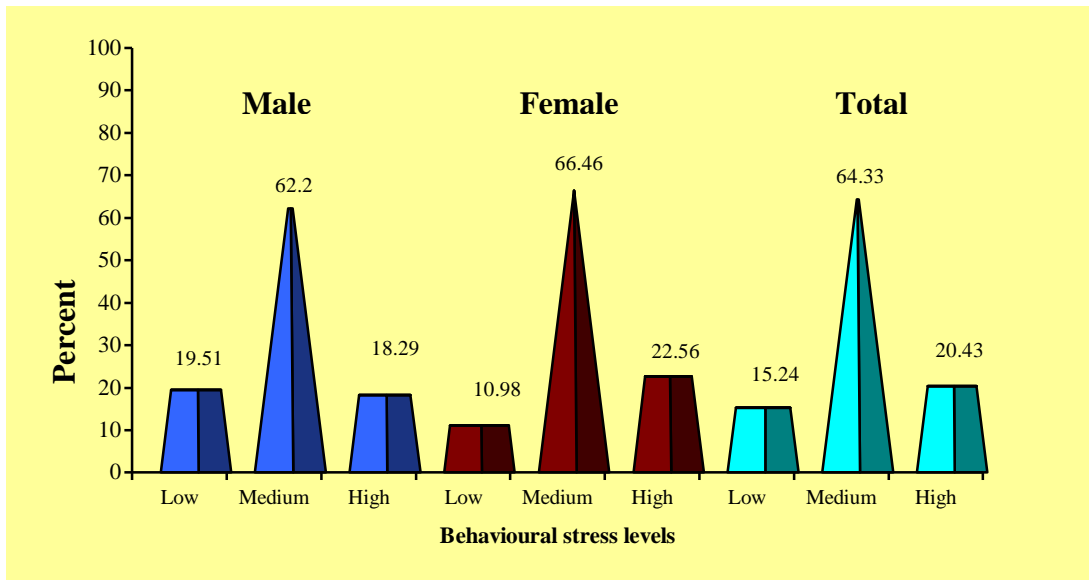


Figure- 30

Levels of behavioural stress-effects in faculty members by gender

Levels of behavioural stress-effects in faculty members by gender:- About two-thirds of the respondents were found to have ‘medium’ level of **behavioural stress-effects** (Table-32). Out of the remaining respondents, about 20.0 percent of them had ‘high’ level and about 15.0 percent had ‘low’ level behavioural stress-effects. On comparison, about 4.0 percent more of women experienced ‘medium’ level symptoms of this stress, while about 9.0 percent more of male faculty members suffered from ‘low’ level symptoms of this stress. Also 4.0 percent more of women respondents felt ‘high’ level behavioural stress-effects. This showed that more women in comparison with men faculty members experienced behavioural stress-effects.

SECTION – IV

4.4 JOB SATISFACTION

Job satisfaction of the respondents was measured by a scale which had 40 statements. These statements were based on four aspects of a job as follows

- i. Work autonomy
- ii. Occupational status
- iii. Work schedule
- iv. Work environment

The extent of job satisfaction was measured by three levels of job satisfaction namely high, moderate and low as suggested in the scale. The frequency and percentage distribution of respondents showing job satisfaction on all the four aspects of job were computed (Appendix C, Tables- 59 to 62).

Means and Standard deviations for the above aspects were computed (Table- 33).

Table 33

Mean scores of job satisfaction in faculty members by gender

Job aspects	Male N=164		Female N=164		Total N=328	
	Mean	SD	Mean	SD	Mean	SD
Work autonomy	37.34	5.21	38.85	5.72	38.09	5.52
Occupational status	47.77	7.25	48.62	8.56	48.20	7.93
Work schedule	42.22	8.38	43.48	8.43	42.85	8.42
Work environment	18.84	3.29	19.48	3.67	19.16	3.49
Overall job satisfaction	146.16	19.23	150.43	22.14	148.30	20.81

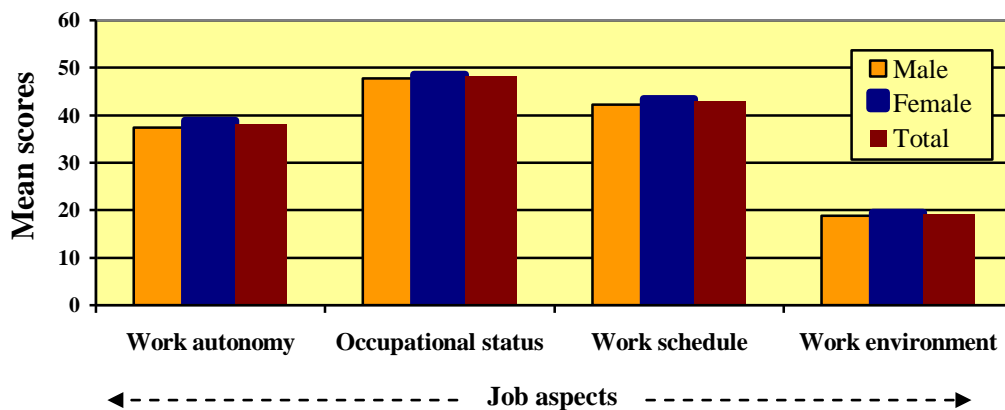


Figure- 31

Mean scores of job satisfaction in faculty members by gender

Job satisfaction in faculty members : The overall total mean score of the respondents on job satisfaction resulting from all four aspects of job was 148.30 (20.81 SD) (Table-33). For males overall mean score on job satisfaction was 146.16 (19.23 SD) and for females it was 150.43 (22.14 SD). There is a difference seen in the overall mean score of both the genders. On the whole, the mean score of women faculty members was higher than the men faculty members. Probably, it indicates that women faculty members as compared to men faculty members at the work place received more satisfaction related to all the aspects of job.

Work autonomy and job satisfaction : The scores ranged between 10 to 50. For total sample the mean score was 38.09 (5.52 SD), for male faculty members mean= 37.34 (5.21 SD) and female faculty members mean = 38.85 (5.72 SD) (Table-33). The mean score of females was found to be slightly higher than males. This indicates that, women faculty members as compared to men were more satisfied in their jobs in relation to work autonomy.

Occupational status and job satisfaction : The scores ranged between 13 to 65. The mean score of total sample of teaching faculty members was 48.20 (7.93 SD) (Table-33). The mean score of women faculty members was found to be slightly higher, mean= 48.62 (8.56 SD) as compared to men, that is mean score = 47.77 (7.25 SD).

Work schedule and job satisfaction : The scores ranged between 12 to 60. The total mean score was 42.85 (8.42 SD) (Table-33). The mean score of female faculty members = 43.48, (8.43 SD) was not much different when compared to the mean score of males that is mean= 42.22 (8.38 SD).

Work environment and job satisfaction : The scores ranged between 5 to 25. The total mean score for the sample was 19.16 (3.49 SD) (Table-33). The female faculty members showed slightly higher mean score of 19.48 (3.67 SD) when compared to the mean score of males that is mean = 18.84 (3.29 SD).

Overall job satisfaction levels: Overall about two-thirds of the respondents (64.6 percent) felt ‘moderately’ satisfied on work environment (Table- 34). Only 13.7 percent felt ‘high’ and 21.6 percent felt ‘low’ levels, respectively of job satisfaction.

As high as 10.0 percent more of women respondents than men felt ‘high’ on overall job satisfaction. A gender difference of only 4 percent was observed on ‘moderate’ level of overall job satisfaction. More of men (25.0 percent) than women

(18.3 percent) respondents felt 'low' overall job satisfaction level. Women faculty members received more overall job satisfaction than men faculty members.

Table 34

The extent of job satisfaction levels in faculty members by gender

Job aspects		Male N=164			Female N=164			Total N=328		
		Low	Moderate	High	Low	Moderate	High	Low	Moderate	High
Work autonomy	f	31	115	18	23	107	34	54	222	52
	%	18.90	70.12	10.98	14.02	65.24	20.73	16.46	67.68	15.85
Occupational status	f	28	119	17	26	106	32	54	225	49
	%	17.07	72.56	10.37	15.85	64.63	19.51	16.46	68.60	14.94
Work schedule	f	33	110	21	25	107	32	58	217	53
	%	20.12	67.07	12.80	15.24	65.24	19.51	17.68	66.16	16.16
Work environment	f	29	116	19	32	95	37	61	211	56
	%	17.68	70.73	11.59	19.51	57.93	22.56	18.60	64.33	17.07
Overall job satisfaction	f	41	109	14	30	103	31	71	212	45
	%	25.00	66.46	8.54	18.29	62.80	18.90	21.65	64.63	13.72

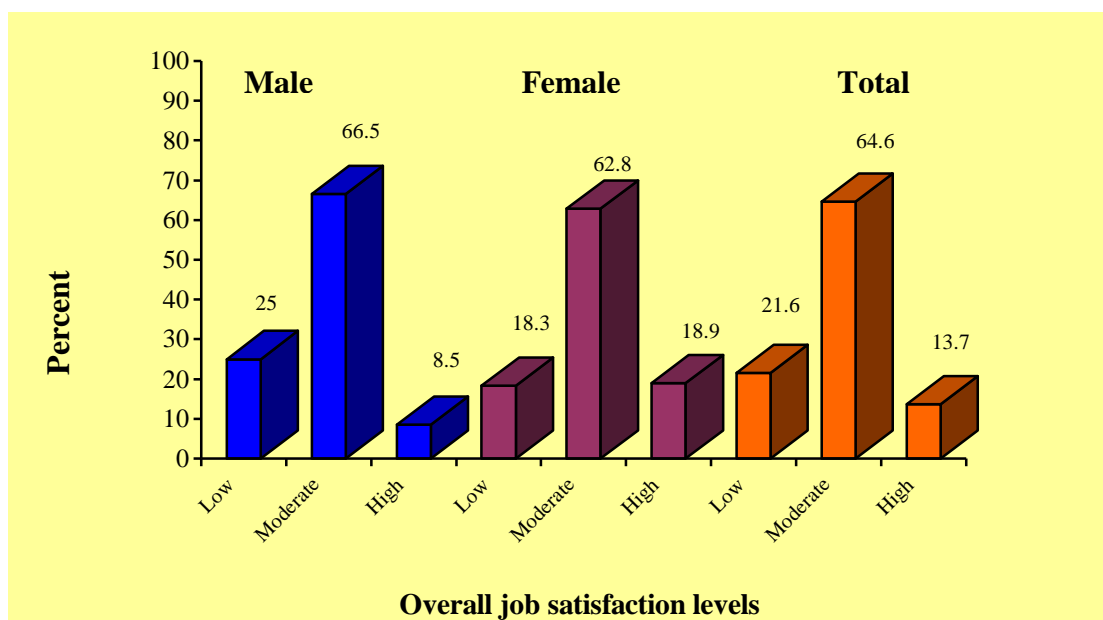


Figure- 32

Overall job satisfaction levels in faculty members by gender

Work autonomy satisfaction levels : About two-thirds of the respondents were ‘moderately satisfied’ because they enjoyed freedom of work autonomy (Table-34). About 15.85 percent of the respondents expressed ‘high’ and 16.46 percent received ‘low’ levels of satisfaction. A higher percentage of female faculty members (20.73 percent) enjoyed autonomy than male faculty members (10.96 percent) leading to job satisfaction.

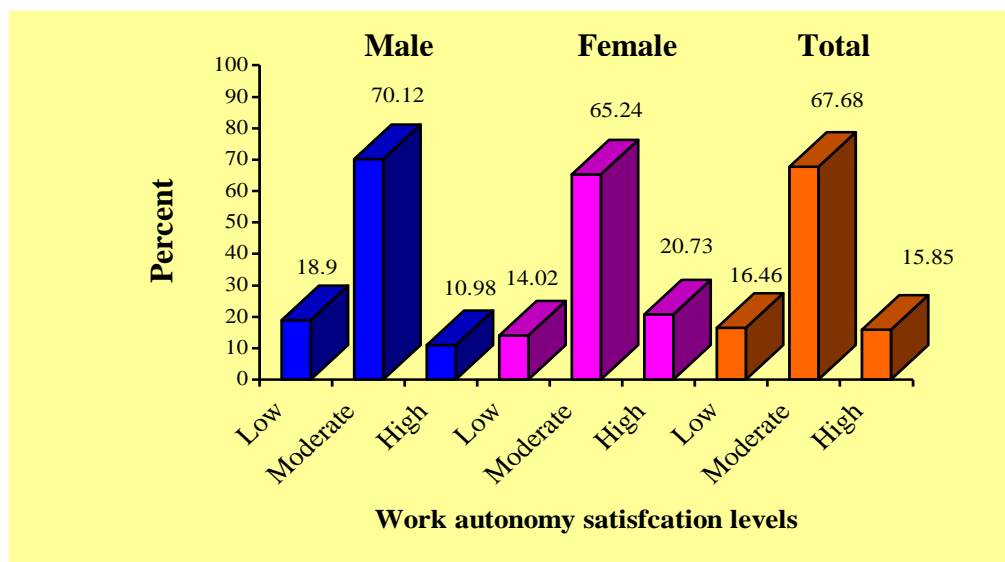


Figure- 33

Job satisfaction levels in faculty members by gender on work autonomy

About 10 percent more of women (20.73 percent) respondents were ‘highly’ satisfied than men (10.98 percent) on this aspect. Similarly 5 percent of male faculty members (65.24 percent) more than female (70.12 percent) faculty members felt ‘moderate’ satisfaction on this job aspect. Similarly 5 percent of male respondents (18.9 percent) more than female (14.02 percent) respondents felt ‘low’ satisfaction on this aspect. It seems that more women than men faculty members enjoyed autonomy at work and hence were more highly satisfied. The men faculty members on the other hand received ‘low’ or ‘moderate’ satisfaction as compared to women faculty members from autonomy at work.

Occupational status satisfaction levels: About 68.6 percent of the respondents showed ‘moderate’ satisfaction level arising from their status at work (Table-34). About 15 percent of the respondents were ‘highly’ satisfied and around 16 percent of them were satisfied on a ‘low’ level. More of women (19.51 percent) than

men (10.37 percent) respondents displayed ‘high’ level of satisfaction where as men (72.56 percent) more than women (64.63 percent) had expressed ‘moderate’ satisfaction level related to occupational status. Men (17.07 percent) more than women (15.85 percent) were ‘low’ on their satisfaction level related to occupational status.

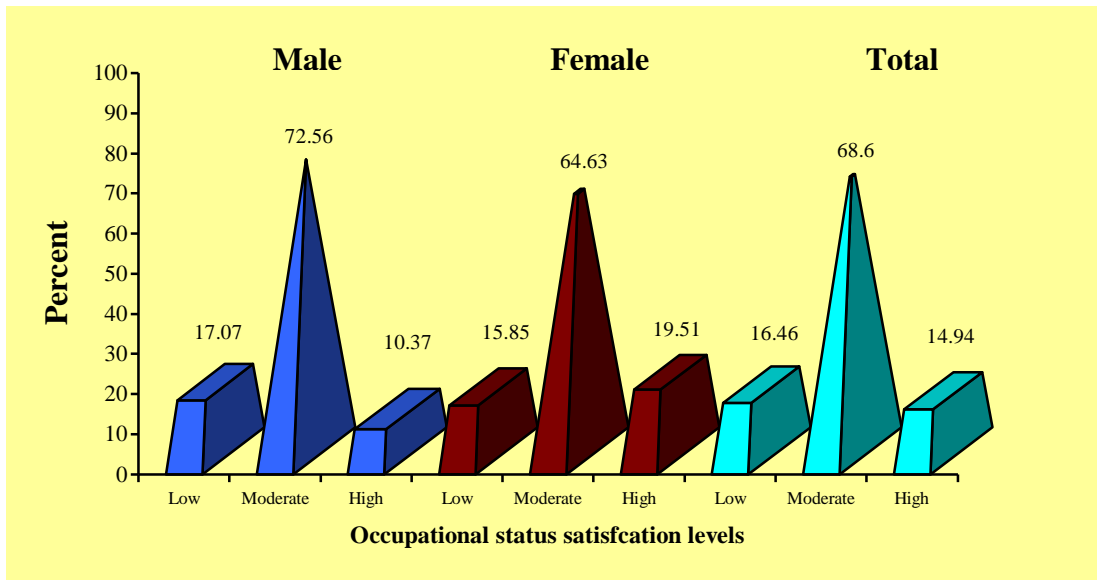


Figure- 34

Job satisfaction levels in faculty members by gender on occupational status

Work schedule satisfaction levels : A total of 66.16 percent respondents felt ‘moderately’ satisfied. 16 percent of respondents were ‘high’ and 17 percent of them were ‘low’ , respectively on their satisfaction level (Table- 34) on this job aspect.

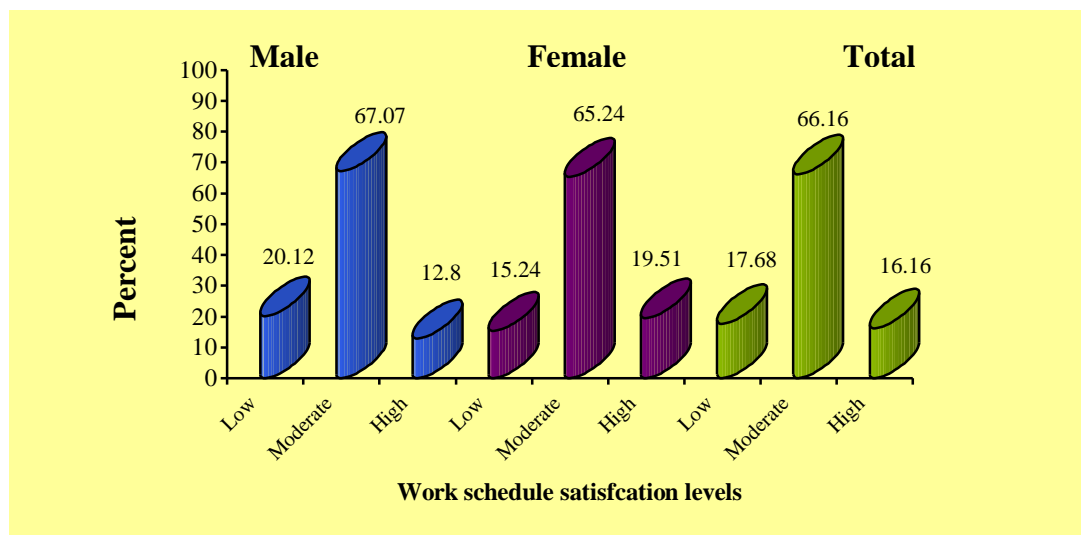


Figure- 35

Job satisfaction levels in faculty members by gender on work schedule

Female faculty members (19.51 percent) more than male faculty members (12.8 percent) were ‘highly’ satisfied with no gender difference on ‘moderate’ satisfaction level. More of men (20.12 percent) than women (15.24 percent) respondents received ‘low’ satisfaction level. Not much of gender difference was found in the satisfaction levels of faculty members on this aspect of job.

Work environment satisfaction levels: About two-thirds of the respondents (64.33 percent) felt ‘moderately’ satisfied on work environment (Table- 34). Only 17.07 percent felt ‘high’ and 18.6 percent felt ‘low’ level of job satisfaction respectively on this aspect.

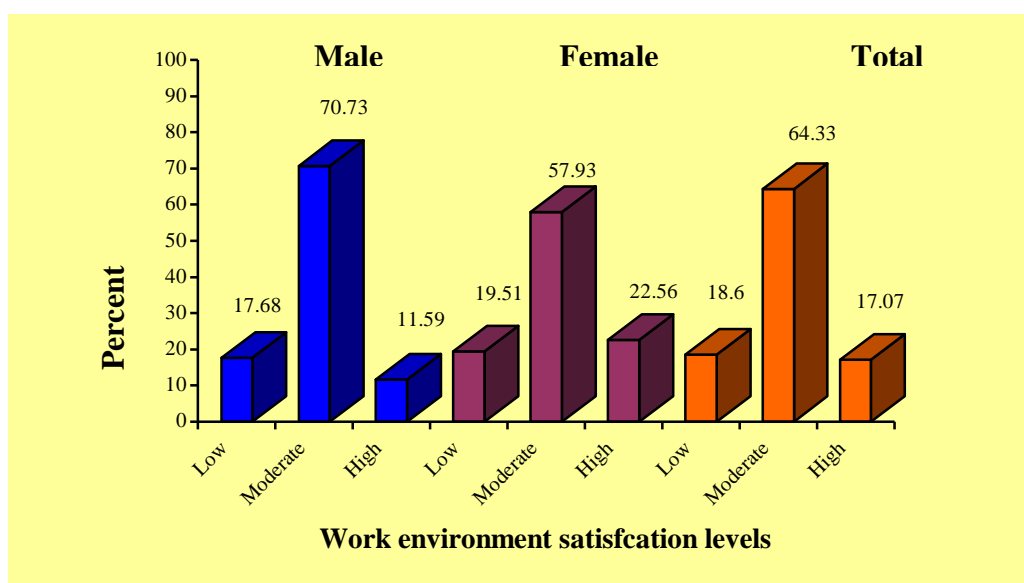


Figure- 36

Job satisfaction levels in faculty members by gender on work environment

As high as 11.0 percent more of women respondents than men felt ‘highly’ satisfied with their work environment and 13.0 percent more male than female respondents felt ‘moderately’ satisfied with their work environment. ‘Low’ level of satisfaction was almost the same in both the genders. It is quite likely that majority of the faculty members from both the genders were satisfied on the whole with their work environment.

SECTION – V

4.5 TESTING THE HYPOTHESES

This section contains observations made in relation to testing of hypotheses. In order to test the hypotheses statistically, null hypotheses were formulated.

Pearsons's product moment correlation coefficient were computed to study the relationship between the selected variables. To compare difference between the groups, 't' test were computed and analysis of variance were carried out among groups on different variables. Wherever significant 'F' values were found, Bonferroni procedure of Post-Hoc comparisons was applied.

The data collected by the measurement scales, namely organizational role stress scale, stress test and job satisfaction scale were analyzed. Acceptance or rejection of hypotheses was done by the comparison of computed values with the critical values for 't' test, 'F' test and correlation coefficient test.

H₀1 The extent of stress-effects experienced by male and female faculty members will not differ.

H₀1_a Male and female faculty members will not differ in the extent of physiological stress-effects experienced by them.

H₀1_b Male and female faculty members will not differ in the extent of psychological stress-effects experienced by them.

H₀1_c Male and female faculty members will not differ in the extent of behavioural stress-effects experienced by them.

The mean scores of male and female faculty members on stress-effects were compared by computing 't' test. The mean scores of faculty members on the overall stress scores showed significant differences ($t = 2.469$, $df 326$, level of significance 0.05) by gender. (Table-35). The mean scores of female faculty members were higher than the male faculty members which showed that women faculty members experienced more stress-effects than the male faculty members.

Findings showed that, there was significant difference in the physiological stress ($t = 2.467$, $df 326$ level of significance 0.05) and behavioural stress ($t = 2.324$, $df 326$, level of significance 0.05) experienced by faculty members but the difference in psychological stress experienced was not significant ($t = 1.776$, $df 326$, NS).

Although physiological and behavioural stress were found to be significant in both male and female faculty members, the psychological stress was not found to be significant at all in both the genders. The null hypothesis was thus *rejected* for physiological and behavioural stress and accepted for psychological stress. It was also *rejected* for the overall stress. Therefore the null hypothesis was *partially accepted*.

Table 35

‘t’ test showing difference in the stress-effects of teaching faculty members by gender.

Stress-effects	Gender	Mean	SD	‘t’ values	df	Level of significance
Physiological Stress	Male N=164	12.02	3.86	2.467	326	0.05
	Female N=164	13.11	4.15			
Psychological stress	Male N=164	17.66	6.33	1.776	326	NS
	Female N=164	18.90	6.35			
Behavioral stress	Male N=164	13.68	5.25	2.324	326	0.05
	Female N=164	15.02	5.21			
Overall stress	Male N=164	43.36	13.63	2.469	326	0.05
	Female N=164	47.04	13.34			

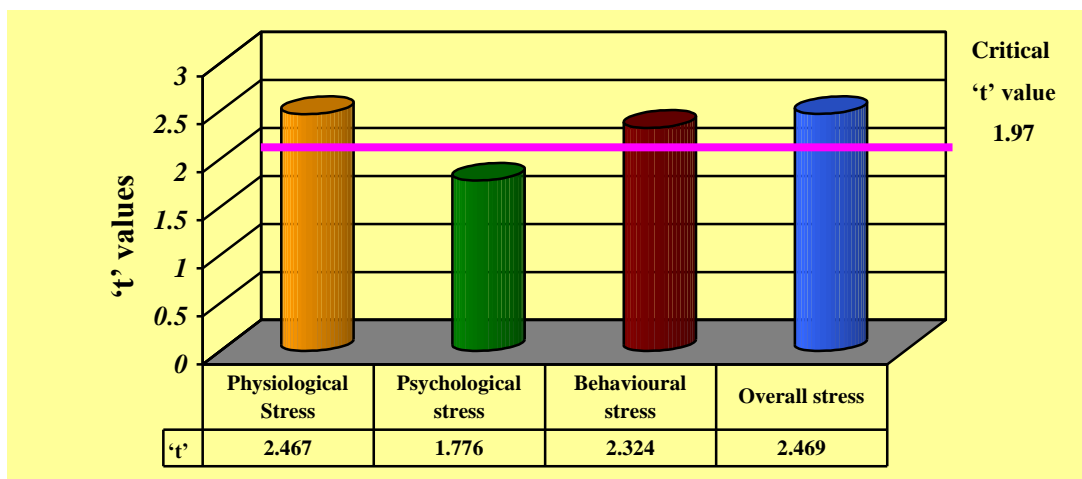


Figure- 37

‘t’ test showing difference in the stress-effects of teaching faculty members by gender

Conclusion: The female faculty members experienced more of physiological, behavioural and overall stress than the male faculty members and the faculty members did not differ in their experience of psychological stress by gender.

H₀2 The span of service duration will not influence the extent of stress-effects experienced by faculty members.

H₀2_a As the number of years of service duration increases, the extent of physiological stress-effects experienced by faculty members will not increase.

H₀2_b As the number of years of service duration increases, the extent of psychological stress-effects experienced by faculty members will not decrease.

H₀2_c As the number of years of service duration increases, the extent of behavioural stress-effects experienced by faculty members will not decrease.

Table- 36

‘r’ values showing the relationship between span of service duration and stress-effects in teaching faculty members

Relationship between duration of service and stress-effects	Correlation coefficient ‘r’	df	Level of significance
Duration of service and physiological stress-effects	-0.045	326	NS
Duration of service and psychological stress-effects	-0.010	326	NS
Duration of service and behavioral stress-effects	-0.079	326	NS
Duration of service and overall stress-effects	-0.049	326	NS

The span of service duration was assessed in relation to its influence on the overall and each of physiological, psychological and behavioural stress-effects by computing correlations between duration of service and the three stress-effects as explained below.

Physiological Stress: There was a negative correlation between physiological stress and duration of service and ‘r’ value was not found to be significant ($r = - 0.045$, df 326, NS). It indicated that as the number of years of service increased, it did not necessarily increase the physiological stress experience by the faculty members but it decreased (Table 36). Thus the null hypothesis was *rejected*.

Psychological Stress: The psychological stress and duration of service also showed that the 'r' value was negative and not significant ($r = -0.010$, $df = 326$, NS). It implied that even with the increase in the number of years of service, the psychological stress perceived by the respondents did not increase, it decreased (Table 36). Hence the null hypothesis was *not accepted*.

Behavioural Stress: The computed 'r' values revealed a negative correlation between the behavioural stress and number of years of service. The 'r' value was not significant ($r = -0.079$, $df = 326$, NS). It showed that with the increase in the number of years of service, the behavioural stress experienced by the faculty members decreased and the stress felt was low (Table 36). Thus the null hypothesis was *not accepted*.

Overall Stress: A negative correlation value was found between the overall stress score of respondents and duration of their service. The 'r' value was low and not significant ($r = -0.049$, $df = 326$, NS) (Table -36). As service duration increased the overall stress in faculty members decreased. Since all the 'r' values were not found to be significant, the main null hypothesis H_02 was *rejected*.

Conclusion: It is concluded that the span of service duration does not have much influence on the extent of stress-effects experienced by faculty members.

H₀₃ The extent of stress-effects felt by faculty members will not differ by antecedent factors: personal factors, family factors and situational factors.

H_{03a} There will be no difference in the felt stress-effects of faculty members by personal factors

- i) Age
- ii) Health Status

H_{03b} There will be no difference in the felt stress-effects of faculty members by family factors

- i) Family type
- ii) Family size
- iii) Paid help

H_{03c} There will be no difference in the felt stress-effects of faculty members by situational factor

- i) Hours of work

Table- 37

‘F’ values showing difference in the extent of stress-effects of teaching faculty members by personal factors.

<u>Personal factors</u>		Sum of Squares	df	Mean Square	F ratio	Level of significance
Age	Between Groups	635.851	2	317.926	1.729	NS
	Within Groups	59776.268	326	183.927		
Health Status	Between Groups	568.747	2	284.374	1.544	NS
	Within Groups	59843.371	326	184.133		

Analysis of variance test results showed that there was no significant difference in the mean scores of respondents on their extent of stress-effects by any of the two selected personal factors namely age and health status (Table- 37). The ‘F’ value for age was ($F = 1.729$, $df 2$, NS) and for health status the ‘F’ value was ($F = 1.544$, $df 2$, NS).

Table- 38

‘F’ values showing difference in the extent of stress-effects of teaching faculty members by family factors.

<u>Family factors</u>		Sum of Squares	df	Mean Square	F ratio	Level of significance
Family Type	Between Groups	816.937	2	408.469	2.228	NS
	Within Groups	59595.182	326	183.370		
Family Size	Between Groups	708.342	2	354.171	1.928	NS
	Within Groups	59703.777	326	183.704		

The result of ANOVA test (Table- 38) revealed that there were no significant difference in the mean scores of the extent of stress-effects of teaching faculty members by the family factors such as family type. ($F = 2.228$, $df 2$, NS) and family size ($F = 1.928$, $df 2$, NS)

Table- 39

‘t’ values showing difference in the extent of stress-effects in teaching faculty members by family factor

<u>Family factor</u>	N	Mean	SD	t	df	Level of significance
Paid help	249	41.28	13.48	2.902	326	0.01
No paid help	79	46.38	13.43			

When the respondents were compared by the family factor namely, “paid help”, the 't' test revealed significant difference in the mean scores of respondents in experiencing stress-effects with respect to paid help employed or not employed (Table- 39). The t value was $t= 2.902$ (df 326, 0.01 level).

The mean score of teaching faculty members with no paid help was higher than the faculty members with paid help (Table- 39). It implied that the teaching faculty members who did not employ paid help at home, experienced the stress-effects more than the faculty members who employed paid help at home and thus were less stressed.

Table- 40

‘F’ values showing difference in the extent of stress-effects of teaching faculty members by situational factor

<u>Situational factor</u>		Sum of Squares	df	Mean Square	F ratio	Level of significance
Hours of work	Between Groups	933.913	2	466.956	2.552	NS
	Within Groups	59478.206	326	183.010		

The analysis of variance test results showed no significant difference in the extent of stress-effects of teaching faculty members by the only situational factor namely hours of work (Table- 40).

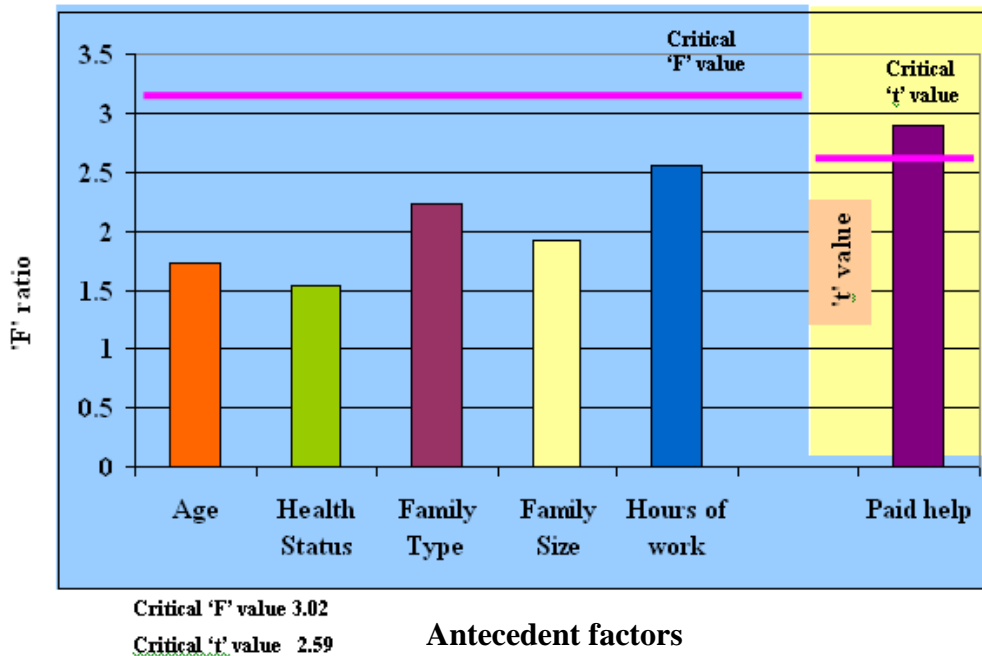


Figure 38

'F' values and 't' values showing difference in the extent of stress-effects of teaching faculty members by personal, family and situational factors

The computed 'F' value was ($F = 2.552$, $df 2$, NS). These findings indicated that the hours of work did not make a difference in the extent of stress-effects experienced by the teaching faculty members. The null hypothesis was *rejected* for paid help and accepted for age, health status, family type and family size and hours of work. Therefore the null hypothesis was *partially accepted*.

Conclusion: It was concluded that the 'paid help' employed had an impact on the extent of stress-effects experienced by faculty members. Other antecedent factors such as age, health status, family type, family size and hours of work at the workplace did not influence the stress-effects in teaching faculty members at all.

H₀4 The extent of job satisfaction among faculty members will not be influenced by the type of role stressors.

H₀4_a The extent of job satisfaction among faculty members will not be influenced by family role stressor.

H₀4_b The extent of job satisfaction among faculty members will not be influenced by work role stressors.

The extent of job satisfaction was measured on the basis of three levels namely, high, moderate and low. Hence, 'F' test was applied to see the difference in the satisfaction level for each of the role stressors. Analysis of variance revealed significant differences at 0.01 level in the mean score on the extent of job satisfaction of teaching faculty members caused by role stressors (Table 41). The 'F' value ($F = 4.147$, $df 2$, 0.01 level) was also found to be significant for the overall effect of all the ten role stressors on the job satisfaction of the faculty members.

The Family role stressor namely inter role distance (IRD) caused a significant difference in the extent of job satisfaction of teaching faculty members as $F = 17.233$ ($df 2$, 0.01 level) and was found to be significant. The 'F' values on all the remaining nine work role stressors and job satisfaction were as follows

Role stagnation ($F = 36.395$, $df 2$, 0.01 level), Role expectation conflict ($F = 35.967$, $df 2$, 0.01 level), Role erosion ($F = 8.808$, $df 2$, 0.01 level), Role overload ($F = 26.708$, $df 2$, 0.01 level), Role isolation ($F = 23.931$, $df 2$, 0.01 level), Personal inadequacy ($F = 21.512$, $df 2$, 0.01 level), Self role distance ($F = 28.591$, $df 2$, 0.01 level), Role ambiguity ($F = 44.425$, $df 2$, 0.01 level), Resource inadequacy ($F = 39.793$, $df 2$, 0.01 level) and all were significant. All the 'F' values were significant on all the ten role stressors. Amongst all the ten role stressors, the 'F' value for Role ambiguity stressor was found to be the highest. It implied that Role ambiguity exerted maximum influence on the extent of job satisfaction in teaching faculty members. Therefore, the null hypothesis was *rejected*.

Table- 41

‘F’ values showing difference in the extent of job satisfaction of teaching faculty members by role stressors

Role stressors		Sum of Squares	df	Mean Square	F ratio	Level of significance
Family role stressor: Inter role distance (IRD)	Between Groups	13583.439	2	6791.720	17.233	0.01
	Within Groups	128082.875	326	394.101		
Work role stressors:						
Role stagnation (RS)	Between Groups	25923.060	2	12961.530	36.395	0.01
	Within Groups	115743.254	326	356.133		
Role expectation conflict (REC)	Between Groups	25673.318	2	12836.659	35.967	0.01
	Within Groups	115992.996	326	356.902		
Role erosion(RE)	Between Groups	7284.161	2	3642.080	8.808	0.01
	Within Groups	134382.153	326	413.484		
Role overload (RO)	Between Groups	19997.469	2	9998.734	26.708	0.01
	Within Groups	121668.845	326	374.366		
Role isolation (RI)	Between Groups	18184.752	2	9092.376	23.931	0.01
	Within Groups	123481.562	326	379.943		
Personal inadequacy (PIN)	Between Groups	16561.710	2	8280.855	21.512	0.01
	Within Groups	125104.604	326	384.937		
Self-role distance (SRD)	Between Groups	21195.790	2	10597.895	28.591	0.01
	Within Groups	120470.524	326	370.679		
Role ambiguity (RA)	Between Groups	30414.553	2	15207.277	44.425	0.01
	Within Groups	111251.761	326	342.313		
Resource inadequacy (RIN)	Between Groups	27866.943	2	13933.472	39.793	0.01
	Within Groups	113799.371	326	350.152		
All work role stressors	Between Groups	4133.415	2	4133.415	4.147	0.01
	Within Groups	324901.850	326	996.631		

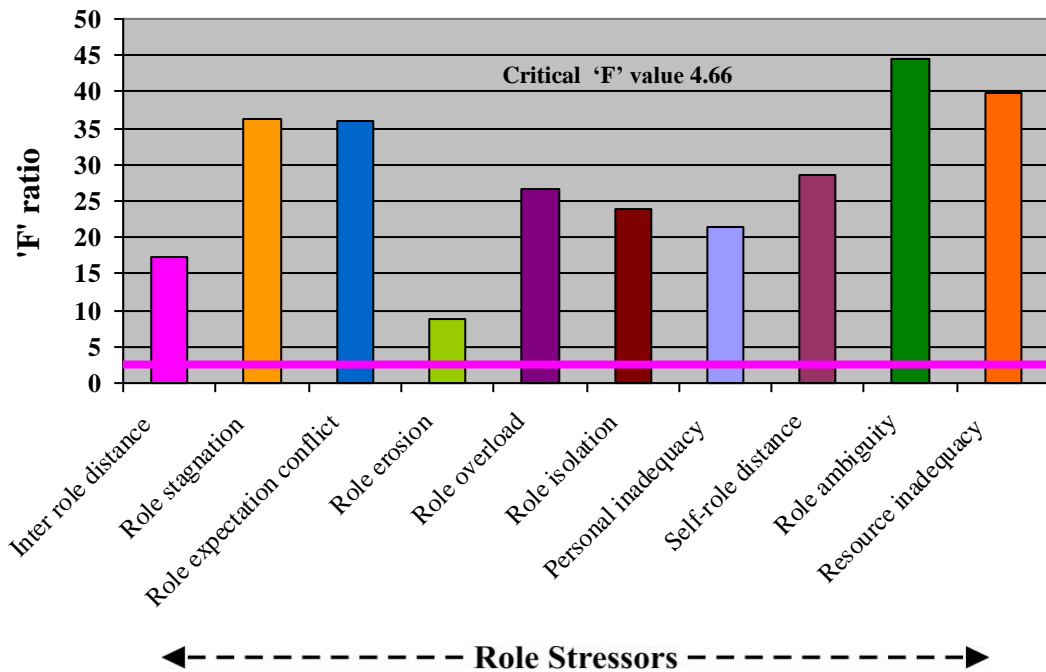


Figure- 39

'F' values showing difference in the extent of job satisfaction of teaching faculty members by role stressors

Conclusion: It was concluded that the extent of job satisfaction among faculty members was influenced by both family role stressor and work role stressors. Role ambiguity was the most influential stressor with reference to job satisfaction among faculty members.

H₀ 5 There will be no association between the extent of stress-effects felt by faculty members and the job satisfaction derived on each aspect of job..

H₀ 5_a The extent of stress-effects experienced by faculty members will not be associated with satisfaction from each of the job aspects

- i) work autonomy
- ii) occupational status
- iii) work schedule
- iv) work environment

Table- 42

‘r’ values showing the relationship between extent of stress-effects and job satisfaction in teaching faculty members

<u>Relationship between stress-effects and job aspects</u>	Correlation coefficient ‘r’	df	Level of significance
Stress-effects and work autonomy	- 0.154	326	0.01
Stress-effects and occupational status	- 0.180	326	0.01
Stress-effects and work schedule	- 0.258	326	0.01
Stress-effects and work environment	- 0.134	326	0.01
Stress-effects and overall job satisfaction	- 0.236	326	0.01

For the present hypothesis, correlation tests were carried out to test the significant relation between the stress-effects and satisfaction from each of the job aspects namely work autonomy, occupational status, work schedule and work environment. The results were as follows

Work autonomy

The computed ‘r’ values between work autonomy and stress showed a negative correlation value ($r = - 0.154$, df 326, 0.01 level) (Table- 42).

It can be inferred that the faculty members were highly satisfied since they enjoyed autonomy at work and the type of job assigned to them, thus reducing their stress and increasing the satisfaction.

Occupational status

A significant negative correlation ($r = - 0.180$, df 326, 0.01 level) was found between satisfaction from occupational status aspect of job and stress experienced by respondents (Table- 42). It implied that the faculty members in their teaching profession were fully satisfied with their status at the workplace leading to low stress.

Work Schedule

The coefficient of correlation was significant and had a negative value ($r = -0.258$, df 326, 0.01 level) between satisfaction from work schedule of respondents and the stress-effects experienced by them (Table-42). It meant that the teaching

professionals could well manage their work schedule and cope up with the job demands so as to experience low stress or no stress at all.

Work environment

A significant negative correlation ($r = - 0.134$, $df 326$, 0.01 level) was found between satisfaction from work environment aspect of job and stress-effects experienced by faculty members (Table-42). It showed that the faculty members worked in a healthy work environment experiencing low stress.

Overall job satisfaction

A negative significant correlation ($r = - 0.236$, $df 326$, 0.01 level) existed between overall job satisfaction from all the four aspects of job and stress-effects experienced by faculty members (Table- 42).

The 'r' values on satisfaction from all the aspects of job were significant including the overall job satisfaction. Hence the null hypothesis was *rejected*.

Conclusion: Therefore, it is concluded that as the job satisfaction in teaching faculty members increased, the extent of stress-effects experienced by them decreased.

H₀₆ The influence of family role stressor and work role stressors on the faculty members will not differ by

- i) Gender
- ii) Service duration

i) Gender

No significant difference was noted in the overall influence of all role stressors on male and female faculty members ($t = 1.734$, $df 326$, NS) (Table- 43).

Table- 43

‘t’ tests showing difference in the influence of family role stressor and work role stressors on the faculty members by gender.

<u>Role stressors</u>	Gender	N	Mean	SD	df	‘t’ values	Level of significance
<u>Family role stressor:</u> Inter role distance (IRD)	Male	164	5.37	4.08	326	0.014	NS
	Female	164	5.37	4.01			
<u>Work role stressors:</u>							
Role stagnation (RS)	Male	164	5.12	3.54	326	-1.122	NS
	Female	164	5.62	4.39			
Role expectation Conflict (REC)	Male	164	4.98	3.61	326	2.552	0.05
	Female	164	3.96	3.58			
Role erosion (RE)	Male	164	6.33	3.54	326	0.799	NS
	Female	164	6.01	3.65			
Role overload (RO)	Male	164	5.35	3.95	326	1.514	NS
	Female	164	4.69	4.00			
Role isolation (RI)	Male	164	5.06	3.77	326	0.597	NS
	Female	164	4.80	4.00			
Personal inadequacy (PIN)	Male	164	5.21	3.98	326	2.224	0.05
	Female	164	4.27	3.61			
Self-role distance (SRD)	Male	164	5.63	3.92	326	3.011	0.01
	Female	164	4.35	3.78			
Role ambiguity (RA)	Male	164	4.80	4.13	326	1.974	0.05
	Female	164	3.91	3.98			
Resource inadequacy (RIN)	Male	164	5.82	4.24	326	2.596	0.01
	Female	164	4.62	4.09			
All work role stressors	Male	164	53.67	31.38	326	1.734	NS
	Female	164	47.62	31.86			

When the respondents were compared by their gender to find out the difference in the influence of family role stressor and work role stressors on them, the ‘t’ test revealed significant differences in the mean score of the following work role stressors (Table- 43)

- (i) Role expectation conflict (REC) (t = 2.552, df 326, 0.05 level)
- (ii) Personal inadequacy (PIN) (t = 2.224, df 326, 0.05 level)
- (iii) Self role distance (SRD)(t = 3.011, df 326, 0.01 level)
- (iv) Role ambiguity (RA) (t = 1.974, df 326, 0.05 level)
- (v) Resource inadequacy (RIN) (t = 2.596, df 326, 0.01 level)

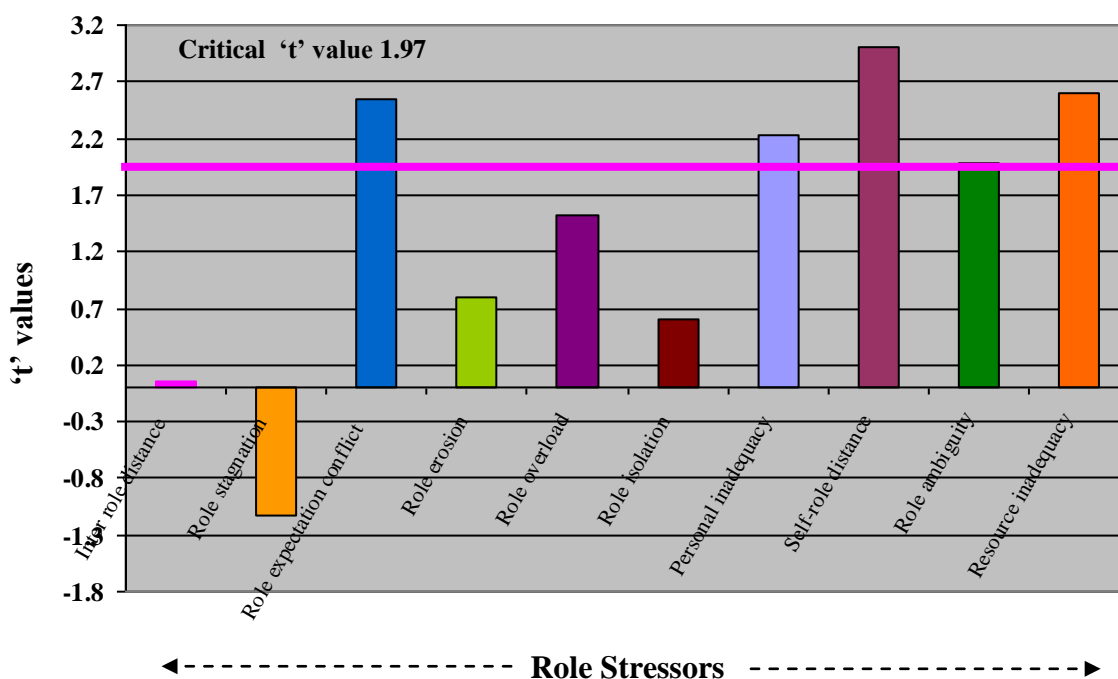


Figure- 40

‘t’ tests showing difference in the influence of family role stressor and work role stressors of the faculty members by gender.

The mean scores of male faculty members were slightly higher than the female faculty members for work role stressors of role expectation conflict, personal inadequacy, self role distance, role ambiguity and resource inadequacy. It implied that male teaching faculty members were somewhat more sensitive to stress due to conflicts arising out of the above role stressors experienced by them than the female faculty members.

However no significant differences were found in male and female faculty members with respect to the influence of family role stressor ($t = 0.014$, $df\ 326$, NS), of inter role distance and work role stressors of role stagnation ($t = 1.122$, $df\ 326$, NS), role erosion ($t = 0.799$, $df\ 326$, NS), role overload ($t = 1.514$, $df\ 326$, NS) and role isolation ($t = 0.597$, $df\ 326$, NS) (Table- 43). Therefore the null hypothesis was *partially accepted*.

Conclusion: Hence it is concluded that there is a difference in the influence of some work role stressors and not family role stressor on the faculty members by gender.

ii) Service duration

Analysis of variance revealed significant difference due to duration of service in the effect of family role stressor. i.e. inter role, distance on the teaching faculty members as the 'F' value ($F = 3.618$, $df\ 2$, 0.05 level) was found to be significant (Table 44). Amongst the work role stressors, only the 'F' values for role expectation conflict ($F = 4.522$, $df\ 2$, 0.05 level) and resource inadequacy ($F = 3.126$, $df\ 2$, 0.05 level) were found to be significant. The 'F' values on the remaining work role stressors namely role stagnation ($F = 2.810$, $df\ 2$, NS), Role erosion ($F = 0.422$, $df\ 2$, NS), Role overload ($F = 2.894$, $df\ 2$, NS), Role isolation ($F = 0.919$, $df\ 2$, NS), Personal inadequacy ($F = 0.896$, $df\ 2$, NS) self role distance ($F = 1.672$, $df\ 2$, NS) and Role ambiguity ($F = 1.898$, $df\ 2$, NS) were not significant. The 'F' value ($F = 2.950$, $df\ 2$, NS) was not significant for the overall influence of all the role stressors on the teaching faculty members by service duration.

Out of the ten role stressors, three 'F' values were significant and rest of the seven 'F' values were not significant on these role stressors. Therefore, the null hypothesis is *partially accepted*.

Table- 44

‘F’ values showing difference in the influence of family role stressor and work role stressors on teaching faculty members by service duration

Stress - effects → Role Stressors ↓		Sum of Squares	df	Mean Square	F ratio	Level of significance
Family role Stressor: Inter role distance (IRD)	Between Groups	116.314	2	58.157	3.618	0.05
	Within Groups	5224.049	326	16.074		
Work role stressors: Role stagnation (RS)	Between Groups	88.401	2	44.200	2.810	NS
	Within Groups	5111.962	326	15.729		
Role expectation conflict (REC)	Between Groups	116.080	2	58.040	4.522	0.05
	Within Groups	4171.615	326	12.836		
Role erosion (RE)	Between Groups	10.941	2	5.470	.422	NS
	Within Groups	4209.498	326	12.952		
Role overload (RO)	Between Groups	90.833	2	45.416	2.894	NS
	Within Groups	5100.018	326	15.692		
Role isolation (RI)	Between Groups	27.730	2	13.865	.919	NS
	Within Groups	4900.794	326	15.079		
Personal Inadequacy (PIN)	Between Groups	26.181	2	13.091	.896	NS
	Within Groups	4750.791	326	14.618		
Self-role distance (SRD)	Between Groups	50.618	2	25.309	1.672	NS
	Within Groups	4919.370	326	15.137		
Role ambiguity (RA)	Between Groups	61.680	2	30.840	1.868	NS
	Within Groups	5365.585	326	16.509		
Resource Inadequacy (RIN)	Between Groups	109.135	2	54.568	3.126	0.05
	Within Groups	5673.060	326	17.456		
All work role stressors	Between Groups	5866.025	2	2933.013	2.950	NS
	Within Groups	323169.240	325	994.367		

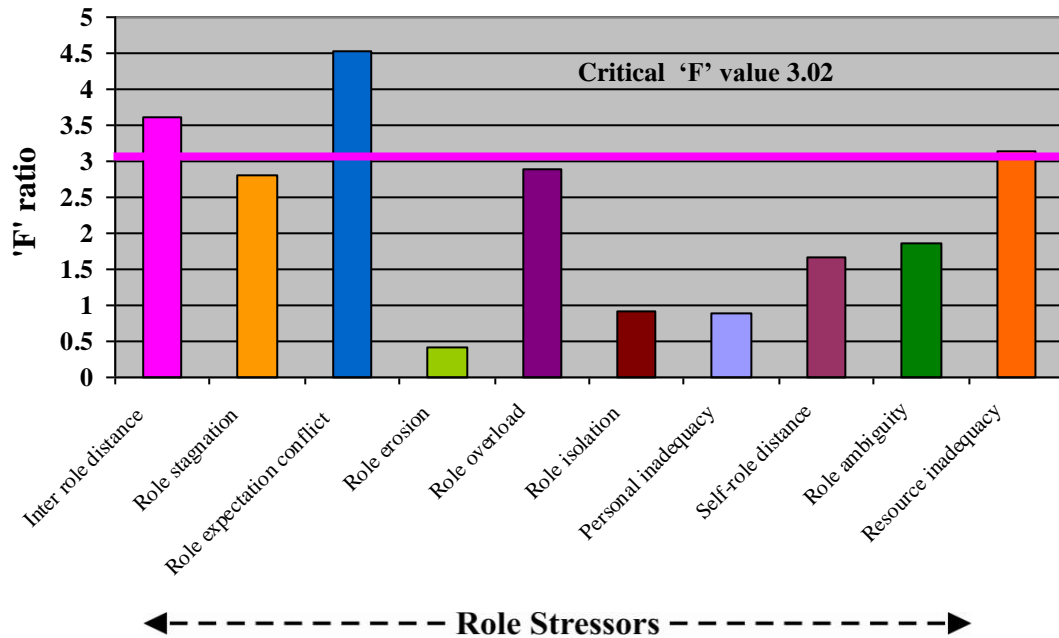


Figure- 41

'F' values showing differences in the influence of family role stressor and work role stressors on teaching faculty members by service duration

Conclusion

Thus, it is concluded that the three categories of service duration namely short service duration (Less than 1 yr to 7 years of experience), medium service duration (8 -14 years of experience) and long service duration (15 years or more of experience) caused significant difference in the influence of family role stressor namely, Inter role distance on the teaching faculty members. While three categories of service duration did not cause any significant difference in influence of the work role stressors on the teaching faculty members except for, Role expectation conflict and Resource inadequacy stressors.

H₀₇ There will be no relationship between each type of role stressor and stress-effects experienced by faculty members.

H_{07a} There will be no relationship between each type of role stressor and physiological stress-effects experienced by faculty members.

H_{07b} There will be no relationship between each type of role stressor and psychological stress-effects experienced by faculty members.

H_{07c} There will be no relationship between each type of role stressor and behavioural stress-effects experienced by faculty members.

Table- 45

‘r’ values showing the relationship between role stressors and stress-effects in teaching faculty members

Stress-effects → Role stressors ↓	Effects of physiological stress		Effects of psychological stress		Effects of behavioural stress	
	Correlation coefficient ‘r’	Level of significance	Correlation coefficient ‘r’	Level of significance	Correlation coefficient ‘r’	Level of significance
Family role stressor :						
Inter role distance (IRD)	0.266	0.01	0.251	0.01	0.262	0.01
Work role stressors:						
Role stagnation (RS)	0.221	0.01	0.256	0.01	0.210	0.01
Role expectation conflict (REC)	0.250	0.01	0.319	0.01	0.251	0.01
Role erosion (RE)	0.137	0.01	0.196	0.01	0.165	0.01
Role overload (RO)	0.190	0.01	0.273	0.01	0.175	0.01
Role isolation (RI)	0.219	0.01	0.269	0.01	0.247	0.01
Personal inadequacy (PIN)	0.180	0.01	0.354	0.01	0.271	0.01
Self-role distance (SRD)	0.209	0.01	0.293	0.01	0.212	0.01
Role ambiguity (RA)	0.189	0.01	0.357	0.01	0.268	0.01
Resource inadequacy (RIN)	0.208	0.01	0.300	0.01	0.232	0.01

df= 326

N=328

Pearsons's product moment correlation coefficient was computed between each of the three effects of stress and each of the ten role stressors (Table- 45). The three effects of stress included physiological stress-effects, psychological stress-effects and behavioural stress-effects. The ten role stressors included both family role stressor and work role stressors. The family role stressor included Inter role distance-

IRD. Among the work role stressors nine work role stressors were included, namely, Role stagnation, Role expectation conflict, Role erosion, Role overload, Role isolation, Personal inadequacy, Self-role distance, Role ambiguity, Resource inadequacy. The coefficients of correlation suggested that there existed a significant positive correlation at 0.01 level between each of the effects of stress in faculty members and all the ten role stressors.

On family role stressor (IRD) the 'r' value for physiological stress-effects ($r = 0.266$, $df\ 326$, 0.01 level) was higher than psychological stress-effects ($r = 0.251$, $df\ 326$, 0.01 level) and behavioural stress-effects ($r = 0.262$, $df\ 326$, 0.01 level) showing more positive significant correlation (Table 45). This indicated slightly higher physiological stress in respondents arising out of family role stressor (IRD).

On all the work role stressors, the effect of psychological stress felt by respondents was slightly more as compared to the other two stress-effects (Table 45). The maximum psychological stress experienced by faculty members was on Role ambiguity stressor ($r = 0.357$, $df\ 326$, 0.01 level) followed by Personal inadequacy stressor ($r = 0.354$, $df\ 326$, 0.01 level), Role expectation conflict ($r = 0.319$ $df\ 326$, 0.01 level) and Resource inadequacy ($r = 0.300$ $df\ 326$, 0.01 level) stressor.

This points out towards some work role stressors being potent sources of psychological stress in teaching faculty members. All the 'r' values showed significant positive correlation between all the ten role stressors and all the three stress-effects. Therefore the null hypothesis was *rejected*.

Conclusion: It was concluded that there is a definite positive relationship between all the role stressors and the stress-effects in teaching faculty members.

On the basis of the findings, it can be stated that the stress-effects experienced by management faculty members namely physiological, psychological and behavioural have a definite positive correlation with all the role stressors but they have a negative correlation with satisfaction derived from all the aspects of job. On one hand the faculty members experienced an increase in stress-effects caused by all the role stressors while on the other hand these stress effect decreased as the satisfaction from job aspects increased.

4.6 DISCUSSION ON FINDINGS

The major findings in relation to interrelationship of variables are discussed below on the basis of these three premises

1. The effects of stress in a teaching professional are influenced by gender and service duration.
2. Various personal factors, family factors and situational factors are responsible for stress.
3. The stress-effects are associated with role stressors and job satisfaction in teaching faculty members.

On the **first premise** the discussion is as follows

1. Gender

a) Stress-effects and gender

On gender comparison, 10 percent more of female respondents (72 percent) than male respondents (62 percent) suffered from medium level of overall stress-effects. The effects of physiological stress at high level were found more in females (18.9 percent) than in the male faculty members (13.41 percent). In case of psychological stress-effects in faculty members, about 5 percent more of women (66.46 percent) than men faculty members (62.2 percent) were found to have medium level of psychological stress. Similarly about 6 percent more women (20.73 percent) than men faculty members (14.02 percent) felt high level effects of this stress. Thus women were more prone to psychological stress than men.

On behavioural stress-effects, the comparison showed that 4 percent more of women than men faculty members experienced medium and high levels of behavioural stress-effects. At medium level, approximately 66.46 percent of women and 62.2 percent of men and at high level about 22.56 percent of women and 18.29 percent of men respondents suffered from behavioural stress-effects. Thus it showed that more women than men respondents suffered from all three stress-effects. Sen in (1981) reported similar findings.

Gupta N.K. and Pratap S. (1987) who studied a group of lecturers also reported similar findings. Mc Shane and Glinow Von (2001) reported that women managers felt more stressed than men managers. Dr. Giri Uday and Rao

Nageswara (2007) also stated that female teachers were more stressful than male teachers.

It seems that women had no escape from stress due to their involvement in both family and work roles which (as reported by them) were difficult to balance at times. The present findings were further supported by the research findings of Lundberg, Mardberg and Frankenhaeuser (1994). Their findings showed a striking gender wise difference in the ability to relax on return home from work. The stress hormones in women professionals and their blood pressure went up where as in men it was vice versa.

As most of the teaching professionals worked with private institutes they were required to follow rigid work timings. Hence the women respondents had a little chance to balance work family activities. Thus overloaded with family and work roles, stress was inescapable for these women teaching professionals. The problem was more acute for those women respondents who had very young children.

The women faculty members faced the challenge of meeting the conflicting demands of their multiple roles of being a wife, mother and teaching professional. They were continuously involved in meeting the expectations imposed on them by their husbands, children and employers. In an attempt to meet all role demands time and again, and please everyone (the “super woman” syndrome) the stress experienced by them was inevitable and not healthy for them. Also by nature, women are more conscious of their duties and responsibilities towards their families, as compared to men. As they worry about their husbands, children, other family members and household work all the time, it contributes to health related problems in them. The present findings revealed that women teaching professionals suffered more from physiological and behavioural stress than psychological stress. It is a known fact that physiological ailments have their roots lying in mental anxieties and stresses generated by happenings at work and in family.

Due to these reasons, it can be inferred that women faculty members suffered from stress more than men faculty members. Viewing the extent of stress-effects experienced by male and female respondents, the mean scores of female respondents were found to be higher than the male respondents, which showed that women experienced more stress-effects than the male respondents. The

findings of computed 't' test in the present research showed that there was significant difference by gender in the physiological stress ($t = 2.467$ sig. 0.05), behavioural stress ($t = 2.324$ sig. 0.05) and overall stress ($t = 2.469$ sig. 0.05) but the difference in the experience of psychological stress by gender was not found to be significant ($t = 1.776$ NS).

Thus it can be concluded that both the genders differed in their experience of physiological, behavioural and overall stress but did not differ at all in their experience of psychological stress.

The latter findings of the present research are supported by the findings of a study by Chan Alan H.S., Chen K. and Chong Elaine Y.L. (2009) which revealed that both male and female teachers in Hong Kong experienced the same level of perceived stress. Koteswari in (2004) reported no gender differences in the influence of gender on stress and coping in employees from various organizations. It is clear from the inspection of the present findings that few gender differences in the experience of stress-effects, were found to be significant. Management teaching professionals, women in general faced higher stress levels and thus possibly suffered from adverse health effects presumably because they shouldered a greater and more diffused workload than men. These were manifested in stress-effects namely physiological, psychological and behavioural. It may also be because women are supposed to perform most of the house hold duties along with their paid work and generally men spouses are less willing to share this. Women faculty members had to cope with the dual responsibility of looking after the household chores and managing their teaching activities. No doubt this became too taxing for their well being and contributed to stress. It was more so because majority of women faculty members were young, married, with one to two children as dependents and lived in nuclear families. Also, some of them had paid help for some household tasks where as others did not have paid help at all for any of the household chores and carried out all the household work by themselves.

In another study by Kyriacou and Sutcliffe (1978a), women teachers were found to experience physiological stress symptoms more frequently as compared to men teachers. This finding is in line with the present study. On the other hand the same study also showed no gender differences in the experience of work stress although reasons attached to work stress were different in both the genders.

b) Role stressors and gender

When the influence of family role stressor and work role stressors on the faculty member was compared by gender, no significant difference was noted in the overall effect of all role stressors computed by 't' test ($t = 1.734$, NS). However, the 't' test revealed significant differences in the influence of some of the work role stressors namely Role expectation conflict ($t = 2.552$ sig. 0.05), Personal inadequacy ($t = 2.224$ sig. 0.05), Self role distance ($t = 3.011$ sig. 0.01), Role ambiguity ($t = 1.974$ sig. 0.05) and Resource inadequacy ($t = 2.596$ sig. 0.01) on the faculty members by gender.

The mean scores of male faculty members on the above five role stressors were higher than the female faculty members. It implied that men faculty members were more sensitive and thus experienced more stress arising out of these role stressors as compared to their counterparts women faculty members. On the remaining work role stressors and the family role stressor namely Inter role distance no significant differences were noted in the influence of these stressors on the faculty members by gender. Thus it may be stated that male and female faculty members differed in their experience of stress-effects from some of the work role stressors. The present study receives support from the findings of a study by Vadra P. and Akhtar Sultan (1989) who found that male teachers experienced more social family role stress as compared to female teachers.

Sultana (1995) through her study also supports the findings of present study by noting gender wise differences on role stressors namely Role expectation conflict Personal inadequacy, Self role distance and Role ambiguity. Another study by Mishra R. in (1996) also supports the present study findings by stating that gender differences were noted in the experience of role stress. Female teachers experienced more role stress especially from "work overload" when compared to male teachers. Gender wise differences were also noted in overall stress. It was also reported that male teachers were more stressed on role "under load" area but this problem was missing in the present study. The present study results can be interpreted in the light of five role stressors namely Role expectation conflict, Personal inadequacy, Self role distance, Role ambiguity and Resource inadequacy.

Most of the male faculty members belonged to younger age group followed by middle age group. Young male teaching professionals may have experienced

role stress due to supervisory pressure, need for career advancement, need based achievements, and high expectations from senior colleagues and superiors. Apart from these, the other probable factors which could have been responsible for role stress in male management faculty members were level of achievement, job related responsibilities, responsibilities without authority, work environment and culture, office politics, advanced technology to be paced with and poor relations at work in both young and middle aged male faculty members. High role demands and expectations communicated by head of the department or the institutional head from time to time which were incompatible for the male faculty members, could have resulted in Role expectation conflict and thus stress arising from it.

An additional source of stress which was present at the workplace was Role ambiguity. As young male faculty members with less experience did not clearly understand the goals related to the courses taught, were not aware about the expectations associated with their role or did not have the adequate information to function in a role, may have experienced stress arising out of this role. On the other hand in more experienced faculty members a promotion, a transfer or a new responsibility, change in subjects taught could have led to this role stress.

The stress arising out of “Self role distance stressor” may have been perceived by faculty members due to reasons of teaching new subjects which did not belong to their specialization, newly restructured courses in which they did not have the training or the expertise to teach and duties which were not challenging and did not meet their caliber.

On “Personal inadequacy stressor”, the male respondents could have felt that they did not possess adequate knowledge, skills and the necessary training to handle their role well, due to which they felt stressed. May be, this was felt more strongly because more men than women were engaged in administrative duties of working as course coordinators, counselors, deans and directors of the institutes.

“Resource inadequacy” was found to be one of the prominent stressors in male respondents because in carrying out their administrative duties, probably they felt handicapped due to the lack of proper information on systems and procedures, lack of manpower due to which they also had to do clerical jobs at certain times, and lack of finances which did not allow them to make improvements in infrastructure and facilities in the campus. This could have created worries and stress in them. All these role stressors would have led to a lot

of dissatisfaction in them causing stress. It is thus inferred from this discussion that the gap between the existing role and the desired role in male teaching faculty members on certain role stressors led to role stress in them. Certain coping strategies are thus formulated and suggested under recommendations to reduce this gap and hence reduce role stress in them.

2. Service Duration

a) Service Duration and Stress-effects

The span of service duration was assessed in relation to its influence on the overall stress and each of the stress-effects namely physiological, psychological and behavioural stress-effects by computing correlations between duration of service and the three stresses. There were negative correlations between span of service duration and physiological stress, ($r = -0.045$, NS) psychological stress ($r = -0.010$, NS) and behavioural stress ($r = -0.079$, NS) along with overall stress ($r = -0.049$, NS).

This indicated that the span of service duration did not have much influence on the extent of stress-effects felt by respondents which suggests that stress experienced did not necessarily increase with the increase in length of service. These results are consistent with the findings of the earlier studies by Pestonjee (1999) and Koteswari and Allam (2005) who concluded that length of service had no effect on the stress experienced.

b) Service Duration and Role Stressors

An attempt was also made to find out the influence of family role stressor and work role stressors on respondents by service duration. The 'F' values were significant at 0.05 level for only three role stressors namely Inter role distance i.e. the family role stressor ($F = 3.618$) and two work role stressors namely Role expectation conflict ($F = 4.522$) and Resource inadequacy ($F = 3.126$). The rest of the "F" values on remaining seven work role stressors along with the overall effect of all role stressors were not significant at all. On the whole, the results showed that except for a few role stressors, the service duration did not influence the overall and other individual role stressors at all. These findings show similarity with the findings of studies by Kumar Satish (1997), Sen (1981) and Surti (1982).

However, the contradictory findings, of a study by Gupta (1988) showed that role stress increased with an increase in service length. Perhaps, the difference could be due to the nature of the sample.

Although the further results of the study of Kumar Satish (1997) also indicated that Role stagnation, Role overload and Role isolation increased with service length but no such evidence was found in the present research. Yet, the role stressors which did get influenced by the three categories of service duration namely short, medium and long service duration were Inter role distance, the family role stressor and the two work role stressors namely Role expectation conflict and Resource inadequacy. As reported by middle aged male and female respondents who were more experienced with longer service duration, had more commitment and responsibility towards their role and institute. This probably led to more role stress among them. Also senior respondents especially male respondents reported that they were engaged in many administrative and extra curricular activities. It is quite possible that due to time bound additional responsibilities, they experienced role expectation conflict and felt stressed. On family role stressor, inter role distance, most of the faculty members reported that their role did not allow them to spend enough time with their family. They also felt that due to high demands of their work, they sometimes could not spend time with their friends as well. This reason justifies their stress from family role stressor, Inter role distance. Keeping all these results in view, it can be stated that on the whole both stress-effects and work role stressors except a few role stressors did not have any influence on teaching faculty members by service duration.

On the **second premise**, the discussion related to the findings of antecedent factors of stress namely personal, family and situational factors is given below

1. Personal Factors

The selected personal factors included were age and health status.

a) Age

The computed analysis of variance value results showed that there was no significant difference in the extent of stress-effects in faculty members by age ($F = 1.729$, NS). Although 72 percent respondents belonged to young age group, 25 percent to middle age group and only 3 percent were in old age group, yet age did not cause any difference in the stress-effects experienced by faculty members.

These findings are supported by findings of Ahmad and Khanna (1992). In their study, a significant negative relationship between job stress and job satisfaction was found irrespective of subject's age. Similar findings were also reported by Pandey (1997) where a positive non significant relationship of age was found with all dimensions of role stress except Role ambiguity.

In contrast Pareek Udai (1993) related age to life stress and commented that young people between 20 and 30 years of age have been found to report twice as much stress when compared to older people. Age was also studied by Sen P.C. (1981) and he found that age was negatively related with role stress. Bhandarkar and Singh (1986) examined certain demographic variables one of which was age, in order to trace the entire stress cycle. It was inferred that age was not among the contributory factors to stress.

With such varied research findings, it is rather difficult to explain the role of age as related to stress. Yet it can be reasoned out that management institutes have got established only recently. The teaching professionals have qualified and entered into teaching of management courses also in the recent past. Hence the teaching force is by and large young. Very few of them are in old age category. Therefore age wise comparisons are difficult to make as related to stress. In these teaching professionals, stress may not necessarily be related to age but to many other factors in their work role setting and family role setting. Therefore age did not have an impact on stress in them. Also the variation in the findings of the present research and existent researches could be due to the different nature of the sample and the type of work culture followed in management education.

b) Health Status

Often stress accompanies illness and it is believed that stress has a part to play in illness related conditions. It is also a universally accepted fact that stress can be reduced with health promoting behaviours such as choice of a healthy diet, regular exercise and adequate sleep. Pursuing of creative activities such as hobbies or leisure time activities also help in stress reduction. Excessive travel time to and fro to work may lead to fatigue and stress. On the personal factor of health status, the 'F' test results ($F = 1.544$, NS) showed no significant difference in the extent of stress-effects felt by faculty members due to health status.

Most of the earlier researches in contrast with the present findings, have shown relationship of stress with health and also highlighted various stress free techniques for good health maintenance. Some of them are reviewed here.

Singh and Srivastava (1996) found that when individuals perceive their jobs to be physically and psychologically threatening, their health is adversely affected. Malhotra (1996) reported that unreasonable lifestyles often cause health problems. Theorell and Rahe (1971), and Terry Berry (1968) noted that quantitative and qualitative work overload were a major source of poor psychological and physical health of the employees. Sutherland V. and Davidson M.J. (1989 b); Langford (1988) found that travel time was a significant stressor because if travel time to workplace is long the pressured individual is forced to spend less time in family and social activities.

Improved health status is linked to changes in personal lifestyle practices that are known as risk factors for disease. Majority of the respondents in this profession were well educated, they were aware about their health status and reported that they were conscious about maintenance of their health. Most of the respondents got a sleep time of 6-8 hours or more which is considered to be adequate. About 90 percent of the faculty members pursued hobbies of their liking and choice and a few of them also engaged themselves in leisure time activities. Literary activities, sports and games were amongst the favorite activities. All the respondents except a few were found to practice some or the other form of exercise regime. Hence 71 percent of the respondents maintained overall good health status with no illness suffered.

On examining the health practices followed by faculty members, over 70 percent of respondents reported to maintain regular meal timings, take nutritious food and follow health awareness programme for self. About 50 percent of them said they followed health awareness programme for their spouse and children also. About 50 percent spent less than two hours and another 50 percent of respondents spent two to three hours on travel to and to their workplace.

A majority of 81 percent of respondents did not report any incidence of illness and only a very small percentage of 6-7 percent took periodical and special treatment for their illnesses. Also over 72 percent of the faculty members went for health check ups quarterly and incurred medical expenses on them.

These findings clearly indicate that the management teaching faculty members maintained good health status on the whole. As a result, the extent of stress-effects felt by faculty members did not differ or got influenced by the personal factor of health status.

2. Family Factors

The family factors chosen were family type, family size and paid help.

a) Family Type and Family Size

The results of ANOVA revealed that there were no significant differences in the experience of extent of stress-effects in teaching faculty members by family type ($F = 2.228$, NS) and family size ($F = 1.928$, NS) factors in this study.

Surti (1982) studied the extent to which demographic and family related variables contributed to role stress. No significant differences were observed in any type of role stress with family related variables. Similar findings noted by Srivastava K. and Srivastava A. K. in (1985) are consistent with the findings of the present study. Bhandarkar and Singh (1986) examined the sources of stress. One of the individual demographic variables studied was “family size”, which was found to be last amongst the contributing factors in both private and public sector junior managers. Sen (1981) studied both “family type” and “family size” along with other background variables in relation to role stress. No significant differences were found with respect to family background or family system whether joint or nuclear. But family size was positively associated with role stagnation and role isolation and negatively with role erosion. This finding is partly consistent and partly contrasting with the present study findings.

Kyriacou and Sutcliffe (1978a) showed no significant differences in any of the biographical categories and self reported stress in teachers.

The present findings were well supported by earlier studies mentioned; indicating that the family factors namely family type and family size were not the causal factors of stress-effects felt by faculty members.

Although more than one half of the respondents stayed in nuclear families, the type of family and household did not seem to influence their stress experiences at

all. Similarly, about family size, more than one third of the faculty members had small size families, a little less than one third stayed alone because they were single or separated and one fourth had medium sized families. Only 14 percent of the faculty members had large size families with more than five members staying with them.

Therefore, because the majority of the faculty members had nuclear family type and small family size, the stress experienced by them must have been minimal and did not show any significance with reference to these factors.

b) Paid Help

When the respondents were compared by the family factor “Paid help”, ‘t’ test revealed significant difference in the experience of stress-effects ($t = 2.902$, sig. 0.01) with respect to paid help employed or not employed.

The mean score of faculty members with “paid help” was lower than the faculty members with “no paid help”. It clearly points out that the faculty members without any paid help experienced stress-effects more than the faculty members with paid help. The respondents without paid help had to carry out all the household jobs by themselves. This led them to a lot of fatigue and thus stress. On the other hand the respondents with employed paid help for various jobs such as cleaning cooking, childcare and sometimes for running errands, got a lot of relief from household chores. This gave them some free time to spend with their family members or pursue leisure time activities, thereby reducing their stress.

Harmon (1981) and Coverman (1985) pointed out that even though women have become the co providers, husbands have not equally shared the household work. Theses studies concluded that there is little change over the years in the amount of time husbands in dual earner families spend on domestic tasks.

Indian studies by Savara Mira (1986), Sharma U. (1986) and Devi Indira (1987) have examined housework in context to role conflict and fatigue experienced by employed wives. Paid domestic help is sought by most of the working couples to reduce Role overload experienced by them. Ramanamma and Bambawale (1987) in their study of women industrial workers concluded that married women seek to find domestic help so that they could relieve themselves of the hardship of house work.

Ramu G.N. (1989) made a comparative analysis of single and dual earner families. The findings showed that wives in single earner families with no domestic servants at all had to do all the house work by themselves in addition to their full time jobs. The dual earner wives however reported experiencing fatigue due to the demands of their dual role. Devi Lalitha V. (1982) concluded that paid help received in household management by women enhances the women's role in the family with reduced stress levels.

Most of these research findings directly or indirectly provide support to the finding of the present study. Arising out of the discussion on paid help, it is commonly understood that among the Indian urban middle classes, the cleaning jobs are normally delegated to servants. Child care jobs are also taken care of by them if families have small children. Sometimes cooking jobs are also carried out by them based on the need of the family.

Therefore, it can be concluded that "paid help" is a great help to teaching professionals in relieving them from performing the various household jobs before and after their working hours and thereby help in reducing their stress.

3. Situational Factor

The only situational factor selected was "Hours of Work".

The computed 'F' value ($F = 2.552$, NS) showed no significant difference in the extent of stress-effects in teaching faculty members by "hours of work". It indicated that less or more "hours of work" did not make a difference in the stress-effects felt by faculty members.

On the whole, about 18 percent of the respondents spent 5 to 6 hours, 60 percent spent 7 to 8 hours and almost 23 percent spent more than 8 hours at work. Even though working hours were long, the management teaching faculty members did not seem to experience stress due to these working hours.

The reasons could be attributed to factors like interest and commitment towards the job and institution, high motivation, goals and deadlines to meet, practicing stress coping strategies at personal level and popularity among students, colleagues and seniors.

Grandjean E. in (1988) found that when people are faced with excessive working hours, they tend to periodically "go sick" in order to recover from fatigue. Todd Carlos R. (2008) in his article said "working overtime or for

longer schedules is by far the single biggest cause of stress and stress related ailments as silent killer”. It is surely dangerous and hazardous to health and physical well being. Major Virginia Smith (2002) in her study concluded that long hours at work increased work family conflict which gave rise to stress related health problems. Ganster Dan and Bates Collette (2003) found that “it is not how long you work, it is how you are working that causes stress”.

Most of the existing research findings reported here show association of stress with long work hours and hence do not support the findings of the present study.

Therefore it can be concluded that “hour of work” as an antecedent factor did not cause any difference in the extent of stress-effects experienced by management faculty members.

The points related to the **third premise** on the association of stress-effects with role stressors and job satisfaction in management faculty members are discussed as follows

a) Stress-effects with role stressors

Pearson’s product moment correlation coefficient was computed between each of the three stress-effects and each of the ten role stressors. The three stress-effects were physiological psychological and behavioural. The ten role stressors included both family role stressor and work role stressors. The coefficients of correlation showed that there existed a significant positive correlation at 0.01 level between each of the stress-effects in faculty members and all the ten role stressors.

On the family role stressor Inter role distance (IRD), the “r” value for physiological stress-effects ($r = 0.266$, sig. 0.01) was higher than psychological stress-effects ($r = 0.251$, sig. 0.01) and behavioural stress-effects ($r = 0.262$, sig. 0.01). This clearly indicated that although physiological stress had slightly higher ‘r’ values, there was not much difference found in all the three stress-effects experienced by faculty members arising out of family role stressor Inter Role Distance (IRD).

This finding gets support from findings of earlier studies. Grant *et al.* (1974) found that there exists a positive relationship between stressful life events, subsequent illnesses and fatigue. Pestonjee D.M. and Pareek Udai (1992, 1997) determined the relationship between non work stress and physical health and

found that high non work stress was associated with poor physical health and high incidence of illness.

Similarly a large number of hassles of daily living also contributed to stress experiences (Kanner *et al.* 1981). Pestonjee (1987b) observed that Inter role distance (IRD) contributed significantly to managerial stress.

It is quite possible that the teaching faculty members experienced “Strain based conflict” and “Work family conflict” in their struggle to manage the dual responsibilities at work and at home. In carrying out the family responsibilities inclusive of household chores, following up of routine and periodical tasks, looking after children and their problems, running errand jobs, and participation in family and social activities kept them on their toes. All these activities had to be managed by a teaching professional along with a fixed full time work schedule at the institute. As a result the teaching professionals at management institutes may have experienced a lot of physical strain leading to physiological stress-effects.

Majority of the respondents were young and married with short service duration and with one or two dependents. On home front, with small and young children to look after, the faculty members were busy. On work front, with little or no experience in teaching, the pre-preparation tasks such as preparing reading material, correction of exam papers, and planning for student’s projects took up extra time of faculty members from their non work hours at home. All these put together, could have lead to physiological stress in faculty members. In the present study, on all the work role stressors, the effect of psychological stress felt by faculty members was slightly higher as compared to the other two stress-effects.

Ahmed, S., Bharadwaj, A. and Narula S. (1985) found significant differences in three dimensions of role stress namely Role isolation (RI), Role ambiguity (RA) and Self role distance (SRD), where as Pestonjee (1987b) observed that Role ambiguity (RA) and Personal inadequacy (PIN) were the least contributors to managerial stress. Menon and Akhilesh (1994) studied functionally dependent stress among managers and found that Role ambiguity (RA) had significantly contributed to managerial stress. Zafar M. Syed and Rao S. B. Nageshwara (1997) in their study found that Personal inadequacy (PIN), Role Stagnation (RS), Role overload (RO) and Role isolation (RI) were the

sources of stress for Junior and middle level managers. However Role Stagnation (RS) was found to be more among executives.

Majority of these investigations have revealed positive relationship between work role stressors and stress outcomes. Stress researchers have associated a variety of work role stressors with symptoms of stress manifested in all the three stress-effects. Although many other factors also may influence the course of these conditions, yet work role stressors play a definite role in bringing about stress-effects causing illness.

The present research findings showed that all the ten role stressors were significantly related to all the three stress-effects. Role stressors namely Role ambiguity, Personal inadequacy, Role expectation conflict and Resource inadequacy showed slightly higher correlations than the remaining role stressors. On account of the above four work role stressors which emerged as potent sources of psychological stress in faculty members in the present study, it may be said that, these stressors were significant for both newly appointed as well as experienced faculty members on the whole.

The freshly appointed faculty members may lack clarity about the nature of their job, job conditions and career prospects and hence may suffer from role ambiguity stress. On the other hand, experienced faculty members due to multiple responsibilities, with higher designations and positions and diversified roles to play may suffer, not only from role ambiguity but also from role expectation conflict. The expectations of their colleagues and superiors may be more than what the faculty members are able to cope up with at one time.

As majority of the faculty members belonged to younger age group with short service duration, personal inadequacy (PIN) is bound to appear as a role stressor in these professionals. With little training, expertise and teaching experience, the faculty members may feel incompetent to teach bigger classes, heterogeneous groups of students, restructured syllabi, classrooms with modern infrastructure and sophisticated equipments in these management institutes, and hence suffer from stress. This problem may become more acute if the faculty member appointed is from a small town or some other state where such facilities are lacking.

Lastly, the stress arising from resource inadequacy(RIN) role stressor may be faced by those faculty members who work with new, small sized

management institutes which lack proper infrastructure, basic facilities for teaching learning such as a good library, a computer laboratory, faculty members for teaching specialized subjects, adequate enrollment of students, short funds and low salary. Management teachers working under unfavorable conditions in these institutes may feel the pinch of resources all the time. Since they need the job, they are the silent sufferers. Therefore they may experience psychological stress at work.

b) Stress-effects with job satisfaction

Computed correlation coefficients between the stress-effects and job satisfaction on each of the job aspects namely work autonomy, occupational status, work schedule and work environment, showed significant negative 'r' values. The overall job satisfaction from all the four aspects of job and stress-effects showed a significant negative correlation with each other. Therefore it was inferred that as the job satisfaction increased, the extent of stress-effects experienced by faculty members decreased.

i) Work autonomy

The computed 'r' values ($r=-0.154$, sig. 0.01) between work autonomy and stress indicated that the respondents were satisfied since they enjoyed autonomy at work. Their job was light in nature but challenging and kept them away from boredom as it was of their caliber. Sometimes the respondents got opportunities to exhibit their talents and skills. Majority of the faculty members maintained good relations with their boss, colleagues and subordinates at the institutes and sometimes received appreciation from their bosses for their good work. All these feelings were reported by the respondents in the job satisfaction scale.

ii) Occupational status

A significant 'r' value ($r = - 0.180$, sig. 0.01) on occupational status implied that the teaching faculty members were more or less satisfied with their status at work leading to low stress. Some of the reasons reported by respondents were having financial security, fulfilling their economic necessity through receipt of adequate salary; provide satisfaction of holding dual responsibilities as a wage earner and help in raising the standard of living of their family. In

addition, some more good reasons reported were good leave facility available and provision for better education to their children.

iii) Work schedule

A significant 'r' value ($r = -0.258$, sig. 0.01) for studying the relationship between work schedule and stress experienced by faculty members meant that the teaching professionals could manage to cope up with their job demands and were satisfied with their work schedule so as to experience low stress or no stress at all.

Some of the reasons reported by 66 percent of the respondents for being "moderately" satisfied on the work schedule category of job satisfaction were because they got relief from domestic responsibilities and also because it helped them in bringing up children in a better way. More of female faculty members as compared to male faculty members agreed to these reasons and were found to be more satisfied on this aspect of job than their counterparts management professionals.

iv) Work environment

Once again, a negative correlation ($r = -0.134$, sig. 0.01) was found between work environment and stress-effects felt by faculty members. It indicated that majority of the faculty members worked in a conducive work environment and thus experienced low stress.

About 65 percent of the respondents were found to be "moderately" satisfied with the work environment in which they worked. They had adequate facilities and also the physical environment at their work place was very good. Not much of gender difference was noted on this aspect of job except that about 11 percent more of women than men faculty members felt "highly" satisfied with their work environment.

In his study, Mannivannan *et al.* (2007) stated that "stress is believed to cause depression, irritation, anxiety and fatigue and thus lower self esteem and reduce job satisfaction". Solaiman *et al.* (2007) found that role stress was experienced in high degree among faculty members of medical school in Iran with reduced job satisfaction. Pestonjee and Mishra (1999) found that job satisfaction variables correlated negatively with all dimensions of role stress in both junior and senior group of doctors.

Langford (1987) concluded that stress was a significant determinant of teacher job satisfaction. Similar findings on primary head teachers were reported by Chaplain (2001). Sen Kakoli (2008) examined the relationship between job stress and job satisfaction among teachers and managers. Results showed that teachers experience low job satisfaction as they face more job stress while in case of managers, the two did not seem to associate.

In another study by Luhadia (1991) it was inferred that job satisfaction was negatively correlated with role stress. Higher the stress, lower was the job satisfaction among different levels of officers. Lakshmi Rama S. and Devi Sarada M. studied “Relative magnitude of role satisfaction and role stress of women in different occupations” in 2005 and found inverse relationship between the two variables. These findings do support the findings of the present study. The findings revealed that with regard to satisfaction, people who experienced stress, found jobs dissatisfying and vice versa. Even though low to moderate stress can lead to better performance, excessively high stress can lower the performance. Stress always has negative impact on satisfaction.

In addition, some interesting findings were noted in order to find out the influence of type of role stressor on the extent of job satisfaction among faculty members in the present study. The Analysis of variance revealed significant difference at 0.01 sig. level in the extent (levels) of job satisfaction of teaching faculty members namely high, moderate and low levels caused by each of the ten types of role stressors.

Both the family role stressor and the nine work role stressors caused a significant difference in the extent of job satisfaction of teaching faculty members. Role ambiguity was the most influential stressor with reference to job satisfaction in faculty members. It was concluded that each type of role stressor made a significant difference in the extent of job satisfaction experienced by management faculty members.

4.7 REVISED CONCEPTUAL FRAMEWORK

On the basis of all the above findings which established a relationship between the independent and dependent variables under the study, the original conceptual framework was revised. The revised conceptual framework is shown in figure 42.

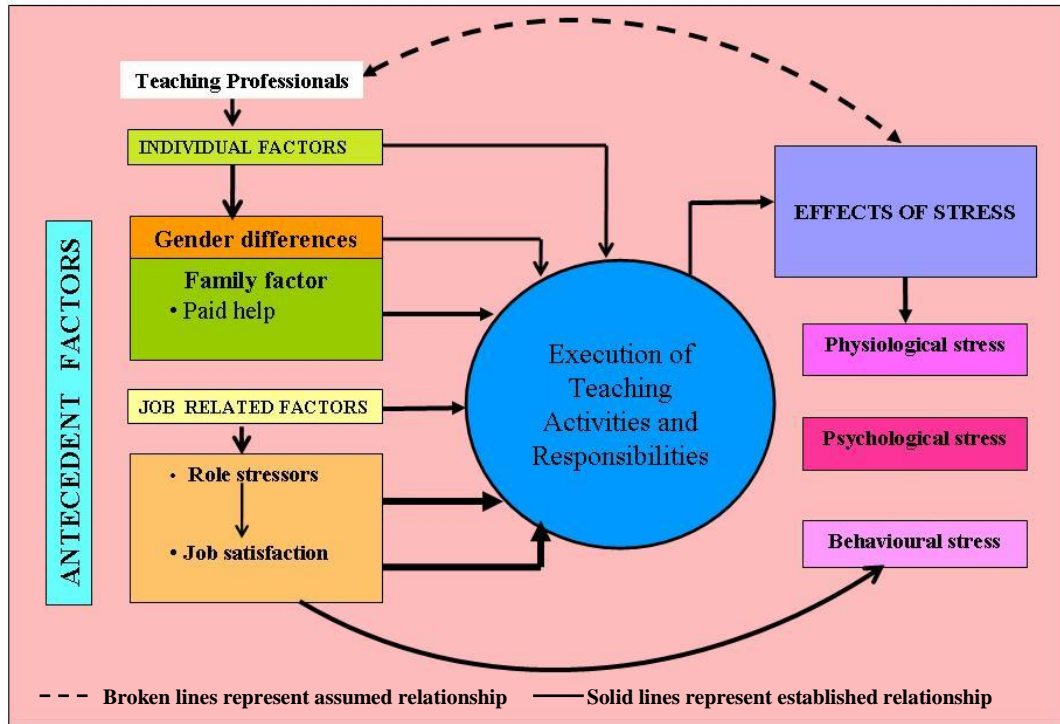


Figure 42.
Revised schematic representation of established relationship amongst the selected variables

In the revised conceptual framework the three noticeable changes are shown on the basis of findings from the hypotheses.

1. Among the antecedent factors, only gender and family factor of paid help emerged to have a relationship with the execution of teaching activities.
2. The job related antecedent factors namely role stressors and job satisfaction had a relationship with all the three stress-effects.
3. The outcomes of teaching activities in terms of stress-effects namely physiological, psychological and behavioural showed a relationship with the teaching professionals.

Thus from the selected variables for the study gender, the family factor of paid help, all the role stressors and job satisfaction from all the aspects of job showed a relationship with stress-effects.



CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

The impact of globalization, urbanization and rapid technological changes have led to the emergence of many management institutes in Pune recently. Growth in the corporate sector has resulted in the requirement of trained management workforce in the industry. The teaching faculty members are the facilitators for knowledge and skill through interactive learning methods in management education.

Fast changing educational process in the present century has influenced the role of teaching professionals, their responsibilities and teaching activities at management institutes. As a result, they may face “stress in their day to day life through common work and non work stressors, ultimately lowering down their psychological well being. Along with teaching, a faculty member has to perform varied other duties such as doing administrative jobs, attending faculty meetings, advising students, guiding project work, internship, summer placement of students, conducting exams, doing assessment and undergoing faculty advancement schemes. In present times, young teaching professionals are increasingly confronted with a problem of conflict between work role and an equally demanding role at home. As a result, a teaching faculty member lives in two systems and needs to perform both professional as well as familial roles. This in turn leads to stress amongst them.

Therefore a management faculty member is under considerable pressure and stress throughout the year.

Rationale for the study

As the mushrooming of management institutes in Pune is a recent development, very few attempts have been made to study stress in management faculty members. Research supports that “teaching is a stressful occupation” Dworkin, Haney, Dworkin and Telschow (1990), Jackson, Schwab and Schuler (1986), and work role stress is a common stressor in these professionals.

“Occupational stress in teaching has been found resulting in both mental and physical ill health, ultimately having deleterious effect on teacher’s professional efficiency” Camp (1985), Claxton (1989), French (1988). Even though researchers have identified stressors for teacher groups in specific teaching contexts but there is notable absence of research in Indian context. The investigator was inspired to know effect of stress on health and ways of coping with stress among these teachers.

Therefore, through this investigation the researcher sought to identify major sources of stress in management professionals and conceptualized three basic premises.

- The effects of stress are influenced by gender and length of service.
- Various personal, family and situational factors are responsible for stress.
- The stress-effects are associated with role stressors and job satisfaction in teaching faculty members.

In light of the above premises and the previous back ground it was decided to carry out the present investigation.

Conceptual framework

The conceptual framework was made to study the effect of stress caused by various antecedent factors in management teaching professionals.

It was theorized that antecedent factors such as personal, family and situational factors caused stress-effects in faculty members leading to physiological, psychological and behavioural effects. Also, the stress-effects in faculty members varied with gender and duration of service. Further, teaching professionals experience stress arising out of various roles performed in execution of teaching activities and responsibilities which influences their job satisfaction level.

Statement of problem

In order to understand the reciprocal relationship between the three variables namely stress-effects, roles stressors and job satisfaction, this study was planned.

The problem was stated as “**A critical analysis of stress faced by teaching professionals at Management Institutes in Pune with special reference to role stressors and job satisfaction**”.

Significance of the study

Teaching faculty members may experience role stress because of multiple roles they play in society. The conflict between work and family demands may all put a strain on the teaching faculty members. Much of the earlier researches on stress have focused on managerial and professional groups but tend to neglect occupations related to teaching. The proposed study would be useful and socially relevant to the present problem of work and family role balance and the stresses arising therein.

REVIEW OF LITERATURE

Relevant references from literature and research studies were collected from books, journals, research papers and research articles. Some relevant literature was also retrieved from various internet websites.

The review of literature was presented as under

- 1) Stress, theoretical background and related studies.
- 2) Antecedents of stress and related studies.
- 3) Stress-effects and related studies.
- 4) Role stress and Role stressors.
 - a. Family role stressor and related studies.
 - b. Work role stressors and related studies.
- 5) Job satisfaction and related studies.
- 6) Stress management - coping strategies and related studies.
- 7) Stress in teaching professionals and related studies.

METHODOLOGY

The study's main emphasis was on effects of stress as related to family role stressor and work role stressors along with job satisfaction. The study also sought to identify the antecedent factors of stress in management faculty members.

Research design

The descriptive research design was chosen as the most suitable one for this study. It took into account various aspects of stress as a phenomenon to be studied.

Objectives

The present study was formulated with the following objectives

1. To identify the effects of stress experienced by male and female management faculty members.
2. To know the causes or antecedent factors of stress among management faculty members.
3. To measure the extent of job satisfaction related to family role stressor and work role stressors.
4. To understand the relationship between stress-effects and job satisfaction.
5. To study the relationship between stress-effects and role stressors in male and female faculty members.

Assumptions of the study

- 1) Management teaching faculty members experience stress at the workplace.
- 2) Gender wise difference in the stress experienced by faculty members can be identified.
- 3) Service wise variation in the stress experienced by faculty members can be identified.

Hypotheses

H1 The extent of stress-effects experienced by male and female faculty members will differ.

H2 The span of service duration will influence the extent of stress-effects experienced by faculty members.

H3 The extent of stress-effects felt by faculty members will differ by antecedent factors: personal factors, family factors and situational factor.

H4 The extent of job satisfaction among faculty members will be influenced by the type of role stressors.

H5 There will be association between the extent of stress-effects felt by faculty members and the job satisfaction derived on each aspect of job.

H6 The influence of family role stressor and work role stressors on the faculty members will differ by gender and service.

H7 There will be relationship between each type of role stressor and stress-effects experienced by faculty members.

Variables

Based on the framework and with elaborate justification two sets of variables were selected for this study namely independent and dependent variables. The independent variables were then again classified into two categories namely individual and job related variables. All the variables under study were as follows

I. Independent variables

A. Individual factors

1. Gender
2. Personal factors
3. Family factors

B. Job related factors

1. Situational Factor
2. Service Duration
3. Role Stressors
4. Job Satisfaction

II. Dependent variables

Effects of Stress

Delimitations of the study

The study was limited to

- 1) Teaching professionals working at various management institutes in Pune city.
- 2) Teaching faculty members who are in service at present inclusive of part time visiting faculty members.

Operational definitions of variables

Certain terms were operationally defined for measurement of variables of this research.

Data collection procedure

A survey study method was adopted for the present study. Questionnaire was used as an instrument for gathering data. It was constructed keeping in mind the objectives of the study. A total of 503 questionnaires were distributed in 65 management institutes initially. But only 328 completed questionnaires were returned from 59 management institutes representing a 63 percent response rate. In the total sample, 164 were male faculty members and 164 were female faculty members. The 328 questionnaires were then ready for data processing. The data collection period fell between April and August, 2010.

Tools used for measurement of the variables

The three most suitable standardized scales used in the present study were as follows

- 1. Organisational Role Stress (ORS) Scale** by Pareek Udai (1983c) revised in (1997, 2002, 2010) measured the ten types of role stressors.
- 2. Stress Test** It was developed by Dr. Prabhu G.G., NIMHANS, Bangalore, in (1991-92). It was used to measure the level of stress-effects namely physiological, psychological and behavioural in teaching faculty members.
- 3. Job Satisfaction Scale** This scale was used to measure the level of job satisfaction in management teaching professionals. It was developed by Murali D. and Kulkarni M.S. in 1997.

Pilot study

A pilot study was carried out by testing the questionnaire on a sample of 30 management teaching professionals inclusive of both male and female from three management institutes in Pune.

Selection of the sample

A total of 32 localities with 59 management institutes located in and around Pune formed the locale of the Study. The respondents were chosen by purposive sampling technique on the basis of certain criteria.

Analysis of data

The data related to various variables were categorized into groups in a structured fashion for the purpose of analysis. Standardized norms for role stressors based on median and quartile deviation were suggested for **low**, **median** and **high**

levels by Pareek Udai (1982a) and Khanna (1986) for managers and the same were used. For all the three stress-effects Mean (M) and Standard deviation (SD) were used as a basis to formulate the categories of level namely **low**, **medium** and **high**.

Similarly for job satisfaction also, as suggested in the scale, three levels of job satisfaction namely **low**, **moderate** and **high** were formulated by using the basis of Mean (M) and standard deviation (SD).

After categorization, data were coded and scores were given. The data were then tabulated and graphs were prepared to represent the various categories as well as the male female differences based on the data.

Statistical analysis

The data were completely analysed using SPSS 11.0 package. Data were analysed employing descriptive as well as relational statistics.

- **Descriptive statistics**

The data were presented in frequencies, percentages, mean and standard deviation for the analysis of personal profile, job profile and family profile of respondents along with data related to ten role stressors of faculty members by gender, data on three stress-effects experienced and data on job satisfaction of faculty members.

- **Relational statistics**

Statistical analysis was carried out to study the relationship between selected variables and to test the null hypotheses stated.

MAJOR FINDINGS

The major findings of this research are briefly presented below

a) **Personal profile**

The total sample constituted 50 percent male and 50 percent female faculty members. Majority of the respondents were young and married. About, 80 percent of the respondents held master's degree with or without diploma or certificate and most of them were engaged in teaching activities. In addition to teaching only a small percentage of faculties carried out administrative, consultancy, counseling and industrial work.

Overall, the respondents got a sleep time of 7-8 hours i.e. adequate sleep. They were found to be engaged in various leisure time activities and hobbies except 7 percent of them who had no hobbies at all. A marked gender difference was noted in literary and combination activities. The faculty members practiced various forms of exercises on a regular basis but no male faculty member practiced yoga, gym and meditation, similarly no female faculty member practiced cycling, aerobics, music therapy and laughter club activities. More than 70 percent of the faculty members reported to have maintained good health with no illness suffered. A little over 80 percent of them took no treatment at all for illnesses suffered. Only a small percentage took periodic and special treatments.

b) Job profile

More than half of the faculty members were junior or senior lecturers and only one sixth were professors. The rest belonged to the categories of assistant or associate professors, principals, counselors, course coordinators, deans and directors.

On an average, male faculty members were more experienced than the female faculty members. The faculty members taught various subjects related to their area of specialization in management.

More than 75 percent of the faculty members worked in private management institutes. The government and semi government management institutes followed more flexible work timings as compared to the private institutes where a rigid fixed schedule was followed more like a corporate culture. About 60 percent of the faculty members worked for 7-8 hours, 23 percent for more than 8 hrs. and the rest for 6 hours or less than 6 hours at the workplace.

c) Family profile

About 60 percent of the respondents belonged to nuclear family staying under one roof. Only 25 percent belonged to joint family. About 40 percent respondents had small size families with 2-3 members, 22 percent faculty members stayed alone and only 14 percent had large families with more than 5 members.

The mean size of family in male respondents was larger than female respondents. The mean total income (monthly) was Rs.57,897.87 of management faculty members. Females had more average income than male respondents. More than 70 percent faculty members had either one or two contributors to their family income.

More than 75 percent faculty members employed “paid help” for doing some type of household jobs where as less than 25 percent did not have paid help at all and carried out all household jobs by themselves. About 50 percent of the faculty members had one or two dependents and less than 25 percent had no dependents at all.

d) Role stressors

Overall, the total mean score of the respondents on all the ten role stressors was 50.70 (SD = 31.78). In men faculty members the mean score was 53.79 (SD = 31.49) and in women faculty members the mean score was 47.62 (SD = 31.86).

No gender difference was found in the mean score of Inter role distance (IRD) i.e. the family role stressor. **Role stagnation** (work role stressor) created slightly higher stress in women than the men faculty members.

On all the remaining eight work role stressors namely **Role expectation conflict** (REC), **Role erosion** (RE), **Role overload** (RO), **Role isolation** (RI), **Personal inadequacy** (PIN), **Self role distance** (SRD), **Role ambiguity** (RA) and **Resource inadequacy** (RIN), men faculty members experienced, higher stress than the women faculty members.

When the level of stress was judged in terms of low, median and high scores on all the ten role stressors, it was found that no gender differences were observed on **Inter role distance** (the family role stressor) and the work role stressor namely **Role stagnation**. On all the rest of the work role stressors, men faculty members experienced higher levels of stress as compared to the women faculty members.

e) Stress-effects

The overall mean score of the respondents on all three stress-effects namely **physiological**, **psychological** and **behavioural** for both genders was

45.20 (SD = 13.59). For men, the overall mean score was 43.36 (SD = 13.63) and for women it was 47.04 (SD = 13.34).

On the **physiological stress-effects**, the mean score of male faculty members was 12.02 (SD = 3.86) and in the female faculty members the mean was 13.11 (SD = 4.15) indicating that women experienced more physiological stress than men faculty members.

On the **psychological stress-effects**, the mean score in male was 17.66 (SD = 6.33) and in females the mean score was 18.90 (SD = 6.35). Again, women felt slightly more psychological stress than the men faculty members.

On **behavioural stress-effects** the mean score for male faculty members was 13.68 (SD = 5.25) and in female faculty members the mean score was 15.02 (SD = 5.21). Although the gender difference was small on this stress effect, women seem to experience slightly more stress than their counterparts on this effect also.

Levels of stress-effects were assessed in terms of high, medium and low levels in both the genders. More women than men were found to experience high levels of stress on all three effects namely physiological, psychological and behavioural along with overall stress-effects.

f) **Job satisfaction**

Overall, women respondents experienced more job satisfaction than men on each aspect of job namely work autonomy, occupational status, work schedule and work environment.

The mean score for women respondents on **work autonomy** was 38.85 (SD = 5.72) and mean score for men was 37.34 (SD = 5.21).

On **occupational status** the mean score for women was 48.62 (SD = 8.56) and mean score of men respondents was 47.77 (SD = 7.25).

On **work schedule** the mean score for women respondents was 43.48 (SD = 8.43) and in men it was 42.22 (SD = 8.38).

On **work environment** women respondents had a mean score of 19.48 (SD = 3.67) and in men it was 18.84 (SD = 3.29). The mean score of women respondents for overall job satisfaction was 150.43 (SD = 22.14) and in men it was 146.16 (SD = 19.23).

Also the extent of job satisfaction level was measured in terms of low, moderate and high. The women faculty members felt a slightly higher level of job satisfaction as compared to men faculty members on all the four aspects of job and also in the extent of **overall job satisfaction**.

g) Results of hypotheses testing

The tests of null hypotheses yielded the following results

H1 The extent of stress-effects experienced by male and female faculty members will differ.

This hypothesis of no difference between male and female faculty members on the extent of stress-effects experienced was partially *rejected*. When compared by 't' test on stress-effects namely physiological and behavioural, the two genders differed significantly including the overall stress. But there was no significant difference on the extent of psychological stress-effects experienced by both the genders. The female faculty members experienced more of physiological, behavioural and overall stress-effects as compared to the male faculty members.

H2 The span of service duration will influence the extent of stress-effects experienced by faculty members.

Hypothesis of no influence of span of service duration on overall stress and the three effects namely **physiological, psychological, and behavioural** in teaching faculty members was *rejected*. On assessment by Pearson product moment correlation test, the relationship between span of service duration and all the three stress-effects including the overall stress were found to be negative and not significant.

H3 The extent of stress-effects felt by faculty members will differ by the antecedent factors : personal factors, family factors and situational factor.

The hypothesis of no difference in the extent of stress-effects of teaching faculty members by personal factors namely **age** and **health status**, family factors namely **family type** and **family size** and situational factor namely **hours of work** was *accepted*. The findings of ANOVA test indicated that these factors did not make a difference in the extent of stress-effects experienced by

the faculty members. When compared on the family factor of **paid help**, the data analyzed by the computed 't' values revealed significant difference at 0.01 level in the stress-effects experienced by respondents with respect to **paid help** employed or not employed. Therefore this hypothesis was *rejected* for the family factor namely **paid help**.

H4 The extent of job satisfaction among faculty members will be influenced by the type of role stressors.

The hypothesis of no influence on the extent of job satisfaction among faculty members by the type of role stressors was completely *rejected*. The 'F' values were found to be significant at 0.01 level on all the ten role stressors namely Inter role distance (IRD) i.e. family role stressor and nine work role stressors namely Role Stagnation (RS), Role Expectation Conflict (REC), Role Erosion (RE), Role Overload (RO), Role Isolation (RI), Personal Inadequacy (PIN), Self Role Distance (SRD), Role Ambiguity (RA) and Resource Inadequacy (RIN).

Analysis of variance highlighted that both family role stressor and work role stressors caused a significant difference in the extent of job satisfaction of teaching faculty members.

H5 There will be association between the extent of stress-effects felt by faculty members and the job satisfaction derived on each aspect of job.

Hypothesis of no association between the extent of stress-effects felt by faculty members and satisfaction from each of the four job aspects namely work autonomy, occupational status, work schedule and work environment was *rejected*; because the extent of stress-effects experienced was negatively correlated with satisfaction from each of the job aspects. The computed 'r' values showed significant negative correlations at 0.01 level between stress-effects and satisfaction from each of the four aspects of job. Higher the job satisfaction in teaching faculty members less was the extent of stress experienced by them.

H6 The influence of family role stressor and work role stressors on the faculty members will differ by

- a) Gender and
- b) Service Duration

H6a Gender

The hypothesis of no difference in the influence of family role stressor and work role stressors on the faculty members by gender was *partially accepted*. When the respondents were compared by gender to find out the difference in the influence of role stressors on them, 't' test revealed significant differences in the influence of some of the role stressors namely **Role expectation conflict**, **Personal inadequacy**, **Self role distance**, **Role ambiguity** and **Resource inadequacy**.

The stress arising out of these role stressors was found to be slightly higher in male faculty members than in the female faculty members. However 't' test showed no significant differences in the effects of family role stressor namely **Inter role distance** and the remaining work role stressors namely **Role stagnation**, **Role erosion**, **Role overload** and **Role isolation** on the faculty members by gender.

H6b Service duration

This hypothesis of no difference in the influence of family role stressor and work role stressors on the faculty members by service duration was also *partially accepted* because out of the ten role stressors, the 'F' values were significant at 0.05 level for only three role stressors namely **Inter role distance** i.e. the family role stressor and the work role stressors namely **Role expectation conflict** and **Resource inadequacy**. Analysis of variance indicated that no significant differences were noted in the influence of rest of the seven work role stressors on the faculty members by three service duration categories namely short service duration (less than 1 year to 7 years of experience), medium service duration (8 to 14 years of experience) and long service duration (15 years or more of experience).

H7 There will be relationship between each type of role stressor and stress-effects experienced by faculty members.

The hypothesis of no relationship between each type of role stressor and stress-effects experienced by faculty members was *rejected*. Pearson's product moment correlation coefficient computed between each of the ten role stressors and the three stress-effects showed significant positive correlations at 0.01 level. The ten role stressors included both the family role stressor and the work role stressors.

Higher the stress arising out of the family role stressor and work role stressors, more were the effects of physiological, psychological and behavioural stress experienced by faculty members.

5.2 CONCLUSIONS

The conclusions from the present study are as follows

- The female faculty members experienced more of physiological, behavioural and overall stress than the male faculty members. The management teaching faculty members did not differ in their experience of psychological stress by gender.

The family role stressor namely Inter role distance (IRD) did not have any influence on the faculty members by gender. But some of the work role stressors such as **Role expectation conflict** (REC), **Personal inadequacy** (PIN) and **Role ambiguity** (RA) showed influence on the faculty members by gender. Two more work role stressors namely **Self role distance** (SRD) and **Resource inadequacy** (RIN) also had a definite influence on the faculty members by gender.

- The selected personal factors of age and health status did not influence the stress-effects in teaching faculty members.

The family factors namely family type and family size had no influence on stress-effects in faculty members. However "**Paid help**" had a definite impact on the extent of stress-effects experienced by faculty members. The other antecedent only situational factor namely "Hours of work" also did not have any impact on the experience of stress-effects in faculty members.

- The extent of job satisfaction among faculty members was influenced by both family role stressor and work role stressors. **Role ambiguity** was the most influential stressor with reference to job satisfaction in faculty members.
- As the job satisfaction in teaching faculty members increased, the extent of stress-effects experienced by them decreased.
- The span of service duration did not have much influence on the extent of stress-effects experienced by faculty members. The three categories of service duration namely **short** service duration, **medium** service duration and **long** service duration caused a significant difference in the influence of family role stressor, **Inter role distance** (IRD) on the teaching faculty members. However, the service duration did not cause a significant difference in the influence of work role stressors except for two stressors: **Role expectation conflict** (REC) and **Resource inadequacy** (RIN).
- A definite positive relationship existed between all the role stressors and the stress-effects in teaching faculty members. The faculty members experienced more **physiological stress** as compared to the other two stress-effects arising out of the family role stressor **Inter role distance** (IRD). The **work role stressors** contributed more towards the experience of **psychological stress** in faculty members when compared to other two stress-effects namely physiological and behavioural.

Maximum **psychological stress** in faculty members was caused by the work role stressors of **Role ambiguity** (RA) followed by **Personal inadequacy** (PIN), **Role expectation conflict** (REC) and **Resource inadequacy** (RIN). These work role stressors emerged as potent sources of psychological stress in management faculty members.

5.3 IMPLICATIONS OF THE STUDY

As educators, it is vital to identify situations that might undo anxiety and stress among management faculty members. Management institutes do need to provide support to the teaching faculty members to relieve stress at the work place.

The findings of the study brought out a number of implications which are self evident. The study can prove to be useful for researchers and academicians, heads of the institutions and educational policy makers as follows

1. Heads of the institutions

- The findings of the present study enables understanding of the key target i.e. identification of stress in management teaching professionals and its relationship to their work role and job satisfaction. In addition, the study helped to identify the health status of faculty members (as reported by them) and the health practices followed by them. Aspects such as details of spouse and children, dependents, type of household and family, time schedule, and paid help added to more understanding of the target group and their family group. Based on this information the working conditions may be improved.
- Information generated from this additional study of stress has the potential to increase job satisfaction and to reduce the turnover rate for experienced as well as the new teaching professionals.
- An understanding of stress in management teaching professionals may not only form the basis of stress analysis but may also be useful in rationalizing stress behaviour and formulating coping strategies for the entire teaching population. Gender comparison on stress-effects will allow employers to understand the differences in attitudes, beliefs and common values of faculty members at the work place. Modules for stress management can be designed on the basis of lifestyles, beliefs and attitudes of management faculty members for different profile groups. It may also help in developing sound overall workplace strategies for management faculty members.
- The study discloses that the weaker area in the domain of stress-effects is “Psychological” stress in management faculty members. Preventive and restorative measures may be designed and adopted to reduce and overcome “psychological” stress in faculty members.
- The findings indicate a point of reference i.e. introspection of management faculty members. They should acquire competence and the essential skill to impart management education, thus receive job satisfaction and over-ride the factors causing stress.

- Role of management towards the teaching professionals should include due recognition and appreciation of the achievements of their faculty members. Decisions related to faculty members' up gradation, promotion and revision of course of studies, should all be participatory.
- The top management should ensure a learning and participatory environment for the faculty members for institutional success.
- The findings can also help to generate and design "Self stress coping programme" for management faculty members enabling them to strike a better balance between work role and family role. The study can act as an eye opener for the corporate sector promoting them to plan internships and placement of students well in advance, use academic calendars and hence minimize the pressure on faculty members throughout the year.
- This research attempts to generate an understanding about the facts of stress. It suggests using resources of the organization to alleviate stress and develop their own functional stress coping strategies for their teaching professionals related to physiological, psychological and behavioural stress-effects.

2. Researchers and academicians

- The results of this study can contribute to the knowledge pertaining to stress-effects in teaching professionals and coping strategies to manage them. Other than this, the findings and results on role stressors and job satisfaction as related to stress can help in setting up a theoretical base for future studies.
- The study indicates relationship between the three variables under study: Stress-effects, role stressors and job satisfaction. Their relationship proposes that neither of them may be overlooked for a better quality of management education.
- The research findings suggest that control of "physiological", "psychological" and "behavioural" stress-effects in faculty members is essential. Hence short courses and programmes on stress management can be developed for improving the quality of life of management teaching professionals.
- Over and above this, the findings of this study can help in contributing to the recommendations for future studies and add on to the current references. It will

be useful for the researchers and academicians to use the conceptual framework to formulate theories. The database of the present study can form a platform for conducting further researches in the similar lines. The study can make a valuable contribution to the knowledge base of stress behaviour of management faculty members in the Indian context.

- As a lead research, it provides many opportunities to study gender differences in stress related professions for researchers.
- With the change in socio-cultural environment especially in urban setting, stress management should be made a part of management studies. In educational management institutes, especially in the departments of MBA, “stress and its management” can form an integral part of the curriculum. Efforts should be made by academicians to introduce the study of stress in “human behaviour” module.

3. Educational policy makers

- Using the inputs from this study that stress-effects and job satisfaction are inversely related, the government can make the job of teaching profession full of attraction and ambition. This may be done by improving upon the pay packets and fringe benefits so that faculty members may feel pride in their job and perform to the best of their capacity, thereby increasing job satisfaction and reducing stress.
- Further, the study has action utility. The findings of the study can justify its utility since knowing the management faculty members precisely and reaching out to them in the effective way, is the key to minimize stress. The data throws light on the problems encountered as related to their health in general and form of illness suffered. The information can be useful to clinical psychologists, doctors and health Insurance agents to bring about appropriate modifications in, Health awareness programmes, insurance policies and stress release measures thereby decreasing stress and increasing job satisfaction. The study can also direct employers of management institutes to evolve flexible work strategies and provide better working conditions which will help in overcoming stress in faculty members to some extent.

- The study will be useful for stress counselors in guiding patients to analyse themselves.
- The statistics with respect to work role and job satisfaction of management faculty members can act as an input to organizations such as Ministry of education, Ministry of health and family welfare, policy makers, voluntary bodies as NGOs and teachers training centers enabling them to act as mediators between management institutes and faculty members to formulate standards for ensuring conducive environment at the workplace and flexible work culture.
- Educational planners and administrators may be greatly benefited by the findings of the present study. They can design programmes to overcome the problem situation, betterment of condition of management professionals and uplift of management education standards. The information can be beneficial to administrators in the leadership of their institutions, to management institutions of high learning for their educator preparation programmes and to service center personnel in their program development and delivery.
- In addition, Media can also reach out to the masses and community of students by planning, organizing and showcasing programmes on teachers; their role, problems and cases by using the major highlights of this study and thus encouraging the masses to understand teachers in a better perspective.

5.4 SUGGESTIONS FOR FUTURE RESEARCH

The following suggestions were evolved from the present study for future researches

1. Further research is needed with larger samples. This study was confined to Pune city. Similar study can be conducted taking a larger geographical area; at regional or state level.
2. The three variables under study namely stress-effects, role stressors and job satisfaction may be explored for their cause and effect relationship with other variables such as personality characteristics, job commitment, leadership styles, and coping strategies.
3. A similar study can also be conducted on other professionals.

4. Role stress can be studied in faculty members teaching the professional and non professional courses.
5. In the present study, the focus was on the sample of teaching professionals working in management institutes. In the same light, the teachers working in other colleges and teaching management courses may also be studied.
6. In depth research may be undertaken to identify “at the job” and “off the job” problems of management teaching professionals.
7. This study was concerned with inter group gender differences. Similarly, a study may be designed with intra group comparisons.
8. A longitudinal research may provide much needed insight into specified changes within each group over time.
9. Further research could determine the effects of implementation of programs and practices to reduce stress-effects and stress levels of faculty members.
10. The working conditions and workplace strategies may be studied in relation to stress.
11. Role stress and quality of work life in teaching professionals may be assessed.
12. Future research may attempt to study work family conflict in different types of organizational settings.

5.5 RECOMMENDATIONS

Based on the findings of the present research, and ideas supported by review of literature, some interventions were designed by the researcher as coping strategies to combat and reduce stress in management teaching professionals to some extent.

These strategies are basically primary preventive measures and hence cannot eliminate stress completely. Yet, the researcher aims to make a new beginning by making the authorities aware about the presence of stress in their faculty members and the importance of reducing stress at the workplace for management teaching professionals.

The recommended coping strategies for stress management are designed at three levels namely personal level, family level and professional level.

Although while designing and recommending coping strategies, the primary focus was on professional coping strategies, but some coping strategies were also recommended at personal and family level. The presence of stress either at personal or at family level will also influence the work and performance of faculty members at the institutions, which in turn will have an impact on the field of education and thus society at large. Therefore the coping strategies were recommended at all the three levels.

The recommendations made by the researcher at the professional level can be given a due thought by the institutional heads. Then, as per the suitability of the needs and availability of resources, each institution can prioritize and implement these recommendations for minimizing stress in their faculty members.

The coping strategies in form of recommendations are given below

1. Personal level

Specific techniques which the management faculty members can use for coping with role stress include the following

- **Effective self control**

It is a “self cure” technique for managing one’s own behaviour to reduce stress. Faculty members can avoid people and situations that they know will put them under stress.

- **Cognitive therapy**

It is another self cure technique by which a faculty member can easily alter the self defeating thoughts which may unnecessarily cause stress and lead to physiological and psychological stress-effects. A personal diary can be maintained by the faculty members to let out the pent up feelings through writing. ‘Self talk’ and ‘self analysis’ can go a long way in managing an individual’s behaviour and the stress.

- **Time management**

For balancing work and family roles, cope up better with work overload (RO), time pressures and Role expectation conflict (REC), the faculty members can prioritize and reschedule their work and family activities accordingly.

- **Social support**

Social support can be beneficial for counterchecking stress. The faculty members can form associations with trusted and empathetic people either at the work place or in the family or at both the places. These people can listen to the problems, and provide support whenever needed by building confidence and help the faculty members overcome stressful situations.

- **Innovative teaching methods**

The faculty members can explore and use innovative methods of teaching. These methods can be used to update knowledge and skills in management education. This will give a lot of confidence and job satisfaction to the faculty members thereby reducing the stress-effects experienced by them especially the psychological stress.

- **Exercise**

Based on the findings, it is recommended that male faculty members should engage themselves in Yoga, Gymnasium, and Meditation along with their other exercise related activities. Similarly women faculty members also can engage themselves in aerobics, cycling, music therapy and laughter club activities. Both genders can pursue these activities suitable to their age. These activities can provide outlet to their feelings and emotions and help in reducing physiological and psychological stress.

- **Leisure time**

Leisure time can be used by faculty members for doing some activities which gives them pleasure and help in building connections with others. Hobbies can easily be pursued in leisure time. Recreational activities, hobbies and connecting with friends can all help to prevent the damaging effects of stress.

2. **Family level**

The techniques suggested here require the involvement of family members to help individual faculty members cope with stress.

- **Sharing of household duties**

Timely sharing of household work and delegation of household duties to the family members and dependents can help to solve the problem of overwork at

home, fatigue and physiological stress to a large extent in the management faculty members.

- **Family support**

Support from family members especially from spouse and other dependents can help in completion of various running errand jobs, problem solving through discussions and participative decision making. The collaborative effort of family members together in dealing with family matters can create a compromising situation and thus reduce stress levels. It is a collective coping strategy at family level.

- **Employed paid help**

Better facilities of paid help employed for repetitive daily tasks is necessary to reduce physiological stress experienced by female faculty members arising out of household chores.

- **Approach coping**

Through effective open communication, a faculty member can share and discuss problems related to work, work place environment, working conditions and relationships at work either with spouse or any other elder member of the family if any. Sharing feelings and experiences freely will enable the faculty members to receive genuine advice for dealing with stressful situations.

A good rapport and free communication amongst family members will encourage an easy approach to each other in times of need. Sharing of ideas and feelings related to a stressful situation with a family member can definitely help in devising ways to combat stress in faculty members.

3. Professional level

The following stress coping strategies may be designed and implemented by management authorities to control work stressors and to reduce job stress in faculty employees.

1) Family supportive work culture

Development of family supportive work culture is strongly recommended based on the findings of the present study through

- a) “Flexible timings” and provision of liberal personal days would be helpful on occasions when dependents in the family require personal attention on medical grounds, help during exams or any other urgent activity that crops up.
 - b) Assistance can perhaps be offered by financing and setting up a day care for faculty members with young children. Payment can be taken from the faculty members on a monthly basis.
 - c) Provision may be made for yearly “Master medical check up” for all permanent faculty members at least. This will enable identification of ailments and their timely treatment. This recommendation can help in the realization of UGC’s recent goal of extending teacher’s services after superannuation if the faculty members maintain good health. Yearly camp can be organised for a free medical check up of the faculty members and their family members.
 - d) If possible, facilities for exercise to the faculty members may be provided at the institutes. Yoga being the most popular and effective relaxation technique suitable for all age groups may be practiced during the free periods, and before or after workplace timings.
 - e) Periodically, some group activities can be planned whereby families are also invited to participate such as picnics, informal get-together and competitions. This will encourage better interaction, establishing linkages and social networking with families and friends of the faculty members.
- The above strategies may contribute towards reducing distress arising out of role expectation conflict as well as work family conflict of managing dual responsibilities.

2) Selection and recruitment

At the time of interview and placement a clear understanding of job description and role clarity can go a long way in reducing conflicts arising from role ambiguity and role expectation later on. At this level, more comprehensive induction programmes may be carried out for effective discharging of duties, roles and functions related to teaching learning activities in management education.

- 3) The role and the job of management teaching professionals should be defined as per the All India Council for Technical Education (AICTE) norms and University of Pune guidelines for job placement.
- 4) “Periodic orientations” and pre service and in service “faculty members education programmes” may be planned from time to time on themes namely “Expectations from future teaching professionals”, “Roles redefined for the twenty first century in teaching professionals” and the like. Such programmes may help to reduce role stress to some extent.
- 5) Management should emphasize on imbibing the social values among the students by the faculty members in order to create dedication to work, social awareness and responsibilities in them as future citizens. By strengthening social values in the student community, the management professionals will have a higher sense of achievement and increased job satisfaction thus leading to low stress levels in them.
- 6) Even though teaching is a solitary activity, “collective coping” is a preventive strategy which may be encouraged through “team work”, setting up of cohesive work groups, increased participation and improved communication at the work place. Multiple activities such as collaborative and inter department research projects, work shops, seminars and other academic meets may be planned, whenever possible to strengthen collective coping. Yearly educational tours may be planned to various destinations to maintain a good rapport with the students.
- 7) **Affective coping** : It can be thought of by initiating to set up a staff club. Activities such as picnics, get-together, tours, dinners, movies and other outings may be organised by this club. Such meets will give a chance to the junior faculty members and visiting faculty members to interact and thus understand their senior faculty members better, enhancing their relationships at work.
- 8) **Effective coping** : It is a primary intervention technique. Directional and constructive problem solving should be followed by all management institutes. Faculty members should be given an opportunity to come up with innovative ideas, and practice new skills in their field of specialization. Participative and

active decision making is the need of the hour. This will not only direct their stress for productive purpose i.e. “Eustress” but also give them a chance to understand their strengths and weakness with a positive attitude. As a result they will use “approach coping” strategy more often than the “avoidance coping” strategy.

9) Manpower planning : Input output ratio matching should be ensured by institution heads. In some institutes, trained young persons may have to wait for years together for appointment whereas in other institutes, trained faculty members may not be available at all. So, it should be ensured that training programmes are planned including all specializations and covering maximum geographical region. This would help in timely appointment of new suitable faculty members.

10) Stress management : Training programmes, refresher courses, extension and enrichment courses may be organized with a mandatory component of “stress management module” for faculty members.

11) Hand books may be prepared for different subjects and specializations at under graduate and post graduate levels for enhancing the quality of teacher’s professional competencies. These could be of great help to the newly appointed teaching professionals by providing them ready teaching material and resources for better classroom teaching.

12) Career counseling: Management authorities should declare career advancement schemes from time to time so that faculty members can take advantage of them and enhance their future prospects.

A career counseling cell or unit should be established to guide those faculty members who need to undergo courses, take higher degrees or do research for promotions and higher placements.

13) Transparency in policies and procedures : The institutions are required to maintain transparency in their norms, policies and procedures, aids, grants and funds for various activities. This will not only enable the faculty members to be more clear about the vision and mission of the institutes but also promote more commitment towards the institute leading to more productivity, increased job satisfaction and reduced stress levels.

- 14) Faculty organization :** A faculty organization represented by senior faculty members may be formulated to defend the material and moral interest of the teachers, and safe guard their status. It can work in collaboration with other professional bodies such as NCTE i.e. National Council for Teacher Education, UGC, other universities, and other educational associations for receiving cooperation and support from State and Central Government. In addition, it can help in professionalizing the management education and quality control through a system of quality assessment and accreditation. The faculty members can approach this organization with their problems seeking decisions from higher authorities, thus relieving them from stress to some extent. This organization can also work as a mediator between parents, teaching faculty members, institutes and community.
- 15) Employment benefits and retirement plans :** Management institutes especially private ones should revise their pay packets and fringe benefits such as medical reimbursement, leave travel concession, education allowance for faculty members and their children and travel allowance from time to time to keep pace with high cost of living. Retirement benefit plans should also be revised in the best interest of the faculty members for a peaceful stress free retired life.
- 16) Provision for leave and cultural exchange :** Study leave for career advancement purpose or for higher studies may be planned for senior faculty members with more experience. Provision of sabbatical leave may also be given due consideration for deputation of faculty members to other states, region or country as a resource person or for cultural exchange to learn about differences in institutional practices and the specific culture. Such practices may generate high motivation amongst faculty members thereby preventing their stress.
- 17) Resource center :** Resource center can be established at the institutes for teaching faculty members under preparation and for the guidance of educators. The institute heads can maintain close collaboration and good working partnership with the neighboring institutes for exchange of learning resources, sophisticated equipments and personnel. Retired faculty members and Alumni can be invited to work as educators to give inputs on teaching learning

activities and conduct training for practicing faculty members. The stress related to fear of teaching in trainees can thus be reduced to some extent.

18) Incentives : The institute heads have a bigger role to play in designing attractive incentives such as scholarships, higher studies abroad and research grants for the deserving faculty members. Even though, it may bring some discrimination between the “deserving” and the rest of the faculty members but it is necessary for the morale boosting of the “suited and the gifted” faculty members. Incentives may be sure measures of capacity enhancing and up gradation for teaching professionals thereby alleviating stress in them.

5.6 LIMITATIONS

While formulating and conducting the research study, the investigator faced certain limitations which are as follows

1. Management institutes being recent in origin, employed only a small number of faculty members who were well experienced with long service duration as compared to a large number of faculty members with short service duration. May be, due to less experience, the faculty members were not able to vividly relate stress-effects with their job.
2. Some management institutes were located on the outer periphery of Pune. The study could not sample from these institutes due to the high cost of resources and practical difficulties in data collection.
3. Most of the small private management institutes manage their education with the visiting faculty members and employ less number of permanent faculty members. Visiting faculty members being cult of the other institutes where they work full / part time might reveal the influence of a different work culture on their commitment towards teaching duties which might influence their stress relationships.
4. Since the focus of this study was on the role of antecedents underlying the stress-effects in faculty members and not on the use of advanced statistical procedures, the statistical technique of multivariate analysis could not be used to study these factors together.

Thus the present study opened up some other aspects of stress experiences in management teaching faculty members which need further research in order to know more about them.

It is clear that employment in teaching profession plays a key role in affecting faculty member's health and well being.

Even though stress from the pace of change in teaching and learning activities is unavoidable, the faculty members can avoid becoming a victim. By taking the time necessary for stress preventive activities, they can save on time and resources and enhance their performance. Awareness is half the battle won. They can prevent or at least minimize the symptoms of stress by responding to stress in their own unique way and get back in control. The management institutes provide them an opportunity to shoulder responsibilities, play new roles, interact with new people and face new situations.

The effective performance of these roles can lead them to a higher status, better income, strengthen their position and achieve a more equitable role distribution between the two genders at work and in the family. With stress at a minimal level, off the working hours, they can also participate in socially meaningful and prestigious programmes and thereby expand their resource base and statue base.

With further knowledge of the precise process involved in the stress-work relationship, certain methods (coping strategies) to reduce occupational stress in management teaching faculty members may be used and occupational health benefits may be optimized. Coping strategies can be used at the work places to better meet the needs of both employers and the faculty members. The management employers can no longer afford to neglect their role in promoting healthier stress free employees with increased levels of job satisfaction, organizational commitment and motivation. A stress free work culture can promote reduced staff turnover, absenteeism and higher quality of management education.



BIBLIOGRAPHY

- Aditya, S.M. and Sen, A.K. (1993). "Executive under stress: A comparison between men and women." Journal of the Indian Academy of Applied Psychology. 19 (1-2). pp. 1-6.
- Agarwal, Rita (2001). Stress in life and at work. New Delhi, Sage Publications India Pvt. Ltd.
- Agervold, M. (1985). "Office work and psychological stress." Journal of Occupational Behavior. 10. pp.1-29.
- Ahmad, S, Bharadwaj, A and Narula, S (1985). "A study of stress among executives." Journal of Personality and Clinical studies. 1(2). pp. 47-50.
- Ahmad, S. and Khanna, P. (1992). "Job stress and satisfaction of middle level hotel employees." Journal of Personality and Clinical Studies. 8(1-2). pp. 51-56.
- Ahmed, P.I., Kolker, A. and Coelho, G.V. (1979). "Toward a new definition of health: An overview". Toward a new definition of health: Psychosocial dimensions, New York: Plenum Press. pp. 7-21.
- Akhtar, Sultan and Vadra, Priti (1990). "A comparative study of extra organisational stress among women teachers and nursing staff". Paper presented at the 27th Annual Conference of IAAP, Aligarh, Aligarh Muslim University.
- Axelrod, W.L. and Gavin, J.F. (1979). "Stress and strain in blue-collar and white-collar management staff." Journal of Vocational Behaviour. 17(1). pp. 41-49.
- Axelrod, W.L. and Gavin, J. F. (1977). "Managerial stress and strain in a mining organisation." Journal of Vocational Behavior. 11. pp. 66-74.
- Baneerjee (1989). "Negative relationship between role stress and mental health of employees in service organisation." Cited in Pestonjee, D.M., (1992), Stress and Coping: The Indian Experience, 2nd Edition, New Delhi, Sage Publications India Pvt. Ltd
- Barling, J., Kelloway, E.K. and Iverson, R.D. (2003). "High Quality work, job satisfaction and occupational injuries." Journal of Applied Psychology. 88(2). pp. 276-283.
- Beehr, T. and Newman, D. (1978). "Job stress, Employee Health and organisational effectiveness: A facet analysis, model and literature review". Personal Psychology. pp. 665 - 700.
- Beehr, T.A. (1976). "Perceived situational moderators of relationship between subjective role ambiguity and role strain". Journal of Applied Psychology. 61. pp. 35-40.

- Beehr, T. (1984, 1985) Cited in Beehr, T. and Franz, T. (1987). "The current debate about the meaning of job stress". Journal of Organisational Behaviour Management, 8. pp.5-15.
- Beehr, Terry A. and Bhagat, Rabi S. (eds.) (1985). Human Stress and Cognition in Organisations: An Integrated Perspective. New York: Wiley.
- Beena, C. and Poduval, P.R. (1991). "Gender differences in work stress of executives". Psychological Studies. 37(2-3). pp. 109-113.
- Bhagat, R.S., Mc Quaid, S.J., Lindholm, H., and Segovis, J. (1985). "Total life stress: A multi method validation of the construct and its effects on organisationally valued outcomes and withdrawal behaviors". Journal of Applied Psychology.70. pp. 202-214.
- Bhagat, R.S., (1983). "Effects of personal life stress upon individual performance effectiveness and work adjustment processes within organisational settings: A research model." Academy of Management Review. 8. pp. 660-671.
- Bhamgara, M.M. (1997). Reverence for health. Mumbai, Image Publications Pvt. Ltd.
- Bhandarker, A. and Singh, P. (1986). "Managerial stress: A study in cyclical perspective". ASCI, Journal of Management. pp. 25-59
- Bhatnagar, D. and Bose, K. (1985). "Organisational role stress and branch managers". Prajnan. 14(4). pp. 349-360.
- Bhattacharya, Sunetra and Basu, Jayanti (2007). "Distress, wellness and organizational role stress among IT professionals: Role of life events and coping resources." Journal of the Indian Academy of Applied Psychology. 33(2). pp. 169-178.
- Bidyadhar, Shwetaleena and Sahoo, Fakir, M. (1997). "Psychological factors of work-family linkage." Psychological Studies. 42(2, 3). pp. 49-59.
- Biswas, P.C. and De, T. (1993). "Effects of organisational climate of school o secondary teacher's professional stress: An exploratory study". Indian Journal of Psychometry and Education. 24(1). pp. 45-52.
- Borg, M.C. (1990). "Occupational stress in British Educational settings: A Review". Educational Psychology.10. pp. 103-126.
- Bradfield, Robert, H. and Fones, Donald, M. (1985). "Special Teacher Stress: Its product and prevention." Intervention in School and Clinic. 21 (1). pp. 91-97
- Brief, A.P. and Aldag, R.J. (1976): "Correlates of role indices." Journal of Applied Psychology. 61. pp. 468-472.

- Broadbent, D.E., Cooper, P.F., Fitzgerald, P. and Parkes, K.R. (1982). "The cognitive failures questionnaire and its correlates". British Journal of Clinical Psychology (1987). 21. pp. 1-16.
- Brown, B.B. (1984). Between Health and Illness: New Notions on stress and the Nature of well being. Boston, Houghton-Mifflin.
- Burgo, P.L. and Culver, S.M. (1989). "The reciprocal relationship between work and home satisfaction for Home Economic teachers". Home Economic Research Journal. 17(4). pp. 337-348.
- Camp, M.D. (1985, 1986). "Selected stress factors concerning the teacher faculty as they relate to students and parents, colleagues, administration, financial security, the job and profession in a selected school district". Dissertation Abstracts International.
- Caplan, R.D., Cobb, S., French, J.R.P. Jr., Harrison, R.D. and Pinneau, S.R., Jr. (1975). "Job demands and worker health". NIOSH, Washington DC, Government Printing Office.
- Caplan, R.D. and Jones, K. W. (1975). "Effects of workload, role ambiguity, and Type A personality on anxiety, depression, and heart rate". Journal of Applied Psychology. 60. pp. 713-719.
- Caplan, R.D. (1985). "Subjective past, present and future fit: Effects of anxiety, depression and other indicators on well being". Journal of Personality and Social Psychology. 48(1). pp. 180-197.
- Castlemen, Michael (1997). A Good Night's Sleep Could Save Your Life. The Times of India, New Delhi, 12th October.
- Chan, Alan H.S., Chen, K. and Chong, Elaine Y.L. (2009). "Work stress of teachers from primary and secondary schools in Hong Kong". International Multi Conference of Engineers and Computer Scientists (ICMECS), March. pp.17-19.
- Chandraiah, K., Agarwal, S.C., Marimuthu, P. and Manoharan, N. (2003). "Occupational stress and job satisfaction among managers." Indian Journal of Occupational and Environmental Medicine. 7 (2). pp. 6-11.
- Chaplain, R.P. (2001). "Stress and job satisfaction among primary head teachers: A question of balance?" Educational Management Administration and Leadership. 29(2). pp. 197-215.
- Claxton, G. (1989). Being a Teacher: A Positive Approach to Change and Stress. London: Cassell Educational Limited.

- Cohen, E. and Lazarus, R.S. (1973). "Active coping processes, coping dispositions and recovery from surgery". Psychosomatic Medicine. 35. pp. 375-389.
- Cohen, S. and Williamson G.M. (1991). "Stress and infectious disease in humans." Psychological Bulletin. 109. pp. 5-24.
- Cohen, S., and Williamson, G.M. (1988). "Perceived stress in a probability sample of the U.S.". Cited in Spacapan, S. and Oskamp, S. (eds.), (1988), The social psychology of health: Claremont Symposium on Applied Social Psychology. Newbury Park, CA: Sage.
- Coles, M. and Walker, S. (eds.) (1989). Teaching and Stress. Milton Keynes: Open University Press.
- Cooper, C. L., and Davidson, M. (1987). "Sources of stress at work and their relation to stressors in non-working environments". Cited in Kalimo, R., El-Batawi, M. A. E. and Cooper, C. L. (eds.) (1987), Psychological factors at work and their relation to health. Geneva, Switzerland: World Health Organisation. pp. 99-123.
- Cooper, C. L., Mallinger, M., and Kahn, R. L. (1980). "Dentistry: What causes it to be a stressful occupation?" International Review of Applied Psychology. 29 (3). pp. 307-319.
- Cooper, C. L., Sloan, S. J., and Williams, S. (1987, 1988). Occupational Stress Indicator (OSI). Windsor, England: NFER-Nelson.
- Cooper, C. L., Watts, J., Baglioni, A. J., and Kelly, M. (1988). "Occupational stress amongst general practice dentists." Journal of Occupational Psychology. 61(2). pp. 163-174.
- Cooper, C.L. and Marshall, J. (1976, 1978). "Understand executive stress," London, The Mac Millian Press Ltd.
- Cooper, C.L. and Roden, J. (1985). "Mental health and satisfaction among tax officers". Social Science and Medicine. 21. pp. 747-7521.
- Coverman, S. (1985). "Explaining Husbands' Participation in Domestic Labor." Sociological Quarterly. 26(1). pp. 81-97.
- Coverman, S., and Sheley, J. F. (1986). "Change in men's housework and child-care time, 1965-1975". Journal of Marriage and the Family. 48: pp. 413-422.
- Cox, J. (1985a, b). Cited in Travers, Cheryl. J. and Cooper, Cary, L. "Background to the study of teacher stress." Teachers under pressure: Stress in the teaching. 1996, Routledge 270 Madison Ave, New York. pp. 26.

- Cox, T (1978). Stress: A review of theories, causes and effects of stress in the light of empirical research. London: Macmillan.
- Crouter, A.C. (1984). "Spillover from Family to Work: The Neglected Side of the Work-Family Interface". Human Relations. 37. pp.425-441.
- Daga, N. (1997). "Influence of social family role stress and social support on the quality of life". Ph. D. thesis, Aligarh, Aligarh Muslim University.
- David, Fontana (1989). Managing Stress. Excel Books. 1st edition, New Delhi. pp. 1-115.
- Davis, M., Eshelman, E.R. and McKay, M. (1980). The relaxation and stress reduction workbook. Richmond, CA, New Harbinger.
- Devi, Indira, M. (1987). Women education, employment and family living: A study of emerging Hindu wives in Urban India. Delhi: Gyan Publishing House.
- Devi, Lalitha U. (1982). "Status of Women within family", Status and Employment of Women in India. Delhi, B.R. Publishing Corporation. pp. 81-91, 148-151.
- Dodge, D. and Martin, W. (1970). Social stress and chronic illness mortality patterns in Industrial society. London, University of Notre Dame Press. pp. 1-331.
- Donaldson, S.I. (1993). "Effects of lifestyle and stress on the employee and organisation: Implications for promoting health at work." Anxiety, stress and coping. 6. pp.155-177.
- Dr. Chaurasia, Gulab, Rohidekar, S.R., Mrs. Singh, Kirpal, T. and Dr. Dev, Raj Vij (1998). "The teacher education and professional organisations of teachers". Professional status of teachers. Bhopal, Council for Teacher Education. pp. 183-199.
- Dua, J.K. (1994). "Job Stressors and Their effects on physical health, Emotional health and Job satisfaction in a University". Journal of Educational Administration. 32. pp. 59-78.
- Dworkin, A. G., Haney, C. A., Dworkin, R. J. and Telschow, R. L. (1990). "Stress and illness behaviour among urban public school teachers". Educational Administration Quarterly. 26 (1). pp. 60-72.
- Eckenrode, John and Gore, Susan (1990). "Stress and coping at the boundary of work and family", "Where work and family met: Stress across social roles", "Role related stress in married couples", "Stress between work and family: Summary and conclusion." Stress between work and family. New York and London, Plenum Press. PP. 1-13, 100-113, 153-173, 205-215.

- Edgerton, Susan, K. (1977). "Teachers in role conflict." Phi Delta Kappan. LIX. pp. 120-122.
- Edwards A. L. (1969). Techniques of attitude scale construction. Vakil's Feffer and Simons Pvt. Ltd., Bombay.
- Esteve, J.M. and Fracchia. (1986). "Inoculation against stress: A technique for beginning teachers". European Journal of Teacher Education. 9. pp.261-269.
- Farmer, Richard E., Monahan, Lynn Hunt and Hekeler, Reinhold W. (1987). "Your Personal stress behavior cycle", "Factors in personal and relational stress", "Stress in human services", "Reduction stress: issues affecting change", "Stress response moderators and individual differences", "Stress and its consequences". Stress management for human services. New Delhi, Sage Publications India Pvt. Ltd. pp. 20-27, 36-41, 49-56, 57, 66-97.
- Fernandes, C. and Murthy, V. (1989). "A study of job related stress and burnout in middle and secondary school teachers". Unpublished Manuscript.
- Fimian, Micheal J. and Blanton, Linda P. (1987). "Stress, burnout and role problems among teacher trainees and first year teachers". Journal of Occupational Behaviour, 8(2). pp. 157-165.
- Flechter, B.C. and Payne, R. L. (1982). "Levels of reported stressors and strains amongst school teachers: Some UK data". Educational Review. 34(3). pp. 267 - 278.
- Folkman, S and Lazarus, R S, (1980). "An analysis of coping in a middle-aged community sample". Journal of Health and Social Behaviour. 21. pp. 219-239.
- Folkman, S., Lazarus, R.S., Schetter, Dunket, C., Delongis, L. and Gruen, R.J. (1986). "Dynamics of successful encounter, cognitive appraisal, coping and encounter outcomes." Journal Personality and Social Psychology. 50. pp. 992-1003.
- Frankenhaeuser, M and Odman, M. (1983). Stress – part of life. Stockholm, Bromberg's, Sweden.
- French (1988). "Dynamics of Teacher's Behavior." Cited in Verma, Romesh, (1998), Psychology of teacher: model approach for twenty-first century. New Delhi, Anmol Publication Pvt. Ltd. pp.1-27.
- French, J. R. P., Jr., and Caplan, R. D. (1970). "Psychological factors in coronary heart disease". Industrial Medicine. 39. pp. 31-45.
- French, J.R., Caplan, R.D. and Harrison, R.V. (1982). "Job demands, strain and intervening variables". The mechanism of job stress and strain. London, Wiley and Sons Ltd. pp. 59-61.

- French, John, R.P., Jr., Tupper, C.J. and Mueller, Ernst (1965). "Workload of university professors." Co-operative Research Project No, 2171. U.S. Office of Education. Ann Arbor, University of Michigan.
- Friedman, H. and Booth-Kewley, S. (1987). "The disease prone personality." American Psychologist.42. pp. 539-555.
- Fuller, F.F. (1969). "Concern of Teachers: A development conceptualization". American Educational Research Journal. 6. pp.207-226.
- Furnham, A., and Schaeffer, R. (1984). "Person-environment fit, job satisfaction and mental health". Journal of Occupational Psychology. 57. pp.295-307.
- Galloway, D., Panckhurst, F., Boswell, K., Boswell, C. and Green, K. (1984). Mental health, absences from work, stress, and satisfaction in a sample of New Zealand primary school teachers. Australian and New Zealand Journal of Psychiatry. 18. pp. 359-363.
- Ganguly, K. (1988). "Role of perceived control in coping with stress". Ph. D. Thesis, Bhopal University, Bhopal.
- Ganster, Dan and Bates, Collete (2003). "Work Stress- Long Work Hours Are not the Culprit". Back to the Science of Mental Health, 22nd August. pp. 1.
- Garrett, H.E and Woodworth, R.S. (1981). Statistics in Psychology and Education. Vakil's Feffer and Simons Ltd., Bombay.
- Ghanekar, Anjali (1995). Organisational behaviour: Concepts and cases, Pune, Everest Publishing House. pp.315-335.
- Giri, Uday and Rao, Nageswara (2007). "An Analytical probe into the levels and extent of the stress creators in teaching profession." Cited in Vimal, T.D., Babu, Prasad B. and Rao, Digumarti Bhaskara, (2007), Stress, Coping and Management. 1st edition, New Delhi, Sonali Publications: pp. 52-63.
- Gmelch, Walter H., Lovrich, Nicholas P. and Wilke, Phyllis K. (1984). "A National study of stress among University Faculty members". The Phi Delta Kappan International, January, 65 (5). pp. 367.
- Goldstein, M.J. (1973). "Individual differences in response to stress." American Journal of Community Psychology. 2. pp. 113-137.
- Grandjean, E. (1988). Fitting the task to the man: A textbook of occupational ergonomics. 4th edition. Taylor and Francis, London and New York.
- Grant, I., Kyla, G.C. et. al. (1974). "Recent life events and diabetes in adults". Psychosomatic Medicine.36.pp. 121.

- Greenberg, S. F., and Valletutti, P. J. (1980). Stress and helping professions. Baltimore: Paul H. Brookes.
- Greenglass, E.R., Burke, R.J. (1988). Work and Family Precursors of Burnout in Teachers: Sex Differences. Sex Roles.18. pp. 215- 229.
- Gupta, G.R. and Murthy, V.N. (1984). "Role conflict and coping strategies: A study on Indian Women." Unpublished Manuscript.
- Gupta, N.K. and Pratap, S. (1987). Cited in Gupta, N.K., (1988), "Organisational role stress and coping strategies of public sector executives". Ph. D. Thesis. Department of Humanities and Social Sciences, University of Roorkee, Roorkee.
- Gupta, N.K. (1988). "Organisational role stress and coping strategies of public sector executives". Ph. D. Thesis. Department of Humanities and Social Sciences, University of Roorkee, Roorkee.
- Gupta, R. K. (1999). "Japanese and Indian work patterns: A study of contrasts". Cited in H. S. R. Kao, D. Sinha, and B. Wilpert (eds.), (1999), Management and cultural values: The indigenization of organisations in Asia. New Delhi: Sage.
- Gupta, S. and Kulkarni, A.V. (2001). "Job satisfaction, job involvement and organisational role stress." Psychological Review. 56(4). pp. 41-46.
- Haggerty, Robert J. (1977). "Changing lifestyles to improve health". Preventive Medicine. 6 (2). pp. 276-289.
- Hall, D.T. (1972). "A model of coping with role conflict: The role behaviour of college educated women". Administrative Science Quarterly. 17. pp. 471-86.
- Hall, D.T. and Gordon, F. (1973). "Career choices of married women: Effects on conflict, role behaviour, and satisfaction". Journal of Applied Psychology. 58. pp. 42-48.
- Hammond, O.W. and Onikama, D.L. (1997). At risk teachers. Honolulu, Hi: Pacific Resources for Education and Learning.
- Harmon, L. W. (1981). "The life and career plans of young adult college women: A follow-up study". Journal of Counseling Psychology. 28. pp. 416-427.
- Head, J., Stansfeld, S.A. and Siegrist, J. (2004). "The psychosocial work environment and alcohol dependence: A prospective study." Occupation and Environmental Medicine 61. pp. 219-224.
- Hendrix, W., Ovalle, N.K. and Troxler, R.G. (1985). "Behavioral and psychological consequences of stress and its antecedents' factors." Journal of Applied Psychology. 70. pp. 188-201.

- Hill, Jeffrey E., Chongming, Yang, Hawkins, Alan, J. and Ferris, Maria (2004). "A cross cultural test of the work-family interface in 48 countries." Journal of marriage and family.66. pp. 1300-1316.
- Holahan, C. J. and Moos, R. H. (1985). "Life stress and health: Personality, coping, and family support in stress resistance". Journal of Personality and Social Psychology. 49. pp. 739-747.
- Holmes T.H. and Masuda M. (1974). "Life change and illness susceptibility". Cited in Dohrenwend B.S., Dohrenwend B.P. (eds.), (1974), Stressful life events. Chichester: John Wiley and Sons.
- Holmes, T.H. and Rahe, R.H. (1967). "The Social Readjustment Rating Scale". Journal of Psychosomatic Research. 2. pp. 213-218.
- Holt, R.H. (1982). "Occupational stress". Cited in Goldberger, L. and Brenitz, S., (eds.), (1993), Handbook of Stress: Theoretical and Clinical Aspects. New York: The Free Press.
- House, James S., Wells, James A., Landerman, Lawrence R., McMichael, Anthony J. and Kaplan, Berton H. (1979). "Occupational Stress and Health among Factory Workers." Journal of Health and Social Behavior. 20(2). pp. 139-160
- House, R.J., Rizzo, J.R. and Lirtzman, S.I. (1970). "Role conflict and ambiguity in organisations." Administrative Science Quarterly. 15. pp.150-163.
- Husain, A. (1998). "Management of stress disorders through individual control techniques." Cited in Pestonjee, D.M., Pareek, U. and Agarwal, R. (eds.), (1999) Studies in stress and its management. Delhi, Oxford and IBH.
- Ivancevich M. J. and Donnelly H. J. (1975). "Relation of Organisational Structure to Job Satisfaction, Anxiety-Stress and Performance". Administrative Science Quarterly. 20(2). pp. 272-280.
- Ivancevich, J.M. and Matteson, M.T. (1980). Stress and work: A managerial perspective. Glenview, Ill, Scott, Foresman.
- Ivancevich, J.M., Matteson, M.T., Feedman, S.M. and Phillips, J.S. (1990). "Worksite stress management interventions." American Psychologist. 45. pp. 252-261.
- Jackson, S. E., Schwab, R. L. and Schuler, R. S. (1986). "Toward an understanding of the burnout phenomenon." Journal of Applied Psychology. 71. pp.630-640.
- Jagdish, (1983). "An investigation into the relationship of Perceived Occupational Stress with Job Satisfaction and Mental Health of First Level Supervisors". Ph.D. Thesis. Banaras Hindu University, Varanasi.

- Jagdish and Singh, R.P. (1997). "Hierarchical level as a moderator of the relationship between occupational stress and strain". Cited in Srivastava, S.K. (eds.), (1997), Developing human relations and ethnic understanding. Hardwar, Gurukul Kangri University.
- Jagdish and Srivastava, A. K. (1989). "Perceived Occupational Stress and mental health: A case study." Indian Journal of Industrial Relations. 24(4). pp. 444-452.
- Jamuna, D. and Ushasree, S. (1990). "Burnout among woman teachers belonging to private and public schools". Unpublished. Paper presented at the 27th Annual Conference IAAP, Aligarh Muslim University, Aligarh.
- Johansson, G., Johnson, J.V., and Hall, E.M. (1991). "Smoking and sedentary behaviour as related to work organisation". Social Science and Medicine. 32(7). pp. 837-846.
- Judge, T.A. and Watanabe, S. (1993). "Another look at the job satisfaction-life satisfaction relationship". Journal of Applied Psychology. 78. pp. 939-948.
- Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D. and Rosenthal, R.A. (1964). Organisational stress: Studies in role conflict and ambiguity. New York, Wiley.
- Kaiser, J.S. and Polczynski, J.J. (1982). "Educational stress: Sources, reactions, preventions". Peabody Journal of Education. 10. pp.127-134.
- Kanner, A.D., Coyne, J.C., Schaefer, C. and Lazarus, R.S. (1981). "Comparison of two modes of stress measurement: Daily hassles and uplifts v/s major life event". Journal of Behavioural Medicine. 4. pp. 1-39.
- Karasek, R., and Theorell, T. (1990). Healthy work: stress, productivity, and the reconstruction of working life. New York, Basic Books. pp. 89-103.
- Kasl, S. V., and Cobb, S. (1970). "Blood pressure changes in men undergoing job loss: A preliminary report". Psychosomatic Medicine. 32. pp. 19-37.
- Kaur, G. and Murthy, V.N. (1986). Organisational role stress, coping strategies and locus of control in major public sector industrial organization. Unpublished manuscript.
- Kelly, M and Cooper, C.L. (1981). "Stress among Blue Collar Workers". Employee Relations, 3. pp. 6-9.
- Kets de Vries, M.F.R. (1979). "Organisational stress: A call for management action". Sloan Management Review. 21(1): pp. 3-14.
- Kets de Vries, M.F.R. (ed.) (1984). The Irrational Executive: Psychoanalytic Explorations in Management. New York.

- Khanna, S. (1986). "Life stress, anxiety and depression in working woman of India: A study of moderators". Unpublished Ph. D. Thesis. Shimla, Himachal Pradesh University.
- Khetarpal A. and Kochar G. K. (2006). "Role Stress and Preventive". The Internet Journal of World Health and Societal Politics. 3(1).
- Knowles, M (1977). The Modern practice of adult's education: Andragogy Versus Pedagogy (18th) New York, Association Press.
- Kobasa, Suzanne C. (1982). "Commitment and coping in stress resistance among lawyers". Journal of Personality and Social Psychology. 42(4). pp. 707-717.
- Kornhauser, A. (1965). Mental health of the industrial worker. New York, John Willey.
- Koteswari B. V. (2004). "Influence of gender and length of service on stress and coping behavior in organisation." Ph. D. Thesis. Tirupati, Sri Venkateshwara University.
- Koteswari Bala, V. and Allam, Zafrul (2005). "Job stress among managers". Praachi Journal of Psycho- Cultural Dimensions. 21(1). pp. 13-18.
- Kothari, C.R. (2004). "Testing of Hypothesis". Research Methodology: Methods and Techniques. 2nd edition. Mumbai, New Age International. pp.184- 313.
- Kumar, S. (1989). "A study of role stress, role satisfaction, role efficacy among public sector executives." Unpublished Ph. D. Thesis. Rohtak, Maharshi Dayanand University.
- Kumar, Satish (1997). "Relationship between organisational role stress and length of service". Journal of Psychological Researches. 41(172). pp. 39-43.
- Kyriacou, C. (1987). "Teacher stress and burnout: An international review". Educational Research. 29. pp. 89-96.
- Kyriacou, C. and Pratt, J. (1985). "Teacher stress and psychoneurotic symptoms." British Journal of Educational Psychology. 55: pp. 61-64.
- Kyriacou, C. and Sutcliffe, J. (1977): "Teacher stress: A review". Educational Review. 29. pp. 299-306.
- Kyriacou, C. and Sutcliffe, J. (1978a). "A model of teacher stress". Educational Studies. 4. pp. 1-6.
- Kyriacou, C. and Sutcliffe, J. (1978b). "Teacher stress: prevalence, sources and symptoms". British Journal of Educational Psychology, 48. pp. 159 - 167.
- Kyriacou, C. and Sutcliffe, J. (1979a). "Teacher stress and satisfaction". Educational Research. 21(2). pp. 89-96.

- Kyriacou, C. and Sutcliffe, J. (1979b). "A note on teacher stress and locus of control". Journal of Occupational Psychology. 52. pp. 227-228.
- Lai, G. (1995). "Work and family roles and psychological well being in urban China". Journal of Health and Social Psychology. 135. pp. 185-90.
- Lakshmi, Siva M. Rama and Devi M. Sarada (2005). "Relative magnitude of role satisfaction and role stress of women in different occupations". Praachi Journal of Psycho-Cultural Dimensions. 21(1). pp. 38-41.
- Langford, D.M. (1987). "Relationship between stress and job satisfaction as perceived by seventh-day Adventist Boarding Academy teachers in the Southern and Southwestern unions". Thesis. Tennessee State University.
- Langford, V. (1988). "Stress, Satisfaction and Managers in the Construction Industry". Occupational Psychologist. 6. pp. 30-32
- Laporte, W. (1966). "The influence of gymnastic pause upon recovery following post office work." Ergonomics. 9. pp. 501-506.
- Latack, J.C. (1986). "Coping with job stress: Measures and future directions for scale development". Journal of Applied Psychology. 71 (3):pp. 377-385.
- Lazarus, R. (1975). "A Cognitively Oriented Psychologist Looks at Biofeedback". American Psychologist. 30. pp. 553-61
- Lazarus, R.S. (1974a). "The psychology of coping: Issues of research and assessment. Cited in Coelho, G.V., Humburg, D.A. and Adams, JE. (eds.), (1974), Coping and adaptation. New York, Basic Books.
- Long, B.C. (1990). "Relation between coping strategies, sex-typed traits and environmental characteristics: A comparison of male and female managers." Journal of Counseling Psychology. 37. pp. 185-194.
- Luhadia, V. (1991). "A study of the relationship between role stress and job satisfaction of geological officer at three different levels." Unpublished M.A. Thesis. Jaipur, University of Rajasthan.
- Lumsden, D.P. (1975). "Towards a system model of stress: Feedback from Anthropological study of the impact of Ghana's Volta river project". Cited in Sarason, I.G. and Speilberger, C.D. (eds.) (1975), Stress and Anxiety. (2), Washington Hemisphere.
- Lundberg, U., Mardberg, B. and Frankenhauser, M. (1994). "The total workload of male and female white collar workers as related to age, occupational level, and number of children". Scandinavian Journal of Psychology. 35. pp. 315-327.

- Maddi, S. R., Bartone, P. T., and Puccetti, M. C. (1987). "Stressful events are indeed a factor in physical illness: Reply to Schroeder and Costa" (1984). Journal of Personality and Social Psychology. 52. pp. 833-843.
- Maddi, S.R. and Kobasa, S.C. (1984). "The hardy executive: Health under stress. Homewood, Illinois, Dow Jones-Irwin.
- Major, Virginia Smith (2002). "Work time, work interference and psychological distress". Journal of Applied Psychology, 87(2).
- Malhotra, Y. (1996). Organisational learning and learning organizations: An overview.
- Mannivannan, L., Saravananaraj, M.G. and Sumathi, S. (2007). "Managing stress among the employees." The ICFAI Journal of Organisational Behaviour. 6(2). pp.53-9.
- Martin, T. N. (1984). "Role stress and inability to leave as predictors of mental health." Human Relations. 37(11). pp. 969-983.
- Mathew, V.J. (1985). "Job stress of a creative manager." FPM written comprehensive examination paper. OB Area, Ahmadabad, Indian Institute of Management.
- Mathur, S. (1997). "Correlated of role stress in working women." Cited in Cited in Pestonjee, D.M. and Pareek, U. (eds.), (1997), Studies in organizational role stress and coping. Jaipur or New Delhi, Rawat Publications.
- Mc Nair, D., Lorr, M, and Droppleman, L. (1971). Profile of mood states manual. San Diego, Educational and Industrial Testing Service.
- Mc Shane, Steven L. and Glinow, Mary Ann Von (2001). "Stress management", Organisational Behaviour. New Delhi, Tata McGraw-Hill Publishing Company Ltd. pp. 136-137, 141-142.
- Mc Grath, J.E. (1976). "Stress and behaviour in organisations". Cited in Dunnette, M.D. (ed.), (1976), Handbook of industrial and organizational psychology. Chicago, Rand Mc Nally. pp. 1351-1395.
- Mc Kay, M., Davis, M. and Fanning, P. (1981). Thoughts and Feelings: The art cognitive stress intervention. Richmond, CA, New Harbinger.
- Mc Lean, A. (1979). Work Stress. Reading, Mass, Addison-Wesley.
- Menon, N. and Akhilesh, K.B. (1994). "Functionally dependent stress among managers: A new perspective." Employee Counseling Today. 6(4). pp. 16-25.
- Mishra, R. (1996). Gender differences in stress and job satisfaction among teachers of higher educational institutions. Unpublished M.A. Dissertation. Department of Psychology, Lucknow University, Lucknow.

- Mishra, R.S. (1994). "Mental Health of primary school teachers.", "Job satisfaction among primary school teachers." Problems of school teacher. New Delhi, Common wealth Publishers. pp. 93-109, 110-130.
- Mohan, V. (1993). "Effect of training in human resource development on leadership styles and effectiveness." Journal of the Indian Academy of Applied Psychology. 19(2). pp. 81-84.
- Morris, J. H., and Koch J.L. (1979). "Impact of Role Perceptions on Organisational Commitment, Job Involvement, and Psychosomatic Illness among Three Vocational Groupings". Journal of Vocational Behaviour. 14. pp. 88-101.
- Mughal, Shahien, Walsh, James and Wilding, John (1996). "Stress and work performance: The role of trait anxiety". Personality and Individual Differences. 20(6). pp. 685-691.
- Murali, D. and Kulkarni, M.S. (1997). "Scale to measure the level of job satisfaction of working women". Indian Journal of Applied Psychology. 34(2). pp. 17-21.
- Murphy, L.R. (1984). "Occupational stress management: A review and appraisal." Journal of Occupational Psychology. 57. pp. 1-15.
- Murphy, L.R. (1988). "Workplace interventions for stress reduction and prevention." Cited in Cooper, C.L. and Payne, R. (eds.), (1988), Causes, coping and consequences of stress at work. Chichester, John Wiley and Sons.
- Nomaguchi, Kel M. and Bianchi, Suzanne, M. (2004). "Exercise time: Gender differences in the effects of marriage, parenthood and employment". Journal of marriage and family.66. pp. 413-430.
- Nuernberger, Phil (1990). Freedom from stress. Pennsylvania, Himalayan International Institute of Yoga Science and Philosophy.
- Orpen, Christopher (1982). "Type A personality as a moderator for the effects of role conflict, role ambiguity and role overload on individual strain". Journal of Human Stress. 8(2). pp. 8-14.
- Orpen, Christopher (1996). "Cognitive failure as a moderator of the effect of work stress on personal strain: An Empirical study". Psychological Studies. 41 (1, 2). pp. 50-52.
- Pandey, A. (1997). "Role stress and role efficacy." Cited in Pestonjee, D.M. and Pareek, U. (eds.), (1997), Studies in organisational role stress and coping. Jaipur or New Delhi, Rawat Publications.

- Parasuraman and Alluto (1981). "Sources and out comes of stress in Organisational selling's: Toward the development of a structural model". Psychological Abstracts. 14th edition. 71 (10).
- Pareek, A., and Mehta, M. (1997). "Role stress among working women". Cited in Pestonjee D.M., and Pareek U. (eds.), (1997), Studies in Organisational Role Stress and coping. New Delhi: Rawat Publications. pp. 173-181.
- Pareek, U. (1981). "Changing concepts of human resource management". Productivity. 22(1). pp. 3-5.
- Pareek, U. (1981). "Role focused interventions". Indian Journal of Training and Development. 1. pp. 45-47.
- Pareek, U. (1982a). "Executive glow up and burnout." Summary of Larsen and Turbo lecture. Ahmadabad, Indian Institute of Management.
- Pareek, U. (1983b). "Preventing and resolving conflict. "Cited in Goodstein, L.D. and Pfeiffer (eds.), The 1983 annual for facilitators, trainers and consultants. San Diego, California, University Associates. pp. 164-169.
- Pareek, U. (1983, 1983c). Role stress scale: ORS scale booklet, answer sheet and manual. Ahmadabad, Navin Publications.
- Pareek, U. (1993). Making Organisational role effective. New Delhi, Tata Mc Graw Hill.
- Pareek, U. (1994). "Studying organisational ethos: The OCTAPACE profile." Cited in Pfeiffer, J.W. (ed.), The 1994 annual: Developing human resources. San Diego, California, Pfeiffer and Co.
- Pareek, Uday and Purohit, Surbhi (1997, 2002, 2010). "Organisational role stress scale (ORS)", Training instruments in Human Resource Development and Organisational Development, 3rd edition. New Delhi, Tata McGraw Hill Publishing Company Ltd. pp. 489- 553.
- Pareek, U. (1987). Organisational role stress, New Delhi, Tata Mc Graw Hill Publishing Company Ltd. pp. 44 -52.
- Parsons, J.J. (1973). "Assessment of anxiety about teaching using the Teaching Anxiety Scale: Manual and research report". The Research and Development Center for Teacher Education, University of Texas.
- Payne, N., Jones, F., and Harris, P. (2002). "The impact of working life on health behavior: The effect of job strain on the cognitive predictors of exercise". Journal of Occupational Health Psychology. 7(4). pp. 342-353.

- Payne, R. (1980). "Organizational stress and social support". Cited in Cooper, C.L. and Payne, R. (eds.), (1980), Current Concerns in Occupational Stress. Chichester, Wiley. pp. 269-98.
- Pestonjee, D.M. (1983). "Stressors or loads: A diagrammatic presentation of the stress, phenomenon". Unpublished teaching note for programme on management of executive stress. Ahmadabad, Indian Institute of Management.
- Pestonjee, D.M. (1987a). Executive stress: Should it always be avoided? Vikalpa. 12 (1). pp. 23-30.
- Pestonjee, D.M. (1987b). "A study of role stress in relation to Type-A and Anger". Working paper no. 670. Indian Institute of Management, Ahmadabad.
- Pestonjee, D.M. (1992, 1999). "Organisational role stress", "Role stress in special groups", "Moderators of stress". Stress and Coping: The Indian Experience, 2nd Edition, New Delhi, Sage Publications India Pvt. Ltd. pp. 101-102, 109-110, 116, 129, 130, 134, 208, 209, 211, 245-247.
- Pestonjee, D.M. and Mishra, P.K. (1999). "Role stress and job satisfaction amongst doctors." Journal of Health Management. 1(1). pp. 117-131.
- Pestonjee, D.M. and Pareek, U. (1992). "Occupational stress in academic and non academic staff working at University of New England in Australia". Cited in Pestonjee, D.M and Pareek, U. (1997), Studies in organisational role stress and coping. New Delhi and Jaipur, Rawat Publications.
- Pestonjee, D.M. and Singh, G.P. (1987). "Organisational behavior issues for managers and systems analysis". Working Paper no. 660. Ahmadabad, Indian Institute of Management.
- Pot, A.M., Zarit, S.H., Twisk, J.W. and Townsend, A.L. (2005). "Transitions in caregiver's use of paid home help: association with stress appraisals and well-being". Psychological Aging, June, 20(2). pp. 211-219.
- Prabhu, G.G. (1991, 1992). Stress test. Bangalore, NIMHANS. (This test was obtained personally from Dr. Deshpande, S.W., Head, Department of Psychology, Pune University in 2009)
- Pratt, John (1978). "Perceived stress among teachers: The effect of age and background of children taught". Educational Review. 30(1). pp. 1-13.
- Quick, J.C. and Quick, J.D. 1984). Organisational stress and preventive management. New York, McGraw Hill.

- Quick, J.C., Murphy, L.R. and Hurrell, J.J. Jr. (eds.) (1992). Stress and well being at work: Assessment and interventions for occupational mental health. Washington DC, American Psychological Association.
- Quinn, R., Seashore, S., Kahn, R., Mangion, T., Cambell, D. and Staines, G. (1971). Survey of Working Conditions: Final Report on Univariate and Bivariate Tables. Washington, D.C.: U.S. Government Printing Office, Document No. 2916-0001.
- Rahe R H, Meyer M, Smith M, Kjaer G and Holmes T.H. (1964). "Social stress and illness onset". Journal of Psychosomatic Research. 8: pp.35-44
- Rahe, R.H. (1968). "Life change measurement as a predictor of illness". Proceedings of Royal Society of Medicine. 61. pp. 1124-1126.
- Rajagopalan, M. and Khandelwal, P. (1988). "A study of role stress and coping styles of public sector managers." Psychological Studies. 33(3): pp. 200-204.
- Ramanamma, A. and Bambawale, D. (1987). Women in Indian Industry. New Delhi. Mittal Publishers.
- Ramu, G.N. (1989). "Women and Paid Work", Women Work and Marriage in Urban India: A study of dual- and Single-Earner couples. New Delhi, Sage Publications India Pvt. Ltd. pp. 52-97.
- Rani, Kala (1976). Role Conflict in Working Women. New Delhi: Chetana Publisher.
- Rao, P.V.K. (1995): "Yoga: Its scientific and applied aspects". Journal of Indian Psychology. 13(2). pp. 1-12.
- Rao, S.K.R. (1983). "The conception of stress in Indian thought: The theoretical aspects of stress in *samkhya* and yoga systems". NIMHANS Journal. 2. pp. 115-121.
- Revieki, D.A. and May, H.J (1985). "Occupational stress, social support and depression." Health Psychology. 4. pp. 61-77.
- Rizzo, J.R., House, R.J. and Litzman, S.I. (1970). "Role conflict and ambiguity in complex organizations". Administrative Science Quarterly. 15. pp. 150-163.
- Robbins, Stephen P., Judge, Timothy A. and Sanghi, Seema (2009). "Attitudes and Job satisfaction". Organisational behaviour. New Delhi, Prentice Hall of India Pvt. Ltd. pp.76-106.
- Rod, Martin, A. and Herbert, Lefcourt, M. (1984). "Situational humor response questionnaire: Quantitative measure of sense of humor". Journal of Personality and Social Psychology. pp. 47: 145-155.

- Rosen, M.D. (1985). "Marriage is back in style with a difference." Ladies Home Journal. 11(6). pp.6, 98-102,159-161.
- Sachdeva, U. (1994). "The effect of yogic lifestyle in hypertension." Homeostasis in health and disease. 35(4-5). pp. 264.
- Sagar, J.K. (1994). "A structural model depicting salespeople's job stress". Journal of the Academy of Marketing Science. 22. pp. 74-84.
- Saiyadain, M. (2007). Human Resource Management. New Delhi, Tata McGraw Hill.
- Sarason, I. G., and Johnson, J. H. (1979). "Life stress, organisational stress and job satisfaction". Psychological Reports. 44. pp. 75-79.
- Saraswati, L.S. (1974). "Job satisfaction of home scientists employed as teachers". Indian Journal of Home Science. 8(2). pp. 84-89.
- Savara, Mira (1986). Changing trends in women's employment: A case study of textile industry in Bombay. Bombay: Himalaya Publishing House.
- Schuler, R. and Von, Sel, M. (1981). Managing Job Stress. Boston: Little, Brown.
- Sekaran, U. (1985). "The paths to mental health: An exploratory study of husbands and wives in dual carrier families." Journal of Occupational Psychology. 58. pp. 129-137.
- Selye, H. (1936). "Thymus and adrenals in the response of the organism to injuries and intoxications". British Journal of Experimental Psychology. 17. pp. 234- 248.
- Selye, H. (1975). "Confusion and controversy in the stress field." Journal of Human Stress. pp. 37-44.
- Selye, H. (1979b). The stress of my life: a scientist's memories. New York, Van Nostrand Reinhold.
- Selye, H. "Real People, Real stories": Stress in Today's World. Cited in Michael Olpin and Margie Hesson, (2010, 2007), Stress Management for Life: A Research-Based, Experiential Approach, 2nd Edition, Wadsworth Belmont, USA. pp.1-10.
- Sen, Kakoli (2008). "Relationship between job satisfaction and job stress amongst teachers and managers". Indian Journal of Industrial Relations. pp. 1-5.
- Sen, P.C. (1981). "A study of personal and organisational correlates of role stress and coping strategies in some public- sector banks". Unpublished Ph. D. Thesis. Gujarat University, Ahmadabad.
- Shahnawaz, M.G. and Ali, Nasir (2007). "Work- family conflict and organisational commitment among dual career women." Journal of National Academy of Psychology, India. 52(3). pp. 248-252.

- Shamir, Boas (1986 b): "Unemployment and household division of labour". Journal of Marriage and the Family. 48(1). pp. 195–206.
- Sharma, R.A. (2000, 1982). Organisational Theory and Behaviour, 2nd Edition. New Delhi, Tata McGraw-Hill Publishing Company Ltd.: pp. 484-485, 487-502.
- Sharma, S. and Acharya, T. (1989). "Coping strategies and anger expression." Journal of Personality and Clinical Studies. 5. pp. 15-18.
- Sharma, U. (1986). Women's work, class and the urban household: A study of Shimla, North India. London: Tavistock.
- Shrimali, Vijay and Sen Ruchira (2009). "Relative factors of stress among IT professional and gender differences of wellness among them." Pacific Business Review- A Quarterly Journal. pp. 22-31.
- Singh, A.P. and Srivastava, U. R. (1996). "Social Support as a Moderator of Stress-Health Relationship among Indian Managerial Personnel," Unpublished manuscript, as cited in Pestonjee, D.M., Stress and Coping.1999, New Delhi, Sage Publications.
- Singh, Anoop, K. and Pandey, J (1985). "Dimensions of coping with socioeconomic problems". Social Change. 15(1). pp. 51-54
- Singh, J.B.P. (1990). Work culture in the Indian Context. New Delhi, Sage Publications.
- Singh, P. (2007). Effect of stress on job satisfaction and work values amongst teachers. Allahabad, Adhyayan Publishers and Distributors.
- Skinner C.E (1958). Essentials of educational Psychology. Englewood cliffs N.J practice – Hall, New Jersey.
- Solaiman, A., Tahereh, C., Masiello, I. and Brommels, M. (2007). "Organisational Role stress among Medical school faculty members in Iran: Dealing with role conflict." BMC Med Educ. Published Online, 7(14).
- Spector, R.E (1997). Job satisfaction: Application, assessment, causes and consequences. London, Sage Publication.
- Spielberger, C.D., Jacobs, G., Russell, S. and Crane, R.S. (1983). "Assessment of anger: State and trait anger scale". Cited in Butcher, J.N. and Spielberger, C.D (eds.). (1985), Advances in personality assessment. 2, Hillsdale N.J., LEA.
- Splitz (1988). "Stress and coping at boundary of work and family". Cited in Eckenrode, John and Gore, Susan (1994), Stress between work and family. New York and London, Plenum Press. pp. 1-13.

- Srivastava, A. K. and Krishna, A. (1992). "Employees' Job Involvement and Mental Health in Public and Private Sector Organisations: A Comparative Study." Indian Journal of Industrial Relations. 28(1). pp. 62-70.
- Srivastava, A. K., and Krishna, A. (1991). "A test of inverted "U"-hypothesis of stress performance relationship in the industrial context". Psychological Studies.36: pp.34-38.
- Srivastava, A.K (1997). "Dynamics of role stress in an organisation". Cited in Pestonjee, D.M. and Pareek, U. (eds.). (1997), Studies in organisational role stress and coping. Jaipur or New Delhi, Rawat Publications.
- Srivastava, A.K. (1991a). "A study of role of stress mental health relationship as moderated by adopted coping strategies." Psychological Studies. 36 (3). pp. 192-197.
- Srivastava, A.K. (1999). "Conceptual perspective", "Sources of occupational stress", "Consequences of occupational stress", "Coping with Occupational stress". Management of Occupational stress: Theories and Practice. New Delhi, Gyan Publishing House. pp. 9-29, 33-49, 51-84,141-150.
- Srivastava, A.K. and Singh, A.P. (1981). "Construction and standardization of an occupational stress index: A pilot study". Indian Journal of Clinical Psychology. 8. pp. 133-136.
- Srivastava, A.K. and Singh, H.S. (1988). "Modifying effects of coping strategies on the relation of organisational role stress and mental health." Psychological Reports. 62. pp. 1007-1009.
- Srivastava, K. and Srivastava, A.K. (1985). "Job stress, marital adjustment, social relations and mental health of dual career and traditional couples: A comparative study". Perspectives in Psychological researches. 8(1). pp. 28-33.
- Steptoe A., Wardle J., Pollard T.M., Canaan L. and Davies G.J. (1996). "Stress, social support and health-related behaviour: a study of smoking, alcohol consumption and physical exercise". Journal of Psychosomatic Research. 41(2). pp. 171-180.
- Stokols, D. (1992). "Establishing and maintaining healthy environments". American Psychologist. 47. pp. 6-22.
- Sullivan, S. and Bhagat, R. (1992). "Organisational stress, job satisfaction and job performance: Where do we go from here?" Journal of Management. 18(2). pp. 353 - 374.

- Sultana (1995). "Gender differences in organisational role stress of professionals and non professional teachers of high educational institutions". M.A. Thesis. Lucknow, Lucknow University.
- Surti, K. (1982). "Some Psychological Correlates of Role Stress and Coping Styles in Working Women". Unpublished Ph. D. Thesis. Gujarat University, Ahmadabad
- Sutherland, V. and Davidson, M.J. (1989b). "Stress amongst Construction Site Managers - A Preliminary Study". Stress Medicine. 5(4). pp. 221-235
- Syrotuik, J. and D'Arcy, C. (1984). "Social support and Mental Health: Direct, Protective and Compensatory effects". Social Science Medicine. 18(3). pp.229-236.
- Tang, Catherine, So-kum, Au, Wing-Tung, Schwarzner, Ralf and Schmitz, Gerdamarie (2001). "Mental health outcomes of job stress among Chinese teachers." Journal of Organisational Behaviour. 22(8). pp. 887-901.
- Terryberry, S. (1968). "The Organisation of Environments". Ph. D. Thesis, Michigan, University Ann Arbor.
- Thakaran, P.N.O. (1992). "Occupational stress and job satisfaction among working women." Journal of the Indian Academy of Applied Psychology. 18(1-2). pp. 37-40.
- The Times of India (1997). Stress levels rising Asia. 8 December, New Delhi.
- Theorell T. and Rahe R.H. (1971). "Psychosocial factors and myocardial infarction: An inpatient study in Sweden". Journal of Psychosomatic Research. 15. pp. 25-31.
- Thoresen, C.E. and Eagleston, J.R. (1985). "Counseling for health". Counsel. Psychology. 13. pp. 15-87.
- Todd, Carlos R. (2008). "The connections to long hours, stress and anger and irritability", Anger on my mind .4th October: pp. 1-2.
- Travers, C., and Cooper, C. (1993). "Mental health, job satisfaction and occupational stress among UK employees". Work and Stress. 7. pp. 203-219.
- Tubesing, N.L. and Tubesing, D.A. (1982). "The treatment of choice: Selecting stress skills to suit the individual and the situation". Cited in Paine, W.S. (ed.). (1982), Job stress and burnout: Research, theory and intervention perspectives. California, Sage Publication.
- Uden, A.L., Orth-Gomer, K., and Elofsson, S. (1991). "Cardiovascular effects of social support in the workplace: twenty four hour ECG monitoring of men and women". Psychosomatic medicine. 53. pp. 50-60

- Vadra, P and Akhtar, S. (1989). "A study of extra- organisational stress". Paper presented at the national Seminar on Anxiety, stress and depression in modern life, Patiala.
- Verma, Romesh (1998). "Dynamics of teacher's behaviour", Psychology of teachers: Model Approach for twenty first century, New Delhi, Anmol Publications Pvt. Ltd. pp. 1-30, 74-77.
- Voydanoff, P. and Donnelly, B.W. (1985). "Economic distress, coping and quality family life". Paper presented at symposium entitled: Economic distress and families: Coping strategies and social policy. University of Dayton.
- Voydanoff, Patrica (2004). "The effect of work demands and resources on work-to-family conflict and facilitation". Journal of marriage and family.66. pp.398-412.
- Warr, P. (1994). "A conceptual framework for the study of work and mental health." Work and Stress. 8(2). pp.84-97.
- Watson Wyatt (2006). Work India Survey. Cited in Sonawane Pragya.(2008) Non-monetary rewards: employee choices and organizational practices. Indian Journal of Industrial relations.
- Zafer, M. Syed, and Rao, S.B. Nageswara (1997). "Impact of organisational role stress on job involvement of managers in public sector organisations." Indian Journal of Applied Psychology. 34(2). pp. 22-27.

WEBLIOGRAPHY

- <http://www.adprima.com>
- <http://angeronmymind.wordpress.com/2008/10/04/the-connections-to-long-hours-stress-and-anger-and-irritability>
- <http://www.apa.org/monitor/jun02/employees.aspx>
- <http://www.articlesbase.com/college-and-university-articles/management-teachers-role-in-building-successful-managers-of-tomorrow-2989807.html>
- <http://careers.stateuniversity.com/pages/737/Teacher-College.html>
- <http://faculty.weber.edu/molpin/healthclasses/1110/Bookchapters/introductionchapter/html>
- <http://www.imdr.edu/>
- <http://www.indcareer.com/maharashtra/pune/symbosis-institute-business-management-sibm-pune>
- <http://www.indiaedu.com/pune/management-colleges.html>
- <File://H:\Phd\introductionchapter.htmphdaugust2010.htm>
- <http://www.jstor.org/stable/4020300>
- <http://www.jstor.org/stable/20387037>
- <http://www.jstor.org/stable/2509239>
- <http://www.jstor.org/stable/3000368>
- <http://www.managingstressnow.com/2010/06/stress-management-for-teachers/>
- <http://mentalhealth.about.com/cs/stressmanagement/a/workstress803.htm>
- <http://www.mitcom.edu.in>
- <http://moneyandvalues.blogspot.com/2008/06/work-stress-longhours-and-your-health.html>
- <http://www.ncbi.nlm.nih.gov/pubmed/1602985>
- <http://www.prel.org/products/Products/Coping-teacherStress.PDF>
- <http://www.stress.org/hans.htm>
- <http://www.vamnicom.gov.in>
- <http://www.brint.com/papers/orglrng.htm>
- <http://www.crcnetbase.com/doi/abs/10.1201/9780203301654.bmatt>
- <http://www.relojournal.com/ current%20Issue/toc.htm>



APPENDIX A

Dear Respondent,

I, Smt. Anita S. Kumar, am a Ph. D. student in the faculty of management. I am studying “the faculty working in management institutes in Pune.”

I have selected you as one of my respondents as you are a faculty member of an institute of management. I would like your co-operation in answering the given questionnaire for my Ph.D. research work. All the information given by you will be kept confidential and will be used only for research purpose.

Your co-operation in giving genuine answers will be highly appreciated.

Thanking you,

Anita S. Kumar
Ph. D. Student,
Associate professor in
Family resource management
S.N.D.T. College of
Home Science, Pune.

Name of Management Institute : _____

Date : _____ Code no. : _____

Questionnaire : Section I

INSTRUCTIONS :

Please give information about yourself in the spaces given below. Please do not leave any questions unanswered :

01	Age :																									
02	Occupation :																									
03	Designation at work :																									
04	Educational Qualification :																									
05	Area of Specialization :																									
06	Subjects taught : <table border="1"><tr><td>U. G. level :</td><td>P. G. level :</td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>	U. G. level :	P. G. level :																							
U. G. level :	P. G. level :																									
07	Number of years of Teaching : Experience at the Present institution : Administration : Any other :																									
08	Spouse's Educational Qualification :																									
09	Spouse's Occupation :																									
10	Information about children : <table border="1"><thead><tr><th></th><th>Sons</th><th>Age :</th><th>Daughters</th><th>Age :</th></tr></thead><tbody><tr><td>1</td><td> </td><td> </td><td> </td><td> </td></tr><tr><td>2</td><td> </td><td> </td><td> </td><td> </td></tr><tr><td>3</td><td> </td><td> </td><td> </td><td> </td></tr><tr><td>4</td><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>		Sons	Age :	Daughters	Age :	1					2					3					4				
	Sons	Age :	Daughters	Age :																						
1																										
2																										
3																										
4																										
11	Number of dependents :																									
12	Dependent's relationship to respondent :																									
13	Total monthly family income (approximately) in Rupees.																									
14	Number of contributors to family income :																									
15	Name your hobbies or Leisure time activities : _____																									
16	Number of hours spent at work place : _____																									
17	Number of hours spent on traveling to and fro to workplace: _____																									
18	Number of hours you sleep everyday: _____																									

19	Name the illnesses you suffer from: Mild : _____ Chronic : _____
20	Duration of illnesses : Years : _____ Months : _____
21	Type of treatment of illnesses : Regular treatment : _____ Yrs. Periodical treatment : _____ Yrs. Special treatment : _____ Yrs. Any other treatment : _____ Yrs.

Please put a tick mark (✓) against the answer applicable to you.

22	Type of Management Institute in which you work : Government : _____ Semi-Government : _____ Private : _____
23	Timings at the work place : Rigid : _____ Flexible : _____
24	Gender : Male : _____ Female : _____
25	Marital Status : Unmarried : _____ Married : _____ Divorced / separated: _____ Widow : _____
26	Type of family : Joint: _____ Nuclear: _____ Extended : _____ Single parent : _____
27	Type of Household : Staying under one roof : _____ Staying under separate roof : _____
28	Your health status : Good : _____ Average : _____ Poor : _____
29	Is paid help employed for sharing household work : Yes : _____ No : _____
30	Type of household jobs carried out by paid help : Cooking : _____ Cleaning: _____ Childcare: _____ Running errands : _____ Any other jobs : _____
31	Are medical expenses taken care of easily : Yes : _____ No : _____

32	<p>Do you carry out the following on regular basis :</p> <p>1.Maintain regular meal timings: Yes : _____ No : _____ Sometimes: _____</p> <p>2.Take nutritious and healthy food : Yes : _____ No : _____ Sometimes: _____</p> <p>3.Follow health awareness program by obtaining health insurance for : Yourself : Yes : _____ No : _____ Spouse : Yes : _____ No : _____ Children : Yes : _____ No : _____</p>
33	<p>How often do you go for health check ups :</p> <p>Monthly : _____ Quarterly : _____ Half yearly : _____ Yearly : _____</p>
34	<p>Do you practice any of the following :</p> <p>Yoga : _____ Gym : _____ Walking : _____ Running : _____ Jogging : _____ Swimming : _____ Cycling : _____ Relaxation techniques : _____ Any other : _____</p>

Questionnaire : Section II

ORS - SCALE

- **Read instructions carefully before responding on this sheet.**

People have different feelings about their roles. Statements describing some of them are given below. Use this answer sheet to write your responses. Read each statement and indicate, in the space against the corresponding number in the answer sheet, how often you have the feeling expressed in the statement in relation to your role in the organization. Use the numbers given below to indicate your feelings.

If you find that the category to be used in answering does not adequately indicate your own feelings, use the one which is closest to the way you feel. Do not leave any item unanswered.

- **Score the items in the order given below.**

- 0 if you **never** or rarely feel this way.
- 1 if you **occasionally** (a few times) feel this way.
- 2 if you **sometimes** feel this way.
3. if you **frequently** feel this way.
4. if you **very frequently** or always feel this way.

- **Write your answer in the space given on the right of each statement.**

No.	Statements	0	1	2	3	4
01.	My role tends to interfere with my family life.					
02.	I am afraid I am not learning enough in my present role for taking up higher responsibility.					
03.	I am not able to satisfy the conflicting demands of various people above me.					
04.	My role has recently been reduced in importance.					
05.	My work load is too heavy.					
06.	Other role occupants do not give enough attention and time to my role.					
07.	I do not have adequate knowledge to handle the responsibilities in my role.					
08.	I have to do things in my role that are against my better judgement.					
09.	I am not clear on the scope and responsibilities of my role (job).					
10.	I do not get the information needed to carry out responsibilities assigned to me.					
11.	I have various other interests (social, religious, etc.) which remain neglected because I do not get time to attend to these.					
12.	I am too preoccupied with my present role responsibility to be able to prepare for taking up higher responsibilities.					
13.	I am not able to satisfy the conflicting demands of my peers and juniors.					
14.	Many functions that should be a part of my role have been assigned to some other role.					
15.	The amount of work I have to do interferes with the quality I want to maintain.					
16.	There is not enough interaction between my role and other's roles.					
17.	I wish I had more skill to handle the responsibilities of my role.					
18.	I am not able to use my training and expertise in my role.					
19.	I do not know what the people I work with expect of me.					
20.	I do not get enough resources to be effective in my role.					
21.	My role does not allow me enough time for my family.					
22.	I do not have time and opportunities to prepare myself for the future challenges of my role.					

No.	Statements	0	1	2	3	4
23.	I am not able to satisfy the demands of clients and others since these are conflicting with one another.					
24.	I would like to take on more responsibility than I am handling at present.					
25.	I have been given too much responsibility.					
26.	I wish there was more consultation between my role and others' roles.					
27.	I have not had the right training for my role.					
28.	The work I do in the organization is not related to my interests.					
29.	Several aspects of my role are vague and unclear.					
30.	I do not have enough people to work with me in my role.					
31.	My organizational responsibilities interfere with my extra organizational roles.					
32.	There is very little scope for personal growth in my role.					
33.	The expectation of my seniors conflict with those of juniors.					
34.	I can do more than what I have been assigned.					
35.	There is need to reduce some parts of my role.					
36.	There is no evidence of several roles (including mine) being involved in joint problem solving or collaboration for planning action.					
37.	I wish I had prepared myself well for my role.					
38.	If I had full freedom to define my role, I would be doing some things differently from the way I do them now.					
39.	My role has not been defined clearly and in detail.					
40.	I am rather worried that I lack the necessary facilities needed in my role.					
41.	My family and friends complain that I do not spend time with them due to the demands of my work.					
42.	I feel stagnant in my role.					
43.	I am bothered with the contradictory expectations different people have from my role.					
44.	I wish I had been given more challenging tasks to do.					
45.	I feel overburdened in my role.					
46.	Even when I take the initiative for discussions or help, there is not much response from the other roles.					
47.	I need more training and preparation to be effective in my work role.					
48.	I experience a conflict between my values and what I have to do in my role.					
49.	I am not clear what the priorities are in my role.					
50.	I wish I had more financial resources for the work assigned to me.					

Questionnaire: Section III

Stress Test

DO YOU EXPERIENCE ANY OF THE FOLLOWING ?

CIRCLE THE APPROPRIATE NUMBER FOR EACH ITEM.

	1. NEVER	2. RARELY	3. SOMETIMES	4. OFTEN	5. ALWAYS
1. Headaches				1 2 3 4 5	
2. Stomach aches or tension in the stomach				1 2 3 4 5	
3. Backaches				1 2 3 4 5	
4. Stiffness in the neck and shoulder				1 2 3 4 5	
5. Increased blood pressure				1 2 3 4 5	
6. Fatigue				1 2 3 4 5	
7. Crying				1 2 3 4 5	
8. Forgetfulness				1 2 3 4 5	
9. Unprovoked shouting				1 2 3 4 5	
10. Blaming others				1 2 3 4 5	
11. Bossiness				1 2 3 4 5	
12. Compulsive chewing				1 2 3 4 5	
13. Compulsive eating				1 2 3 4 5	
14. Agitation				1 2 3 4 5	
15. Anger				1 2 3 4 5	
16. Gossiping				1 2 3 4 5	
17. Teeth grinding				1 2 3 4 5	
18. Worrying				1 2 3 4 5	
19. Depression				1 2 3 4 5	
20. Impatience				1 2 3 4 5	
21. Frustration				1 2 3 4 5	
22. Loneliness				1 2 3 4 5	
23. Powerfulness				1 2 3 4 5	
24. Inflexibility				1 2 3 4 5	
Any other				1 2 3 4 5	

Questionnaire : Section IV

Job Satisfaction Scale

SA–Strongly Agree 5

A-Agree 4

UC–Uncertain 3

DA–Disagree 2

SDA–Strongly Disagree 1

Note :

Please tick mark (\checkmark) the answer most suited to you for each item.

Please do not leave any item unanswered.

No.	Statements	SA	A	UC	DA	SDA
01	I do not get satisfaction of job because I am always insulted by my boss at work place.					
02	I get satisfaction of job because I get opportunity to exhibit my talents / skills.					
03	I get satisfaction of job because I am appreciated by my boss.					
04	I do not get satisfaction of job because office work keeps me always under stress.					
05	I do not get satisfaction of job as I am always discouraged by my boss.					
06	I get satisfaction of job because it keeps me away from boredom					
07	I get satisfaction of job because job is light in nature.					
08	I do not get satisfaction of job because I do not get along well with my colleagues.					
09	I get satisfaction of job because I feel that job is of my caliber.					
10	I get satisfaction of job because I have good relation with my boss, colleagues, subordinates in work place.					
11	I do not get satisfaction of job because it doesn't help me in raising my personal status					
12	I get satisfaction of job because it improves my personal status in society					
13	I get satisfaction of job because it helps me in having financial security					
14	I get satisfaction of job because job provides good leave facility					
15	I get satisfaction of job because it helps me in providing better education to my children					
16	I do not get satisfaction of job because it is not financially secured					
17	I do not get satisfaction of job because it does not help me in raising my standard of living					
18	I get satisfaction of job because it helps me in having financial security					
19	I do not get satisfaction of job because I get inadequate salary					
20	I get satisfaction of job because it helps in raising the standard of living of my family					

No.	Statements	SA	A	UC	DA	SDA
21	I get satisfaction of job because I get the satisfaction of holding dual responsibilities as a wage earner.					
22	I get satisfaction of job because it fulfils my economic Necessity.					
23	I get satisfaction of job because I get adequate salary.					
24	I do not get satisfaction of job because I cannot do justice to household responsibilities					
25	I do not get satisfaction of job because I do not get domestic help for household task					
26	I do not get satisfaction of job because I do not get relief from household responsibilities					
27	I do not get satisfaction of job because I do not get leisure time					
28	I do not get satisfaction of job because job keeps me too busy that I cannot avail leave facility					
29	I do not get satisfaction of job because it does not allow free time to spend with my family					
30	I get satisfaction of job because it helps in bringing up children in a better way					
31	I do not get satisfaction of job because I cannot participate in family gathering due to lack of time					
32	I do not get satisfaction of job because I have to neglect my family and children because of job					
33	I do not get satisfaction of job because I cannot cope up with dual responsibility					
34	I do not get satisfaction of job because I enjoy doing work assigned to me at my work place					
35	I get satisfaction of job because it relieves me from domestic responsibilities					
36	I do not get satisfaction of job because I do not like the type of work					
37	I do not get satisfaction of job because nature of job is monotonous					
38	I do not get satisfaction of job because I do not like the working environment of work place					
39	I get satisfaction of job because the physical environment of work place is very good					
40	I get satisfaction of job because I have adequate facilities at my work place					

THANK YOU FOR YOUR HELP !

APPENDIX B
LOCALE OF SAMPLE POPULATION

List of management institutes and selection of sample

Sr. No	Name of the Institute	Area and Pin code	Number of male faculty	Number of female faculty	Total number of faculty
1	All India Shri. Shivaji Memorial Socieity, (AISSMS)	Shivajinagar, Near Corporation, Pune - 411 005	0	4	4
2	AISSMS College of Hotel Mangement and Catering Technology	Shivajinagar, Near Corporation, Pune - 411 005	3	3	6
3	Alard' School of Business Mangement Sciences	Hinjewadi, Pune - 411 058	2	2	4
4	Audyogik Tantra Shikshan Sanstha's College of Business Studies and Computer Applications (ATSS)	MIDC, Chinchwad, Pune - 411 019	1	1	2
5	ACP Agricultural College, Department of Mangement	Shivajinagar, Pune 411 005	11	1	12
6	AISS-IICMR - Audyogik Tantra Shikshan Sanstha's Institute of Industrial Computer Management and Research	Nigdi, Pradhikaran, Pune - 411 044	1	9	10
7	Brihan Maharashtra College of Commerce, BBA, MBA, Management College	Law College Road, Pune - 411 004	3	2	5
8	Bharati Vidyapeeth Institute of Management and Entrepreneurship Development	Gokhalenagar, Pune - 411 016	0	1	1
9	Bharati Vidyapeeth Institute of Management	Shastri Road, Pune - 411 038	0	2	2
10	Choice Institute of Management	Behind Kothrud Macdonalds, Pune - 411 029	1	3	4
11	D.Y.Patil Institute of Management Studies	Nigdi, Akurdi, Pune - 411 035	1	0	1
12	Enterpreneurship Management Development Institue (EMDI)	Shrinath Plaza, Shivajinagar, Pune - 411 005	0	3	3
13	Human Scope Management Institute (HSMI)	Erandwane, Pune - 411 038	6	2	8
14	Hiraben Nanawati Management Institute (HNMI)	Karvenagar, Hingane Warje, Pune - 411 052	7	10	17

Sr. No	Name of the Institute	Area and Pin code	Number of male faculty	Number of female faculty	Total number of faculty
15	International Business School (IBS, ICFAI)	Sanghavinagar Road, Aundh, Pune - 411 007	7	2	9
16	Indian Institute of Cost and Management Studies and Research (INDSEARCH)	Law College Road, Pune - 411 004	10	9	19
17	Institute of Management Development and Research (IMDR)	Fergusson College Campus, F.C.Road, Pune - 411 004	3	4	7
18	Indira Institute of Management	Wakad, Talhewade, Pune - 411 041	3	2	5
19	Indira Institute of Computer Mangement and Research	Wakad, Talhewade, Pune - 411 041	1	0	1
20	Institute of Management amd Entrepreneurship Development (IMED)	Bharati Vidyapeeth, Paud Road, Pune - 411 038	9	10	19
21	Institute of Business Studies and Research (IBSAR)	Pashan, Pune - 411 008	2	4	6
22	Institute of Business Management Information Technology	Vitthalwadi, Pune - 411 051	3	0	3
23	Institute of Academic Business Management	Law College Road, Pune - 411 004	0	1	1
24	Institute of Management and Business Development	Nigdi, Pune - 411 044	1	0	1
25	Institute of Management Social Science & Research	Tilak Road, Pune - 411 030	1	1	2
26	Jayawantrao Sawant Institute of Management and Research	Indrayaninagar, Hadapasar, Pune - 411 013	0	2	2
27	Krishak Institute of Management and Research Development	Katraj-Kondhwa Road, Katraj, Pune - 411 047	3	1	4
28	"Let's Talk" Management Training Centre	Law College Road, Pune - 411 004	0	1	1
29	MIT College of Management (MITCOM) Maharashtra Institute Technology	Paud Road, Kothrud, Pune - 411 038	5	4	9
30	MIMA MITCON Institute of Management	Shiv Chhatrapati Krida Sankul, Balewadi, Pune - 411 045	3	13	16
31	Marathwada Mitramandal	Deccan Gymkhana, Pune - 411 004	0	1	1
32	MITCON-Academy of Management and Entrepreneuship	Agriculture College Campus, Shivajinagar, Pune - 411 005	0	1	1

Sr. No	Name of the Institute	Area and Pin code	Number of male faculty	Number of female faculty	Total number of faculty
33	Modern College of Business Administration	Shivajinagar, Pune - 411 005	0	3	3
34	Modern College of Computer and Business Studies	Shivajinagar, Pune - 411 005	0	3	3
35	Maharashtra Institute of Technology (MIT)	Near Pune Station, Pune - 411 001	10	4	14
36	Mandke Institute of Business and Management	Paud Road, Pune - 411 036	0	1	1
37	MIT Broadcasting and Journalisum	Paud Road, Kothrud, Pune - 411 038	1	0	1
38	N. G. Narlikar Institute of Management	Sadashiv Peth, Pune - 411 030	0	6	6
39	Pravara Centre for Management Research and Development (PCMRD)	Shivajinagar, Pune - 411 005	3	6	9
40	Pride Institute of Hotel, Hospitality and Business Management	J. M. Road, Shivajinagar, Pune - 411 005	0	5	5
41	Pune Management Association	Shivajinagar, Pune - 411 005	1	0	1
42	Pune University MBA (PUMBA)	Ganeshkhind, University Road, Pune - 411 005	2	0	2
43	Rajaram Bapu Institute of Business Management	Ambegaon, Near Katraj, Pune - 411 037	3	1	4
44	Research Institute of Health Science and Management (RIHSM)	Near Ayurvedic Rasashala, Karve Road, Pune - 411 038	3	1	4
45	Sinhagad Institute Aviation and Hospitality Management (SIAHM)	Vadgaon Budruk Pune - 411 041	2	5	7
46	Symbiosis Institute of Computer Studies and Research	Senapati Bapat Road, Model Colony, Pune - 411 016	4	6	10
47	SKM College of Engineering Dept.of MBA (Sido Kanhu Murmu - SKM)	Wakad, Pune - 411 041	0	2	2
48	Symbiosis Institute of Business Management	Symbiosis College Village, Lavale, Pune - 411 042	1	1	2
49	Sinhagad Business School	Vadgaon Budruk Pune - 411 041	1	6	7

Sr. No	Name of the Institute	Area and Pin code	Number of male faculty	Number of female faculty	Total number of faculty
50	Sinhagad Commerce & Economics Management	Vadgaon, Pune - 411 041	3	0	3
51	Sadhana Centre for Management & Leadership Development	Deep Banglow Chowk, Model Colony, Pune - 411 016	0	1	1
52	Silva Bright Institute of Management	Paud Road, Pune - 411 038	0	1	1
53	Suryadatta College of Management and Information Technology (Suryadatta Group of Industries)	Behind S. P. College, Sadashiv Peth, Pune - 411 030	5	2	7
54	Synergy Institute of Management	Khajina Vihir Chowk, Off. Tilak Road, Pune - 411 030	0	1	1
55	Sinhagad Institute of Management	Vadgaon Budruk, Pune - 411 041	20	6	26
56	Sinhagad Institute of Management and Computer Applications	S. No.49/1, Off Western Highway, Pune-Mumbai Expressway, Narhe, Pune - 411 041	7	2	9
57	Sudhatai Mandke Institute of Management	Paud Road, Pune - 411 038	4	0	4
58	Unity Business Management School	Guru Ganesh Nagar, Kothrud, Pune - 411 038	1	2	3
59	Vaikunth Mehta National Institute of cooperative Management	Pune University Road, Pune - 411 007	6	0	6
		TOTAL	164	164	328

APPENDIX C

Table 46

Frequency of role stressor experienced by respondents Inter Role Distance -IRD

Role stressor statements Family role stressor		Male N=164					Female N=164					Total N=328				
		Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always
Inter role distance																
My role tends to interfere with my family life.	f	65	50	34	7	8	74	41	35	4	10	139	91	69	11	18
	%	39.63	30.49	20.73	4.27	4.88	45.12	25.00	21.34	2.44	6.10	42.38	27.74	21.04	3.35	5.49
I have various other interests (social, religious, etc.) which remain neglected because I do not get time to attend to these.	f	58	46	41	10	9	56	44	35	18	11	114	90	76	28	20
	%	35.37	28.05	25.00	6.10	5.49	34.15	26.83	21.34	10.98	6.71	34.75	27.44	23.17	8.53	6.1
My role does not allow me enough time for my family.	f	66	44	35	10	9	74	38	36	11	5	140	82	71	21	14
	%	40.24	26.83	21.34	6.10	5.49	45.12	23.17	21.95	6.71	3.05	42.68	25.00	21.64	6.40	4.27
My organizational responsibility interferes with my extra organizational roles.	f	71	45	33	10	5	72	50	21	13	8	143	95	54	23	13
	%	43.29	27.44	20.12	6.10	3.05	43.90	30.49	12.80	7.93	4.88	43.60	28.96	16.46	7.01	3.96
My family and friends complain that I do not spend time with them due to the demands of my work.	f	72	43	30	4	15	72	36	36	8	12	144	79	66	12	27
	%	43.90	26.22	18.29	2.44	9.15	43.90	21.95	21.95	4.88	7.32	43.9	24.08	20.12	3.66	8.23

Table 47
Frequency of role stressor experienced by respondents Role Stagnation - RS

Role stressor statements Work role stressor		Male N=164					Female N=164					Total N=328				
		Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always
Role stagnation																
I am afraid I am not learning enough in my present role for taking up higher responsibilities.	f	65	60	27	10	2	66	41	37	8	12	131	101	64	18	14
	%	39.63	36.59	16.46	6.10	1.22	40.24	25.00	22.56	4.88	7.32	39.94	30.80	19.51	5.49	4.27
I am too preoccupied with my present role responsibility to be able to prepare for taking up higher responsibilities.	f	61	57	29	11	6	59	46	34	11	14	120	103	63	22	20
	%	37.20	34.76	17.68	6.71	3.66	35.98	28.05	20.73	6.71	8.54	36.59	31.40	19.205	6.705	6.1
I do not have time and opportunities to prepare myself for the future challenges of my role.	f	55	64	24	14	7	58	52	34	10	10	113	116	58	24	17
	%	33.54	39.02	14.63	8.54	4.27	35.37	31.71	20.73	6.10	6.10	34.45	35.37	17.685	7.315	5.185
There is very little scope for personal growth in my role.	f	68	45	33	11	7	80	41	24	9	10	148	86	57	20	17
	%	41.46	27.44	20.12	6.71	4.27	48.78	25.00	14.63	5.49	6.10	45.12	26.22	17.38	6.1	5.185
I feel stagnant in my role.	f	68	55	24	9	8	62	51	37	6	8	130	106	61	15	16
	%	41.46	33.54	14.63	5.49	4.88	37.80	31.10	22.56	3.66	4.88	39.64	32.32	18.6	4.575	4.88

Table 48

Frequency of role stressor experienced by respondents Role Expectation Conflict- REC

Role stressor statements		Male N=164					Female N=164					Total N=328				
		Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always
Work role stressor																
Role expectation conflict																
I am not able to satisfy the conflicting demands of various people above me.	f	59	51	39	12	3	79	47	29	7	2	138	98	68	19	5
	%	35.98	31.10	23.78	7.32	1.83	48.17	28.66	17.68	4.27	1.22	42.08	29.88	20.73	5.795	1.53
I am not able to satisfy the conflicting demands of my peers and juniors.	f	71	50	31	7	5	92	40	21	10	1	163	90	52	17	6
	%	43.29	30.49	18.90	4.27	3.05	56.10	24.39	12.80	6.10	0.61	49.70	27.44	15.855	5.185	1.83
I am not able to satisfy the demands of clients and others since these are conflicting with each other.	f	75	48	29	8	4	93	45	17	8	1	168	93	46	16	5
	%	45.73	29.27	17.68	4.88	2.44	56.71	27.44	10.37	4.88	0.61	51.22	28.36	14.025	4.88	1.53
The expectation of my seniors conflict with those of juniors.	f	73	49	25	14	3	83	37	27	12	5	156	86	52	26	8
	%	44.51	29.88	15.24	8.54	1.83	50.61	22.56	16.46	7.32	3.05	47.56	26.22	15.855	7.925	2.44
I am bothered with contradictory expectations different people have from my role.	f	63	43	39	10	9	80	43	26	9	6	143	86	65	19	15
	%	38.41	26.22	23.78	6.10	5.49	48.78	26.22	15.85	5.49	3.66	43.60	26.22	19.815	5.795	4.58

Table 49
Frequency of role stressor experienced by respondents Role Erosion- RE

Role stressor statements Work role stressor		Male N=164					Female N=164					Total N=328				
		Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always
Role erosion																
My role has recently been reduced in importance.	f	74	49	23	12	6	100	37	12	9	6	174	86	35	21	12
	%	45.12	29.88	14.02	7.32	3.66	60.98	22.56	7.32	5.49	3.66	53.05	26.22	10.67	6.4	3.66
Many functions that should be a part of my role have been assigned to some other role.	f	71	54	27	9	3	97	33	23	9	2	168	87	50	18	5
	%	43.29	32.93	16.46	5.49	1.83	59.15	20.12	14.02	5.49	1.22	51.22	26.53	15.24	5.49	1.53
I would like to take on more responsibility than I am handling at present.	f	41	44	35	29	15	47	37	46	16	18	88	81	81	45	33
	%	25.00	26.83	21.34	17.68	9.15	28.66	22.56	28.05	9.76	10.98	26.83	24.70	24.69	13.72	10.06
I can do more than I have been assigned.	f	37	39	53	26	9	30	47	49	17	21	67	86	102	43	30
	%	22.56	23.78	32.32	15.85	5.49	18.29	28.66	29.88	10.37	12.80	20.43	26.22	31.1	13.11	9.15
I wish I had been given more challenging tasks to do.	f	48	55	30	23	8	49	51	29	23	12	97	106	59	46	20
	%	29.27	33.54	18.29	14.02	4.88	29.88	31.10	17.68	14.02	7.32	29.58	32.32	17.99	14.02	6.10

Table 50

Frequency of role stressor experienced by respondents Role Overload - RO

Role stressor statements Work role stressor		Male N=164					Female N=164					Total N=328				
		Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always
Role overload																
My work load is too heavy.	f	61	51	31	12	9	60	41	41	17	5	121	92	72	29	14
	%	37.20	31.10	18.90	7.32	5.48	36.58	25.00	25.00	10.37	3.05	36.89	28.05	21.95	8.84	4.27
The amount of work I have to do interferes with the quality I want to maintain.	f	72	54	20	12	6	72	47	27	10	8	144	101	47	22	14
	%	43.90	32.92	12.20	7.32	3.66	43.90	28.66	16.46	6.10	4.88	43.9	30.795	14.33	6.705	4.27
I have been given too much responsibility.	f	76	39	27	15	7	86	40	28	5	5	162	79	55	20	12
	%	46.34	23.78	16.46	9.15	4.27	52.44	24.39	17.07	3.05	3.05	49.39	24.085	16.765	6.1	3.66
There is a need to reduce some parts of my role.	f	64	52	28	11	9	88	36	23	6	11	152	88	51	17	20
	%	39.02	31.71	17.07	6.71	5.49	53.66	21.95	14.02	3.66	6.71	46.34	26.83	15.55	5.18	6.1
I feel overburdened in my role.	f	59	46	29	22	8	88	41	20	9	6	147	87	49	31	14
	%	35.98	28.05	17.68	13.41	4.88	53.65	25.00	12.20	5.49	3.65	44.82	26.52	14.94	9.45	4.27

Table 51
Frequency of role stressor experienced by respondents Role Isolation- RI

Role stressor statements Work role stressor		Male N=164					Female N=164					Total N=328				
		Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always
Role isolation																
Other role occupants do not give enough attention and time to my role.	f	68	47	40	7	2	85	43	23	8	5	153	90	63	15	7
	%	41.46	28.66	24.39	4.27	1.22	51.83	26.22	14.02	4.88	3.05	46.65	27.44	19.21	4.56	2.14
There is not enough interaction between my role and other roles.	f	64	59	27	9	5	72	55	30	6	1	136	114	57	15	6
	%	39.02	35.98	16.46	5.49	3.05	43.90	33.54	18.29	3.66	0.61	41.47	34.76	17.37	4.58	1.82
I wish there was more consultation between my role and other roles.	f	58	53	36	9	8	60	53	35	10	6	118	106	71	19	14
	%	35.37	32.32	21.95	5.48	4.88	36.58	32.32	21.34	6.10	3.66	35.96	32.32	21.65	5.80	4.27
There is no evidence of several roles (including mine) being involved in joint problem solving or collaboration for planning action.	f	68	51	30	10	5	71	42	29	17	6	139	93	59	27	9
	%	41.46	31.10	18.29	6.10	3.05	43.29	25.61	17.28	10.37	3.45	42.38	28.35	17.99	8.23	2.74
Even when I take the initiative for discussion or help, there is not much response from the other roles.	f	67	53	22	12	10	71	42	32	12	7	138	95	54	24	17
	%	40.85	32.32	13.41	7.32	6.10	43.29	25.61	19.51	7.32	4.27	42.07	28.96	16.37	7.32	5.18

Table 52

Frequency of role stressor experienced by respondents Personal Inadequacy- PIN

Role stressor statements Work role stressor		Male N=164					Female N=164					Total N=328				
		Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always
Personal inadequacy																
I do not have adequate knowledge to handle the responsibility in my role.	f	82	51	22	3	6	111	32	16	4	1	193	83	38	7	7
	%	50.00	31.10	13.41	1.83	3.66	67.68	19.51	9.76	2.44	0.61	58.84	25.31	11.585	2.135	2.14
I wish I had more skill to handle the responsibilities of my role.	f	60	51	28	12	13	56	51	38	10	9	116	102	66	22	22
	%	36.59	31.10	17.07	7.32	7.93	34.15	31.10	23.17	6.10	5.49	35.37	31.10	20.12	6.705	6.71
I have not had the right training for my role.	f	83	49	18	11	3	94	38	22	9	1	177	87	40	20	4
	%	50.61	29.88	10.98	6.71	1.83	57.32	23.17	13.41	5.49	0.61	53.97	26.53	12.195	6.1	1.22
I wish I had prepared myself well for my role.	f	59	46	26	18	15	84	39	23	10	8	143	85	49	28	23
	%	35.98	28.05	15.85	10.98	9.15	51.22	23.78	14.02	6.10	4.88	43.60	25.92	14.94	8.535	7.01
I need more training and preparation to be effective in my work role.	f	57	49	41	10	7	67	51	31	11	4	124	100	72	21	11
	%	34.76	29.88	25.00	6.10	4.27	40.85	31.10	18.90	6.71	2.44	37.81	30.49	21.95	6.4	3.36

Table 53

Frequency of role stressor experienced by respondents Self-Role Distance- SRD

Role stressor statements Work role stressor <u>Self-role distance</u>		Male N=164					Female N=164					Total N=328				
		Never	Occasion ally	Someti mes	Freque ntly	Always	Never	Occasi onally	Sometim es	Freque ntly	Alway s	Never	Occasio nally	Sometim es	Freque ntly	Alway s
I have to do things in my role that are against my better judgment.	f	56	53	32	15	8	78	57	21	6	2	134	110	53	21	10
	%	34.15	32.32	19.51	9.15	4.88	47.56	34.76	12.80	3.66	1.22	40.86	33.54	16.16	6.4	3.05
I am not able to use my training and expertise in my role.	f	73	47	24	15	5	83	45	25	8	3	156	92	49	23	8
	%	44.51	28.66	14.63	9.15	3.05	50.61	27.44	15.24	4.88	1.83	47.56	28.05	14.94	7.01	2.44
The work I do in the organization is not related to my interests.	f	71	43	30	13	7	109	23	19	6	7	180	66	49	19	14
	%	43.29	26.22	18.29	7.93	4.27	66.46	14.02	11.59	3.66	4.27	54.88	20.12	14.94	5.795	4.27
If I had full freedom to define my role, I would be doing some things differently from the way I do them now.	f	53	40	34	20	17	52	49	29	19	15	105	89	63	39	32
	%	32.32	24.39	20.73	12.20	10.37	31.71	29.88	17.68	11.59	9.15	32.01	27.14	19.20	11.89	9.76
I experience a conflict between my values and what I have to do in my role.	f	71	47	27	13	6	86	47	18	8	5	157	94	45	21	11
	%	43.29	28.66	16.46	7.93	3.66	52.44	28.66	10.98	4.88	3.05	47.87	28.66	13.72	6.4	3.36

Table 54

Frequency of role stressor experienced by respondents Role Ambiguity- RA

Role stressor statements		Male N=164					Female N=164					Total N=328				
Work role stressor		Never	Occasion ally	Sometim es	Frequen tly	Always	Never	Occasion ally	Sometim es	Frequen tly	Always	Never	Occasional ly	Sometimes	Frequent ly	Always
Role ambiguity																
I am not clear on the scope and responsibilities of my role (job).	f	78	44	24	11	7	98	41	14	7	4	176	85	38	18	11
	%	47.56	26.83	14.63	6.71	4.27	59.76	25.00	8.54	4.27	2.44	53.66	25.91	11.59	5.49	3.35
I do not know what the people I work with expect of me.	f	69	44	32	10	9	84	46	23	8	3	153	90	55	18	12
	%	42.07	26.83	19.51	6.10	5.49	51.22	28.05	14.02	4.88	1.83	46.65	27.44	16.77	5.49	3.66
Several aspects of my role are vague and unclear.	f	84	34	28	11	7	88	39	19	8	10	172	73	47	19	17
	%	51.22	20.73	17.07	6.71	4.27	53.66	23.78	11.59	4.88	6.10	52.44	22.26	14.33	5.79	5.18
My role has not been defined clearly and in detail.	f	67	53	23	18	3	83	36	29	8	8	150	89	52	26	11
	%	40.85	32.32	14.02	10.98	1.83	50.61	21.95	17.68	4.88	4.88	45.73	27.13	15.85	7.93	3.35
I am not clear what the priorities are in my role.	f	82	37	31	11	3	104	34	13	7	6	186	71	44	18	9
	%	50.00	22.56	18.90	6.71	1.83	63.41	20.73	7.93	4.27	3.66	56.71	21.65	13.41	5.49	2.74

Table 55

Frequency of role stressor experienced by respondents Resource inadequacy- RIN

Role stressor statements		Male N=164					Female N=164					Total N=328				
		Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always	Never	Occasionally	Sometimes	Frequently	Always
Work role stressor																
Resource inadequacy																
I do not get the information needed to carry out responsibilities assigned to me.	f	66	54	28	4	12	92	36	27	7	2	158	90	55	11	14
	%	40.24	32.93	17.07	2.44	7.32	56.10	21.95	16.46	4.27	1.22	48.17	27.44	16.77	3.355	4.27
I do not get enough resources to be effective in my role.	f	56	53	24	22	9	71	41	36	12	4	127	94	60	34	13
	%	34.15	32.32	14.63	13.41	5.49	43.29	25.00	21.95	7.32	2.44	38.72	28.66	18.29	10.365	3.97
I do not get enough people to work with me in my role.	f	61	52	29	14	8	86	29	33	9	7	147	81	62	23	15
	%	37.20	31.71	17.68	8.54	4.88	52.44	17.68	20.12	5.49	4.27	44.82	24.70	18.9	7.01	4.58
I am rather worried that I lack the necessary facilities needed in my role.	f	61	49	30	14	10	85	35	28	7	9	146	84	58	21	19
	%	37.20	29.88	18.29	8.54	6.10	51.83	21.34	17.07	4.27	5.49	44.51	25.61	17.68	6.4	5.80
I wish I had more financial resources for the work assigned to me.	f	65	37	33	15	14	75	43	17	17	12	140	80	50	32	26
	%	39.63	22.56	20.12	9.15	8.54	45.73	26.22	10.37	10.37	7.32	42.69	24.39	15.24	9.755	7.93

Table 56

Frequency of physiological stress-effects experienced by respondents

Symptoms of physiological Stress		Male N=164					Female N=164					Total N=328				
		Never	Rarely	Sometimes	Often	Always	Never	Rarely	Sometimes	Often	Always	Never	Rarely	Sometimes	Often	Always
Headache	f	61	55	34	10	4	35	52	53	20	2	96	107	89	30	6
	%	37.20	33.54	20.73	6.10	2.44	21.34	31.71	33.54	12.20	1.22	29.27	32.62	27.13	9.15	1.83
Stomach aches or tension in the stomach	f	67	63	29	5		71	52	30	10	1	138	115	59	15	1
	%	40.85	38.41	17.68	3.05	0.00	43.29	31.71	18.29	6.10	0.61	42.07	35.06	17.99	4.57	0.30
Backaches	f	50	61	47	4	2	38	44	55	21	6	88	105	102	25	8
	%	30.49	37.20	28.66	2.44	1.22	23.17	26.83	33.54	12.81	3.66	26.83	32.01	31.10	7.62	2.44
Stiffness in the neck and shoulder	f	50	58	47	5	4	46	45	46	22	5	96	103	93	27	9
	%	30.49	35.37	28.66	3.05	2.44	28.05	27.44	28.05	13.41	3.05	29.27	31.40	28.35	8.23	2.74
Increased blood pressure	f	88	32	31	10	3	119	25	11	7	2	207	57	42	17	5
	%	53.66	19.51	18.90	6.10	1.83	72.56	15.24	6.71	4.27	1.22	63.11	17.38	12.80	5.18	1.52
Fatigue (Tiredness)	F	58	50	34	18	4	32	46	56	24	6	90	96	90	42	10
	%	35.37	30.49	20.73	10.98	2.44	19.51	28.05	34.15	14.63	3.66	27.44	29.27	27.44	12.80	3.05

Table 57

Frequency of psychological stress-effects experienced by respondents

Symptoms of psychological stress		Male N=164					Female N=164					Total N=328				
		Never	Rarely	Sometimes	Often	Always	Never	Rarely	Sometimes	Often	Always	Never	Rarely	Sometimes	Often	Always
Crying	F	126	29	6	2	1	80	47	28	7	2	206	76	34	9	3
	%	76.83	17.68	3.66	1.22	0.61	48.78	28.66	17.07	4.27	1.22	62.80	23.17	10.37	2.74	0.91
Forgetfulness	F	83	42	29	9	1	59	56	37	11	1	142	98	66	20	2
	%	50.61	25.61	17.68	5.49	0.61	35.98	34.15	22.56	6.71	0.61	43.29	29.88	20.12	6.10	0.61
Unprovoked shouting	F	93	39	25	6	1	80	43	30	11	-	173	82	55	17	1
	%	56.71	23.78	15.24	3.66	0.61	48.78	26.22	18.29	6.71	-	52.74	25.00	16.77	5.18	0.30
Blaming others	F	98	39	19	5	3	86	52	22	4		184	91	41	9	3
	%	59.76	23.78	11.59	3.05	1.83	52.44	31.71	13.41	2.44	0.00	56.10	27.74	12.50	2.74	0.91
Bossiness	F	99	35	21	5	4	98	37	23	4	2	197	72	44	9	6
	%	60.37	21.34	12.80	3.05	2.44	59.76	22.56	14.02	2.44	1.22	60.06	21.95	13.41	2.74	1.83
Compulsive Chewing		120	24	15	4	1	126	19	15	3	1	246	43	30	7	2
	F	73.17	14.63	9.15	2.44	0.61	76.83	11.59	9.15	1.83	0.61	75.00	13.11	9.15	2.13	0.61
Compulsive eating	%	109	36	14	4	1	110	29	18	5	2	219	65	32	9	3
	F	66.46	21.95	8.54	2.44	0.61	67.07	17.68	10.98	3.05	1.22	66.77	19.82	9.76	2.74	0.91
Agitation	%	96	38	23	7	-	88	48	26	2	-	184	86	49	9	-
		58.54	23.17	14.02	4.27	-	53.66	29.27	15.85	1.22	-	56.10	26.22	14.94	2.74	-
Anger	F	60	57	40	6	1	41	59	54	10		101	116	94	16	1
	%	36.59	34.76	24.39	3.66	0.61	25.00	35.98	32.93	6.10	0.00	30.79	35.37	28.66	4.88	0.30
Gossiping	F	106	32	22	4	-	67	58	27	10	2	173	90	49	14	2
	%	64.63	19.51	13.41	2.44	-	40.85	35.37	16.46	6.10	1.22	52.74	27.44	14.94	4.27	0.61
Teeth grinding	F	118	18	23	5		132	21	8	2	1	250	39	31	7	1
	%	71.95	10.98	14.02	3.05	0.00	80.49	12.80	4.88	1.22	0.61	76.22	11.89	9.45	2.13	0.30

Table 58
Frequency of behavioural stress-effects experienced by respondents

Symptoms of behavioural stress		Male N=164					Female N=164					Total N=328				
		Never	Rarely	Sometimes	Often	Always	Never	Rarely	Sometimes	Often	Always	Never	Rarely	Sometimes	Often	Always
Worrying		63	48	38	15	-	31	52	52	21	8	94	100	90	36	8
	f	38.41	29.27	23.17	9.15	0.00	18.90	31.71	31.71	12.80	4.88	28.66	30.49	27.44	10.98	2.44
Depression	%	75	44	34	9	2	62	44	46	8	4	137	88	80	17	6
		45.73	26.83	20.73	5.49	1.22	37.80	26.83	28.05	4.88	2.44	41.77	26.83	24.39	5.18	1.83
Impatience	f	65	43	39	13	4	53	47	44	17	3	118	90	83	30	7
	%	39.63	26.22	23.78	7.93	2.44	32.32	28.66	26.83	10.37	1.83	35.98	27.44	25.30	9.15	2.13
Frustration	f	69	45	36	10	4	54	51	46	11	2	123	96	82	21	6
	%	42.07	27.44	21.95	6.1	2.44	32.93	31.1	28.05	6.62	1.22	37.50	29.27	25.00	6.40	1.83
Loneliness		83	38	23	16	4	73	40	34	13	4	156	78	57	29	8
	f	50.61	23.17	14.02	9.76	2.44	44.51	24.39	20.73	7.93	2.44	47.56	23.78	17.38	8.84	2.44
Powerfulness	%	71	32	29	28	4	63	30	40	18	13	134	62	69	46	17
		43.29	19.51	17.68	17.07	2.44	38.41	18.29	24.39	10.98	7.93	40.85	18.90	21.04	14.02	5.18
Inflexibility	f	95	37	24	6	1	83	42	26	9	4	178	79	50	15	6
	%	57.93	22.56	14.63	3.66	1.22	50.61	25.61	15.85	5.49	2.44	54.27	24.09	15.24	4.57	1.83

Table 59

Distribution of respondents showing job satisfaction on work autonomy

Job aspect		Male N=164					Female N=164					Total N=328				
		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
I do not get satisfaction of job because I am always insulted by my boss at work place.	f	15	14	15	63	57	8	10	18	51	77	23	24	33	114	134
	%	9.15	8.54	9.15	38.41	34.76	4.88	6.10	10.98	31.10	46.95	7.01	7.32	10.06	34.76	40.85
I get satisfaction of job because I get opportunity to exhibit my talents/ skills.	f	1	6	24	85	48	2	5	19	81	57	3	11	43	166	105
	%	0.61	3.66	14.63	51.83	29.27	1.22	3.05	11.59	49.39	34.76	0.91	3.35	13.11	50.61	32.01
I get satisfaction of job because I am appreciated by my boss.	f	5	13	31	76	39	5	7	27	85	40	10	20	58	161	79
	%	3.05	7.93	18.90	46.34	23.78	3.05	4.27	16.46	51.83	24.39	3.05	6.10	17.68	49.09	24.09
I do not get satisfaction of job because office work keeps me always under stress.	F	7	23	27	67	40	3	14	37	69	41	10	37	64	136	81
	%	4.27	14.02	16.46	40.85	24.39	1.83	8.54	22.56	42.07	25.00	3.05	11.28	19.51	41.46	24.70
I do not get satisfaction of job as I am always discouraged by my boss.	F	9	14	30	59	52	6	7	25	58	68	15	21	55	117	120
	%	5.49	8.54	18.29	35.98	31.71	3.66	4.27	15.24	35.37	41.46	4.57	6.40	16.77	35.67	36.59
I get satisfaction of job because it keeps me away from boredom.	F	7	28	45	53	31	8	9	37	71	39	15	37	82	124	70
	%	4.27	17.07	27.44	32.32	18.90	4.88	5.49	22.56	43.29	23.78	4.57	11.28	25.00	37.80	21.35
I get satisfaction of job because job is light in nature.	F	10	37	42	54	21	17	41	40	46	20	27	78	82	100	41
	%	6.10	22.56	25.61	32.93	12.80	10.37	25.00	24.39	28.05	12.20	8.23	23.78	25.00	30.49	12.50
I do not get satisfaction of job because I do not get along well with my colleagues.	F	13	11	34	59	47	6	7	24	59	68	18	18	58	118	116
	%	7.93	6.71	20.73	35.98	28.66	3.67	4.27	14.63	35.98	41.46	5.49	5.49	17.68	35.98	35.37
I get satisfaction of job because I feel that job is of my caliber.	F	2	14	28	76	44	7	11	18	70	58	9	25	46	146	102
	%	1.22	8.54	17.07	46.34	26.83	4.27	6.71	10.98	42.68	35.37	2.74	7.62	14.02	44.51	31.10
I get satisfaction of job because I have good relation with my boss, colleagues, subordinates in work place.	F	1	8	30	79	46	8	8	21	74	53	9	16	51	153	99
	%	0.61	4.88	18.29	48.17	28.05	4.88	4.88	12.80	45.12	32.32	2.74	4.88	15.55	46.65	30.18

Table 60
Distribution of respondents showing job satisfaction on occupational status

Job aspect		Male N=164					Female N=164					Total N=328				
		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
I do not get satisfaction of job because it does not help me in raising my personal status.	f	11	22	24	76	31	9	14	25	69	47	20	36	49	145	78
	%	6.71	13.41	14.63	46.34	18.90	5.49	8.54	15.24	42.07	28.66	6.10	10.98	14.94	44.21	23.78
I get satisfaction of job because it improves my personal status in society.	f	3	15	39	71	36	6	11	22	75	50	9	26	61	146	86
	%	1.83	9.15	23.78	43.29	21.95	3.66	6.71	13.41	45.73	30.49	2.74	7.93	18.60	44.51	26.22
I get satisfaction of job because it helps me in having financial security.	f	1	18	27	75	43	4	10	24	74	52	5	28	51	149	95
	%	0.61	10.98	16.46	45.73	26.22	2.44	6.10	14.63	45.12	31.71	1.52	8.54	15.55	45.43	28.96
I get satisfaction of job because job provides good leave facility.	f	17	26	30	59	32	19	24	36	51	34	36	50	66	110	66
	%	10.37	15.85	18.29	35.98	19.51	11.59	14.63	21.95	31.10	20.73	10.98	15.24	20.12	33.54	20.12
I get satisfaction of job because it helps me in providing better education to my children.	f	12	12	33	64	43	8	18	29	68	41	20	30	62	132	84
	%	7.32	7.32	20.12	39.02	26.22	4.88	10.98	17.68	41.46	25.00	6.10	9.15	18.90	40.24	25.61
I do not get satisfaction of job because it is not financially secured.	f	8	16	30	68	42	9	16	24	57	58	17	32	54	125	100
	%	4.88	9.76	18.29	41.46	25.61	5.49	9.76	14.63	34.76	35.37	5.18	9.76	16.46	38.11	30.49
I do not get satisfaction of job because it does not help me in raising my standard of living.	f	20	18	22	68	36	17	14	15	67	51	37	32	37	135	87
	%	12.20	10.98	13.41	41.46	21.95	10.37	8.54	9.15	40.85	31.10	11.28	9.76	11.28	41.16	26.52
I get satisfaction of job because it helps me in having financial security.	f	3	8	29	94	30	9	11	18	81	45	12	19	47	175	75
	%	1.83	4.88	17.68	57.32	18.29	5.49	6.71	10.98	49.39	27.44	3.66	5.79	14.33	53.35	22.87
I do not get satisfaction of job because I get inadequate salary.	f	8	17	34	86	19	14	17	33	62	38	22	34	67	148	57
	%	4.88	10.37	20.73	52.44	11.59	8.54	10.37	20.12	37.80	23.17	6.71	10.37	20.43	45.12	17.38
I get satisfaction of job because it helps in raising the standard of living of my family.	f	4	13	31	79	37	11	9	31	77	36	15	22	62	156	73
	%	2.44	7.93	18.90	48.17	22.56	6.71	5.49	18.90	46.95	21.95	4.57	6.71	18.90	47.56	22.26
I get satisfaction of job because I get satisfaction of holding dual responsibilities as a wage earner.	f	10	21	26	80	27	12	11	34	71	36	22	32	60	151	63
	%	6.10	12.80	15.85	48.78	16.46	7.32	6.71	20.73	43.29	21.95	6.71	9.76	18.29	46.04	19.21
I get satisfaction of job because it fulfils my economic necessity.	f	3	14	30	90	27	8	9	26	84	37	11	23	56	174	64
	%	1.83	8.54	18.29	54.88	16.46	4.88	5.49	15.85	51.22	22.56	3.35	7.01	17.07	53.05	19.51
I get satisfaction of job because I get adequate salary.	f	4	11	38	82	29	6	19	30	78	31	10	30	68	160	60
	%	2.44	6.71	23.17	50.00	17.68	3.66	11.59	18.29	47.56	18.90	3.05	9.15	20.73	48.78	18.29

Table 61
Distribution of respondents showing job satisfaction on work schedule

Job aspect		Male N=164					Female N=164					Total N=328				
		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
I do not get satisfaction of job because I can not do justice to household responsibilities.	f	11	26	33	67	27	2	17	37	62	46	13	43	70	129	73
	%	6.71	15.85	20.12	40.85	16.46	1.22	10.37	22.56	37.80	28.05	3.96	13.11	21.34	39.33	22.26
I do not get satisfaction of job because I do not get domestic help for household tasks.	f	10	19	38	66	31	8	15	25	67	49	18	34	63	133	80
	%	6.10	11.59	23.17	40.24	18.90	4.88	9.15	15.24	40.85	29.88	5.49	10.37	19.21	40.55	24.39
I do not get satisfaction of job because I do not get relief from household responsibilities.	f	8	20	29	70	37	4	11	33	72	44	12	31	62	142	81
	%	4.88	12.20	17.68	42.68	22.56	2.44	6.71	20.12	43.90	26.83	3.66	9.45	18.90	43.29	24.70
I do not get satisfaction of job because I do not get leisure time.	f	10	21	22	89	22	4	21	27	74	38	14	42	49	163	60
	%	6.10	12.80	13.41	54.27	13.41	2.44	12.80	16.46	45.12	23.17	4.27	12.80	14.94	49.70	18.29
I do not get satisfaction of job because job keeps me so busy that I cannot avail leave facility.	f	8	24	29	74	29	9	25	27	67	36	17	49	56	141	65
	%	4.88	14.63	17.68	45.12	17.68	5.49	15.24	16.46	40.85	21.95	5.18	14.94	17.07	42.99	19.82
I do not get satisfaction of job because it does not allow free time to spend with my family.	f	6	28	29	70	31	10	21	32	67	34	16	49	61	137	65
	%	3.66	17.07	17.68	42.68	18.90	6.10	12.80	19.51	40.85	20.73	4.88	14.94	18.60	41.77	19.82
I get satisfaction of job because it helps in bringing up children in a better way.	f	8	26	45	63	22	8	16	45	61	34	16	42	90	124	56
	%	4.88	15.85	27.44	38.41	13.41	4.88	9.76	27.44	37.20	20.73	4.88	12.80	27.44	37.80	17.07
I do not get satisfaction of job because I cannot participate in family gathering due to lack of time.	f	8	21	36	76	23	6	28	41	54	35	14	49	77	130	58
	%	4.88	12.80	21.95	46.34	14.02	3.66	17.07	25.00	32.93	21.34	4.27	14.94	23.48	39.63	17.68
I do not get satisfaction of job because I have to neglect my family & children because of job.	f	3	20	34	77	30	6	21	36	61	40	9	41	70	138	70
	%	1.83	12.20	20.73	46.95	18.29	3.66	12.80	21.95	37.20	24.39	2.74	12.50	21.34	42.07	21.34
I do not get satisfaction of job because I cannot cope up with dual responsibility.	f	9	18	30	76	31	7	10	39	62	46	16	28	69	138	77
	%	5.49	10.98	18.29	46.34	18.90	4.27	6.10	23.78	37.80	28.05	4.88	8.54	21.04	42.07	23.48
I do not get satisfaction of job because I enjoy doing work assigned to me at my work place.	f	11	19	33	71	30	13	21	45	48	37	24	40	78	119	67
	%	6.71	11.59	20.12	43.29	18.29	7.93	12.80	27.44	29.27	22.56	7.32	12.20	23.78	36.28	20.43
I get satisfaction of job because it relieves me from domestic responsibilities.	f	18	39	37	44	26	22	40	32	42	28	40	79	69	86	54
	%	10.98	23.78	22.56	26.83	15.85	13.41	24.39	19.51	25.61	17.07	12.20	24.09	21.04	26.22	16.46

Table 62

Distribution of respondents showing job satisfaction on work environment

Job aspect		Male N=164					Female N=164					Total N=328				
		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
Work environment																
I do not get satisfaction of job because I do not like the type of work.	f	7	15	24	77	41	5	10	27	65	57	12	25	51	142	98
	%	4.27	9.15	14.63	46.95	25.00	3.05	6.10	16.46	39.63	34.76	3.66	7.62	15.55	43.29	29.88
I do not get satisfaction of job because nature of job is monotonous.	f	11	16	30	72	35	6	17	24	70	47	17	33	54	142	82
	%	6.71	9.76	18.29	43.90	21.34	3.66	10.37	14.63	42.68	28.66	5.18	10.06	16.46	43.29	25.00
I do not get satisfaction of job because I do not like the working environment of work place.	f	7	16	25	82	34	7	7	28	69	53	14	23	53	151	87
	%	4.27	9.76	15.24	50.00	20.73	4.27	4.27	17.07	42.07	32.32	4.27	7.01	16.16	46.04	26.52
I get satisfaction of job because the physical environment of work place is very good	f	4	13	29	81	37	3	10	25	82	44	7	23	54	163	81
	%	2.44	7.93	17.68	49.39	22.56	1.83	6.10	15.24	50.00	26.83	2.13	7.01	16.46	49.70	24.70
I get satisfaction of job because I have adequate facilities at my work place.	f	7	12	25	73	47	6	9	37	70	42	13	21	62	143	89
	%	4.27	7.32	15.24	44.51	28.66	3.66	5.49	22.56	42.68	25.61	3.96	6.40	18.90	43.60	27.13

