JOB STRESS AMONG IT EMPLOYEES-A STUDY ON SELECT IT COMPANIES IN KARNATAKA

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By

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Declaration

I hereby declare that the thesis entitled **"JOB STRESS AMONG IT EMPLOYEES - A STUDY ON SELECT IT COMPANIES IN KARNATAKA"** is an authentic record of independent research work done under the guidance and supervision of **Dr. H.N. Ramesh,** Associate Professor and Chairman, Institute of Management Studies and Research, Kuvempu University, Shankaraghatta, Shivmoga. This thesis is the result of my own efforts and has not been submitted earlier for the award of any Degree, Diploma, Associateship, Fellowship or any other similar title to any University or Institution.

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Certificate

This is to certify that the thesis entitled **"JOB STRESS AMONG EMPLOYEES-A STUDY ON SELECT IT COMPANIES IN KARNATAKA"** being submitted to the Institute of Management Studies and Research, Kuvempu University, Shankarghatta by **PADMAVATI** for **DOCTOR OF PHILOSOPHY** in **MASTER OF BUSINESS ADMINISTRATION** of Kuvempu University, is a record of bonafide research work carried out by her under my supervision and guidance.

The results presented in this thesis have not been submitted to any other University or Institution for the award to the candidate of any Degree, Diploma and Associateship, Fellowship or any other similar title.

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Research Guide

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Padmavati

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ABBREVIATION

ACDI/VOCA: Agriculture Co-operative Development International and Volunteers in Overseas Co-operative Assistance

ANOVA : Analysis and Variance

APJC : Asia Pacific, Japan and China

BIAL : Bangalore International Airport Limited

BPO : Back Processing Outsourcing

BPO : Back Processing Outsourcing

BSNL : Bharath Sanchar Nigam Ltd.

BSS : Business Support System

CCIE : Cisco Certified Internal work Expert

CHD : Center on Human Development

CMC : Certified Management Consultant

CMMI : Capability Maturity Model Integration

CPG : Consumer Packaged Goods

EAP : Employee Assistance Program

EFF : Electronic Frontier Foundation

EFT : Emotional Freedom Technique

ESDM : Electronic System Design and Manufacturing

ESP : Effective Sensory Projection

ESP : Extra Sensory Perception

EXIM : Export Import

FDI : Financial Data Analysis

FII : Financial Institutional Investors

GDP : Gross Domestic Product

GE : General Electrical

HD : High Definition

IBM : International Business Machine

IIMB : Indian Institute of Management Bangalore

IISc : Indian Institute of Science

ILO : International Labour Organisation

IOS : iphone Operating System

IOS : Internetwork Operating System

IP : Internet Protocol

IPO : Initial Public Offering

ISP : Internet Service Providers

ISRO : Indian Space Research Organisation

IT : Information Technology

ITeS : Information Technology enabled services

JNCASR : Jawaharlal Nehru Centre for Advance Scientific Research

LAN : Local Area Network

MAKE : Most Admired Knowledge Enterprises

MBTI : Myers – Briggs Type Indicator

MNC : Multi National Companies

NASSCOM : National Association of Software and Services Companies

NCBS : National Centre for Biological Science

NGN : Next Generation Network

NIAS : National Institute of Advanced Studies

NLP : Neuro Linguistic Program

NLP : National Language Processing

NLSIU : National Law School of India University

NSDAQ : National association of Securities Dealers Automated Quotations

NYSE : New York Stock Exchange

OS : Occupational Stress

OSI : Occupational stress Index

OSS : Operating Support System

PCI : Per Capita Income

RRC : Raman Research Centre

SD : Standard Deviation

SEI : Software Engineers Institute

SEZ : Special Economic Zone

SME : Small and Medium Enterprise

STPI : Software Technology Park of India

TCS : Tata Consultancy Services

UK : United Kingdom

US : United States

USD : United State Dollars

VGTC : Variable Geometry Turbo Charger

VOIP : Voice Over Internet Protocol

VPN : Virtual Private Network

WAN : Wide Area Network

WCDMA : Wide band Code Division Multiple Access

WMNETSERV: Wipro Motorola Network Service

YTP : Yoga Training Programme

Chapter - I

INTRODUCTION

1.1 Introduction

1.2 Review of literature

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CHAPTER – I
INTRODUCTION

1.1 INTRODUCTION:

Indian software and services industry's strong value proposition is existence of a large English speaking, technically qualified manpower, competitive billing, high productivity gains and scalability etc. These aspects have helped the country to emerge as a key IT services outsourcing destination. The situation further continues to hold India in good stead. These intrinsic strengths and advantages gave Indian a leg up in the burgeoning ITeS-BPO space as well, taking it beyond the realm of IT services.

Export comprises of traditional and the non-traditional goods that fetch buoyant sources of Foreign Exchange to any country like India. According to a report non-traditional exports constitute over 90% of the total exports in India. Needless to say, non-traditional trade consists of gems and Jewelry, leather, consultancy services, software, IT services, setting of joint venture abroad, engineering and capital goods etc.

Information Technology is one of the most important industries in the Indian economy. The IT industry of India has registered huge growth in recent years. India's IT industry grew from $150 million US in 1990-1991 to a whopping $50 billion US in 2006-2007. The sales growth of large companies (Annualized sales more than $10 billion) moderate, sales growth of companies with annualized sales between 5-10 billion remained near stagnant and sales of smaller companies continued to contract (Reserve Bank of India – Data Release – 2013-14 Sept. 2014).

The liberalization of the Indian economy in the early 90s, has played a major role in the growth of the IT industry in India. De-regulation policies adopted by the Government of India, have led to substantial domestic investment and inflow of foreign capital to this industry. In 1970, high import duties had forced IBM to leave

India. However, after the early 90s, many multinational IT companies, including IBM, have set up their operations in India.

Microsoft became a pioneer, in the field of software. The transnational company having its institution and its associates all over the world has been making splendid performance. In consequence, the company with talented human resources could post profit perpetuating for decades together. Tata Consultancy Services (TCS), Infosys Technologies Ltd. and Wipro have also made similar attempts for internationalization of their products that is software services. These companies having the state-of-art infrastructure, including core-competency and the talented young blood directly from the educational institutions, can train them properly so as to enable them to meet the challenges of global business environment.

The stress faced by employee is substantial. For many professionals, it is inherent to the job itself, where challenging demands and pressures unavoidable. The sheer amount of work can also be overpowering at times, whether one is a corporate professional, social worker, professor, practitioner or administrator. Anyone in this kind of job knows, either from their own direct experience or from observing colleagues, that stress can have very serious penalty. It can extend into a living nightmare of operation faster and faster to stay in the same place, feeling undervalued, feeling unable to refusal any demand but not working efficiently on anything. The signs of stress can include sleeplessness, aches and pains and sometimes physical symptoms of anxiety about going to work. What is more, people who are chronically stressed are no pleasurable to work with. They may be ill-tempered, fed-up, lacking in energy and promise, egocentric etc. They may find it hard to focus on any one job and cannot be relied on to do their share.

Stress is not a new theory, and was first introduced into life sciences by Hans Selye in 1936. There has been ample of research going on in this grassland since then. Mason (1975) reviewed literature on stress and concluded that there was confusion and lack of consensus regarding its definition. The term, '*stress',* has been approached by different people in different ways.

When all the psychosomatic processes of a human being like consideration, observation, detection, judgment, interpretation and imagination etc, function in a usual manner, the person is able to alter and cope with his surroundings. He meets the various expectations of life on his own quite productively, and are believed to be of jingle mental health. Such a person experiences sensibly less worry, nervousness, concern, conflict and stress. He is able to solve the troubles of life successfully. But a person who, on the contrary fails to do so is said to have unsafe mental and physical condition and is affected repeatedly by stress. When the demand on a person from the environment is more and his potential to meet such demands is less, then this inability might lead to nervousness and stress.

According to McGrath (1983), stress is present when an ecological demand is of such an extent that it may pressurize to beat a person's capabilities or resources for meeting it, and particularly under circumstances where coping is vital or even very important. The situation will be influenced by the nature and the extent of the demands, the character of the individual, the social support available, and the constraints under which the coping process is taking place. Workplace stress may lead to depression, tetchiness, short temper, job dissatisfaction an organization can only rise with the growth of its human resource. Most updated machines, the best infrastructure or highly developed technology may not be of any use if organization does not have the best of the human resource (employees). Therefore, it becomes

necessary that these employees are eustressed so that they can give their best in the improvement of the organization. An effort has also been made to determine the above with age, gender, position, marital status, education level and different chosen companies.

Job Stress can be defined as the unsafe physical and emotional responses that happen when the requirements of the job do not go with the capabilities, resources or desires of the employee. Job Stress can lead to poor health and even injury." [Stress at work, United States National Institute of Occupational Safety and Health, Cincinnati, 1999]. 'Eustress' is a term used for positive responses, whereas the term 'distress' suitably describes negative aspects. 'Stress', therefore, should be viewed as a continuum along which an individual may pass, from feelings of eustress to those of mild/moderate distress, to those of severe distress.

IT companies will not compromise with productivity by hook or crook they have achieve their targets. Work Load is the amount of work assigned to or expected from a worker in a particular time period. It may be separated into work overload and work under load which may be further sub divided into quantitative and qualitative aspects. When individuals perceive that they are incapable of coping with the amount of work assigned to them, they feel stress due to work load. Working under pressure to meet strict deadlines is a most important source of quantitative overload, tedious and routine work is a source of quantitative under load. Qualitative work overload is the beliefs by workers that they are short of necessary skills to complete the job whereas in Qualitative work under load, workers feel stress due to non ease of use of opportunity to demonstrate their skills to the fullest. Kahn et al. (1964) were the first to emphasize the significance of role related tension, and defined role dysfunctions as happening in two most important ways: role ambiguity (insufficient clarity on

expected role behaviours) and role conflict (conflicting or competing job demands) (Cooper, Dewe and O'Driscoll, 2001). Home-work interface may be defined as spill over of work life to home and home life to work due to demands from work at home, no support from home, absent of stability in home life. It asks about whether home problems are brought to work and work has an unenthusiastic blow on home life Alexandros-Stamatios G.A. et al. (2003). Job insecurity refers to the fear of job loss or dismissal, or the fear of loss of vital aspects of a job. Physical environment refers to anything in the employees' physical functioning environment, which may lead to increased levels of stress.

1.2 REVIEW OF LITERATURE:

The researcher has carried out review of exhaustive literature relating to the Stress Management in IT industry and selected IT companies. An attempt has been made to summarize the important studies and works, keeping in mind the relevance of the present study. Literature survey is conducted to secure a strong base to this research on stress management in IT industry, besides identifying the gap in the research undertaken so far.

Hans Selye (1956) states that "stress is not necessarily something bad – it all depends on how you take it. The stress of exhilarating, creative successful work is beneficial, while that of failure, humiliation or infection is detrimental." He believes that the biochemical effects of stress would be experienced irrespective of whether the situation was positive or negative.

Suttle (1977) opines that; by improving the quality of working life, the mental health of workers, improves. He observes that, improved quality of work life leads to healthier, more satisfied and more productive employees and more consequently more efficient, adaptive, and profitable organizations. According to him, Quality of

working life refers simply to the objective, situational on the job environmental conditions, in addition, the subjective experience of the workers related to such work. Studies show that stressful working conditions are actually associated with increased absenteeism, tardiness, and intention of quitting their jobs – all of which have a negative effort from the bottom line.

Das, G.S. (1982) investigates variations in managerial satisfaction in relation to the reality in managerial activities performed. Findings indicate that managers' satisfaction with the job, is determined by what managers really do at their job. Mangers' actual work and the frequency of performance of various activities are important in determining the effect of various factors in different aspects of satisfaction.

Motovidle *et al.* (1986) carried out a study on occupational stress and its relation with antecedent variables and job performance using a sample of 104 nurses. The information from respondents was collected through group discussion and the survey method. It was found that dominant stressful events for nurses were work overload, non co-operative patients, criticism, negligent co-workers, lack of support from supervisors, and difficulties they experience with physicians.

Srivastava (1989): suggests that, the effect of approach and avoidance modes of coping on the relation between occupational stress and job performance. A significant inverse relationship was obtained between perceived occupational stress and performance.

Singh and Abhigyan (1990): have stated that, role stress and job satisfaction emanating from different variables would vary over time. Differences between the two sub-samples regarding overall role stress and job satisfaction are insignificant. However, role erosion and inter- role distance has increased, whereas role isolation and role overload has decreased.

Prakash R. (1991): opines about the importance of perception in the experience of stress. According to him, the disparity between perceived demand and perceived capability produces a feeling of stress. Responses to the occupational stress inventory indicated a negative relationship between perceived capability and perceived demand. The difference between the two stress groups was significant on the basis of perceived capability and perceived demand.

Krishna and Srivastava (1991): have analyzed the relationship of different degrees of occupational stress and job performance. Further, they reveal that, subjects who experienced a moderate level stress performed their job efficiently. Low occupational stress correlated positively and high stress correlated negatively with job performance. A moderate degree of stress correlated positively, but not highly, with performance.

Singh (1991): feels, that, the impact of job stress dimensions on frustration, physical strain, alienation and the intent to quit. The results indicated that experience of inequity, role conflict, job requirement and capability mismatch and role overload, significantly influenced all job strain dimensions, namely, frustration, physical strain, alienation and intention to quit. Constraints of change and lack of group cohesiveness had an influence on frustration and physical strain respectively.

Ashok Kumar Pandey, Rudra Pratap (1991): have stated that there is a relationship between role conflict and anxiety, and between role ambiguity and anxiety. Role conflict and role ambiguity were both high, having a low correlation with anxiety.

Sagar Sharma *et al.* (1991): investigated the dominant coping strategies used by 150 male electrical engineers working in a state electricity board, to deal with their job hierarchy and job anxiety. Subjects with higher job anxiety exhibited a greater proportion of avoidance-coping relative to total coping efforts.

Menon and Akilesh (1992): have opined that stress among executives in Indian organizations may be high in comparison with stress among their western counter parts, given the fact that Indian executives perform in a more complicated environment than their counterparts in western countries. This makes Indian managers extremely susceptible to pressure.

Shirley Anne Telles (1992): opines that occupation related stress among working population is drastically increasing worldwide. Stress at work has become an integral part of everyday life. There is not much doubt that, occupational stress affects a significant number of workers and costs heavy financial losses, human sufferings and mental illness. He also, defines occupational stress as "The adverse reaction people have to excessive pressures or other types of demand placed on them." Occupational stress may have harmful physiological and psychological effects on workers. Various studies have shown that workers suffering from stress exhibit decreased productivity, absenteeism, higher number of accidents, lower morale and greater interpersonal conflict with colleagues and superiors. The effect of a Yoga Training Programe (YTP) on Occupational Stress (OS), consisted of an integral yoga practice which included selected Asanas, Pranayamas, Prayer (Omkar and Gayatri Mantra Chanting) and Yoganidra. Result revealed that participants experienced a statistically significant reduction of stress at work place.

DiTecco and Cwitco (1992), in their study on operator stress and monitoring practices, attempted to identify the major sources of work related stress among telephone operators in call centers, with special emphasis on computer monitoring and telephone surveillance. Call time pressure items were most linked to job stress by operators. With 70% reporting difficulty in serving a customer well and still keeping call time down, it contributed to their feelings of stress to large extent. About 55 % of

operators reported that telephone monitoring contributed to their feelings of job stress. If given the opportunity 44% of operators stated that they would prefer not to be monitored by telephone at all, while 23% stated they would prefer some monitoring.

Srivastav, Avinash Kumar (1993) describes an unexpected and disturbing trend: home is feeling more like work and the workplace is feeling more like home. In a vicious cycle, the more hours we work, the more stressful our home lives become; the greater the tensions at home, the more we escape into work. Our families and especially our children are the potential losers unless important changes take place.

Geller and Pamela (1994) compared the amount of tedium, job stress at home and work, and social support available for 61 men and 55 women employed by 4 Ohio employers. The differential effects of each source of support (supervisors, co-workers and partners) on tedium and job stress were also assessed. Results from self-report questionnaires show that women and men reported similar amounts of job stress and similar amount of work support. It was found that women reported the experience of more tedium than men, and men reported the receipt of more household assistance than women.

Menon and Akhilesh (1994) have revealed that the managers representing personnel, marketing, finance, etc., expressed that, the stressors identified were not found to be dependent on age, hierarchical level or tenure in the organization. On the other hand, stress is viewed as being functionally dependent.

Vandana Kaushik and Madhu (1994) have suggested that subjects at higher organizational levels experienced significantly lower role conflict (RC) and role ambiguity (RA) than subjects at lower organizational levels. Further, it is concluded that, subjects promoted to higher organizational levels, developed skills to cope with RC and RA and perhaps did not perceive the stressful nature of some events.

Daniel and Guppy (1994) in a study on 244 accountants confirmed that those with an internal locus of control and high social support were significantly less affected by stress than those with an external locus of control.

Rolf (1994) in a study on perceptions of organizational stress among female executives in the U.S. government investigated the psychometric properties and factor stress of a 15 item self – reporting instrument measuring perception of stress precipitators in a sample of 146 female senior executive service employees of the U.S. federal government. Cluster analysis revealed the presence of 3 relatively homogenous subgroups of sample respondents based on the source and level of their perceived stress. It was found that concerns about one's performance was the highest ranked stressor, followed by concerns about work load, responsibility and authority, ambiguities and the fear of making wrong decisions. The cluster analysis resulted in 3 groups of stress patterns. The highest stress group included women who put their job above everything else. The second highest group had a high propensity for job achievement while the lowest stress group represented women who placed a high emphasis on self – actualization and outside job considerations.

Lerner and Debra (1994) examined the relationship of job stress to more comprehensive health status measures, encompassing a health related quality of life. Job stress was significantly associated with physical functioning, role functioning related to physical health, vitality, social functioning, and mental health. Job stress made a statistically significant contribution beyond the effects of chronic illness and psychosocial variables. Results provide justification for investigating job strain as an independent risk factor for a health related quality of life.

H. VanderHek and H.N. Plomp (1994) have opined that "There are many occupational stress management programmes available which are designed to prevent and cure the negative aspects of job-stress. The focus of the programmes can be directed towards the individual worker, the working group, the organization of the work or the organization as a whole. Moreover, programmes show a considerable variation with respect to the type of interventions they promote and their underlying assumptions, as well as their duration and costs".

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David, B. and Posen, M.D. (1995) expresses that "Stress is the most common cause of ill health in our society, probably underlying as many as 70% of all visits to family doctors. It is also the one problem that every doctor shares with every patient". This provides physicians with two advantages and benefits.

Wonderful Frone and Micheal (1995) carried out a study on job stressors, job involvement and employee health, using a test of, identity theory. Identity theory postulates that the psychological importance or salience of the job role may intensify relationships between job stressor and employee health. This study tested the moderating influence of job involvement and the relationships of work pressures, lack of monotony, and role ambiguity to depression, physical health and heavy consumption of alcohol. Data were obtained through household interviews with a randomly selected community sample of 795 employed adults. Moderator regression

analyses provided limited support for the stress. Exacerbating influence of job involvement, of the 9 interactions tested, 3 were found to be significant. High levels of job involvement specifically exacerbated the relationship between role ambiguity and physical health.

Driscoll and Richard (1995) examined the psychological effects of physical assault at the work place and the effects of more traditional psychological job stressors (high demands, low control, and low social support) among approximately 5,000 public service employees. Subjects who were assaulted were more likely to report depression, anxiety and low job satisfaction than their co–workers who were not. Evidence for a moderating effect of work related social support on the relationship between assault and depression is noted.

Iqbal, N. and Ahmad, H. (1995) have identified the relationship between occupational stress and locus of control. Results show that occupational stress was negatively correlated with an external locus of control. There were significant differences between high and low stress groups in relation to both external and internal spot of control. Findings suggested that subjects with internal locus of control, experience lower amounts of stress than those with external locus of control.

Satyanarayana (1995) opines that personal inadequacy, resource inadequacy and role stagnation were the dominant contributors to role stress in executives and supervisors. Further, two groups differed significantly in respect of inter-role distance, role overload, and personal inadequacy and role ambiguity dimensions.

Frone and Micheal (1995) have expressed that the Identity theory postulates, the psychological importance or salience of the job role may intensify relationships between job stressor and employee health. This study tested the moderating influence of job involvement and the relationship of work pressures, lack of monotony, and role

ambiguity to depression, physical health and heavy consumption of alcohol. Moderator regression analysis provided limited support for the stress.

Brook and Brook (1995) have stated that, sequential decision tree method that segmented the sample into homogeneous sub groups and gave insight in to the relationship between job satisfaction and mental health. They suggested that these are sub groups of managers whose response to work stressors depends on those aspects of the work environment they consider to be most important.

John (1995) expresses the employees in complex jobs who believed their abilities were not high enough to meet the demands of their jobs experienced significantly higher stress than the employees, who believed that their abilities matched their jobs demands. Employees in a situation of work overload who did not feel competent to cope with the required tasks reported a high level of stress.

Barnett and Rosalind (1995) have discussed that there is relationship between job conditions and psychological distress among male and female employees. Job conditions identified as potential job stressors, included skill discretion, decision authority, schedule control, job demands, pay adequacy, job security and relations with supervisor. Results showed that only skill discretion and job demands were related to self reported psychological distress. For both men and women, the positive effects of feeling concerned about having to do monotonous work and having to work under pressure of time and conflicting demands, were associated with psychological distress.

Susan Cartwright and Cary L. Cooper (1997) have suggested workplace as a source of stress. It contains clear description of the importance of organizational culture/climate as influencing perceived stress. Managing Workplace Stress examines the cause of this increase in work-related stress, with a particular emphasis on stress,

created by organizational changes, including redesigning of jobs, reallocations of roles and responsibilities, and the accompanying job insecurities. They highlight the everyday stressors, which are likely to have an impact on managers and employees, such as working with difficult people and managing increased workloads.

Agarwala, U.N. *et al.* (1998) studied job satisfaction and job stress in 3 hierarchical ranks and employees working in 2 private organizations. The study was designed to investigate the relationship as well as the impact of Emotional Intelligence (EI) on, to the perception of role stress of medical professionals in their organizational lives.

They could identify significant difference in the level of Emotional Intelligence and perceived role stress between genders, but negative relationships of Emotional Intelligence with organizational role stress for both the gender and the medical professionals as a whole. Emotional Intelligence of both the gender and the medical professionals as a whole to predict significant amount of variance in the total variance in their perceived role stress.

Charles N. Roper (1998) suggests that **-** The Fantasy: Get sober, and everything will fall neatly into place. The Reality: Get sober and watch your stress level explode. One of the many paradoxes surrounding recovery is that, it can bring out the best or the worst in alcoholics and addict. This is especially true of those, who work under stressful conditions. Stress management is not the same as stress relief. Stress management is a long-term solution to millions of short-term problems. A true stress management "program" focuses more on internal sources of stress the ones we create for ourselves than it does to external sources the ones we see around us and blame for the way we feel.

Kumar and Murthy (1999) a study relating to 100 women managers, found that the most frequent stressor for women managers was office politics. The possible reason could be that the women generally have less experience in corporate politics than their male counterparts. The second most frequently experienced stressor among women managers is the conflict between work and family.

Pattanayak and Sarangi (2000) have examined organizational role stress and quality of work life among Indian public sector employees, according to the type of organization, area of work and role position. Service area subjects reported less organizational role stress and greater quality of work life than subjects in the production area. Older public sector subjects experienced more role expectation conflict and greater self-role distance than did new public sector subjects. Total organizational stress was experienced differently by executive and non-executive, new versus old public sectors subjects and production versus service subjects.

Jones, M.C. and Johnston, D.W. (2000) have opined that there evidence of continuing high levels of distress in both trainer and student nurses, show a critical review of the stress reduction and stress management literature targeting both trained and student nurses. Using a systematic approach, some 36 studies dating from 1980 until the present day were identified, adopting pre-experimental, quasi-experimental or experimental designs. While many work-site programmes in this series were successful in terms of adaptive changes in problem-solving, self-management skills including relaxation and interpersonal skills, affective well-being, and work performance, a number of design and evaluation inadequacies were identified. Recommendations regarding the future design, provision and evaluation of such work-site interventions, include the further clarification of the structure of perceived

stressors, and development of causal models of the stress process to identify the job characteristics `causing' work-related distress.

Suneel Khanna (2001) discusses the double-edged sword of modern information technology, like email, cell phones and laptops that were meant to make life simpler. Conveniences of such technologies; Stress caused by the unrelenting flow of information; Disadvantage of telecommuting; Burnout caused by the struggle of employees to keep pace.

Andrew Noblet (2003) Opines that, occupational stress is a serious threat to the health of individual workers, their families and the community at large. The settings approach to health promotion offer valuable opportunities for developing comprehensive strategies to prevent and reduce job stress. However, there is evidence, that many workplace health promotion programs adopt traditional, lifestyle-oriented strategy when dealing with occupational stress, and ignore the impact that the setting itself has, on the health of employees. The results revealed that, the work characteristics 'social support' and 'job control' accounted for large proportions of explained variance in job satisfaction and psychological health. In addition to these generic variables, several job-specific stressors were found to be predictive of the strain experienced by employees.

Henry (2003) examines relationships among stress, cognitive style and job satisfaction of computer programmers, as related to four cognitive styles, Concrete Sequential, Abstract Sequential, Abstract Random, and Concrete Sequential cognitive style among this sample. Correlation analysis revealed several significant associations. CS style predicted total job satisfaction, and Total job satisfaction predicted Cumulative Severity (Stress) inversely.

Michelle Pearson (2004) expresses that "Stress can cause health problems, as well as, exasperate already present health problems. Further, she suggests that clients seek a medical opinion before coming to a stress consultant. This way any medical problem can be diagnosed, treated and then have a solid base to work".

Tanja Gardner (2005) opines that "Stress and self-esteem, however, the relationship is negative - both in the technical sense of the word (i.e., as one increases, the other decreases, and vice versa), and in its ultimate result upon the person concerned".

Terry A. *et al.* (2006) have expressed that **"**Job stress has been a relatively neglected area of research among industrial psychologists. The empirical research that has been done, is reviewed within the context of six facets i.e., environmental, personal, process, human consequences, organizational consequences, and time of a seven facet conceptualization of the job stress–employee health research domain, in general and a sequential model is proposed for tying the facets together. They concluded that some of the major problems of the research in this area are: confusion in the use of terminology regarding the elements of job stress, relatively weak methodology within specific studies, the lack of systematic approaches in the research, the lack of interdisciplinary approaches, and the lack of attention to many elements of the specific facets.

Bruno and Maria (2006) have expressed that most employees involved in information technology jobs, are overworked. According to the survey, most respondents said they feel obligated to some degree, to be on call for the office 24 hours, 7 days a week. The situation can be a problem for firms because there is an indication of overwork. This will cost companies in the end employee burnout, healthcare and disability because people feel stressed.

Goran and Johansson (2007) have studied on job characteristics, motivators and stress among information technology consultants in a structural modeling approach, intended to test a structural model of the relationship between job characteristics (job demand, job control) and perceived stress (e.g., stressed, pressed, and tense) with 'motivators', as the mediating variable. The study reveals that, job demand was positively related to perceived stress. The results further indicate that, motivators in part, mediate the relation between job control and perceived stress.

Tsai *et al.* (2007) studied whether the expectation on today's Information Technology (IT) professionals to remain technically competent, constitutes a significant source of stress. They examined how IT professionals experience and cope with the threat of technical obsolescence. Interestingly, results revealed that, not all IT professionals consider technology change a threat to their technical competence; some viewed updating as enjoyable and pursued learning for its own sake.

Paul M. Lehrer *et al.* (2007) have stated that the stress is ever – present a universal feature of life. Arousal is an inevitable part of living, people, constantly think, feel and act, with some degree of arousal. Stress cannot and should not be avoided. Rather, it is to be contained, managed, and directed.

Rao and Pradhan (2007) have examined the influence of personality on perceived work deadlines among software professionals. The perceived deadline was measured with the dimensions namely task support, task significance, task identity, task management, task uncertainty and task capability, and personality measured with Myers-Briggs Type Indicator (MBTI)- personality inventory. The study came out with the significance of difference among different personality groups of (i) extrovert and introvert (ii) intuitive and sensing (iii) thinking and feeling and (iv) judging and perceiving on perceived work deadline dimensions.

Major *et al.* (2008) have examined the influence of work-family culture and workplace relationships on work interference with family, in a multilevel model. The results demonstrate the value of work-family culture in understanding supportive supervisory and coworker relationships and work interference with family and, highlight the need to employ multilevel models to understand these relationships.

Wang, J.L. *et al. (*2008) have expressed that the gender-specific associations between work stress, major depression, anxiety disorders and any mental disorder, adjustment for the effects of demographic, socioeconomic, psychological and clinical variables. Imbalance between work and family life was the strongest factor associated with mental disorders, regardless of gender. Policies improving the work environment may have positive effects on workers' mental health status. Imbalance between work and family life may be a stronger risk factor than work stress for mental disorders.

Sumangala C. (2007) opines that the stress faced by the professional workers is substantial. For many professionals, it is intrinsic to the job itself, where competing demands and pressures are inescapable. The sheer volume of work, can also be overwhelming at times, whether one is a social worker, a teacher, doctor or a manger. Anyone in this kind of job knows, either from their own direct experience or from observing colleagues, that stress can have very serious consequences. It can develop into a living nightmare of running faster and faster to stay in the same place, feeling undervalued, feeling unable to say 'no' to any demand but not working productively on anything. The signs of stress can include sleeplessness, aches and pains and sometimes physical symptoms of anxiety about going to work.

Bhattacharya *et al.* (2007) undertook to study distress, wellness and organizational role stress of professionals in the area of information Technology (IT). The effect of sex and age on the above variables as well as the predictability of the

variables from stressful life events and coping resources taken together were also examined. Results of the study reveal that women experienced greater wellness and older personnel experienced more distress. Distress could not be predicted from life events and coping resources taken together.

Raghavan *et al.* (2008) have conducted empirical investigation of stress factors in Information Technology Professionals, explores whether organizations can employ job design strategies to relieve organizational stress for information technology (IT) professionals. The results suggest the removing role ambiguity and improving work-facilitation to ease work-related stress. Allowing employees to have flexible work schedules was also found to ease their perceptions of workload.

Karan Raj (2008) Suggests individual experiencing emotional challenges related to job, money, relationships, life changes, addictions, physical/emotional/ sexual trauma, low self-esteem, guilt, anxiety, and depression. Individuals experiencing physical challenges related to asthma, anxiety/panic attacks, back pain, chronic fatigue, fibromyalgia, gastrointestinal disorders, headaches, high blood pressure, high blood cholesterol, infertility, insomnia, skin problems, heart disease, cancer, AIDs.

Randhir Singh Ranta (2009) opines that everyone in today's life experiences a fair share of stress, irrespective of personal characteristics, environment and social conditions. The police fulfill an essential role in the society and stress potentially reduces the effectiveness of the personnel. The stressed police officers pose a threat to themselves, their colleagues, offenders and/or to public safety and thus it is a matter of urgent concern for psychologists in particular and mental health researchers in general.

Stephen Palmer (2009) says that it is important to establish a working relationship, underpinned by mutual trust and respect. If the person perceives that the

threatening situation has passed, then the parasympathetic nervous system helps to restore the person to a state of equilibrium. However, for many people, they perceive everyday of their life as stressful. Unfortunately, the prolonged effect of the stress response is that, the body's immune system is lowered and blood pressure is raised, which may lead to essential hypertension and headaches.

Vikram Karve (2009) focuses on “stress prevention” rather than “stress management”. He feel that the word “weak” is all encompassing and embraces anything that creates in you a stressful situation like all negative emotions and feelings including anger, irritation, infuriation, frustration, despondency, depression, demoralization, unhappiness – anything that disturbs your inner tranquility and equanimity, drains you emotionally and intellectually, besides literal physical weakness.

Azmathulla (2009) states that the modern world, which is said to be a world of achievements, is also a world of stress. One fined stress everywhere, whether it be, the family, business organization or any other social or economic organization. No institution is stress free. The extent of stress is, however, a matter of degree. Some organizations are more harmonious whereas others have greater friction and tension. In this all-pervasive atmosphere of stress, the relevant question is whether stress can be reduced even if there is no escape from it.

Swamy Parthasarathi (2006) he opined Stress and strain plague life today. All over the world people succumbs to life's trials and tribulations. Worry and anxiety infest people's thoughts. Stress-related disease is reaching epidemic proportions, exacting a heavy toll on human life. Stress-management courses have mushroomed everywhere. They offer remedies to the problems of stress without getting to its root. They have been tackling the problem from the wrong end. They believe that stress arises from external factors

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Bing C. Lin, Jason M. Kain, Charlotte Fritz (2013) Don't Interrupt Me. Study will examine the relationship between intrusions and strain, beyond the effects of displaced time. Interruptions by others, or intrusions, are a common phenomenon in today's workplaces. Intrusions can be disruptive for employees because they displace time required to complete job tasks (thereby increasing perceptions of workload). However, from a resources perspective, intrusions are associated with strain incrementally beyond that of displaced time through the depletion of self-regulatory and cognitive resources. That is, intrusions explain incremental variability in strain (i.e., emotional exhaustion, physical complaints, and anxiety). In a sample of 252 U.S. employees recruited through Study Response, Researcher found that

workload explained 12% of variability in exhaustion, 11% of variability in physical complaints, and 7% of variability in anxiety. However, intrusions accounted for significant incremental validity beyond that of workload in exhaustion (9%), physical complaints (4%), and anxiety (3%). These results suggest intrusions are associated with strain, uniquely, beyond that of workload.

Serge Brand (2013) this mediation model was examined to find out how stress, depression, and hypomania precipitate the occurrence of dysfunctional sleep-related cognitions, which in turn lead to insomnia. A total of 862 participants (639 women, 223 men; M age: 24.67 years, SD = 5.91) completed a series of self-report questionnaires assessing perceived stress, depression, hypomania, dysfunctional sleep-related cognitions, and insomnia. Compared to men, women reported higher levels of stress, depression, and insomnia. Women also suffered from more dysfunctional sleep-related cognitions. All variables were inter-correlated. Structural equation analyses showed that the relationship between stress and insomnia was largely mediated by dysfunctional sleep-related cognitions. Links between depression and insomnia were found to be weak when controlled for stress and dysfunctional sleep-related cognitions. The findings support a cognitive model of insomnia. Stress must be seen as a precipitating factor in the onset and maintenance of insomnia. Consequently, competencies to deal with dysfunctional sleep-related cognitions should be fostered in stress management programs. In turn, stress management should be a primary focus in the treatment of insomnia.

Eva Maria Schraub, Sarah Turgut and Karlheinz Sonntag (2013) examined the impact of two emotion regulation strategies, reappraisal and expressive suppression, on recovery experiences and affective well-being after significant study-related events. In a sample of 63 undergraduate students who completed a time-

contingent daily diary over 14 consecutive days (726 diary entries), the assumption that perceived emotional stress during study-related events would reduce affective well-being at bedtime was supported. Multilevel analyses further showed that recovery experiences partially mediated this negative relationship.

As postulated, reappraisal buffered the adverse effects of emotional stress on recovery experiences. Unexpectedly, expressive suppression had the same buffering effect. They conclude that an additional, fine-grained focus on context and time would usefully enhance our knowledge of the effects of emotion regulation on stress responses. After stressful events, people need time to recover to restore their resources (Meijman and Mulder, 1998). Accordingly, recent evidence shows that recovery experiences are positively related to different measures of psychological well-being (e.g., Geurts and Sonnentag, 2006; Hahn, Binnewies, Sonnentag and Mojza, 2011; Sonnentag, 2003; Sonnentag and Fritz, 2007). However, while studies indicate that high work demands.

Dr. Nisha Kumari, Dr. Shashi Verma, Dr. Yoginder Singh Verma (2013) according to these researchers in the modern world, stress is a phenomenon that must be seriously recognized and addressed in various professions, particularly in view of increasing incidents of burnouts and health hazards. The teaching profession is no exception. Knowledge about stressors could be valuable in order to avoid and /or manage factors causing stress with teaching at the higher educational level. The present study attempts to understand the relationship of organizational role stress with personal factors such as gender, age and education. The study was conducted among college teachers serving in Himachal Pradesh. After collecting data from representative sample and tabulating it statistical techniques like correlation, ANOVA and Regressions were used to analyze the data. The results revealed significant

relationship of gender with certain stress dimensions namely, inter role distance; role explosion, role overload and role ambiguity. Males were found to be more under the influence of stress as compared to females. Further the respondents from the lowest age group and lowest level of education were found to be highly stressed. Teachers at the formative stage tend to be more under stress. The reasons may be varied depending upon the career aspirations, family responsibilities and environmental threats. Since a stressful employee is hardly a productive employee, hence strategies should be worked out for providing an environment where the employees seek solutions for the effective management of their stress.

Swamynathan (2014) says Indian employers are ahead of their Asia Pacific counterparts in developing strategies to manage work-related stress as one in every three employers instituted stress management programmes last year and an almost equal number plan to do so this year, says a survey. According to the inaugural Asia Pacific edition of the 'Staying at Work' survey conducted by professional services company Towers Watson, stress is the number one lifestyle risk factor ranking above physical inactivity and obesity.

1.3 RESEARCH GAP:

Meticulous assessment of the research works already undergone on the area has enabled the researcher to crystallize the present study. Although, there are several studies conducted on stress management, the focus of these studies is on stress management practices only in manufacturing industry and very few studies are dealing with stress management in services industry. But, with reference to IT sector there is a dearth. Hence, the present study is designed to fill the gaps in the previous studies. There have been plenty of research studies on stress over a period of time. Different writers have different views about the concept of stress. A study of different

views has been made under the current study to understand the concept of stress and get an in-depth insight into it. This study intends to find out the various causes of stress among the Information Technology employees and the methods adopted by them in managing stress. A study about the concept of stress and coping has been helpful to develop curiosity towards the various aspects of stress and its management.

The present study therefore addresses the following issues;

- What are the stressors in IT industry,
- Positive and negative impact of stress on the employee performance.
- Stress coping strategies in IT industry etc.

Chapter - II

RESEARCH DESIGN

2.1 Introduction

2.2 Need and Significance of the Study

2.3 Statement of the Research Problem

2.4 Objectives of the Study

2.5 Research Hypotheses

2.6 Scope for the Study

2.7 Research Methodology

- Research Design
- Data Sources
- Sampling Plan
- Data Analytical Tools

2.8 Limitation of the Study

2.9 Chapter Scheme

CHAPTER – 2
RESEARCH DESIGN

2.1 INTRODUCTION:

Research design is a framework or blueprint for conducting the research. It details the procedures necessary for obtaining the information needed to structure or solve research problems. In simple words it is the general plan of how you will go about your research and detailed outline of how an investigation will take place, it typically include how data is to be collected, what instruments will be used and the intended means for analyzing data collected to reach objectives with the help of hypotheses.

2.2 NEED AND SIGNIFICANCE OF THE STUDY:

The export potential of India's IT industry has been recognized by all developed nations across the world. The IT and IT enabled sectors, the online businesses, and the software products of India are renowned all over the world for their quality and cost efficiency. With its huge growth potential, the information technology sector of India has emerged as a preferred investment area for the IT biggies across the world.

IT contributes over 1/3rd of economic growth of the country. Financial Institutional Investor's (FII's) are jubilant in investing a sizeable amount of FDI into the sector owing to more profitability. Interestingly, employees working in IT field are multi skilled, and within 18-30 age group. All the employees are hard pressed for time to complete the task or project assigned to them mainly to reap good compensation package. Needless to say, the pay in Software Companies is very good compared to other industries in India. The work place is well furnished as the company has no financial crunches. Working hours in IT Company are invariably more than 12 hours; as a result IT

work culture is messed up. According to a study, over 70 per cent of the employees in IT sector are prone to stress resulting in health disorder. IT companies have already evolved strategies to prune the stress of their employees. Leading IT companies in America have already employed latest tools and techniques to stress management, the same need to be injected into Indian IT firms as well.

Former President of India A.P.J. Abdul Kalam has stated that, India can expect better contribution from service sector; as such IT Industry is required to be harnessed with adequate Infrastructure needs that include Human Resource also.

Attrition rate in IT Industry needs to be controlled besides managing the stress of the employees. Stress is like a catastrophe both to the employee and the organization. These catastrophes are to be controlled with latest management skills. The Stress Management in IT industry will help the employees and the organization to perform significantly. It is the stress management which can promote employees to achieve their targets, help them lead a satisfactory life in the society. Living standard is also a factor which decides the prosperity of the employees. The country is moving fast in order to become a developed nation by 2025, which is possible, if the living condition of the employee is satisfactory. Stress Management in IT Industry undoubtedly contributes to its might, and ensures better living conditions for the employees.

There is hardly research work related to stress management in IT industry, especially in the shadow of economic recession. The proposed research is of greater significance to know the quality of work life, in the wake of globalization. Thus, the researcher to fill this gap has conducted the research on stress management in Indian IT industry of the select companies in Karnataka.

2.3 STATEMENT OF RESEARCH PROBLEM:

IT sector emanated in India after economic reforms were undertaken were by the Government. Industrial Policy 1992, and thereafter, have given more scope for IT as India is considered to be a better location for IT companies. IT companies set in unrealistic targets and strive hard to accomplish the targets with limited infrastructure including human resources. All tasks in IT are time-bound; therefore employees are under compulsion to finish the projects or tasks within the time frame. Further, surveys conducted in UK and the US respectively, found that employees in Information Technology (IT) industry (including the ITeS outsourcing industry) were the most stressed. Accordingly, these organizations had started implementing various unconventional methods to decrease stress at the workplace.

A majority of IT employees suffer from health disorders as the stress levels are unbelievably high. A young employee works enthusiastically, but hardly has any time for a social life. A huge compensation does not help young people to lead satisfactory life, besides; family is also getting pulverized as most of them ought to work in the organization. As already stated, IT contributes a buoyant share to the economic growth in the foreign exchange and international business, but they fail to maintain good organization culture. Stress management, which was advocated since time immemorial, is not properly channelized. This situation pushed majority of the IT employees into slough of despondency. Further, IT firms are liable to give a huge medical reimbursement, if stress management used properly can cure the stress related problems and make IT firms highly productive. Hence, in this context the study designed to analyse the reasons, impact and de-stressors in the chosen IT firms. The study result would help the IT firms, HR managers and Executives to develop measures to manage the health of firms and employees.

2.4 OBJECTIVES OF THE STUDY:

The main aim of the study is to analyse the employee stress in IT industry. To achieve this aim, the following objectives are stated in this study.

1. To examine the extent of occupational stress experienced by IT employees
2. To analyze the factors which cause stress among the IT employees
3. To analyze the influence of managerial hierarchical levels on occupational stress of IT employees
4. To assess whether IT employees working in different companies and different nature of work differ in their occupational stress
5. To analyze the influence of nature of family environment on occupational stress of IT employees
6. To study the major predictors of occupational stress by its components.

2.5 RESEARCH HYPOTHESES:

The following hypotheses were formulated for the present research to study the results scientifically.

H1: IT employees experience moderate level of occupational stress.

H2: IT employees with different age groups differ significantly in their occupational stress

H3: Male and female IT employees differ significantly in their occupational stress

H4: Married, unmarried and widower IT employees differ significantly in their occupational stress

H5: Demographic variables (Educational background, managerial levels, companies, nature of work) of IT employees significantly influence their occupational stress

H6: IT employees with different family environment differ significantly in their occupational stress

H7: Components of Occupational stress are significantly related to each other and best predict the total occupational stress of IT employees

2.6 SCOPE OF THE STUDY:

The research focuses upon stress of non-managerial and managerial cadre of employees working in select IT companies in Karnataka. There is large number of IT companies established in Karnataka and it is continued. The industrial policy could attract lot of MNC's and domestic companies to operate in Bangalore as well. The Government of Karnataka is committed to provide the state-of-art infrastructure, which enthused companies to operate in different economic activities. Bangalore has the potential to become the hub of IT perhaps. The firms undoubtedly generate employment opportunities to thousands of young people who will be forced to work under stress. Stress management would be the recipe to save not only the younger generation but also IT firms in Bangalore. Therefore, study focuses on employee stress in IT firms and stress management strategies of the firms operating in Karnataka.

Five companies viz., Cisco, Wipro, Nous info systems, Infosys and Ericson are the leading IT firms functioning in Karnataka, account for major share in IT services employees. Therefore, these companies are chosen to focus the present study. The data collected for the period years from 2006 to 2013, from the chosen firms.

2.7 RESEARCH METHODOLOGY:

This research uses descriptive research design to elicit the data and analyse the collected data. Variables such as demographic, organisational and other related variables are analysed with the help of both primary and secondary data. Therefore, both researches depend upon on primary data and secondary data. In IT companies generally there are three groups of employees that are top level, middle level and bottom level. These groups put their efforts to steer IT companies towards greater productivity. As already stated, the researcher has chosen 5 major IT companies in Karnataka for collecting the research data.

The study was conducted in two phases, pilot study and main study. A pilot study was conducted initially to identify the significance of the study and design data collection instruments and decide upon the analytical tools for data analysis. During this study, a total of 5 employees of each company were randomly selected and interviewed personally by the researcher. This was mainly done in order to have an insight about the plight of the employees because of undue stress in the select IT companies.

The selected IT companies CISCO, WIPRO, NOUS INFOSYSTEM, INFOSYS, and ERICSON are considered in this study to draw the sample respondents. The researcher has adopted stratification of different cadres of employees in the sampling units. Out of (600) respondents, the researcher elicited responses from 425 employees by using stratified sampling method.

The researcher prepared a structured questionnaire and administered it to the said respondents on stratified sampling basis. The questionnaire consisted of two parts; Part-A, focused on eliciting information related to demographic aspects, Part-B focused on deriving information into HR practices in the respective firms with Likert's Scale. The researcher has also interviewed the Project Managers and team leaders to validate the data found in the form of feedback.

The research also depends on secondary data like books, journals, magazines, articles and both published and unpublished information; in addition to that researcher browsed different websites. For this purpose the researcher has conducted literature survey at the National and International level. Conventional library and the digital library have been made use extensively.

As a part of the design the following occupational stress index is used in the study to compare the stress levels in IT firms.

Occupational Stress Index:

Occupational Stress Index (OSI) standardized by Srivastava and Singh (1984) was administered to assess the level of stress among the employees of Information Technology Companies. This scale consists of 46 items, each to be rated on the five point rating scale, by indicating strongly disagree, disagree, undecided, agree, strongly agree. Out of 46 items, 28 items are true keyed and the rest 18 are false keyed. The items relate to almost all relevant components of the occupational life, which cause stress in some way or the other such as role overload, role ambiguity, role conflict, unreasonable group and political pressure, responsibility for persons, under-participation, powerlessness, poor peer relations, intrinsic impoverishment, low status, strenuous working conditions and unprofitability. The occupational stress index purports to measure the extent of stress which employees perceive as arising from various constituent conditions of their job. It also measures the stress arising exclusively from job roles. The reliability index ascertained by split half (odd-even) method and Cronbach's alpha co-efficient for the scale as whole were found to be 0.935 and 0.90 respectively. The reliability indices of the 12 subscales were also computed through split half method. The following table records the obtained indices of reliability.

Table – 2.1: Occupational Stress Indices of reliability

Sub scales	Reliability Index
1. Role Overload	.684
2. Role ambiguity	.554
3. Role conflict	.696
4. Unreasonable group & political pressure.	.454
5. Responsibility for persons	.840
6. Under-participation	.630
7. Powerlessness	.809
8. Poor peer relations	.549
9. Intrinsic impoverishment	.556
10. Low status	.789
11. Strenuous working conditions	.733
12. Unprofitability	.767

The validity of the OSI was determined by computing co-efficient of correlation between the scales on O.S.I and various measures of job attitudes and job behaviour. The employees' scores on the O.S.I is likely to positively correlate with the scores on the measures of job related, attitudinal, motivational and personality variables which have proved lowering or moderating the level of occupational stress. The coefficients of correlation between the scores on O.S.I and the measures of Job Involvement (Lodhal and Kejner, 1965), Work Motivation (Srivastava), Ego – Strength (Hasan, 1970) and job satisfaction (Pestonjee, 1973) were found to be .56, .44, .40, .51 respectively. The correlation between the scores on the O.S.I and the measures of Job anxiety (Srivastava, 1974) was found to be 0.59.

Data Collection Method:

Primary data is collected from both self administered questionnaire and Personal Interview. A structured questionnaire is designed and administered to the chosen respondents in the above said IT firms, Five point Likert Scale was administered with scale values ranging from strongly agree to strongly disagree. Researcher also conducted personal interview by asking different questions regarding stress. The aim of the present investigation was to assess and compare the level of occupational stress among the employees of Information Technology (IT) companies. The data obtained from 425 employees was subject to relevant statistical techniques to test the hypotheses formulated for the study.

Statistical Techniques:

The data collected from the respondents are edited for accuracy and option categories are coded. Apart from tables, charts and descriptive statistics, the following statistical methods were employed in the present study.

a. Descriptive statistics

b. One-way ANOVA

c. Independent samples ‘t’ test

d. Regression Analysis-Stepwise multiple

e. Pearson’s product moment correlation.

A brief description of each of the above method given below:

a. Descriptive statistics

This procedure provides summary information about the distribution, variability, and central tendency of a variable. The descriptive procedure displays univariate summary statistics for several variables in a single table and calculates standardized values. In the present study descriptive statistics were employed for subscales and total occupational stress of IT employees.

b. One-way ANOVA

The One-Way ANOVA procedure produces a one-way analysis of variance for a quantitative dependent variable by a single factor (independent) variable. Analysis of variance is used to test the hypothesis that several means are equal. This technique is an extension of the two-sample ‘t’ test. In the present study One-way ANOVA was employed to find out the influence of managerial levels, education, age groups, and family environment on occupational stress.

c. Independent samples ‘t’ test

The Independent-Samples ‘t’ test procedure compares means for two groups of cases. Ideally, for this test, the subjects should be randomly assigned to two groups, so that any difference in response is due to the treatment (or lack of treatment) and not to other factors. In the present study, Independent samples ‘t’ test was applied to see the influence of gender and marital status on occupational stress and coping strategies including subscales.

d. Regression analysis-Stepwise multiple

Linear Regression estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable. For example, you can try to predict a salesperson's total yearly sales (the dependent variable) from independent variables such as age, education, and years of experience. In the present study, regression analysis was applied to see which the best predictor coping strategies are for occupational stress is.

e. Product moment correlation

The Bivariate Correlations procedure computes Pearson's correlation coefficient. Correlations measure how variables or rank orders are related. Before calculating a correlation coefficient, one must screen the data for outliers (which can cause misleading results) and evidence of a linear relationship. Pearson's correlation coefficient is a measure of linear association.

The above analysis is conducted with SPSS data analysis software.

2.8. LIMITATIONS OF THE STUDY:

Stress is generic. Notwithstanding, the study focuses on stress in IT industry, IT industry operates all over the country but the study is confined to the selected companies in Karnataka. The response from target group does not reflect on the responses of the universe. There may be a slight variation in the data and the statistical figure published in different secondary sources. The variations in the study may be due to the impact of global economic crisis.

2.9 CHAPTER SCHEME:

This research work on the topic entitled, **"JOB STRESS AMONG IT EMPLOYEES-A STUDY ON SELECT IT COMPANIES IN KARNATAKA"** is presented in six chapters:

Chapter - 1. Introduction: This chapter deals with introduction of the thesis, Need for the study, Review of literature, Research Gap.

Chapter - 2. Research Design: This chapter includes Statement of the problem, Objectives, Methodology, Hypotheses, Scope for the study and limitations and Scheme of Chapterization.

Chapter - 3. Conceptual Background and Models of Stress: This chapter deals with Introduction of stress, Concept of stress, Causes of stress, Consequences of stress, coping strategies of stress and Models of stress.

Chapter - 4. Profile of Selected Companies and the Study Area: This chapter deals with Introduction of Information Technology Industries and sector in India and Karnataka and Profile of the chosen companies.

Chapter - 5. Data Analysis and Interpretation: This chapter includes, Introduction of Occupational stress Index, Explanation of objectives, Data analysis and Interpretation**.**

Chapter - 6. Summary of Findings, Suggestions and Conclusion: This chapter deals with summary of findings, suggestions and conclusion.

Chapter - III

CONCEPTUAL BACKGROUND AND MODELS OF STRESS

3.1 Introduction

3.2 Forms of Stress

3.3 Causes of Stress

3.4 Theoretical Model of Executive Stress

3.5 Consequences of Occupational Stress

3.6 Coping of Stress

3.7 Common Myths About Stress

3.8 Management of Organisational Stress in IT Companies

CHAPTER - III
CONCEPTUAL BACKGROUND AND MODELS OF STRESS

3.1 INTRODUCTION:

Stress is a part of day-to-day living of every individual. The business men may suffer stress to reach office in time and to complete the projects on time, college students may experience stress in meeting the academic demands, people on the job and even the house hold ladies may experience stress in managing the home affairs and to look for the maid servant. The reasons for the stress differ from person to person. The stress people experience should not be necessarily treated as harmful. An optimum amount of stress can always act as an energizer or motivator and boost people to apply the efforts and complete the work. But a high level of Stress can be a serious threat to the personality traits of the individual and can cause physiological and social problems.

IT industry is most popular now a day compared to other industries and facing very rapid developments, when new technology come up, then it is very difficult to cope up with that and employees will face lot of pressure, faster processing and increasing trends force employees to work faster and faster, this lead to stress.

Stress is a silent killer, according to Ayurveda; human body is made of three doshas – 1. Vata, 2. Pitta and 3. Kapha, these three are continual interface with each other inside and outside of the human body these three should be balanced and if they are disturbed then it leads to stress, it may be because of lack of recognition for achievement and rise when mistake have been done and highlighted.

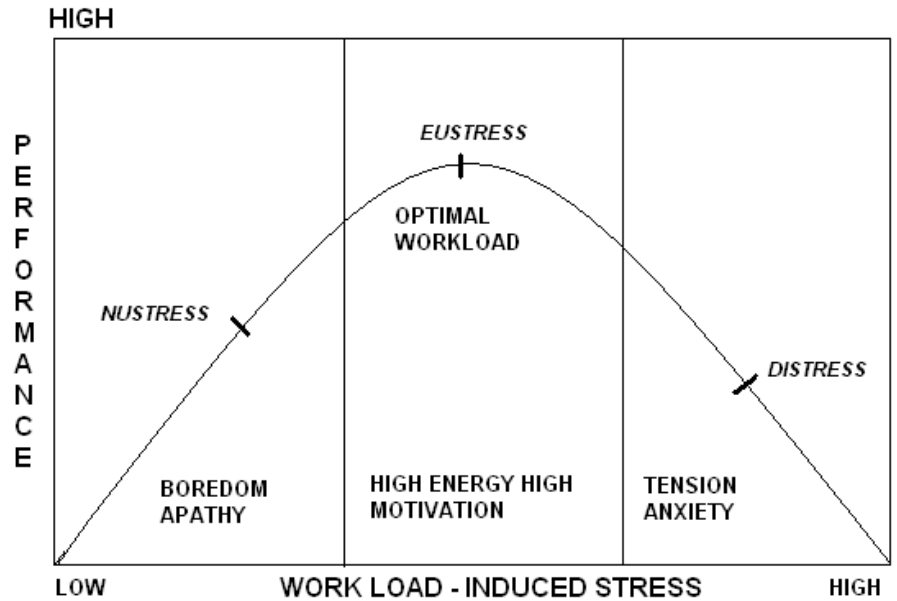
Stress leads to serious health problems like hair-loss, obesity, thyroid, backache, migraine, infertility, anxiety and depression there are many more to count on, stress also increase the common attack of cold, influenza and viral infections will

increase. One should stop unrealistic expectation and try to give more and more attention towards family and children.

3.2 FORMS OF STRESS

There are four basic variations of stress, viz., good stress (eustress), bad stress (distress), neustress, which is combination of overstress (hyper stress), and under stress (hypo stress). There is a difference between good stress and bad stress. Good stress is called eustress. In fact, good stress is a condition of arousal resulting from positive information or a positive outcome. Eustress is really no stress at all. Bad stress, which is also called distress, has detrimental consequences for individual performance and well-being.

The researcher has given an outline on the conceptual framework which, highlights the meaning, definition of stress, forms of stress, common myths about stress, stress curve, the factors responsible for stress, impact of stress, in a broader perspective. The researcher has also made an attempt to go into the depth keeping the conceptual frame in mind.



(Source: Adapted from Moorhead, Grifin, Organizational Behaviour, p.459)

Figure – 3.1: Workload-induced stress

- **Neustress:** Morse and Furst (1979): The stress which is not helpful or harmful is in simply known as neustress or neutral stress. The mind and body aroused by small amount of stress, have little impact on the demand.

  It is the contribution of the hyper and hypo stress. This stress has to be controlled at the initial stage; otherwise, it will be fatal for the employees on the one hand and burden on the organization, on the other hand, as the later is compelled to pay wages, although the performance of the former is either minimal or even less than that. In this case, the physical immobility, boredom, sensory deprivation etc., are the common factors among the employees. For instance, an employee whose distress is left unmanaged both by himself and the management will even come to the office, without worrying about his contribution. This is not unusual in the government sector, but the private company keeps these people away from the work-place due to non-performance.

- **Eustress:** The stress to the optimal level which helps in enhancing an individual performance in any of the field is, Eustress. This positive stress which helps in moderate, occasional elevations of anxiety, prepares one for meetings, difficult conferences, and complex business negotiations. Positive stress helps employees to respond quickly and forcefully, in any of the physical emergencies. Positive stress helps one to prepare for deadlines, achieve unrealistic targets, and take up challenging assignments.

- **Distress:** Lazarus and Folk man (1984): have said that when arousal is too high i.e., hyper stress or too low i.e., hypo stress leads to distress. In view of the downsizing of employees in public sector undertaking that the management has decided, the existing employees shoulder more

responsibilities. The employees who are wither to shouldering definite work. Start bearing the additional load, in the process of carrying out the work, the employees concerned will not be able to achieve the growth, due to the fact that 'stress goes beyond the level of Eustress". Eustress makes a dent on the health condition and productivity of the organization.

Selye (1956) suggests, while dealing with stress, one must learn to recognize `overstress' (hyperstress), when one has exceeded the limits of one's adaptability; or `understress' (hypostress), when one suffers from lack of self-realization, physical immobility, boredom, sensory deprivation. He further emphasizes that the goal should be to strike a balance between the equally destructive forces of hypo-and hyper stress, to find as much eustress as possible and to minimize distress.

The foregoing analysis of stress conceptualization, it is concluded that the concept of stress lacks precision, in that it has been both broadly and narrowly defined. It is treated as stimulus, a response, an environmental characteristic, an individual attribute, and an interaction between an individual and his or her environment. Further, stress has a variety of usage in different fields, ranging from engineering and physics to medicine and behavioural sciences. The usage varies according to the specific focus and purpose of the discipline.

In job stress literature, most of the definitions and conceptualizations focus on two different levels: one representing the state within the individual, and the other referring to the entire area of study encompassing the sources, consequences and moderators involved in the process. Against this background, there is a need for multi-level holistic approach to the definition and conceptualization of stress, which perhaps can be achieved, by the process of integrating the findings from the related fields.

3.3 CAUSES OF STRESS

Stressors are those actions, situations, or events that place special demands on a person. The antecedents of stress or the so-called stressors, affecting today's employees. The potential sources of stress can be broadly classified into various categories.

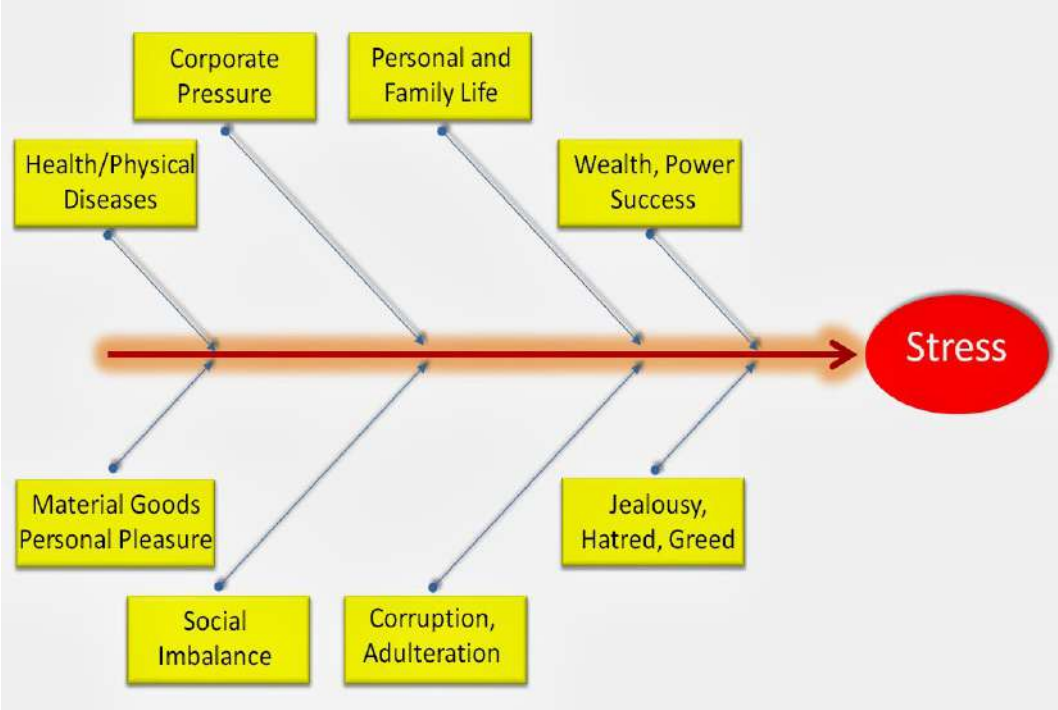


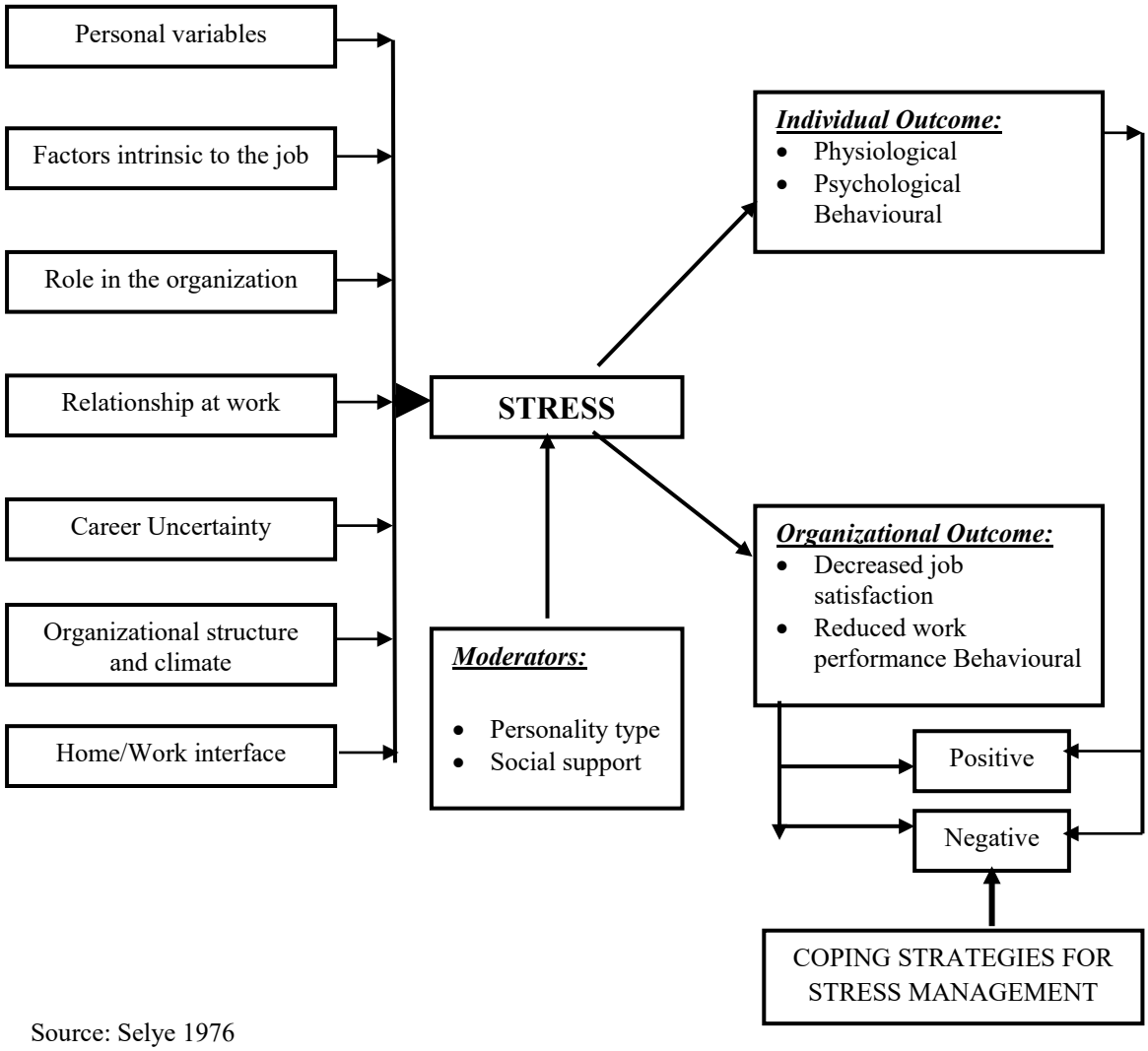
Figure – 3.2: Causes of Stress

There are various causes for stress among few listed below: Jealousy, Corruption, Adulteration, Social imbalance, Material Goods Personal Pleasure, Health physical diseases, Corporate pressure, Personal and family life, wealth power and success.

3.4 THEORETICAL MODEL OF EXECUTIVE STRESS:

As mentioned earlier, most often the phenomenon of stress is researched with a one-dimensional rather than multi-dimensional perspective. Hence, to investigate this research issue in a more comprehensive way an integrated approach is needed. In this context, the present researcher has made an attempt to develop a theoretical framework, which will be used in the subsequent sections to address the various research issues and to draw meaningful conclusions. Figure 3.3 shown in the next page, highlights the elements and process of stress phenomenon.

The model has been developed on the basis of the insights drawn from the theoretical framework developed by Marshall and Cooper (1979), Ivancevich and Matteson (1990) and Parker and Decotiis (1983). As shown in Figure 3.3, the various work and non-work related factors, may act as sources or causes of stress for executives. These factors can be grouped into six broad categories: factors intrinsic to the job, role in the organization, relationship at work, career uncertainty, organizational structure and climate, and home/work conflict. These factors lead to stress state within the person system, which manifests in the form of different adverse individual and organizational outcomes. However, the amount of stress an individual experiences is moderated by variables like personality type and social support.



Source: Selye 1976

Figure – 3.3: A Model of Job Stress

FACTORS RESPONSIBLE FOR STRESS:

Conditions that tend to cause stress are called “stressors”. In other words, stressors are those actions, situations, or events that place special demands on a person. The potential sources of stress can be broadly classified into six categories.

Factors intrinsic to the job: The various factors intrinsic to the job that seem to affect smooth functioning of executives includes work overload, time pressure and deadlines, having to make too many decisions, fatigue from the physical strain of the work environment, excessive travel, long working hours, having to cope with changes at work and the expenses monetary and career of making mistakes.

There are various factors responsible for stress at workplace; some are inherent, while the factors are emanated due to variations at the workplace.

Intrinsic: Overload in sequel to downsizing of the work on the one hand, productivity linked benefits on the other, forces employees to work more than what is actually stipulated in the job description. As the sustenance of the employees is limited, employee will be in stress when he takes over work load.

As far as time pressure and deadlines is concerned, ILO suggested that an employee has to work for 7 to 8 hours. But globalization has virtually dismantled the working hours. Hence, employees in IT companies are concerned have face up on which they have to execute with the period, in the process of execution, the silent killer plays a dominant role.

In the competitive arena, the organization has changed their operations as per the needs of the society, which is very difficult to predict. In a bid to cope with the challenges, the organization has to take too many decisions, same will be productive and few mass the organization.

The Excessive travel, despite limit working hours, will lead to fatigue and the physical strain of the employees. Further, working environment in government by internal and external; will be so dynamic which employees, may not be able to cope with stresses. An employee is a human being who he makes mistakes and is bound to happen beside, the damage of the operations. All these are considered to be the stressor of intrinsic in nature.

Role on the organization: The study conducted suggests that organizational membership, one of the vital components of a social system, is a potential source of stress. Kahn and others (1964) developed a theory of role dynamics, which reports stress, resulting from conflicting and vague expectations. The theory points out that when the behaviour of an individual in the organization is inconsistent, he will be in a state of role conflict, which produces stress. Role theory also indicates that role ambiguity stemming from lack of necessary information, leads to stress.

Relationships at work: Another major source of occupational stress is the nature of relationship, which one has with people working in the same organization. Cooper et al. (2001) have suggested that good relationships between members of a work group are a central factor in individual and organizational health. Selye (1956) suggested that learning to live with other people is one of the most stressful aspects of life. There are three critical relationships at work – those with supervisors, those with subordinates, and those with colleagues/ co-workers – which can produce stress.

Career uncertainty: Issues such as job security, fear of job loss, obsolescence, under promotion, status incongruities and frustration of having reached career stagnation can create pressure and strain. Satisfaction with salary and promotional opportunities has, been found to be associated with increases in self-esteem and job commitment in management population.

Organizational structure and climate: Organizational structure and climate, being one of the largest constructs of the work environment, does have some bearing on the job stress experience of the organizational members. Factors like restrictions on behaviour, office politics, lack of effective consultation and no participation in decision making process, can contribute to stress.

Cyclical fluctuations in the economy both at macro and micro level will force the organization to take austerity measures, such as dismissal downsizing, compensation readjustment, lay-off will also be the factor responsible for the stress. When ILO in 2009, predicted that over 52 million employees will lose jobs in another two years, consequent to global financial meltdown; the silent killer i.e., stress started is a deterrent factor. Many employees have taken extreme steps even before the declaration by the organization concerned, about the lay-off or retrenchment.

Home/Work interface: Finally, factors external to work environment or extra-organizational factors can also contribute to the personal stress which affects the physical and mental well-being of individual at work. The various factors apart from work that cause stress in an individual are: family relations, economic problems, conflict of company with family demands, etc. Cavanaugh *et al*. (2000) identified kinds of daily work stress.

1. ***Challenge related stress*** which includes pressure and a high level of responsibility that lead to feelings of fulfilment and achievement. Challenge related stress is motivating and positively related to job satisfaction.
2. ***Hindrance related stress*** which includes excessive job demands and constraints such as poor support from higher management and job security that interfere with achieving goals. Hindrance related stress is associated with frustration and low job satisfaction.

3. ***Hardiness*** is a personality variable that may explain individual differences in vulnerability to stress. So called hardy persons believe they can control the events in their lives and thus may be more resistant to stress.
4. ***Work overload and Work under load*****:** Psychologists use the term work overload to describe the common condition of over work. They have identified two types:

Quantitative over load is the condition of having too much to do in the time available. It is an obvious source of stress and has been linked to stress related ailments such as CHD. The key factor seems to be the degree of control workers have over the rate at which they work rather than the amount of work itself.

Qualitative overload involves work that is too difficult. Having insufficient ability to perform a job is stressful. Even employees with considerable ability can find themselves in situations in which they cannot cope with the job's demands.

The opposite condition work under load having work that is too simple or is insufficient to fill one's time or challenge one's abilities is also stressful. Thus, an absence of challenge in the work place is not necessarily beneficial. A certain level of job stress can be stimulating, invigorating and desirable.

5. ***Role ambiguity and role conflict*** an employee's role in the organization can be a source of stress. Role ambiguity arises when the scope and responsibilities of the job are unstructured or poorly defined. Adequate orientation and socialization programs for new employees can reduce role ambiguity.

Breaugh and Colihan (1994), have proposed three components of '*role ambiguity'*.

- ***Performance criteria ambiguity*** – Uncertainty about the standards used to evaluate a workers job performance.

- ***Work method ambiguity*** **-** Uncertainty about the methods or procedures appropriate to the successful performance of the jobs.
- ***Scheduling ambiguity*** **-** Uncertainty about the timing or sequencing of work.

Role conflict arises when a disparity exists in job requirements or between the job's demands and the employee values and expectation. Problems of career development such as when an employee fails to receive an anticipated promotion may also lead to stress. Over promotion can be stressful when employees are advanced beyond their level of competence to positions with which they cannot cope, leading to qualitative overload. The fear of failure on the job can induce considerable stress performance appraisal is a source of stress.

Lastly, it is worth noting that all the executives may not suffer from all the above sources of stress, but even a single problem is good enough to breed the other ones.

OUTCOMES OF STRESS

Stress beyond optimal level is distress, as already stated is a silent killer. Therefore proper management is necessary both at the individual and organizational level. Stress is an oft-encountered syndrome in today's world and it can bring about both positive and negative effects. Kets de Vries (2006) emphasizes the fact that the present day researchers and practitioners visualize the phenomenon of stress in a new perspective and state that, each individual needs a moderate amount of stress to be alert and capable of functioning effectively in an organization. Pestonjee (1991) has also subscribed to this view. However, stress when unchecked or unmanaged, manifests itself in the form of many individual and organizational outcomes.

POSITIVE OUTCOMES:

Positive stress can be helpful in a number of specific ways:

- It helps to respond quickly and forcefully to physical emergencies.

- Positive stress is useful to perform effectively under pressure.
- Positive stress helps to prepare for deadlines.
- Positive stress helps to realize potential, over a period of years in a given career.
- Positive stress adds zeal and variety to daily life.

NEGATIVE OUTCOMES:

Some of the effects of negative stress are:

- Decreased productivity at work.
- Wasted potential, lack of career advancement.
- Low self-esteem.
- Physical illness, lower energy levels.
- Decreased satisfaction with life, work and relationships.
- Absence of fun and play/sports, loss of interest in sex.

Individual Outcomes

The consequences of stress manifest themselves in physiological, psychological and behavioural symptoms. The physiological symptoms include increased heartbeat, headache, ulcer, blood pressure, heart attack and diabetic. The psychological reactions include withdrawal, apathy, boredom, anxiety, depression, negative emotions and forgetfulness. The extreme behavioural reactions would be the loss of appetite, sudden change in appearance and complexion, over-eating and sleeplessness.

World Health Organization came out, with the statement that over 52% of the people in India are either diabetic or prone to any other diseases. Diabetic strikes due to distress, the rise in the level of the blood sugar will lead to impotency, further; this segment may not enjoy the marital status.

High stress levels also affected the morale and motivation of the employees. Prolonged exposure to stress without effective coping mechanisms could lead to, a host of physical and mental problems. For instance, stress could lead to stress-induced gastrointestinal problems, irritable bowel syndrome, acidity, acid reflux, insomnia, depression, heart disease, etc.

Moreover, stress could push the victim toward high risk behaviour such as smoking, drinking, and substance abuse. Stress-related illness led to increase in absenteeism and attrition, affecting the profitability of the organizations.

Organizational Outcomes

In addition to the adverse effects at the individual level, stress can also lead to certain organizational consequences. Excessive stress increases job dissatisfaction, which in turn generates a number of dysfunctional outcomes, including increased turnover and absenteeism, and reduced job performance.

Employee attrition is a serious problem in any organization, more so, in IT and ITeS, the management of the organization concerned, has to check attrition to moderate level, failure to do so will damage the reputation of the organization, besides, spending on acquisition of human resources. Performance of any organization cannot be good with the status of distress employees. Distressed employees generally lose interest; therefore their involvement in promoting productivity is either negligible or even zero.

While examining the outcomes of stress, it may be noted that the distinction between organizational and individual consequences in the model is somewhat arbitrary. For example, excessive stress leads to reduced performance, which is an individual consequence. However, the organization also experiences important consequences from stress-related performances.

Figure – 3.4: Model of Stress

As model suggest stress will come from different sources like internal and external demands, internal demand and pressure includes responsibilities, obligations and self criticism. And external demand and pressure includes family problems, social problems, environmental problems and individual problems which is very stressful to employees. Major stress comes from when find the scarcity of money or we can say financial problem.

Stress leads to accidents, major illness, absenteeism, office conflicts, big mistakes and so many. There are so many coping strategies are there to overcome stress.

3.5 CONSEQUENCES OF OCCUPATIONAL STRESS

Nearly everyone agrees that job stress results from the interaction of the worker and the conditions of work. Views differ, however, on the importance of worker characteristics versus working conditions as the primary cause of job stress. These differing viewpoints are important because they suggest different ways to prevent stress at work.

According to one school of thought, differences in individual characteristics such as personality and coping style are most important in predicting whether certain job conditions will result in stress. In other words, what is stressful for one person may not be a stressful for the other. This viewpoint leads to prevention strategies that focus on workers and ways to help them cope with demanding job conditions.

Although the importance of individual differences cannot be ignored, scientific evidence suggests that certain working conditions are stressful to most people. Examples of individual and situational factors that can help to reduce the effects of stressful working conditions include the following:

- Balance between work and family or personal life
- A support network of friends and co-workers
- A relaxed and positive outlook

Employee stress is an increasing problem in organizations. The employees are stressed out from greater workloads and having to work longer hours because of downsizing at their company. Stress shows itself in a number of ways. There can be subsumed under 3 general categories

1. Physiological
2. Psychological
3. Behavioural symptoms.

1. **Physiological Symptoms:** Most of the early concern with stress was directed at physiological symptoms. Stress could create changes in metabolism, increase in heart and breathing rates, increase blood pressure, bring headaches, and induce heart attacks.
2. **Psychological Symptoms:** Stress can cause dissatisfaction; job-related stress can cause job-related dissatisfaction, which is the simplest and most obvious

psychological effect of stress and shows itself in other psychological states like tension, worry, anxiety, boredom. The evidence indicates that when the employees are placed in jobs that make multiple and conflicting demands or in which there is a lack of clarity about the incumbent's duties, authorities and responsibilities, both stress and dissatisfaction are increased. Similarly, the less control people have over the pace of their work, the greater the stress and dissatisfaction.

3. **Behavioural Symptoms:** Behaviour related stress symptoms include changes in productivity, absence and turn over etc. The low to moderate levels of stress stimulate the body, and increase its ability to react. Individuals then often perform their tasks better, more intensely or more rapidly. But too much stress places attainable demands or constraints on a person, which result in lower performance.

Stress affects millions of employees, but it operates in more silent and subtle ways. Stress is a psychological agent that influences physical and emotional well-being and the ability to perform jobs. Stress in work place is also costly to employers as reflected in lower productivity, reduced motivation, increased errors and accidents. High stress is related increase in turn over intentions and counterproductive behaviour such as theft drug and alcohol abuse. Stress affects employees at all levels and types of jobs. Those employees who report being very satisfied with their jobs suffers fewer harmful effects of stress, those who are very dissatisfied with their jobs show many more stress related effects.

- **ORGANIZATIONAL STRESS**

In the past two or three decades there have been many empirical studies on the theme of stress. Researchers have focused on the casual factors of stress-strain relationship, types of stresses experienced by different work populations and also various coping strategies adopted by organizations (Pestonjee, 1992).

Stress in organization can be defined as a misfit between a person's skills and abilities and demands of his/her job, and as a misfit in terms of a person's needs not being fulfilled by his/her job environment (French, Rogers and Cobb, 1974).

3.6 COPING WITH STRESS

Coping is defined as a steadying factor that allows individuals' to maintain psychological adaptation during stressful times. The ability to cope with stress is an important aspect of working life, both in terms of work performance and general health. The greatness of stress that an executive practices, and the scope to which its harmful effects arise, perhaps pivots on how and how well the person copes with stressful conditions.

Coping refers to the way of allocating with stress, or the effort to dominant conditions of hurt, threat or defy when a routine involuntary response is not freely available. Coping has two major functions. The directive of emotions or distress i.e., emotion concentrated coping and also managing the stressful situations i.e., problem motivated coping.

Coping elegances or policies may either be preoccupied with avoiding stress or towards dealing with stress. The former are dysfunctional while the latter are functional managerial effectiveness. It is apparent that challenges posed by changing business scenario are forcing IT employees to perform their task under a very compelling situation. Coping with such stressors is also one of the mechanisms

followed by the professionals, where varieties of coping strategies are helpful for employees in dealing with such every day stressors.

Studies have suggested that control over the work place dictates the patterns of non- adrenaline and adrenaline balance and may determine the degree of experienced anxiety. Working conditions form an important source of potential stress and may have a pervasive influence on mental state and physical health in the long term.

Stress at work is no longer thought to be the prerogative of white collar and professional workers. Repetitive manual work is associated with adrenaline levels paced assembly line workers who have been found to be very anxious and computer operators who spend more than 90% of their time working at the interface may be tense for unwound periods after work. Depression is likely when personal discretion is reduced. There is lack of social support or when social communication is impaired, as in condition of high machine noise. General physical health is related to susceptibility to stress, people in better physical condition suffer fewer harmful effects from a stressful work environment than do people in poorer physical condition. Employees with high skill levels usually find their work less stressful than do employees with lower skill levels.

Landsbergis, Cahill and Schnall (1999) has put forth that strategies for combating stress can be carried out taking into consideration two key points namely,

- Job stress has multiple causes, and so has to have multiple solutions.
- Interventions with the individual worker alone will not solve the problems of occupational stress. Organizational change also has to occur.

They have identified three levels of change at the individual level, small group level and at the organizational or structural level. The most important of the three was said to be organizational level.

Personal Intervention Strategies are designed to help the individual employee cope more effectively with stress. Examples include, diet, exercise, cognitive techniques, assertiveness training, EAP programs, relaxation training etc.

Small group interventions are intended to help workers develop more social support both on the job and at home. Examples include, supervisory training, family counselling, team building, sensitivity training etc.

Structural or organizational change is directed towards improving the conditions of work. Examples include, modifying shifts, reducing physical hazards, improving career ladders, modifying the use of training and technology, job rotation and enrichment, increasing skill levels, worker decision making etc.

Figure – 3.5: Coping Strategies

There are different methods to cope up with stress among women employees among few listed out below.

- **Time management:** If a men and women maintains time then everything will be maintained well in home and in organization, if they woke up early in the morning and finishes their household work within the time and send their children to school and rush to their office with the cool mind, then stress will be minimized.

- **Therapy:** There are different kinds of therapies are available in the world which, experts are giving for relaxation and keeping mind fresh so women can take monthly therapy to avoid stress, therapy means curing, healing and is the attempted remediation of a health problem. Some therapies are supportive and some are preventive.
- **Music:** If music is on then cow also give more milk, likewise if continuously women hear music then she can work more and more without having stress.
- **Spa:** This spa is new trend, which is everywhere developing to reduce stress; **spa** is associated with water treatment which is also known as balneo-therapy.
- **Exercise:** Regular exercise and warm-up will keep everyone fit physically and mentally.
- **Hobby:** From the busy schedule if women take time for enjoying her hobby like photography, travelling, singing, dancing, writing etc then internally she will be very happy and stress can be avoided.
- **Nature:** Nature is the best friend of every human being if any one sad or unhappy then nature can reduce their sadness if they sit under a tree and see the green leaves. Nature is having power of changing the mood of the person.
- **Holiday trip:** With family or friends if she goes trip then she will stress free person.

3.7 COMMON MYTHS ABOUT STRESS

There are many misconceptions and outright myths that have arisen related to stress. Frequently, we hear that stress is bad for everyone and that we all get stressed out over things like work, and traffic. Also, we are frequently hearing that stress is in epidemic proportions in today's society. Below are eleven common myths about stress, and what we currently know about the phenomenon of stress and stress management. Action that is destructive at worst and ineffective at best in handling

stress. Therefore, it is important to dispel these common myths. All the 11 beliefs might better be described as myths.

Myth 1: **All stress is bad.**

Absolutely not. Stress can be helpful as well as harmful. Positive stress can provide zest and enjoyment, as well as attentiveness and energy for meeting deadlines, entering new situations, coping with emergencies, achieving maximum performance, and meeting new challenges, in moderate amounts, stress in useful. Even in large doses it is often appropriate and vital. People have to respond to changes in the world that inevitably involve some level of stress. Without stress, probably anybody wouldn't be able to cope with life's challenges and problems. Also, without some level of stress in our lives, people will probably never feel the satisfaction of overcoming problems and mastering challenges that come into their lives. Zero stress makes us happy and healthy. Stress can be the kiss of death or the spice of life. The issue, really, is how to manage it. Managed stress makes us productive and happy; mismanaged stress hurts and even kills us.

Myth 2: **Goal of Stress Management should be to eliminate stress.**

No, this is simply not true. Stress cannot and should not be eliminated. As Hans Selye, father of this field, has stated, only the dead are free of stress. Arousal is part of life. The goal of stress management should be, to control stress so it turns into unharmful distress as infrequently and as briefly as possible.

Myth 3: **The "good life" should be free of stressors.**

No, this is untrue. Stressors, demand on mind or body, are an ever-present part of existence, just like stress. It is vital, insofar as possible, to control stressors and interpretations of them, so they are not overburdening in intensity or number. But fulfilment of human potential, in fact life itself, depends on exposure to

appropriate kinds of stressors. Although many of these stressors may be annoying to some or most people, the extent to which individuals feel stressed by them, is very different. People respond to experiences in very different, individual ways, including things that others may feel to be stressful. Some people adapt very well to certain types of stress and become used to it, while others may find the slightest annoyance to be too much to handle.

Myth 4: **People who complain about stress are just weak.**

Obviously this is not true. Contemporary research continues to demonstrate that stress, genuinely affects mental and physical health. Excessive stress should be dealt with promptly before it creates serious health problems. If people are feeling too much stress in their lives, they may need to contact their doctor or a mental health professional. But, the way that stress is experienced differently by different individuals is, no reflection on their level of strength or weakness.

Myth 5: **The less the stress, the better….**

Not necessarily. The more arousal the better when facing challenges or emergencies, up to a certain point. Stress mobilizes action, shapes interpretations of events, and heightens attention. The less distress the better, since by definition distress is harmful.

Myth 6: **A person can always adapt to difficult circumstances if he or she tries hard enough.**

This belief is false on two counts. First, each person has limits of adaptability. If physical, social, or psychological pressures exceed one's upper stress limit for an extended period, wear and tear will lead to eventual breakdown. This state of resistance gives way to the stage of exhaustion. Second. "Trying harder" is not always the answer to distress. The opposite may be true, in that activity needs to be alternated

with rest and recovery. One can plan their life so that stress does not overwhelm an individual. Effective planning involves setting priorities and working on simple problems first, solving them, and then, going on to more complex one's. When stress is mismanaged, its difficult to prioritize. All the problems seem to be equal and stress seems to be everywhere.

Myth 7: **Some people are destined through hereditary to be highly stressed.**

It is true that to some degree genetic and social background can affect resistance and vulnerability to pressure. But environmental and biological inheritance sets only very broad limits, except in cases of severe mental or physical handicaps. Whatever the background, most people can take personal responsibility and constructive steps, which can dramatically increase the ability to handle and reduce stress.

Myth 8: **Distress has only harmful effects, and only major symptoms of stress require attention.**

By definition, mental and physical distress is harmful to the self and others. Yet even intense distress can have positive side effects – learning about the self or others, a new beginning, or a renewed relationship with someone. The myth assumes that the "minor" symptoms, such as headaches or stomach ache, may be safely ignored. Minor symptoms of stress are the early warnings that one's life is getting out of hand and that they need to do a better job of managing stress.

Myth 9: **The most popular techniques for reducing stress are the best ones.**

Again, not so, No universally effective stress reduction techniques exist. Everybody is different, lives are different, situations are different, and reactions are different. Only a comprehensive programme tailored to the individual works. Moderate, progressive physical exercise increases energy through the body's

marvelous adaptive process. “People say they don’t have enough energy to exercise; they need it to meet the demands of life” is a shallow excuse, without foundation in the reality of exercise physiology. The only exceptions are, when a very hard workout might leave one temporarily too tired to cope well, when recovering from illness, or during the early weeks of exercise after a long period of sedentary living.

Myth 10: **No symptoms, no stress. Meditation is cultish.**

Nonsense, Absence of symptoms does not mean the absence of stress. In fact, camouflaging symptoms with medication may deprive an individual the signals they need for, reducing the strain on their physiological and psychological systems. Some forms of meditation indeed, are associated with gurus and cults. But mediation itself is, highly effective method of controlling stress by means of quieting the body releasing the relaxation response with a repeated mental focus, such as a silent sound, word, or thought. Deep relaxation through meditation is effective in preventing and reducing stress-related illnesses and psychological disorders. It is important to assess meditation, as a method separately from any persons or organizations that might promote it.

Myth 11: **Stress affects only adults and is epidemic in our society today.**

Not true: Stress is part of everyone’s life, young or old. Children and adolescents experience, the same responses as adults and run the same risks of distress illness. Stress has always been a natural part of human condition, and there has always been a certain amount of suffering involved. Stress is different for each and every one. What is stressful for one person may or may not be stressful for another; most of us respond to stress in an entirely different way. Some experts believe that people actually faced greater stress in the past than they do today. In Western society at least, hunger, war, serious overwork, poor health and so on, were much more prevalent in

the past than they are in contemporary society. People today are much more conscious of stress as an issue in their lives. They hear or read about stress more and this has raised their awareness.

3.8 MANAGEMENT OF ORGANIZATIONAL STRESS IN IT COMPANIES

Mismanaged organizational stress can produce individual strain and distress which is detrimental for an organization's human resources and leads to low productivity. When an organizational stress is well managed it can lead to improved performance, workers' satisfaction and productivity.

Organizational Stress Management programs abound and a growing body of research has given us insight into the causes and potential antidotes for stress. Yet, stress has not gone away. The problem is stress can be cumulative. What goes on at work can add to the "volume" of stress a person perceives and experiences.

Some stress clearly can be traced to individual factors (e.g., personality, social support, coping skills). Research has shown a number of factors to be important in our capacity to tolerate stress. Some people who see problems as challenges, and who experience a sense of control are buffered against the effects of stress. For the most part, an organization can do little to modify or change these individual factors (except perhaps more rigorous recruitment and selection practices that screen those especially susceptible to stress, or those who are known carriers of stress).

Besides an individual's personality, emotional predisposition or coping skills, there are many organizational sources of stress. Without addressing organizational sources of stress, individual stress management programs usually are ineffective with respect to productivity and quality of work life outcomes. Some of the organizational stressors could be, bad bosses, work overload, job designs that do not make sense, lousy feedback, money, unpleasant co-workers, work itself, multitasking, work life balance etc.

Employers can do quite a bit to help alleviate employees' stress. Some of the methods generally adopted are investing in talent management, managing the pace of change, getting the right person for the jobs, providing services (like child care centers, wellness programs, employees assistance programs), having family friendly policies, make sure employees know that the organization cares about their well being.

The employees also can do their part to relieve stress. Positive thinking, positive lifestyle and health habits (like nutrition, regular exercise, relaxation, meditation, restful sleep, social support etc.), humour, taking a vacation etc are some such measure.

Lazarus (1991) has identified three main strategies for reducing work-related stress.

1. Alter the working conditions so that they are less stressful and/or more conducive to effective coping. This strategy is most appropriate for large numbers of workers working under severe conditions. Examples include altering physical annoyances such as noise levels, or changing organizational decision-making processes to include employees.
2. Help individuals adapt by teaching them better coping strategies for conditions that are impossible or difficult to change. A limitation to this strategy is that it is costly to deal with each individual's unique transaction with the environment. Intervention strategies could include individual counselling services for employees, Employee Assistance Programs, or specialized stress management programs, such as cognitive behavioural interventions (Long, 1988).
3. Identify the stressful relationship between the individual or group and the work setting. Intervention strategies might include changes in worker assignment to produce a better person-environment fit, or it could involve

teaching coping strategies for individuals who share common coping deficits (e.g., training in relaxation skills).

MANAGING STRESS AT WORK PLACE

Given that stress is wide spread and is also disruptive in organizations, it is essential to manage stress more effectively. Many strategies have been developed to manage stress in workplace. Coping Strategies can be of two types: Individual coping strategies and Organizational coping strategies. They may be individual coping strategies like exercise, relaxation, time management, role management, support group and organizational coping strategies like, institutional programs; properly designed jobs, proper work schedule, organizational cultures, supervision etc; collateral programs like stress management programs, health promotion programs; employee fitness programs, career development programs etc**.**

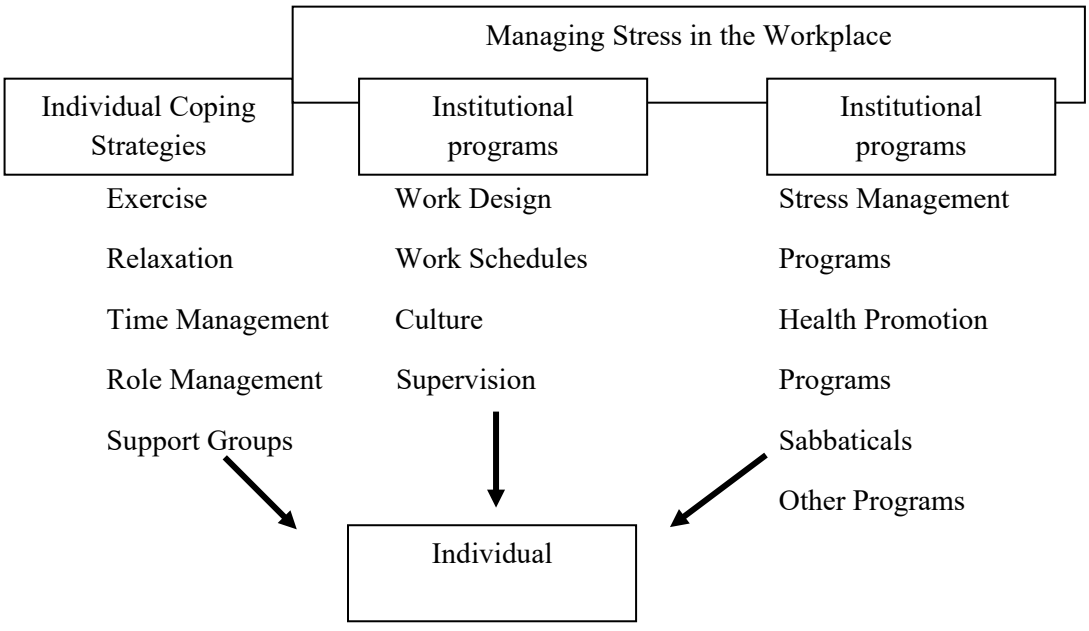


Figure – 3.6: Stress Management in Workplace

Individual Coping Strategies:

- ***Exercise:*** Research has suggested that people who exercise regularly feel less tension and stress, are more self confidant, and show greater optimism. People, who do not exercise regularly, feel more stress, are more likely to be depressed, and experience other negative consequences.
- ***Relaxation:*** Coping with stress requires adaptation. Proper relaxation is an effective way to adapt. Relaxation can take many forms. One way to relax is to take regular vacations. Another way is that people take regular breaks during their normal workday. A popular way of resting is to sit quietly with closed eyes for ten minutes.
- ***Time Management*****:** One popular approach to time management is to make a list of things to be done that day. Then group the items in the list to three categories: critical activities that must be performed, important activities that must performed and trivial things that can be delegated or postponed. Then you do the things on the list in their order of importance. This strategy helps people get more of the important things done every day.
- ***Role Management*****:** Role management is where the individual actively works to avoid overload, ambiguity, and conflict. If one does not know what is expected of him/her, he/she should not sit and worry but clarify with his/her boss. Another strategy is learning to say 'no'. Lot of people creates problems for themselves by always saying 'yes'.
- ***Support Groups:*** A support group is simply a group of family members or friends with whom a person can spend time. Supportive family and friends can help people deal with normal stress on an ongoing basis. Support groups can be particularly useful during times of crisis.

Organizational Coping Strategies:

Organizations are increasingly realizing that they should be involved in managing their employees' stress. Two basic organizational strategies for helping employees manage stress are institutional programs and collateral programs.

- Institutional programs for managing stress are undertaken through established organizational mechanisms (For e.g., properly designed jobs and work schedules can help ease stress). Organization's culture can also be used to help manage stress. Thus, the organization should strive to foster a culture that reinforces a healthy mix of work and non-work activities. Supervision can play an important institutional role in managing stress. A supervisor can be a major source of overload. If made aware of their potential for assigning stressful amounts of work, supervisors can do a better job of keeping workloads reasonable.
- Collateral programs**:** It is an organizational program specifically created to help employees deal with stress. Organizations have adopted stress management programs, health promotion programs and other kinds of programs for this purpose. Many firms today also have employee fitness programs. These programs attack stress indirectly by encouraging employees to exercise, which is presumed to reduce stress. However, the firms must invest enough to develop the required physical facilities. Finally organizations try to help employees cope with stress through other kinds of programs like career development programs. Some companies use programs from promoting humour to massage in order to relieve stress. Thus, the managers must take several steps that any organizational effort to help employees cope with stress is at least reasonably effective.

Identifying the source of stress and making use of various interventions to reduce the amount of stress is what is most important. In this light we shall see what is coping and how various coping strategies are made use of to reduce stress.

Chapter - IV

PROFILE OF THE SELECTED INFORMATION TECHNOLOGY COMPANIES AND THE STUDY AREA

CHAPTER – IV
PROFILE OF THE SELECTED INFORMATION TECHNOLOGY COMPANIES AND THE STUDY AREA

4.1 INTRODUCTION:

Since, Independence India has scarcity of financial resources. Un-employment and Underemployment, dismal standard of living, low per capita income (PCI) at the national level. The import and export of traditional goods were sluggish such as petroleum, leather products, gems and jewellery the company had a shift on non-traditional goods, such as software, hardware and other Information Technology integrated services.

Information Technology (IT) is an industry through which the use of computers and other supporting equipments such as numerical control machines, bar code readers, scanners and internet help in the spread of knowledge and provides solution to pertinent problems. The term information technology includes computers and communication technology includes computers and communication technology along with associated software.

Information technology for some time was used as synonym to computers. But, with the rapid advancement in various information delivery systems such as Radio, TV, Telephone, Newspapers, Fax and of course Computers and Computer Networks, information technology refers to, the entire gamut of media and devices used to transmit and process information for use by various target groups in the society. IT has, therefore, been rightly termed as Information and Communication Revolutions.

4.2 IT INDUSTRIES IN INDIA:

The country is at an important juncture in its history, having completed the transition from an agrarian economy to a fully-fledged, first-world economy, operating at the leading edge of contemporary technology. A key element in taking

the country forward and maintaining its growth momentum will be the provision of a highly skilled and competent global workforce.

The apt IT and management skills, in fact, are assuming an ever-greater importance, in the current day environment where the IT sector is emerging as a major drive of the Indian economy. IT manpower development today, is not only crucial for sustaining the growth of the Indian economy, but also important for maintaining the country's edge in the global markets where competition is on the rise.

The emphasis on quality is just as predominant in the ITeS-BPO industry. Most of the Indian ITeS-BPO companies adhere to world class quality standards; have a dedicated quality department responsible for developing and deploying the organization's quality policies. They undertake periodic reviews of their quality processes – which are conducted by their own senior management team as well as members from the client organisations.

Today, a majority of the companies in India have already aligned their internal processes and practices to international standards such as ISO, CMM, Six Sigma, etc., which have helped establish India as a credible sourcing destination. As of December 2008, over 500 Indian companies had acquired quality certifications with 112 companies certified at SEI CMM Level 5 – higher than any other country in the world.

The growth of IT-Industry in India can also be attributed to the following:

- **Abundant availability of skilled manpower**

India is the second largest populated country in the world. Population explosion is considered to be bane for the country. In the wake of globalisation, the population explosion is treated as a major strength of the country, as it can prosper by training the human resources. A.P.J. Abdul Kalam, the then President of India admits, that India has rich potential due to the abundant manpower. Needless to say, manpower comprises of

unskilled, semi-skilled and skilled. IT industry having the state-of-art training institute imparts proper knowledge and skill. Infosys Technologies Ltd has carved out Global Training Centre with a total investment of Rs. 360 crores. A heritage building comprising of 7200 rooms, could accommodate human resources from different parts the world, for imparting knowledge and skill in IT industry.

❖ **Reforms in the telecommunication sector.**

The turnover of the Indian telecom sector has touched US $ 15 billion Telecommunication Regulatory Authority of India (TRAI) and corporatizing of Bharath Sanchar Nigam Ltd (BSNL), to facilitate the operations of IT industry. The growth in telecom market is observed from 1996-97, with the influx of many private operators entering the market showing 20% growth annually. Some of the major reforms are opening of International Long Distance, National Long Distance and Basic Telephone Services for free competition. Further Internet Service Providers (ISPs) were granted licenses freely and have been allowed to set up their own international gateways and submarine cable landing stations. Revenue sharing and internet telephony, have added their contribution to the significant growth of IT sector.

❖ **Reduction of import duties on software and hardware products**

In an endeavour to step up software and hardware products development, the government announces various packages to ensure the cost of effectiveness. India imports components and accessories of software and hardware development from other countries such as USA, UK, Germany, China, Japan and south-east nations. The Ministry of Commerce and Industry recommends to the Ministry of Finance, to reduce import duties on such products mainly for promotion of software and hardware in India.

❖ **Cost advantages due to adequate supply of skilled human resource**

IT and ITeS have gained momentum in India due to cost of advantage. MNCs operate in the field of IT in our country to reap the benefits of cost advantage as envisaged by Ricardo. In a given situation, US and India are considered to be strong countries. Notwithstanding, India is considered to be the strongest, as the human resources are available in plenty. Further, this is proved by the application of opportunity cost.

❖ **Encouragement of government policies**

Government of India announces export/import policies from time to time, not only for the development of software in India but also for export to the overseas countries. EXIM policies 1992-97, 1997-2002, 2002-2007, 2007-2012, make reference about proper encouragement to IT and ITeS. Concessional export credit, tax benefits to the products, tax holidays to the companies concern, and market development fund for the effective marketing of software and hardware products in the overseas countries. This support given by the government, obviously promotes the software and hardware at the global level.

❖ **Some of the major companies in the IT industry of India are –**

Today the software industry has become the backbone of companies around the world. With technology advancing in leaps and bounds, there is no stopping of IT professionals from around the world, to bridge the gap between huge untapped markets and its customers, as well as creating an opportunity for innovation.

The companies that dominate the software industry are those, which look out for these opportunities and provide instant solutions. The Indian software industry has arrived, and the companies that are dominating this industry, based on their turnovers, are:

Table – 4.1: Revenue of the Major Companies

Name of the company	Year	Revenue	Profit
Ericsson	2013	SEK 227.4 billion	SEK 12.1 billion
Tata Consultancy Services (TCS) Ltd	2013-14	US$ 14.44 billion	US$ 02.59 billion
Wipro Limited	2013-14	₹437.6 billion (US$7.3 billion)	₹78.4 billion (US$1.3 billion)
Infosys Technologies Limited	2013-14	US$ 8.24 billion	US$ 1.75 billion
Mahindra-Tech	2013	$3.1 billion	$687 million
CMC Limited	2013	₹22309 million (US$360 million)	₹2804 million (US$45 million)
M-Phasis BFL Limited	2013	₹59.36 billion (US$960 million)	₹7.43 billion (US$120 million)
Microsoft	2014	US$86.83 billion	US$22.07 billion

Source: Company profile, 2013-14

India's IT industry caters to both domestic and export markets. Exports contribute to around 75% of the total revenue of the IT industry in India.

- Total IT-BPO industry to reach US$ 71.7 billion accounting for 5.8% of India's GDP; software and services revenues aggregated to about US$ 60 billion.
- Software and Services export revenues estimated to grow over 16-17% to reach USD 47 billion.
- Direct employment expected to reach nearly 2.23 million, an addition of 226,000 employees, while indirect job creation estimated at 8 million.
- India's fundamental advantages—abundant talent and cost—are sustainable over the long term. With a young demographic profile and over 3.5 million graduates and postgraduates that are added annually to the talent base, no other country offers a similar mix and scale of human resources.
- Seven Indian cities that account for 95 per cent of export revenues, focus on developing 43 new locations to emerge as IT-BPO hubs.
- Higher growth in European/Asian market.

The constant encouragement accorded by Government of India from time to time, has given a big push to IT and ITeS. The cost advantage in terms of human resource could be a motive behind MNCs operating in IT and ITeS. The economy which was at the verge of collapse in 1989-90 could see a turn around, owing to magnificent growth of IT and ITeS. The IT sector could bring in metamorphosis in the economy.

- SME, like Infosys, has achieved the status of global company in a short span.
- Leading companies such as Tata Consultancy Services, Wipro, Satyam Computer Services Ltd (Mahindra-Tech), I- Flex Solutions, Cognizant, M-phasis BFL Ltd, CMC Ltd, etc have focused on IT and ITeS.
- MNCs preferred to operate in India due cost advantage.
- Provides employment opportunities in terms of millions.
- Standard of living of the people increased dramatically.
- Purchasing Power Parity goes up, hence retail sector became vibrant.
- Other sectors such as capital market, tourism, hospitality, education, civil-aviation, automobile, real estate, etc., have also gained momentum.
- Export of IT and ITeS also increased stupendously. The contribution of exports was considered equivalent to 30% of the contribution from service sector.

The software companies in India which were few hundred in 1991-1992 have gone up un-precedent the robust growth of companies in the field of software was, because of the huge demand made on the International Market (Global). Export-Import policies notified from time-to-time liberalizes the licensing procedures for the software exports. As such, every company irrespective of the fact that it was big or small has made all out efforts to produce or to complete the projects within the stipulated period. In fact, most of software companies are fully aware that software

encompassed by cost, quality and the price, can penetrate into the global markets without any barriers. The software companies in India which have understood the competitiveness in the Global Market have started achieving the goals within the time schedule. Obviously, the employees at different cadre have been nourished overtly or covertly to achieve the targets. “Pressure of work coupled with improper working conditions and family constraints lead to stress”. As is known, an employee who works without being stressed-out contributes significantly, besides, they will lead happy life. Occupational stress becomes a Silent Killer; as such it becomes a catastrophe both to the organization and to its employees.

IT and ITeS in India have registered a significant growth over a period of a decade, thanks to proactive approach on the part of the government. As the numbers of IT companies grow, the professionals in those companies have also registered a remarkable increase. This is evident from the fact that the human resource which stood less than 10,000 in 1991-92 has increased to over 1.1 million in 2004-05. Further, the human resources in IT industry have increased to over 2.2 million in 2009.

4.3 IT INDUSTRIES IN KARNATAKA:

IT Sector in Karnataka

Present Scenario and Strengths:

80% of global IT companies have based their India operations and R&D centres in Bangalore. This city is the 4th largest technology cluster in the world after Silicon Valley, Boston, and London. City has the highest number of R&D centres in India. Presence of 47 IT/ITeS SEZs in Karnataka; 3 software technology parks with 2,160 units, dedicated IT Investment Regions.

Karnataka: The Knowledge State

Karnataka is the leading IT hub of the country with Bangalore as the 4th largest technological cluster in the world after Silicon Valley, Boston and London.

With a third of India's software technology park units, the state is the country's largest software technology hub. 2100 IT companies constitute over 20% of the IT companies in the country India's largest software exporter. 50% of the world's SEI CMM Level 5 certified companies located in Bangalore Presence of almost all leading IT companies of the world, including Infosys, Wipro, Tata Consultancy Services, Oracle, Dell, IBM, Microsoft, Accenture, Cognizant, etc.

Bangalore: The Science Capital

- Indian Institute of Science (IISc)
- Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)
- National Centre for Biological Sciences (NCBS)
- Indian Space Research Organization (ISRO)
- Indian Institute of Management Bangalore (IIMB)
- National Law School of India University (NLSIU)
- National Institute of Advanced Studies (NIAS)
- Raman Research Centre (RRC)

According to Bangalore ITE.biz. India’s premier IT and electronic event (Oct 22-24, 2013).

Bangalore is today the second largest IT cluster on the planet with about 9 lakh direct and about 27 lakh indirect employments, second only to the Silicon Valley; by 2020 it will overtake Silicon Valley to become the single largest IT cluster anywhere on the planet with 20 lakh direct and 60 lakh indirect jobs. This policy is meant to firstly reposition Bangalore and Karnataka as the preferred global investment destination for IT/ITeS/BPO Sectors. Second to focus on newer areas of knowledge and innovation- based industries such as start-ups, ESDM, Animation and graphics and other web-based and mobile based creative areas etc. Third to leverage

Karnataka's leadership positions in IT to create many transformational e-governance projects such that IT/ITeS/Innovation will permeate the day-to-day lives of the citizens to Karnataka. The fourth stated objective of this policy is to strengthen Karnataka's leadership position as the global IT capital and also to make it the global innovation capital of the world, over the next decade.

These are the highlights of the new policy also called i4.

- Employment linked incentivization of land allotment outside Bangalore urban and rural district limit. Land allotment for IT/ITeS, Animation for – CGI/Knowledge based industries at concessional price shall be linked to employment generation for investments outside Bangalore.

The **software industry in Karnataka** state in India has become one of the main pillars of economy. Karnataka stands first among all the states of India in terms of revenue generated from software exports. Software exports from Karnataka amounted to excess of 487 billion ($11.6 billion). This achievement has earned Karnataka's capital city, Bangalore is the *Silicon Valley of India*. This is because of the presence of major software companies in Bangalore and the revenue generated by exports of computer software. Though most software companies are located in Bangalore, some have settled in other cities like Mysore, Mangalore and Hubli in Karnataka.http://en.wikipedia.org/wiki/Software_industry_in_Karnataka - cite_note-it-1. The Nandi Hills area in Devanahalli outskirts is the site of the upcoming $22 Billion, 12,000-acre (49 km^2) BIAL IT Investment Region, one of the largest infrastructure projects in the history of Karnataka. This endeavour expected to create four million jobs over by the year 2030. The infrastructure required for setting up software industries in Karnataka is provided by STPI. The software industry in Karnataka includes companies dealing with various fields like telecommunication, banking software, avionics, database, automotive, networking, semiconductors, mobile handsets, internet applications and business process outsourcing.

4.4 BRIEF PROFILE OF THE COMPANIES

4.4.1 INTRODUCTION

The Government has played a vital role in the development of the Indian Software Industry. In 1986, the Indian government announced a new software policy which was, designed to serve as a catalyst for the software industry. This was followed in 1988, with the World Market Policy and, the establishment of the Software Technology Parks of India (STPI) scheme. In addition, to attract foreign direct investment, the Indian Government permitted foreign equity of up to 100 percent and duty free import on all inputs and products. Researcher has chosen 5 major Information Technology (IT) Companies for the study of stress level in the sector those are as follows: 1. Cisco, 2. Wipro, 3. Nous Info systems, 4. Infosys and 5. Ericson.

4.4.2 CISCO SYSTEMS

i. ABOUT COMPANY

Cisco Systems was founded in 1984 by Leonard Bosack and Sandy Lerner, husband and wife computer scientists at Stanford University who invented a technology to link their disparate computer systems together. Bosack and Lerner developed the first “multi-protocol” router – a specialized microcomputer that sat between two or more networks and allowed them to “talk” to each other by deciphering, translating, and funneling data between them. Cisco’s technology opened up the potential of linking all of the world’s disparate computer networks together in much the same way as different telephone networks were linked around the world.

Cisco began by competing primarily in the LAN (local-area network) market, offering high-end routers. The devices were the traffic cops of cyberspace – they directed network traffic to its final destination via the most efficient, least congested network path. As the global Internet and corporate Intranets grew in importance, so too did Cisco. With an early foothold in this rapidly growing industry, Cisco quickly became the leader in the data networking equipment market – the "plumbing" of the Internet. By 1997, approximately 80% of the large scale routers that powered the Internet were made by Cisco.

Although routers, LAN switches, and wide-area network (WAN) switches would remain Cisco's core products, the company expanded its product line to include a broad range of other networking solutions, including Website management tools, dial-up and other remote access solutions, Internet appliances, and network management software. Despite the breadth of its product offerings, Cisco held the number one or number two positions in nearly every market in which it competed. In addition, Cisco's Internetwork Operating System (IOS) software was increasingly becoming the de facto industry standard for delivering network services and enabling networked applications.

Cisco received its initial funding from the venture capital firm Sequoia capital, which helped to recruit John Morgridge as CEO in 1988. The company went public in February 1990 with a $222 million market value and never looked back, growing into a multinational corporation with over 10,000 employees in 54 countries. By 1997, revenues had increased over ninety-fold since, the IPO, from $69.8 million in fiscal 1990 to $6.4 billion in fiscal 1997. (Exhibit 1) In June 1997, Cisco's market value totaled $46.3 billion.

Founded	San Francisco, California, U.S. (1984)
Founders	Leonard Bosack and Sandy Lerner
Headquarters	San Jose, California, U.S
Area served	Worldwide
Products	Networking Device Network Management Cisco IOS and NX-OS Software Interface and Module Optical networking Storage area networks Wireless, Telepresence, VOIP
Revenue	US$ 47.142 billion (2014)
Operating income	US$ 9.345 billion (2014)
Net income	US$ 7.853 billion (2014)
Total assets	US$ 105.134 billion (2014)
Total equity	US$ 56.654 billion (2014)
Employees	74,043 (2014)
Website	Cisco.com

Source: Company profile, 2014

Two highly respected CEOs have led the company: John Morgridge, and his successor, John Chambers. Morgridge helped to shape the Cisco culture from day one, focusing on customer satisfaction, product quality, and frugality. He once gave a legendary presentation on frugality to the Cisco sales force, after being appalled by reports that salespeople were flying first class on business trips. Equipped with slippers, earplugs, and eye covers, Morgridge displayed how to fly coach and make it seem like first class. John Chambers, who joined Cisco in 1991 and succeeded

Morgridge in January 1995, was well known for his fair but ultra-competitive nature. Chambers, a former IBM and Wang Laboratories marketing and sales veteran, fostered Cisco's strong customer focus and was credited with continuing Cisco's striking success in the networking industry.

ii. HISTORY OF COMPANY

During the early 1980s, there was a married couple namely Len and Sandy Bosack who used to work in two different departments of computer located in Stanford University. This couple was facing problem in making their computers communicate with each other. In order to overcome this problem, they made a gateway server in their living room which led to a simpler way of making two departments communicate each other by the help of IP protocol. They founded Cisco Systems (with small c) in 1984, having a small commercial gateway server which brought a revolution in Networking. The name of the company was changed to Cisco Systems, Inc. in 1992. Advanced Gateway Server (AGS) was the first marketed product of the company. After this came the Mid-Range Gateway Server (MGS), the Compact Gateway Server (CGS), the Integrated Gateway Server (IGS) and AGS+.

Cisco eventually created routers of 4000, 7000, 2000 and 3000 series. These routers still exist and are enhancing daily. Cisco is the mighty leader of the world when it comes to networking for the Internet. The product of this company leads to simplicity in accessing and transferring information regardless of the differences in time, place or platform.

Cisco also supplies a huge range of hardware products which create information networks by the help of Cisco Internetwork Operating System (IOS) software. Cisco IOS gives network services and make a route for networked technical support and services. Another program made by Cisco to assist the big amount of

hardware is the Cisco Certified Internetwork Expert (CCIE) program. CCIE helps in managing the large number of installed Cisco networks. The CCIE program helps in making people take care of complicated networks. Cisco is still monitoring this program constantly in order to do a possible transition needed to meet the everyday requirements of internetworking business places. Due to the very successful CCIE program, one can be certified in network designing and support with the help of Cisco Career Certifications.

iii. OVERVIEW OF COMPANY

Cisco Systems, Inc. (Cisco) incorporated on December 10, 1984, designs, manufactures, and sells Internet protocol (IP)-based networking and other products related to the communications and information technology (IT) industry and provide services associated with these products and their use. The Company provides a line of products for transporting data, voice, and video within buildings, across campuses, and around the world. Its products are designed to transform how people connect, communicate, and collaborate. Its products are installed at enterprise businesses, public institutions, telecommunications companies, commercial businesses, and personal residences. The Company operates in three segments: The Americas; Europe, Middle East, and Africa (EMEA), and Asia Pacific, Japan, and China (APJC). In July 2013, the Company announced that it has completed the acquisition of Composite Software, Inc. In October 2013, Cisco Systems Inc completed the acquisition of Source-fire, Inc. In October 2013, the Company announced that it has completed the acquisition of privately held WHIPTAIL. In December 2013, Cisco Systems Inc completed the acquisition of privately held in same Networks.

The Company’s product offerings fall into three categories: its core technologies, routing and switching; advanced technologies, and other products.

In addition to its product offerings, the company provides a range of service offerings, technical support services and advanced services. The advanced services program supports networking devices, applications, solutions, and complete infrastructures.

- **Routing**

The Company offers a range of routers, from core network infrastructure for service providers and enterprises to access routers for branch offices and for telecommuters and consumers at home. Key products within its routing category are the Cisco ASR 901/903, Cisco 1000, 5000, and 9000 Cisco Aggregation Services Routers (ASR), as well as the Cisco ASR 800, 1900, 2900 and 3900 Cisco Integrated Services Routers (ISR); Cisco CRS-1, 7600 and Cisco CRS-3 Cisco Carrier Routing Systems (CRS). During the fiscal year ended July 31, 2010 (fiscal 2010), Cisco introduced the Cisco CRS-3 Carrier Routing System (CRS-3) and Cisco 7600 Series Routers.

- **Service Provider Video**

The Company's end-to-end, digital video distribution systems and digital interactive set-top boxes enable service providers and content originators to deliver entertainment, information and communication services to consumers and businesses around the world. Key product areas within its Service Provider Video category are: Set-Top Boxes, IP set-top boxes (both High-Definition (HD) and Standard Definition (SD)); Digital cable set-top boxes (both HD and SD); Cable Modem CPE (Data, EMTA, and Gateways); Video-scape Software Products and Head-end Equipment (Encoders, Decoders, and Transcoders).

- **Switching**

The Company's switching products offer many forms of connectivity to end users, workstations, IP phones, access points, and servers, and also function as aggregators on local-area networks (LANs), metropolitan-area networks (MANs), and wide-area networks (WANs). Its switching systems employ several widely used technologies, including Ethernet, Power over Ethernet and Fiber Channel over Ethernet, Packet over Synchronous Optical Network, and Multiprotocol Label Switching. Many of its switches are designed to support an integrated set of advanced services, allowing organizations to be more efficient by using one switch for multiple networking functions rather than multiple switches to accomplish the same functions.

Cisco offers a family of Ethernet switching solutions from fixed-configuration switches for small and medium-sized businesses to modular switches for enterprises and service providers. Its fixed-configuration switches are designed to provide a foundation for converged data, voice, and video services. Key products within its switching category are the Cisco Catalyst 2960, 3560, 3750, 4500 and 6500 Series; the Cisco Nexus 2000, 3000, 5000 and 7000 Series switches; and MDS Series: MDS 9000.

Fixed-configuration switches are designed to cover a range of deployments in small and medium-sized businesses. It fixed-configuration switches are designed to provide a foundation for converged data, voice, and video services. They range from small, standalone switches to stackable models that function as a single, scalable switching unit. Modular switches are typically utilized by enterprise and service provider customers. Fixed-configuration and modular switches also include products such as optics modules which are shared across multiple product platforms.

- **NGN Routing**

Routing technology is fundamental to the Internet, and this technology interconnects public and private IP networks for mobile, data, voice, and video applications. The Company's NGN Routing products are designed to enhance the intelligence, security, reliability, scalability, and level of performance in the transmission of information and media-rich applications. It offers a broad range of routers, from core network infrastructure and mobile Internet network for service providers and enterprises to access routers for branch offices and for telecommuters and consumers at home. Key product areas within its NGN Routing category are, Cisco Aggregation Services Routers: Cisco ASR 901/903, Cisco ASR 1000, Cisco ASR 5000 and Cisco ASR 9000. Cisco Integrated Services Routers: Cisco ISR 800, Cisco ISR 1900, Cisco ISR 2900 and Cisco ISR 3900. Cisco Carrier Routing Systems: Cisco CRS-1, Cisco CRS-3 and Cisco 7600 Series Routers.

- **Security**

Cisco security solutions deliver identity, network and content security solutions designed to enable customers to reduce the impact of threats and realize the benefits of a mobile, collaborative, and cloud-enabled business. The products in this category span firewall, intrusion prevention, remote access, virtual private networks (VPNs), unified clients, network admission control, Web gateways, and email gateways. Its Any Connect Secure Mobility Client solution enables users to access networks with their mobile device of choice, including laptops and smart phone-based mobile devices, while allowing organizations to manage the security risks of networks. Its cloud-based Web security service is designed to provide real-time threat protection and to prevent malware from reaching corporate networks, including roaming or mobile users. It focuses on a proactive, layered approach to counter both

existing and emerging security threats. During the fiscal year ended July 28, 2012, it introduced the Cisco ASA 5500-X Series Midrange Security Appliance, Cisco Security Manager 4.3, the IPS 4500 Series, and Prime Security Manager.

- **Wireless**

The Cisco Unified Wireless Network aims to harness the network to solve business problems, uniting high-performance wireless access across campus, branch, remote and outdoor environments. Its offerings include wireless access points (including the Cisco Aironet product family), controllers, antennas, and integrated management. The Company's offerings provide users with simplified management and mobile device troubleshooting features which are designed to reduce operational cost and maximize flexibility and reliability. It is also investing in custom chipsets to deliver functions such as Clean Air proactive spectrum intelligence, Client Link acceleration for mobile devices and Video Stream multicast optimization technology.

- **Data Centre**

The Company's data centre product category has been its major product category for the past two fiscal years. Cisco Unified Computing System (UCS) and Server Access Virtualization form the core of the Data Centre product category. Key product areas within its Data Centre product category are: Cisco UCS B-Series Blade Servers, Cisco UCS C-Series Rack Servers and Cisco UCS Fabric Interconnects.

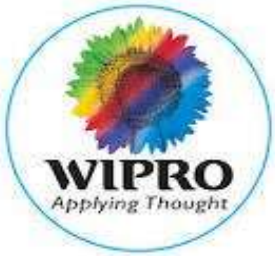
- **Other Products**

The Company's other products category primarily consists of Linksys home networking products, certain emerging technologies, and other networking products. In addition to its product offerings, it provides a range of service offerings, including technical support services and advanced services.

The Company competes with Alcatel-Lucent; ARRIS Group, Inc.; Aruba Networks, Inc.; Avaya Inc.; Belden Inc.; Brocade Communications Systems, Inc.; Check Point Software Technologies Ltd.; Citrix Systems, Inc.; D-Link Corporation; LM Ericsson Telephone Company; Extreme Networks, Inc.; F5 Networks, Inc.; Force10 Networks, Inc.; Fortinet, Inc.; Hewlett-Packard Company; Huawei Technologies Co., Ltd.; International Business Machines Corporation; Juniper Networks, Inc.; Log Mein, Inc.; Meru Networks, Inc.; Microsoft Corporation; Motorola, Inc.; NETGEAR, Inc.; Polycom, Inc.; Riverbed Technology, Inc.; and Symantec Corporation

Stress Management in Cisco: Apart from regular stress reducing techniques Company has introduced new courses on stress management and Human Resource Management.

4.4.3 WIPRO LIMITED



i. ABOUT COMPANY

Wipro Ltd. is a leading India based provider of IT Services, including Business Process Outsourcing (BPO) services, globally. The company provides comprehensive IT Solutions and Services, including Systems Integration, Information Systems Outsourcing, IT Enabled Services, Package Implementation, Software Application development and maintenance, and Research and Development Services to corporations globally. They also provide Consumer Products, Lighting, Furniture, Eco Energy, Water treatment and Hydraulic business. The company is the first

PCMM Level 5 and SEI CMM Level 5 certified IT Services Company globally. In the Indian market, they are a leader in providing IT Solutions and Services for the corporate segment in India, offering System Integration, Network Integration, Software Solutions and IT Services. In the Asia Pacific and Middle East markets, they provide IT Solutions and Services for global corporations. The company is headquartered in Bangalore, India. The company provides the integrated business, technology and process solution on a global delivery platform to customers across Americas, Europe, Middle East and Asia Pacific, they offer business value to clients through process excellence and service delivery innovation such as Information Technology services, Product Engineering services, Technology Infrastructure services, Business Process Outsourcing services and consulting services.

Industry	IT services, IT consulting
Founded	Mumbai, Maharashtra (in 1945)
Founders	M.H. Premji
Headquarters	Bangalore, Karnataka, India
Area served	Worldwide
Key people	Azim Premji (Chairman & CEO)
Services	IT, business consulting and outsourcing services
Revenue	₹437.6 billion (US$7.3 billion) (2013-14)
Operating income	₹89.3 billion (US$1.49 billion) (2013-14)
Profit	₹78.4 billion (US$1.3 billion) (2013-14)
Total assets	₹502.3 billion (US$8.37 billion) (Mar 2014)
Total equity	₹344.9 billion (US$5.75 billion) (Mar 2014)
Employees	154,297 (Q2, 2014-15)
Website	www.wipro.com

Wipro Limited (Western India Products Limitedhttp: //en.wikipedia.org/wiki/Wipro - cite_note-NPHistory-1) is an Indian multinational IT Consulting and System Integration services company headquartered in Bangalore, Karnataka. As of 2014, the company has 154,297 employees servicing over 900 large enterprise and Fortune 1000 corporations with a presence in 61 countries. On 31st March 2014, its market capitalization was approximately ₹1.27 trillion ($20.8 billion), making it one of India's largest publicly traded company and seventh largest IT services firm globally. To focus on core IT Business, it demerged its non-IT businesses into a separate company named Wipro Enterprises Limited with effect from 31st March 2013. The demerged company offers consumer care, lighting, healthcare and infrastructure engineering and contributed to approx. 10% of the revenues of Wipro Limited in previous financial year. Recently Wipro has also identified Brazil, Canada and Australia as rapidly growing markets globally and has committed to strengthen the presence in the respective countries over the next 3 years.

ii. HISTORY OF COMPANY

Wipro Ltd. was incorporated in the year 1945 at Karnataka by Azim H. Premji who is promoter and chairman of the company. The company started as a edible oil producer and then transformed themselves in into leading player in Fast Moving Consumer Goods and IT services and Products business. During the year 1994-95, the company secured ISO 9001 certification for their five manufacturing and development facilities. In February 2001, the company became the first software technology and services company in India to be certified for ISO:14001 certification for complying with the international standards for Environmental Management System (EMS) in three major software development and technology centres in

Bangalore. Wipro Technologies won the 'Banker Technology Award' for the year 2004 Instituted by the Financial Times in the 'Risk Management Award' category.

During the year 2005-06, the company acquired mPower Software Services Inc, a Princeton, New Jersey; US headquartered company with a development centre in Chennai and MPACT Technology Services Pvt. Ltd., based in Chennai, for an all cash consideration of USD 28 million. Also, they acquired New Logic Technologies AG, an Austrian firm which is mainly engaged in the semiconductor IP business and the Engineering Design Services business including the Analog Mixed Signal Business for an all cash consideration of Euro 26 million. The company received the BEST award from American society for training and development (ASTD) for three consecutive years 2004, 2005 and 2006. During the year 2006-07, the company acquired US based Quantech Global Services LLC and the India based Quantech Global Services Ltd. for a cash consideration of approximately USD 3 million. They acquired US based CMangoInc and India based CMango India Pvt. Ltd. for cash consideration of USD 20 Million. They also acquired Finland based Sarawareoy Middle East and SAARC operations of 3D Networks and Planet PSG during the year. In their Consumer Care and Lighting business, the company acquired North-West Switches business from North- West Switchgear Ltd, a company in the business of switches, sockets, MCBs etc. for an upfront cash consideration of ₹ 1,022 million. In the Infrastructure Engineering business, they acquired Hydrauto Group AB for a cash consideration of USD 31 million.

The company in partnership with Motorola and formed a joint venture namely WMNETSERV Ltd. for delivering world-class managed Services to telecom operators in the area of network operations. During the year 2007-08, as per scheme of amalgamation, Wipro Infrastructure Engineering Ltd., Wipro Healthcare IT Ltd.,

Quantech Global Services Ltd. mPact Technology Services Pvt. Ltd., mPower Software Services (India) Pvt. Ltd. and cMango India Pvt. Ltd. were amalgamated with the company with effect from April 1, 2007. The company in association with DAR Al-Riyadh Holding Co. Ltd. formed a joint venture namely Wipro Arabia Ltd., for providing application development, implementation and maintenance services, systems integration and data storage services in the Kingdom of Saudi Arabia. During the year, the company acquired 100% shareholding in Unza Holdings Ltd., a Singapore based Fast Moving Consumer Goods Company together with their subsidiaries for an all cash consideration of approximately USD 246 million.

They acquired US-based provider of IT infrastructure management, enterprise application and business process outsourcing services, for an acquisition price of about USD 600 million. They also acquired OKI Techno Centre Singapore Pte Ltd. (now called as Wipro Techno Centre Singapore Pte Ltd) in an all cash deal of USD 2.5 million. During the year 2008-09, the company invested an aggregate of USD 432 million as equity, in their direct subsidiaries Wipro Cyprus Pvt. Ltd., Wipro Holdings (Mauritius) Ltd., Wipro Inc and Wipro Technology Services Ltd. They also re-structured a few of their overseas subsidiaries and merged them with their holding company in the US. In January 2009, the company acquired Wipro Technology Services Ltd. (formerly called as Citi Technology Services Ltd.) for USD 127 million. During the year 2009-10, Wipro Networks Pte Ltd, Singapore and WMNETSERV Ltd., Cyprus were amalgamated with the company with effect from April 1, 2009. In August 2009, the company entered into partnership with Lavasa Corporation Ltd. for planning, implementing and managing Information and Communication Technology services across Lavasa City. In October 2009, the company signed an agreement with Delhi International Airport Pvt. Ltd. and formed a joint venture company namely Wipro

Airport IT Services Ltd. Also, Wipro GE Healthcare Pvt. Ltd., the joint venture between the company and GE Healthcare, transformed their business by integrating several existing stand-alone business units and manufacturing plants of GE Healthcare in India under Wipro GE Healthcare Entity. In November 2009, the company signed an agreement to acquire the 'Yardley' Brand business in Asia, Middle East, Australia and certain African markets from UK based Lornamead Group. In March 2010, they won a turnkey project from the Financial Intelligence Unit - India, Ministry of Finance, Government of India. As part of the project, the company will implement FiNnet (Financial Intelligence Network) for FIU-IND. In April 2010, the company signed a partnership agreement with Philips to offer Blu-ray middleware and solution development services around Philips' developed Blu-ray technology. In May 2010, the company and Oracle Corporation launched a co developed solution, a Process Integration Pack (PIP) for the High Technology industry.

This solution is part of Wipro's offerings that provide a comprehensive solution footprint for the High Technology industry. They entered into a co-innovation agreement with SAP AG to develop and deliver sustainability management and energy management solutions to enterprise customers globally. In June 2010, the company's Business Process Outsourcing division partnered with Microsoft Corporation for providing global Legal Process Outsourcing (LPO) for Microsoft’s Intellectual Property (IP) portfolio. The company launched Wipro Hospitality Management Solution at HITEC 2010, the conference for the Hospitality and Leisure industry. In July 2010, the company in association with Lavasa Corporation Ltd. and Cisco Systems Inc signed definitive agreements for Cisco to participate in MyCity Technologies Ltd. to provide information and communications technology services in the new development of Lavasa City. In August 2010, the

company entered into a five year agreement with Arcelor Mittal, the steel company, to consolidate and migrate their messaging systems to the Microsoft Exchange 2010 messaging platform. In September 2010, the company signed five year strategic partnership with Central Bank of India for providing core banking solution for seven sponsored regional rural banks. The company will deliver business-IT alignment by deploying and implementing the core banking solution and the identified delivery channels seamlessly. They will also set up a 24 hour centralized helpdesk facility for the project covering applications, data centre, networks, security and end user systems. During the year 2010-11, the company re-structured a few of their subsidiaries including overseas subsidiaries through merger/other legal process. Wipro Yardley Consumer Care Pvt. Ltd, a subsidiary company got merged with Wipro Ltd. with effect from April 1, 2010, being the appointed date. In December 2010, the company signed a contract with Vodafone Essar. As a part of this strategic engagement, the company will support Vodafone Essar with its fixed line telecom services for enterprise business customers.

Wipro will provide a wide range of services including network design and build, integration with existing IT OSS/ BSS applications and managed services if the setup over three years. In addition, Wipro will also build an Enterprise Network Operation Centre to manage the operations of Vodafone Essar's enterprise customers. In January 2011, the company and Callidus Software Inc entered into a partnership to drive sales performance management across organizations in the Asia-Pacific region. In May 2011, the company signed an agreement to acquire majority stake of Brazil based Hydraulic Cylinder manufacturer R.K.M. EQUIPAMENTOS HIDRAULICOS LTDA. In June 10, 2011, the company acquired the Commercial Business Services Business Unit of Science Applications International Corporation (SAIC).

Wipro Technologies is the No. 1 provider of integrated business; technology and process solutions on a global delivery platform. Wipro Technologies is a global services provider delivering technology-driven business solutions that meet the strategic objectives of our clients. Wipro has 40+ 'Centers of Excellence' that create solutions around specific needs of industries. Wipro delivers unmatched business value to customers through a combination of process excellence, quality frameworks and service delivery innovation. Wipro is the World's first CMMi Level 5 certified software services company and the first outside USA to receive the IEEE Software Process Award. Wipro's complete range of IT Services addresses the needs of both technology and business requirements to help organizations leverage leading-edge technologies for business improvement.

Wipro takes charge of the IT needs of the entire enterprise. The gamut of services extends from Enterprise Application Services (CRM, ERP, e-Procurement and SCM), to e-Business solutions. Wipro's enterprise solutions have served and continue to serve clients from a range of industries including Energy and Utilities, Finance, Telecom, and Media and Entertainment.

iii. OVERVIEW OF COMPANY

WIPRO is one of the largest IT services companies in India. Established in 1980 as subsidiary of WIPRO limited listed on New York Stock Exchange. WIPRO was initially set up in 1945 with main product of producing sunflower Vanaspati Oil and different soaps. At that time Company was called Western India Vegetable Products limited with representative offices in Maharashtra and Madhya Pradesh states of India. During 1970s and 1980s it shifted its focus and begin to look into business opportunities in IT and computing industry which was at nascent stages in India at that time. WIPRO was the first company which marketed the first indigenous homemade PC from India in 1975.

In 1966 Azim Premji, still the majority shareholder in WIPRO, took over as the chairman of the company at the age of 21 and with the passage of time transformed it into one of the finest and largest IT outsourcing services provider of the world. It is now considered the world's largest independent R&D service provider. It offers different technology driven services all over the globe with 46 development centers. Azim Premji is still the Chairman of the WIPRO along with other top class professionals heading different wings of the business.

Wipro is globally recognized for its innovative approach towards delivering business value and its commitment to sustainability. Wipro champions optimized utilization of natural resources, capital and talent. Today this companies are trusted partner of choice for global businesses looking to ‘differentiate at the front’ and ‘standardize at the core’ through technology interventions.

In today’s world, organizations will have to rapidly reengineer themselves and be more responsive to changing customer needs. Wipro is well positioned to be a partner and co-innovator to businesses in their transformation journey, identify new growth opportunities and facilitate their foray into new sectors and markets.

Stress management in Wipro

Tranquil Gardens, enable people to achieve comprehensive success in three dimensions of life namely Professional, Personal and Spiritual. Everyone have ambition in these three dimensions and consciously or unconsciously keep working towards those ambitions day after day. But not everyone reach those ambitions, every time as expected leaving them frustrated, worried, exasperated, exhausted and some sort of negativity sets in at some point in life. This is very natural cycle in everyone s life without any exceptions.

Company's programs and coaching help in opening the participant s minds to those higher and worthy ambitions, and set up a structure and method in their day to day working using various techniques. These techniques bring the focus to their ambitions and methods to achieve them with the combination of physical and Spiritual actions.

Company offer the following courses and workshops which are built on various techniques like NLP, EFT, Reiki, Hypnosis and Silva Ultramind as well as Aurobindo and Vivekananda's teachings.

1. Workshops on EFT, Reiki**,** Chakra Healing
2. NLP Practitioner and Master Practitioner workshop
3. Silva Ultramind ESP, Silva Meditation
4. Law of Attraction workshop and coaching
5. Emotional Intelligence workshop and coaching
6. Workshop on Stress Management
7. Workshops on Alpha Mind power, Hypnosis and Guided Imagery
8. Power packed Performance
9. Time Management

Company also offer the following courses and workshops which are built on various techniques like NLP, EFT, Reiki, Hypnosis and Silva Ultramind as well as Aurobindo and Vivekananda's teachings.

Silva Ultramind ESP: This an Intuition development program whereby one can understand the powers of both sides of the brain. The worldwide research shows that they all use only one side of our brain, without realizing its full potential, in this program, train the candidate to use the other side of the brain and unleash the potential within which one can never thought to possessed.

Violight Spectra Healing this is an Unique Tranquil Gardens comprehensive healing training program consisting of Reiki all levels, Emotional Freedom Technique, Chakra Healing and Hoponopono healing methods. This program adequately equips every individual to heal all kinds of diseases which are predominantly psychosomatic in nature. They can lead a wonderful, joyous and disease free life. It also offer individual training for Reiki, Hypnosis, Chakra Healing and Emotional Freedom Technique.

Turning Point: This program creates a powerful, positive, and permanent attitude shift towards one s life based on the Concepts of NLP, Law of Attraction and Swami Vivekananda s preachings. This program enables every individual redefine the very nature of what is possible in his/her own life. In effect, one can create a future of their own design. It also corporate and individual workshops like Basic and Master Practitioner Level NLP, Emotional Intelligence for Stress Management, Leading Teams with Emotional Intelligence, Intuitive Leadership, Stress management, Time Management and Power packed performance.

It promotes the Home Seminar and Self training products and Healing products which help people in their day to day life. These are available in digital form in CDs which will guide everyone through various techniques. These self learning courses can supplement the class room courses in terms of reference guide, review guide, and also as a pre-preparation for the class courses.

Trainers Training: Company create leaders and trainers for, taking these techniques and methods, to a large number of people worldwide through their train the trainer courses. After the necessary trainings, the certificates will be provided.

Coaching the Coaches: It also offers NLP Coach training. It train the trainers and coach the coaches.

4.4.4 NOUS INFO SYSTEMS

i. ABOUT COMPANY

NOUS Company is a Capability Maturity Model Integration (CMMI) Level 5 certified global Information Technology Services company based in New Jersey, USA. It has its development centres in India at Bengaluru (Bangalore) and Coimbatore, and also has offices in the USA, UK, Germany and Canada. The company also has subsidiaries which provide services in software testing and remote infrastructure management.

ii. HISTORY OF COMPANY

NOUS was established in 1999. A succession of landmark projects, reports and advisory roles for private and public organisations in Australia has seen the firm develop and expand to six capital cities. Company's point of difference is the depth of understanding of what drives business performance and tailored interventions in business strategy, public policy, organisational capability, executive and talent development and performance, and digital strategy and capability.

NOUS Group is a leading Australian owned management consulting and leadership development firm, with offices and experienced consultants throughout the country. Company is partner with clients in demanding and complex sectors to create innovative, enduring solutions. It bring a unique, cross-disciplinary approach to clients' challenges, ensuring the right balance of expertise and real world experience across business strategy, public policy, organisational capability, executive & talent development, and digital strategy and capability.

For over a decade they have delivered outstanding results, working with clients on solutions to some of the biggest challenges facing business and government.

iii. OVERVIEW OF COMPANY

NOUS (Ancient Greek: Mind) is a dynamic Customer Relationship Management platform, coupled with a powerful Operations Management system offering flexibility, reliability and workflow management. NOUS' rich functionality is geared towards businesses' specific needs for improving daily monitoring of activities and processes, while enhancing customer relationships.

- **Suitable for**

NOUS is addressing the needs of companies of any size and in any sector. It is suitable for businesses that need to develop or improve their relationships with existing or potential customers. Profile has also developed vertical solutions which are based on international best practices of their respective industries. Indicatively, these solutions include:

- NOUS Medical for addressing the specific needs of the medical sector.
- NOUS Auto for companies in the auto industry.
- NOUS Helpdesk for consulting companies and service-providing businesses.
- NOUS ISO for businesses that have ISO certified processes and procedures.

- **Features**

- Monitoring of the sales cycle and resellers
- Management of promotional activities via multiple communication channels
- Recording of various loyalty schemes
- Structured project management
- Reliable contracts management

- Multi-user access points
- Links to 3rd party systems in real time
- Integration with office automation applications (Microsoft Office)

➢ **Benefit**

- Effective modeling of customer behavior for strategic planning
- Low cost of user training
- Advanced customer service
- Improvement of intra business processes
- Reduction of operating costs

iv. Investment Value

NOUS offers advanced customization to effectively meet varying business needs. Its advanced built-in capabilities guarantee a small break-even period (typically less than a year), thus, offering exceptional value for money.

NOUS in the News

- NOUS Infosystems is now an 'IRON' partner with Mobile Iron - July 24, 2014.
- July 24, 2014, Bangalore, India: Iron Partner status is the highest rank that can be achieved by a Mobile Iron Partner and it requires sales and technical teams to reach specific certification levels.
- NOUS Infosystems announces partnership with Perfecto Mobile - July 8, 2014.
- July 8, 2014, Bangalore, India: NOUS Infosystems, a global IT organization offering quality software solutions and services across a broad spectrum of industries and domains, has signed a strategic partnership with Perfecto Mobile, provider of the MobileCloud™ Platform and integrated mobile application quality suite.

- NOUS Infosystems Partners with Nintex to Strengthen SharePoint Practice - June 30, 2014.
- June 30, 2014, Bangalore, India: NOUS Nintex partnership will strengthen the existing SharePoint practice and will enable them to enhance service offerings using SharePoint and accelerate business solutions using custom business workflows.
- NOUS Info-systems enters into a Strategic Partnership with Smart Bear Software April 16, 2014.
- April 16, 2014, Bangalore, India: NOUS Smart Bear Partnership to Establish Offshore Center of Excellence (CoE) in Bangalore Expanding Global Reach of Smart Bear's Automated Testing Tools.
- NOUS Info-systems & Testree get Listed in Gartner Vendor Guide March 21, 2014.
- March 21, 2014, Bangalore, India: NOUS Info-systems and Testree are now listed in Gartner's Vendor "Guide to the Right Application Testing Service Partner" report, published November 20, 2013 by Susanne Matson, Gilbert Vander Heiden.
- NOUS Announces Strategic Partnership with Neotys - February 28, 2014.
- February 28, 2014, Bangalore, India: NOUS enters into a Strategic Partnership with Neotys to provide much improved Testing solutions to its customers.
- NOUS joins hands with Kony -October 03, 2013, Bangalore
- October 03, 2013, Bangalore, India: NOUS Info-systems, a global Information technology company providing quality software solutions across a broad spectrum of industries and domains and Kony Inc., the leading mobile and multi-channel application platform provider announced that they are entering into a strategic

partnership agreement http://www.nousinfosystems.com/casestudies/NousPartners with Kony - Press Release.pdf.

- NOUS – a CMMi level 5 SVC+SSD v1.3 appraised company -July 24, 2013
- July 24, 2013, Bangalore, India: NOUS Infosystems Pvt. Ltd., the Bangalore based IT Services organization, announced that its Global Software Services division has been appraised at CMMI SVC+SSD Version 1.3 Level 5.
- NOUS partners with Horton work to bring big data solutions to Enterprise customers - July 17, 2012.
- July 17, 2012, Edison, USA: NOUS enters into a strategic agreement with Horton works which will help customers deploy advanced enterprise-class "Big Data" applications, thus addressing their Big Data needs using the leading minds in the industry. http://www.nousinfosystems.com/casestudies/Nous Infosystems Partners with Hortonworks_July17_2012.pdf.
- NOUS Announces Strategic Partnership with QlikTech - May 04, 2012
- May 04, 2012, Bangalore, India: NOUS enters into a Strategic Partnership with Qlikview to leverage its expertise in providing Business Driven/Self Service BI solution to its Clients.
- NOUS Announces Strategic Partnership with Nexaweb - March 09, 2012
- March 09, 2012, Bangalore, India: NOUS enters into a Strategic Partnership with Nexaweb to solutions to provide much improved and unique solutions to its customers in the BFS and Healthcare domain.
- NOUS Announces Strategic Partnership with Nastel - February 02, 2012
- February 02, 2012, Bangalore, India: NOUS Infosystems enters into a strategic Partnership with Nastel to offer a comprehensive and a best in the class application monitoring and management services to its clients.

Stress Management in Nous Info-systems: In this company they are conducting different competitions in games and other activities for reducing stress.

4.4.5 INFOSYS

i. ABOUT COMPANY

Infosys is a global leader in consulting, technology, and outsourcing solutions. As a proven partner focused on building tomorrow's enterprise, Infosys enables clients in more than 30 countries to outperform the competition and stay ahead of the innovation curve. With US$7.9 billion (in LTM Q2 FY14 revenues) and 160,000+ employees, they provide enterprises with strategic insights on what lies ahead. They help enterprises transform and thrive in a changing world through strategic consulting, operational leadership, and the co-creation of breakthrough solutions, including those in mobility, sustainability, big data, and cloud computing.

ii. HISTORY OF COMPANY

Infosys Ltd. is a global technology services firm that defines designs and delivers information technology (IT)-enabled business solutions to their clients. The company provides end-to-end business solutions that leverage technology for their clients, including technical consulting, design, development, product engineering, maintenance, systems integration, package-enabled consulting, and implementation and infrastructure management services. The company also provides software products to the banking industry. They have developed finacle, a universal banking solution to large and medium size banks across India and overseas. Infosys BPO is a majority owned subsidiary. Through Infosys BPO, the company provides

business process management services, such as offsite customer relationship management, finance and accounting, and administration and sales order processing.

The company is having marketing and technical alliance with FileNet, IBM, Intel, Microsoft, Oracle and System Application Products. Infosys Ltd. is a public limited and India's second largest software exporter company was incorporated in the year 1981 as Infosys Consultants Pvt. Ltd. by Mr. N.R. Narayana Murthy at Karnataka. The company was started by seven people with the investment of USD 250. The company became a public limited company in the year 1992. The company was the first Indian company to be listed on the NASDAQ at the year 1999. Infosys also forms a part of the NASDAQ-100 index. Continuously in the year 2001, 2002 and 2003, the company wins the National award for excellence in corporate governance conferred by the Government of India. In April 2002, Infosys BPO Ltd. was incorporated in India to address opportunities in business process management. In the year 2004, the company acquired 100% equity in Expert Information Services Pty. Ltd. Australia for USD 24.3 million. The acquired company was renamed as Infosys Technologies (Australia) Pty. Ltd. In October 2, 2004, they set up a wholly owned subsidiary in People's Republic of China named Infosys Technologies (China) Co. Ltd.

In the year 2005, the company established Infosys Consulting Inc, a wholly owned subsidiary in Texas, US to add high-end consulting capabilities to their Global Delivery Model. The company was selected as 'Best Outsourcing Partner' by the readers of Waters, a publication covering the needs of chief information officers in the capital market firms. In the year 2007, the company increased the stake value in Progeon to 98.9% after acquiring shares from Citicorp International Financial Company. Infosys had taken over Philips' finance and administration business

process outsourcing (BPO) centres spread across India, Poland and Thailand for USD 28 million. Infosys Technologies has 47% of core business assets stagnating. The company scanning the markets of Europe and Japan for acquisitions in the price bands of USD 200 - USD 300 million to energies their non-linear business strategy as well as to expand its geographic reach.

Infosys set up various Special Economic Zone that for the company has an additional tax benefit. They set up another Special Economic Zone unit in Chandigarh which will be eligible for 100% deduction of profit from exports tax calculation for the first five years followed by 50% deduction for next five years. Infosys has been pursuing their expansion plans over the past few years. The future enhancement of the company is to emerge the developing economies changing the business landscape with help of accessible talent pools and the adoption of non-linear growth model; it is a long term strategy. Infosys Technologies Ltd has partnered with ACDI/VOCA for promotes broad-based economic growth and to develop information and communication technology-enabled application to improve efficiencies in the agro supply chain in India. In the year 2008, the company established their first Latin American subsidiary, namely Infosys Technologies SdeRLdeCV in Mexico to improve proximity to their North American clients. They also opened a development centre and office for the region in Monterrey, Mexico. As of April 2008, the company acquired Internet Protocol (IP) from an Australian company to add more functionality to finacle. The IP, that provides a comprehensive set of financial tools to company's existing product line. In July 2008, the company launched ShoppingTrip360 to help retailers and consumer packaged goods (CPG) companies achieve visibility into in-store activity. ShoppingTrip360 is a platform that enables a suite of managed-information services to create a 360-degree view of real time in store shopper and shelf activity.

The company was ranked among the top 50 most respected companies in the world by Reputation Institute's Global Reputation Pulse 2009. They have been voted the 'Most Admired Indian Company' in The Wall Street Journal Asia 200 for 10 years in a row since 2000. The company was also listed in the Most Admired Knowledge Enterprises (MAKE) 2008 study and Forbes' Asian Fabulous 50 for the fourth consecutive year. In March 2009, the company incorporated a wholly owned subsidiary in Sweden, namely Infosys Technologies (Sweden) AB. In November 2009, the company opened their second Latin America IT Development Centre in Mexico offering global, near-shore, and Latin American clients a full range of information technology (I.T.) services including Business and I.T. Consulting, Business Process Outsourcing (BPO), Packaged Solutions Implementation and Infrastructure Management. In November 12, 2009, the company and NVIDIA Corp. entered into a partnership to develop Nvidia Cuda to compute unified device architecture and technology-enabled software solutions. Also, the company signed a contract with Georgia-Pacific LLC (Georgia-Pacific), a forest and consumer products company, to implement its Supply Chain Visibility and Collaboration Suite.

In December 2009, the company has set up a wholly owned unit in the U.S. to tap the multibillion dollar opportunities from government projects. The subsidiary, called Infosys Technologies Inc, will be headquartered in Dallas, Texas, where the company has most of their operations. In December 14, 2009, the company launched Flypp, an application platform which will empower mobile service providers to delight digital consumers through a host of ready-to-use experiential applications across the universe of devices and in December 15, 2009, they launched Finacle Advizor, an integrated platform which helps banks to deliver products and services through a fully assisted self-service channel using existing Internet banking capabilities. Also, the

company incorporated a wholly owned Brazilian subsidiary, namely Infosys Technologia Do Brasil Ltda. During the year 2009-10, Infosys Consulting Inc incorporated a wholly-owned subsidiary, Infosys Consulting India Ltd. and invested ₹ 1 crore in the subsidiary. SETLabs' IP Cell filed 31 patent applications in the United States Patent and Trademark Office (USPTO) and Indian Patent Office. In December 2009, Infosys BPO acquired 100% voting interests in McCamish Systems LLC (McCamish), a business process solutions provider based at Atlanta, US.

The business acquisition was conducted by entering into Membership Interest Purchase Agreement for a cash consideration of ₹ 173 crore and a contingent consideration of ₹ 67 crore. In March 2010, the company launched Finacle Treasury-in-a-Box, a rapid implementation framework for an integrated front, middle and back office treasury system. During the year 2010-11, the company formally launched their new corporate strategy, Building Tomorrow's Enterprise to showcase our plan for leading the services industry into the new era as the next generation global consulting and Services Company. Infosys Labs' IP Cell filed 91 patent applications in the United States Patent and Trademark Office (USPTO) and the Indian Patent Office. In February 2011, the company incorporated a wholly-owned subsidiary, Infosys (Shanghai) Company Ltd. Also, they inaugurated their first Software Development Block (I) at their Techno-park Campus II (SEZ) in Thiruvananthapuram, Kerala. A 1,800 seater Software Development Block (II) is also currently under construction at their Techno-park Campus II (SEZ) in Thiruvananthapuram, Kerala. The name of the company was changed from Infosys Technologies Ltd. to Infosys Ltd. with effect from June 16, 2011.

In November 2011, Atlas Copco AB entered into an agreement with the company to handle parts of its financial processes, such as accounting to reporting and

processing of supplier invoices. The project will affect approximately 230 positions within Atlas Copco, and of these Infosys will offer employment to around 70 staff working in the Czech Republic. The transition of services to Infosys is planned to begin on November 16, 2011. In December 2011, the company signed a multi-year Transformation and Business IT services contract with Syngenta AG. In a landmark contract that will provide consistency and predictability of service delivery, Infosys will consolidate Syngenta's Global Business IT services landscape under a single shared services engagement. In February 2012, Bharti Airtel chooses the company as its partner for Airtel Money, mobile wallet service by a mobile operator. Under this partnership, Infosys Wallet-Edge, the mobile commerce platform will enable the ubiquitous mobile wallet service to support cashless payments and settlements needs of diverse customer segments.

Infosys Limited (Infosys) provides business consulting, technology, engineering and outsourcing services. Its end-to-end business solutions include consulting and systems integration comprising consulting, enterprise solutions, systems integration and advanced technologies; business information technology (IT) services consisting application development and maintenance, independent validation services, infrastructure management, engineering services comprising product engineering and life cycle solutions and business process management; products, business platforms and solutions, including Finacle. In November 2013, the Company announced that Infosys BPO, the business process outsourcing subsidiary announced the opening of a new delivery center in Eindhoven, the Netherlands.

iii. OVERVIEW OF COMPANY

Established in 1981, Infosys is a NYSE listed global consulting and IT services company with more than 158,000 employees. From a capital of US$ 250,

they have grown to become a US$ 8.095 billion (LTM Q3 FY14 revenues) company with a market capitalization of approximately US$ 33 billion.

Industry	IT services, IT consulting
Founded	2 July 1981
Founders	Narayan Murthy, Nandan Nilekani, Ashok Arora, N. S. Raghavan, S. Gopalakrishnan, S.D. Shibulal and K. Dinesh
Headquarters	Electronics City, Bangalore, Karnataka, India
Area served	Worldwide
Services	IT, business consulting and outsourcing services
Revenue	US$ 8.24 billion (2014)
Operating income	US$ 1.97 billion (2014)
Profit	US$ 1.75 billion (2014)
Total assets	US$ 9.53 billion (2014)
Total equity	US$ 7.93 billion (2014)
Employees	173,000 (As of October 31st, 2014)
Website	infosys.com

In the journey of over 30 years, company have catalyzed some of the major changes that have led to India's emergence as the global destination for software services talent. The company pioneered the Global Delivery Model and became the first IT Company from India to be listed on NASDAQ. Our employee stock options program created some of India's first salaried millionaires.

Stress management at INFOSYS

Stress is a rising concern among employees, especially those belonging to the IT sector. It not only affects employees' health and productivity but also hampers the financial health of the company. The IT and health ministers became concerned about

the effect of stress in the IT sector in India - which was detrimental to employee health and likely to wipe off a large amount of national income in India. Stress had hampered the professional and personal life of the employees which necessitated the need for a work life balance in the organization. Infosys Technologies had initiated various programmes for the work life balance of their employees. The systematic approach toward work life balance would help employees to attain individual as well as organizational goal.

To understand the impact of stress on employee health and productivity with stress management. To gain an insight into the importance of work life balance in the organization and to understand the initiatives of Infosys on work life balance and their impact. Infosys adopted the meditation program to overcome the stress.

Benefits of Meditation

Whilst modern medicine has no doubt made many advances, sometimes one may feel left alone in handling what life throws at us. Stress and anxiety are two experiences which people often feel they could do better without. Most medical practioners recognize that stress & anxiety contribute to ill health and disease, yet views differ about how best to cope with these conditions. Stress reduction has been shown in many researches to be beneficial to general well being, as it improves physical and psychological health and lifestyle awareness.

Stress comes in many forms and can be seen as anything that produces the emotional and mental pressure that leads to worry, anxiety, fear, anger, apprehensions, even over-excitements to which our body responds in a quick and inefficient way. According to medical researches over 90% of 21st century illnesses can be traced back to psycho-somatic forces, over 95% of headaches are caused by stress along with many other physical ailments like acidity, indigestion, and even

heart attacks. Did you know the highest moment for heart attacks is early Monday morning, after a relaxing weekend the bodies stress levels escalate when facing the start of a new work week.

Many people have found that a simple stress management technique like meditation may help the employee to gain relief.

4.4.6 ERICSON

i. ABOUT COMPANY

Ericsson is a world-leading provider of telecommunications equipment and services to mobile and fixed network operators. Over 1,000 networks in more than 180 countries use our network equipment, and more than 40 percent of the world's mobile traffic passes through Ericsson networks.

They are one of the few companies worldwide that can offer end-to-end solutions for all major mobile communication standards. Our networks, telecom services and multimedia solutions make it easier for people, across the world, to communicate and as communication changes the way they live and work, Ericsson is playing a key role in this evolution. Using innovation to empower people, business and society, they are working towards the Networked Society, in which everything that can benefit from a connection will have one.

ii. HISTORY OF COMPANY

Lars Magnus Ericsson was, no doubt, the entrepreneur behind the early years of telephone manufacturing. There were others of course, but it seemed that Ericsson was intent to succeed. Australia adopted as its first standard wall telephone an Ericsson Fiddle back, which was built in Sweden to Australian specifications and

after 1901 became known as the "Commonwealth Ericsson" (P.M.G. type No.1 - 131MW). These instruments date back to the mid-1890s, and many were still in operation in regional areas in the 1960s.

Lars Magnus Ericsson opened his electro-mechanical workshop in rented premises in Stockholm in 1876. His assets were not extensive but consisted of an instrument-maker's lathe, a working capital of around 1000 Krona (A$50), and a twelve year old assistant. In the early days of his venture he was involved in the repair of telephone equipment and other electrical devices, but he soon began to produce improved equipment of his own design - designs such as a dial telegraph instrument for use in railway systems, and a fire telegraph system for small communities. Such developments won him recognition for his work in this field. Ericsson's reputation for quality work soon enabled him to obtain orders from a wide variety of public and private authorities in areas such as telegraphy, fire protection, police administration and railway systems.

Not long after opening his workshop, Ericsson brought in a former workmate, Carl Anderson, as his first and only partner. Anderson, who had studied abroad with the assistance of Government grants, contributed 1000 Krona to the enterprise, which then became known as L.M. Ericsson & Co. Anderson continued as Ericsson's closest associate for many years, even after the partnership was dissolved and the founder regained complete control of the company.

In 1878, at the age of 32, Lars married Hilda Simonson. Hilda became an active colleague in the new and thriving business, and for a number of years the winding of electromagnet coils using silk insulated copper wire was given to Mrs. Ericsson, at first working alone and later with the help of assistants. It has also

been recorded that at times when Mrs. Ericsson was confined to bed, she continued with the winding machine propped on her knees.

The second major event of 1878 was the delivery of the first telephones of Ericsson's manufacture. American-made instruments had been introduced in Sweden the previous year, and some of them had already been in Ericsson's shop for repair. The experience gained from the repair work, and with studies Ericsson had undertaken after reading accounts of Bell's patent, enabled him to design and produce serviceable instruments. Other orders followed in close succession, and although the telephone continued to be regarded as a luxury, Ericsson intensified his efforts to improve his instruments. The breakthrough of telephony in Sweden occurred in 1880 when the American Bell Company, using American equipment, constructed the first telephone networks. The situation was critical for Ericsson, as he stood to lose virtually all of his home market unless he and Anderson could demonstrate convincingly that their equipment was equal, if not superior, to Bell's.

The showdown came in 1881, when the city of Galve on the Baltic coast was to be equipped with a local telephone system. The Bell Company in Stockholm offered to install and operate a system for 200 krona per subscriber per year, which was to be based on a five-year contractual arrangement. Instruments from Bell and Ericsson telephones were set up for testing, it was agreed by the 'testers' that the Ericsson telephones were simpler, stronger and more attractive. There were also other contenders plying their interests in the project.

Early in 1880 Ericsson had ten workmen on his payroll. By 1884, the number was closer to one hundred. The growth of the fledgling enterprise was to continue, albeit not without some setbacks, for more than one hundred years. One of Ericsson's important contributions was to give telephone instruments and their necessary

components a light, attractive appearance without any degradation of technical performance. In this respect, Ericsson instruments differed substantially from the early equipment offered by other manufacturers. Ericsson instruments produced during the last two decades of the nineteenth century, widely imitated by other companies, are today collectors' items par excellence, throughout the world.

Ericsson contributed substantially to the design of early telephone exchanges, designing and producing the first 'multiple desk' in Europe in 1884. Many of these switchboards were used for more than half a century. In the concluding years of his business life, Ericsson participated actively in the design and engineering of the then new central battery system. However, he still insisted on continuing product excellence and his standards were higher than those then considered necessary for foreign competitors. The solid quality of Ericsson's work and the elegance of his designs established his products as symbols of the finest available.

By 1896 the company had approximately five hundred employees in nearly all countries. At that time, Ericsson transferred the business of L.M. Ericsson & Co. to a new corporation, Aktiebolaget L.M. Ericsson & Co., capitalised at one million krona. He served as Managing Director and Chairman of the Board in the new corporation. He retired in 1900, but displayed an active interest in the company until 1903, when he disposed of his shareholdings and severed all formal connections with the enterprise he had founded and guided to a position of international stature. He took up farming on an estate near Stockholm in 1906 and died in December 1926, at the age of eighty.

Founded	Stockholm, Sweden (1876)
Founders	Lars Magnus Ericsson
Headquarters	Kista, Stockholm, Sweden
Area served	Worldwide
Revenue	SEK 227.4 billion (2013)
Operating income	SEK 17.8 billion (2013)
Profit	SEK 12,1 billion (2013)
Total assets	SEK 269,1 billion (2013)
Total equity	SEK 140,2 billion (2013)
Employees	115,382 (June 2014)
Parent	Investor AB (5.0%)
Subsidiaries	Ericsson-LG (75%)
Website	Ericsson.com

iii. OVERVIEW OF COMPANY

At Ericsson, these are making the Networked Society a reality, where anything that can benefit from being connected is connected. To realize this vision, they provide industry-leading network equipment and software, as well as services for network and business operations, their portfolio also includes products for the enterprise, cable, mobile platform and power module markets. Their products and services are as follows.

- **Networks**

A society is only as strong as its connections. And those connections need reliable networks. Mobile communications – and particularly mobile broadband – are at the heart of today's Networked Society. Ericsson is the world's biggest supplier of mobile networks, chosen by around half of the world's operators with commercial mobile broadband networks.

The leader in the development and deployment of LTE systems around the world, Ericsson is also continuing research into innovative solutions for GSM, which still provides voice and data services for billions of people; WCDMA, which brought mass mobile broadband to the world; and CDMA, which now provides cost-effective mobile-data connections. And Company's mobile broadband modules are connecting a growing range of devices, systems and even vehicles to the internet.

Besides mobile networks, Ericsson is a strong player in core networks, microwave transport, Internet Protocol (IP) networks and fixed-access solutions for copper and fiber. In addition, they keep these networks running at optimal efficiency with the portfolio of operations support systems (OSS).

With communications playing an increasing role in our Networked Society, communications networks are expanding beyond the traditional telecom sphere.

Our energy-efficient networks and solutions are contributing to sustainable growth for societies around the world by making telecommunications accessible and affordable for all (Networks account for about 55 percent of Ericsson's net sales).

- **Services**

People are at the heart of our services business: 57,000 professionals in 180 countries, including more than 20,000 employees outsourced to Ericsson in managed services contracts. Most of our customers are operators, but company also works with other adjacent industries such as TV and media, public safety and utilities.

Company used to combine local capabilities with global expertise. That means it base their competence and delivery resources close to their customers, while the global processes, methods and tools allow this to move our competences anywhere in the world, making the most of global learning and knowledge-sharing.

Our four Global Services Centers – in China, India, Mexico and Romania – house Global Network Operation Centers, which in combination with our local and regional centers manage networks for 900 million subscribers. The Global Services Centers also develop competence to support our regional service-delivery organizations in delivering professional services for the ICT sector in areas such as complex consulting, IT, systems integration, network rollout and customer support.

With the people, processes and partnerships, company will help customers expand their businesses and keep pace with the latest industry developments. Operators can maximize network quality and performance, and focus on their customers, by having Ericsson integrate equipment from multiple vendors, handle multi-technology change programs, design and integrate new solutions, and manage their operations.

Company services business accounts for about 40 percent of Ericsson's net sales. Company is also among the world's top 10 IT services providers (www.servicestop100.org and Ovum's ICT services market-share report).

- **Support Solutions**

Business Unit Support Solutions develops and delivers software-based solutions for operations and business support systems (OSS and BSS), real-time, multi-screen and on demand TV and Media solutions as well as solutions and services for the emerging M-Commerce eco-system.

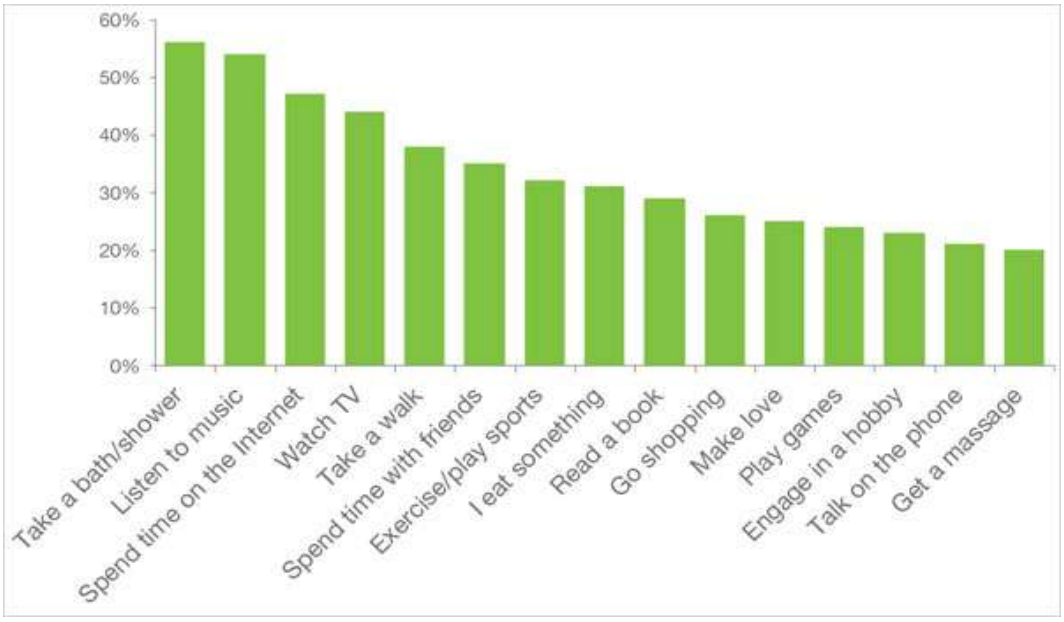
Stress management in ERICSSON:

Ericsson is using 5point techniques to reduce stress apart from regular counseling from the experts and training institutions

These are as follows: 1. Drinking water, 2. Breath/Inhale, 3. Purging, 4. Nixing the attitude and 5. Walk it out.

1. **Drinking water:** Drinking water is the best stress-busting elixir on the market. Aiming half of person's body weight in ounces each day. When employees are working the corporate grind. It can be easy to forget to take trips to the water cooler. Instead keeping a gigantic cup of water or Nalgene bottle by employee side to sip on throughout the day. Water keeps employee internal functioning and working at optimal performance to help employee keep ones focus.
2. **Inhale/ Breath:** A delicious sip of pure oxygen is proven to work wonders for the mind and body to help employee manage stress and keep employee cool. He/she should do 4counts in and 4counts out.
3. **Purging:** Purging can be one of the best stress busters employee should take 5 minutes to clear the crap off of your desk and reorganize employee tasks. Organization leads to focus. Focus leads to accomplishment. Accomplishment leads to feeling of satisfaction and achievement. Leaving the office with an organized desk and list of tasks for the next day will help you start the day feeling a whole lot better about what is in store the rest of the week and will give employee a stronger sense of control.
4. **Nixing the attitude:** Doing an "inner-talk" checking and making sure that employee own attitude is making employee miserable, sometimes employees become their own worst enemy and it is the inner-monologues that are toxic to one's sanity.
5. **Walk it out:** Getting up and simply one should take a walk. Employee should go outside and get a reinvigorating dose of sun and vitamin D. employee may think he/she don't have time to leave the job but not much effective are employee really when he/she frustrated and cannot focus on the task at hand. Removing himself/herself for about five minutes to jump and start those healthy endorphins.

There are some levels of stress management shown in following figure.



Source: Ericsson Consumer Lab Analytical Platform 2011 (online sample)

Figure – 4.1: Levels of Stress Management in Ericsson

Table – 4.2: Employee Stress Management Strategies of the Chosen IT firms

Name of the Company	Technique of Management of stress
CISCO SYSTEMS	Introduced courses on stress management and HRM
WIPRO LIMITED	Appointed stress trainers from different consulting centers. They use to teach reiki, yoga, meditation etc.
NOUS INFOSYSTEMS	Conducting tournament of different games.
INFOSYS LTD	Incorporating concept of fun at work
ERICSSON	Maintaining 5 point concept

Source: Field survey

Majority of IT managements discourage employees from working late and insists on health and fitness. Their philosophy is sound planning and work-life management and strategy is flexi timing allowing employees to work at their time schedules. After work hours, it is exercise time. These companies believe that productivity levels peak when-their employees are happy.

1. Delegating responsibility
2. Time management
3. Person environment fit
4. The political climate
5. Sense of humour
6. Social support
7. Professional development
8. A process of stress management
9. Biofeedback
10. Improving communication
11. Learn to relax

Chapter - V

DATA ANALYSIS AND INTERPRETATION

5.1 INTRODUCTION

5.2 ANALYSIS

CHAPTER - 5
DATA ANALYSIS AND INTERPRETATION

5.1 INTRODUCTION:

This chapter aims to understanding the views of IT employee levels of stress among different cadre. The data has been collected by administering a structured questionnaire and analyzed in this chapter.

Data analysis and interpretation is an integral part of the research. Ability of a research to meet the research objectives depends upon the methodology used for data analysis and interpretation. This chapter presents the detailed analysis of the data collected from 425 respondents. The data collected is edited and presented in the form of tables and charts for further analysis. Employees, managerial carders working in the organizations are taken as one face of the coin and non-managerial who are facing the stress was considered as the other face of the coin. The employees working in the organizations make all-out efforts to implement the policies laid down by the management. Any change in the working environment is ultimately reflected on the employees working in the IT companies. Keeping this in mind, the researcher, identified employees working both in managerial and non-managerial cadre. The data collected from the five IT company employees are analysed according to the Occupational stress Index adopted.

5.2 ANALYSIS:

The following statistical methods were employed in the present study for proper analysis and interpretation.

a. Descriptive statistics
b. One-way ANOVA
c. Independent Samples ‘t’ test
d. Regression Analysis-Stepwise multiple
e. Pearson’s product moment correlation

Table – 5.1: Sample Size of the Study

Cadre	Name of the Companies						
	WIPRO	CISCO	INFOSYS		ERICSON	NOUS	Total
	Bangalore	Bangalore	Bangalore	Mysore	Bangalore	Bangalore	
Team Manager (Top Level)	5	5	3	2	5	5	25
Sr. Engineer (Middle Level)	45	45	30	15	45	45	225
Jr. Engineer (Bottom level)	35	35	20	15	35	35	175
Total	**85**	**85**	**85**		**85**	**85**	**425**

Source: Field Survey

A total of 425 employees taken for research from five companies among major IT companies in Karnataka as shown in the table 85% respondents selected from each companies (Ericson, Wipro, Cisco, Nous info systems and Infosys). Except Infosys all four companies are from Bangalore, researcher has chosen 53% employees from Infosys situated in Bangalore and 32% employees from Infosys situated in Mysore.

The study has included data from employees of different cadres 25% respondents are Managers, 225% respondents are Sr. Engineers and 125 respondents are Jr. Engineers. The opinions expressed by the sample respondents have been presented in multi column tables to facilitate easy understanding of stress level among IT employees.

Employee centricity:

The respondents were asked to reveal their opinion whether all employees get individual attention and award and reward for reaching target in time on five point scales. All of the employee centricity and all the information extracted from the employees with the help of Likert's five point scale of questionnaire which includes strongly agree, agree, undecided, disagree and strongly disagree.

Table – 5.2: Likert's Scale

Sl. No.	Categories of response	True keyed Items	False Keyed Items
1	Never/Strongly disagree	1	5
2	Seldom / Disagree	2	4
3	Sometimes/undecided	3	3
4	Mostly/Agree	4	2
5	Always/Strongly agree	5	1

Source: Field survey

To meet framed objectives researcher has been used Occupational stress Index by Srivatsava and Singh (1974) which have examined the 12 components of day today environment of IT employees those are Role overload, Role ambiguity, Role Conflict, Unreasonable group and Political pressure, Responsibility for persons, Under-participation, Powerlessness, Poor peer relations, Intrinsic impoverishment, low status, strenuous working conditions and Unprofitability.

Table – 5.3: Showing the Selection of Tool

Sl. No.	Tools	Variables Measured
1	The Occupational Stress Index by Srivastava and Singh (1974)	Occupational Stress (12 subscales)

The scores were divided into 3 categories that is High, Moderate and low, following the principles of normal distributions the score falling above +1sd, between + or – 1sd and below -1sd were categorized respectively as to indicate high moderate and low level of occupational stress.

Table – 5.4: Sub Scales

Sub Scales	Low	Moderate	High
I	6-14	15-22	23-30
II	4-9	10-12	13-20
III	5-12	13-17	18-25
IV	4-9	10-14	15-20
V	3-7	8-11	12-15
VI	4-9	10-12	13-20
VII	3-7	8-11	12-15
VIII	4-8	9-13	14-20
IX	4-9	10-13	14-20
X	3-6	7-11	12-15
XI	4-9	10-12	13-20
XII	2-4	5-7	8-10
Scale as a whole	46-122	123-155	156-230

The above Table No. 5.4 presents the data in support of the First Objective of the study i.e., the extent of occupational stress experienced by IT employees.

The analysis of the data show that employees of IT Company are suffering with varied level of stress, some are facing High level of stress, and some are facing moderate level of stress and some of employees facing low level of stress. Among 425 respondents 45% were facing high level of stress for work overload, 104 were facing low level of stress and 276 employees are facing moderate level of stress in Occupational stress index role ambiguity, 79% respondents are facing high level of stress. 153 respondents facing moderate level of stress and 193 respondents are facing low level of stress. One more occupational stress index of under participation, 128 employees facing high level of stress, 174 respondents facing moderate level of stress and 123 respondents facing low level of stress.

VERIFICATION OF HYPOTHESES:

Hypothesis means a supposition or explanation that is provisionally accepted in order to interpret certain events or phenomena and to provide guidance for further investigation. A hypothesis may be proven correct or wrong and must be capable of

refutation. If it remains un-refuted by facts, it is said to be verified or corroborated. In this study researcher has formulated 7 hypotheses. Each hypothesis is sequentially verified.

H1: IT employees experience moderate levels of occupational stress.

Table showing distribution of IT employees falling under different levels of occupational stress and results of chi-square tests.

Table – 5.5: Level of Stress

Component		Levels of stress			Chi-square test	P value
		Low	Moderate	High		
Role overload	F	104	276	45	203.355	.001
	%	24.5	64.9	10.6		
Role Ambiguity	F	193	153	79	47.228	.001
	%	45.4	36.0	18.6		
Role Conflict	F	176	212	37	120.569	.001
	%	41.4	49.9	8.7		
Unreasonable Group and Political Pressure	F	105	274	46	197.708	.001
	%	24.7	64.5	11.5		
Responsibility for persons	F	100	276	49	200.249	.001
	%	24.7	64.9	11.5		
Under-participation	F	123	174	128	11.158	.004
	%	28.9	40.9	30.1		
Powerlessness	F	180	213	32	131.186	.001
	%	42.4	50.1	7.5		
Poor peer relations	F	74	303	48	277.981	.001
	%	17.4	71.3	11.3		
Intrinsic impoverishment	F	151	204	70	64.296	.001
	%	35.5	48.0	16.5		
Low status	F	182	231	12	186.499	.001
	%	42.8	54.4	2.8		
Strenuous working conditions	F	95	240	90	102.471	.001
	%	22.4	56.5	21.2		
Unprofitability	F	49	240	136	129.096	.001
	%	11.5	56.5	32.0		
Total occupational stress	F	141	275	9	249.732	.001
	%	33.2	64.70	2.10		

1. **Role Overload**: In this component, it is found that a majority of the IT employees had moderate levels (64.9%) of stress, 24.5% of them experienced low levels of stress, and remaining 10.6% of them had high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =203.355; P=.001), further confirming that majority of the IT employees experienced moderate levels of stress.

2. **Role Ambiguity:** In the role ambiguity came to know that 45.4% got low level of stress, 36% moderate level stress and 18% got high level of stress. When chi-square test was applied to various frequencies of levels of role ambiguity, a significant X^2 value was observed (X^2 =47.228; P=.001).
3. **Role Conflict**: In this component, 49.9% of the IT employees had moderate levels of stress, 41.4% of them experienced high levels of stress, and remaining 8.7% of them had high levels of stress. When chi-square test was applied to various frequencies of levels of Role Conflict, a significant X^2 value was observed (X^2 =120.569%; P=.001), further confirming that majority of the IT employees experienced moderate levels of stress.
4. **Unreasonable Group and Political Pressure**: In this component, majority of the IT employees had moderate levels (64.5%) of stress, 24.7% of them experienced high levels of stress, and remaining 11.5% of them had low levels of stress. When chi-square test was applied to various frequencies of levels of unreasonable group and political pressure, a significant X^2 value was observed (X^2 =197.708; P=.001), further confirming that majority of the IT employees experienced moderate levels of stress.
5. **Responsibility for Persons:** In this component, majority of the IT employees had moderate levels (64.9%) of stress, 24.7% of them experienced high levels of stress, and remaining 11.5% of them had high levels of stress. When chi-square test was applied to various frequencies of levels of responsibility for persons, a significant X^2 value was observed (X^2 =200.249; P=.001), further confirming that majority of the IT employees experienced moderate levels of stress.

6. **Under-Participation**: In this component, 40.9% of the IT employees had moderate levels of stress, 30.1% of them experienced low levels of stress, and remaining 28.9% of them had high levels of stress. When chi-square test was applied to various frequencies of levels of under-participation, a significant X^2 value was observed (X^2 =11.158; P=.004).
7. **Powerlessness**: In this component, majority of the IT employees had moderate levels (50.1%) of stress, 42.4% of them experienced high levels of stress, and remaining 7.5% of them had low levels of stress. When chi-square test was applied to various frequencies of levels of Powerlessness, a significant X^2 value was observed (X^2 =131.186; P=.001), further confirming that majority of the IT employees experienced moderate levels of stress.
8. **Poor Peer Relations**: In this factor, majority of the IT employees had moderate levels (71.3%) of stress, 17.4% of them experienced high levels of stress, and remaining 11.3% of them had low levels of stress. When chi-square test was applied to various frequencies of levels of Poor peer relations, a significant X^2 value was observed (X^2 =277.981; P=.001), further confirming that majority of the IT employees experienced moderate levels of stress.
9. **Intrinsic Impoverishment**: In this component, 48.5% of the IT employees had moderate levels of stress, 35.5% of them experienced high levels of stress, and remaining 16.5% of them had low levels of stress. When chi-square test was applied to various frequencies of levels of Intrinsic impoverishment, a significant X^2 value was observed (X^2 =64.296; P=.001).
10. **Low Status**: In this part, majority of the IT employees had moderate levels (54.4%) of stress, 42.8% of them experienced high levels of stress, and remaining 2.8% of them had low levels of stress. When chi-square test was

applied to various frequencies of levels of Low status, a significant X^2 value was observed (X^2 =186.499; P=.001), further confirming that majority of the IT employees experienced moderate levels of stress.

11. **Strenuous Working Conditions**: In this element, researcher find majority of the IT employees had moderate levels (56.5%) of stress, 22.4% of them experienced high levels of stress, and remaining 21.2% of them had low levels of stress. When chi-square test was applied to various frequencies of levels of strenuous working conditions, a significant X^2 value was observed (X^2 =102.471; P=.001), further confirming that majority of the IT employees experienced moderate levels of stress.
12. **Unprofitability**: In this section, study find majority of the IT employees had moderate levels (56.5%) of stress, 32% of them experienced low levels of stress, and remaining 11.5% of them had high levels of stress. When chi-square test was applied to various frequencies of levels of Unprofitability, a significant X^2 value was observed (X^2 =129.096; P=.001), further confirming that majority of the IT employees experienced moderate levels of stress.

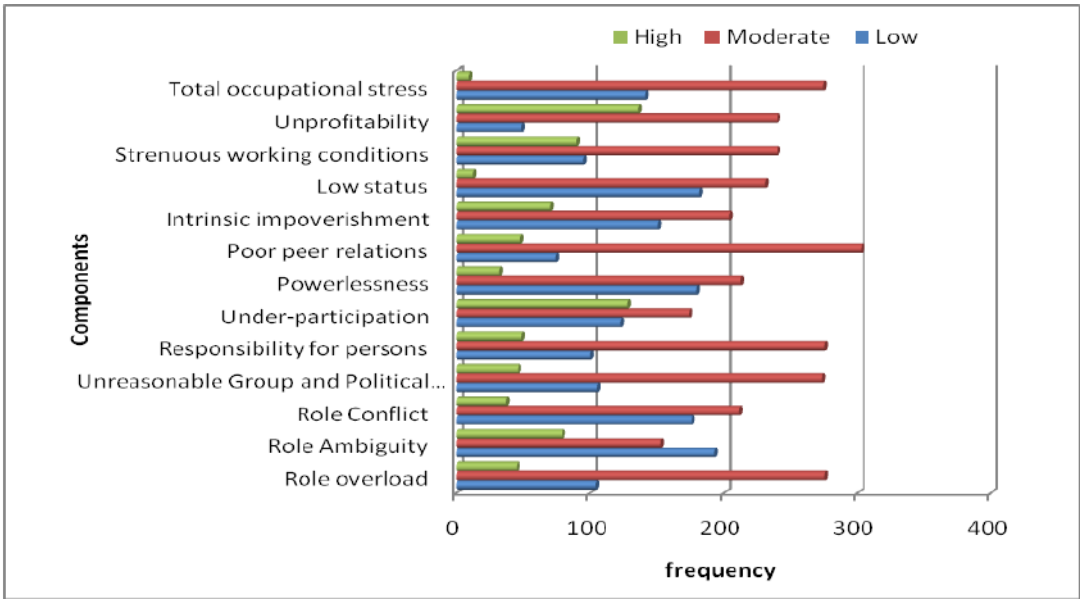


Figure – 5.1: Levels of Stress

Second Objective: To analyze the factors which cause stress among the IT employees which consists of age, gender, marital status and educational background.

Influence of age on occupational stress of IT employees.

In terms of age, three age groups of respondents in 3 sections are considered that is 20-25, 26-40 and 41-55. These categories are observed for the level of stress they are suffering in different components of occupational stress index.

Table – 5.6: Showing distribution of the sample by age

Age	No. of Respondents
20 – 25	153
26 – 40	221
41 – 55	**51**
Total	**425**

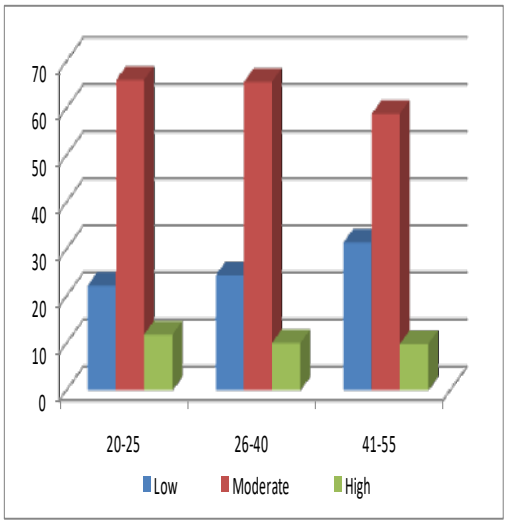
Source: Field Survey

H2: IT employees with different age groups differ significantly in their occupational Stress.

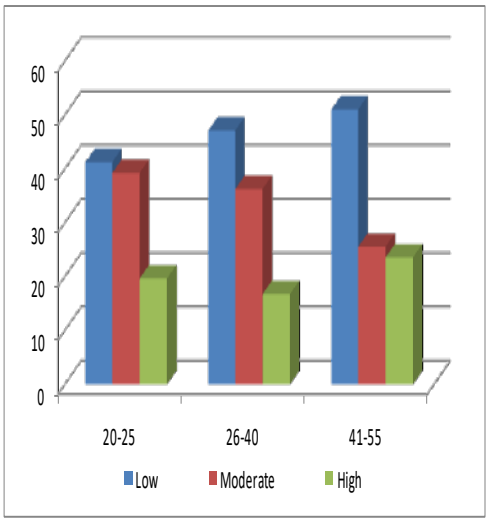
Table – 5.7: Stress in different Age Group

Components of Occupational Stress	Age Groups		Developmental Stage			Total	Test Statistics
			Low	Moderate	High		
Role Overload	20-25	Frequency	34	101	18	153	
		Percent	22.2%	66.0%	11.8%	100.0%	
	26-40	Frequency	54	145	22	221	X^2=1.959
		Percent	24.4%	65.6%	10.0%	100.0%	P=.743
	41-55	Frequency	16	30	5	51	
		Percent	31.4%	58.8%	9.8%	100.0%	
Role Ambiguity	20-25	Frequency	63	60	30	153	
		Percent	41.2%	39.2%	19.6%	100.0%	
	26-40	Frequency	104	80	37	221	X^2=4.252
		Percent	47.1%	36.2%	16.7%	100.0%	P=.373
	41-55	Frequency	26	13	12	51	
		Percent	51.0%	25.5%	23.5%	100.0%	
Role Conflict	20-25	Frequency	58	85	10	153	
		Percent	37.9%	55.6%	6.5%	100.0%	
	26-40	Frequency	98	101	22	221	X^2=4.040
		Percent	44.3%	45.7%	10.0%	100.0%	P=.401
	41-55	Frequency	20	26	5	51	
		Percent	39.2%	51.0%	9.8%	100.0%	
Unreasonable Group & Political Pressure	20-25	Frequency	45	86	22	153	
		Percent	29.4%	56.2%	14.4%	100.0%	
	26-40	Frequency	49	156	16	221	X^2=10.599
		Percent	22.2%	70.6%	7.2%	100.0%	P=.031
	41-55	Frequency	11	32	8	51	
		Percent	21.6%	62.7%	15.7%	100.0%	

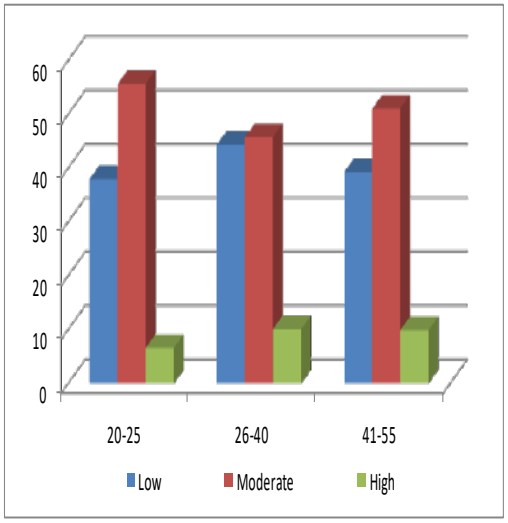
Responsibility for persons	20-25	Frequency	39	96	18	153	
		Percent	25.5%	62.7%	11.8%	100.0%	
	26-40	Frequency	49	146	26	221	X^2=.753
		Percent	22.2%	66.1%	11.8%	100.0%	P=.945
	41-55	Frequency	12	34	5	51	
		Percent	23.5%	66.7%	9.8%	100.0%	
Under-participation	20-25	Frequency	44	59	50	153	
		Percent	28.8%	38.6%	32.7%	100.0%	
	26-40	Frequency	63	90	68	221	X^2=3.382
		Percent	28.5%	40.7%	30.8%	100.0%	P=.496
	41-55	Frequency	16	25	10	51	
		Percent	31.4%	49.0%	19.6%	100.0%	
Powerlessness	20-25	Frequency	71	68	14	153	
		Percent	46.4%	44.4%	9.2%	100.0%	
	26-40	Frequency	92	116	13	221	X^2=4.974
		Percent	41.6%	52.5%	5.9%	100.0%	P=.290
	41-55	Frequency	17	29	5	51	
		Percent	33.3%	56.9%	9.8%	100.0%	
Poor Peer Relations	20-25	Frequency	22	114	17	153	
		Percent	14.4%	74.5%	11.1%	100.0%	
	26-40	Frequency	41	156	24	221	X^2=2.336
		Percent	18.6%	70.6%	10.9%	100.0%	P=.674
	41-55	Frequency	11	33	7	51	
		Percent	21.6%	64.7%	13.7%	100.0%	
Intrinsic Impoverishment	20-25	Frequency	64	64	25	153	
		Percent	41.8%	41.8%	16.3%	100.0%	
	26-40	Frequency	74	113	34	221	X^2=6.305
		Percent	33.5%	51.1%	15.4%	100.0%	P=.177
	41-55	Frequency	13	27	11	51	
		Percent	25.5%	52.9%	21.6%	100.0%	
Low Status	20-25	Frequency	69	81	3	153	
		Percent	45.1%	52.9%	2.0%	100.0%	
	26-40	Frequency	94	120	7	221	X^2=1.516
		Percent	42.5%	54.3%	3.2%	100.0%	P=.824
	41-55	Frequency	19	30	2	51	
		Percent	37.3%	58.8%	3.9%	100.0%	
Strenuous Working Conditions	20-25	Frequency	34	78	41	153	
		Percent	22.2%	51.0%	26.8%	100.0%	
	26-40	Frequency	47	132	42	221	X^2=6.105
		Percent	21.3%	59.7%	19.0%	100.0%	P=.191
	41-55	Frequency	14	30	7	51	
		Percent	27.5%	58.8%	13.7%	100.0%	
Unprofitability	20-25	Frequency	15	83	55	153	
		Percent	9.8%	54.2%	35.9%	100.0%	
	26-40	Frequency	25	132	64	221	X^2=4.522
		Percent	11.3%	59.7%	29.0%	100.0%	P=.340
	41-55	Frequency	9	25	17	51	
		Percent	17.6%	49.0%	33.3%	100.0%	
Total	20-25	Frequency	49	101	3	153	
		Percent	32.0%	66.0%	2.0%	100.0%	
	26-40	Frequency	72	143	6	221	X^2=2.277
		Percent	32.6%	64.7%	2.7%	100.0%	P=.685
	41-55	Frequency	20	31	0	51	
		Percent	39.2%	60.8%	.0%	100.0%	



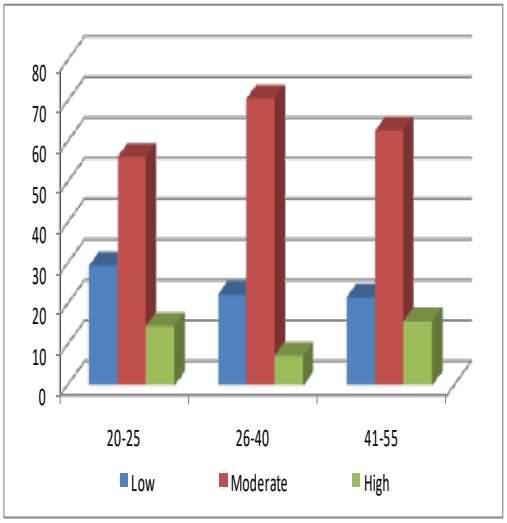
Role Overload



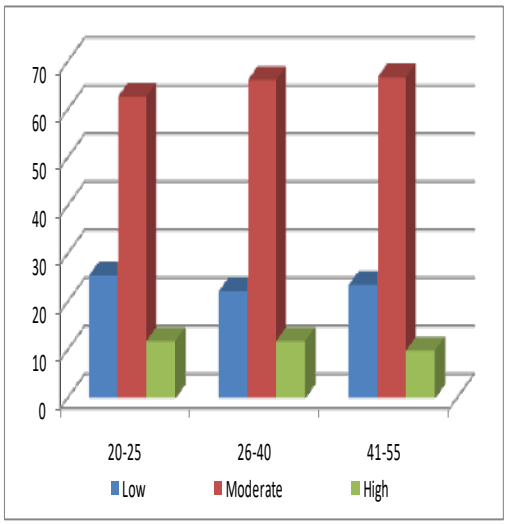
Role Ambiguity



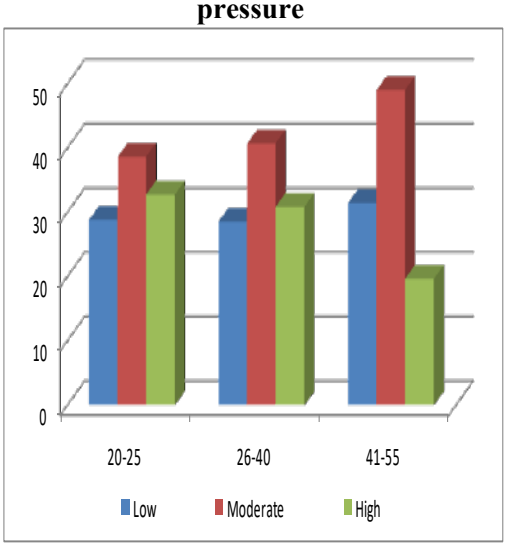
Role Conflict



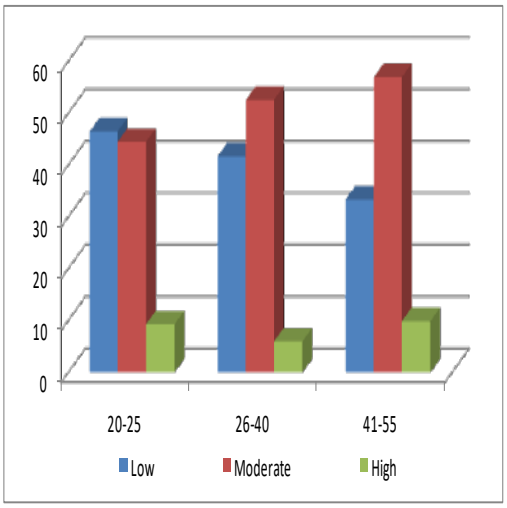
Unreasonable group and political pressure



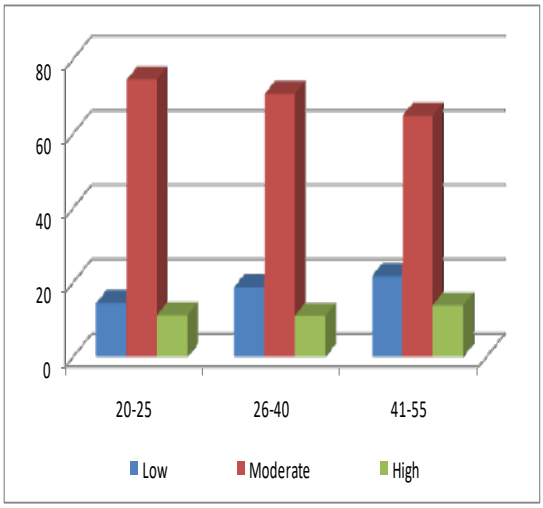
Responsibility for Persons



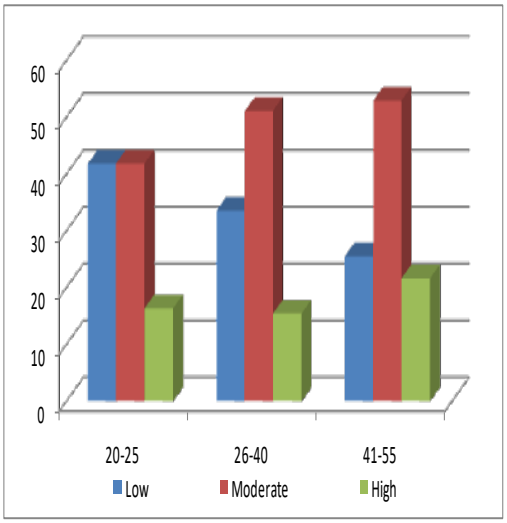
Under participation



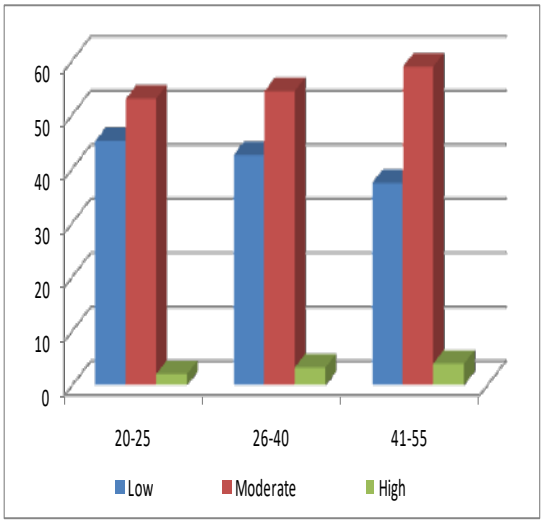
Powerlessness



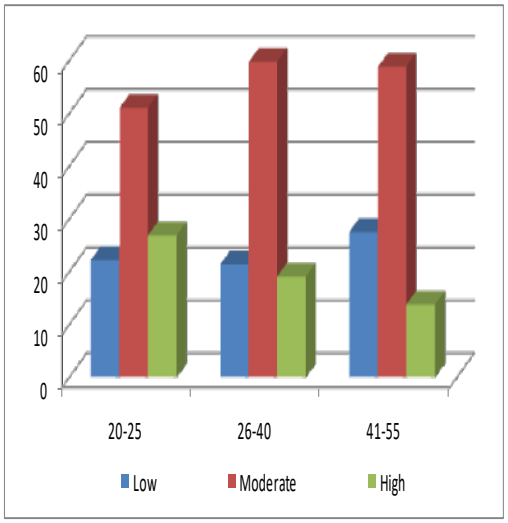
Poor Peer Relations



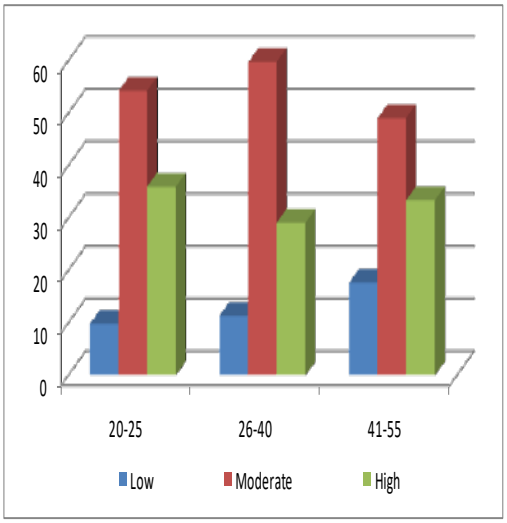
Intrinsic Impoverishment



Low Status



Strenuous Working Conditions



Unprofitability

Figure – 5.2: Stress in different Age Group.

1. **Role Overload**: In this component, it is found that in a age group 20-25 majority of the IT employees (66.0%) have moderate levels of stress, 22.2% of them experienced low levels of stress, and remaining 11.8% of them have high levels of stress. In the age group of 26-40 majority of the IT employees (65.6%) have moderate levels of stress and 24.4% employees facing Low level of stress and remaining 11.8% of them have high levels of stress. In the age group of 41-55 majority of the IT employees (58.8%) have moderate levels of stress and 31.4% employees facing Low level of stress and remaining 9.8% of them have high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =1.959; P=.0.743), further confirming that majority of the IT employees in all the age group experiencing moderate levels of stress.
2. **Role Ambiguity**: In this component, it is found that in a age group 20-25 majority of the IT employees (41.2%) have Low levels of stress, 39.2% of them experienced Moderate level of stress, and remaining 19.6% of them have high levels of stress. In the age group of 26-40 majority of the IT employees (47.1%) have Low levels of stress and 36.2% employees facing Moderate level of stress and remaining 16.7% of them have high levels of stress. In the age group of 41-55 majority of the IT employees (51.0%) have Low levels of stress and 25.5% employees facing Moderate level of stress and remaining 23.5% of them have high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =4.252; P=.0.373), further confirming that majority of the IT employees in all the age group experiencing Low levels of stress.

3. **Role Overload**: In this component, it is found that in a age group 20-25 majority of the IT employees (55.6%) have moderate levels of stress, 37.9% of them experiencing low levels of stress, and remaining 6.5% of them have high levels of stress. In the age group of 26-40 majority of the IT employees (45.7%) having moderate levels of stress and 44.3% employees facing Low level of stress and remaining 10.0% of them have high levels of stress. In the age group of 41-55 majority of the IT employees (51.0%) have moderate levels of stress and 39.2% employees facing Low level of stress and remaining 9.8% of them have high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =4.040; P=.0.401).
4. **Unreasonable Group and Political Pressure**: In this component, it is found that in a age group 20-25 majority of the IT employees (56.2%) have moderate levels of stress, 29.4% of them experienced low levels of stress, and remaining 14.4% of them have high levels of stress. In the age group of 26-40 majority of the IT employees (70.6%) have moderate levels of stress and 22.2% employees facing Low level of stress and remaining 7.2% of them have high levels of stress. In the age group of 41-55 majority of the IT employees (62.7%) have moderate levels of stress and 21.6% employees facing Low level of stress and remaining 15.7% of them have high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =10.599; P=.0.031), further confirming that majority of the IT employees in all the age group experiencing moderate levels of stress.
5. **Responsibility for Person**: In this component, it is found that in a age group 20-25 majority of the IT employees (62.7%) have moderate levels of stress,

25.5% of them experienced low levels of stress, and remaining 11.8% of them have high levels of stress. In the age group of 26-40 majority of the IT employees (66.1%) have moderate levels of stress and 22.2% employees facing Low level of stress and remaining 11.8% of them have high levels of stress. In the age group of 41-55 majority of the IT employees (66.7%) have moderate levels of stress and 23.5% employees facing Low level of stress and remaining 9.8% of them have high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =0.753; P=.0.945), further confirming that majority of the IT employees in all the age group experiencing moderate levels of stress.

6. **Under-participation**: In this component, it is found that in a age group 20-25 majority of the IT employees (38.6%) have moderate levels of stress, 28.8% of them experienced low levels of stress, and remaining 32.7% of them have high levels of stress. In the age group of 26-40 majority of the IT employees (40.7%) have moderate levels of stress and 28.5% employees facing Low level of stress and remaining 30.8% of them have high levels of stress. In the age group of 41-55 majority of the IT employees (49.0%) have moderate levels of stress and 31.4% employees facing Low level of stress and remaining 19.6% of them have high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =3.382; P=.0.496), further confirming that majority of the IT employees in all the age group experiencing moderate levels of stress.
7. **Powerlessness**: In this component, it is found that in a age group 20-25 majority of the IT employees (46.4%) have Low levels of stress, 44.4% of them experienced Moderate levels of stress, and remaining 9.2% of them have high

levels of stress. In the age group of 26-40 majority of the IT employees (52.5%) have moderate levels of stress and 41.6% employees facing Low level of stress and remaining 5.9% of them have high levels of stress. In the age group of 41-55 majority of the IT employees (56.9%) have moderate levels of stress and 33.3% employees facing Low level of stress and remaining 9.8% of them have high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =4.974; P=.0.290), further confirming that majority of the IT employees in all the age group experiencing moderate levels of stress.

8. **Poor Peer Relations**: In this component, it is found that in a age group 20-25 majority of the IT employees (74.5%) have moderate levels of stress, 14.4% of them experienced low levels of stress, and remaining 11.1% of them have high levels of stress. In the age group of 26-40 majority of the IT employees (70.6%) have moderate levels of stress and 18.6% employees facing Low level of stress and remaining 10.6% of them have high levels of stress. In the age group of 41-55 majority of the IT employees (64.7%) have moderate levels of stress and 21.6% employees facing Low level of stress and remaining 13.7% of them have high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =2.336; P=.0.674), further confirming that majority of the IT employees in all the age group experiencing moderate levels of stress.
9. **Intrinsic Impoverishment**: In this component, it is found that in a age group 20-25 majority of the IT employees (41.8%) have moderate levels of stress, 41.8% of them experienced low levels of stress, and remaining 16.3% of them have high levels of stress. In the age group of 26-40 majority of the IT

employees (51.1%) have Moderate levels of stress and 33.5% employees facing Low level of stress and remaining 15.4% of them have high levels of stress. In the age group of 41-55 majority of the IT employees (52.9%) have moderate levels of stress and 25.5% employees facing Low level of stress and remaining 21.6% of them have high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =6.305; P=.177), further confirming that majority of the IT employees in all the age group experiencing moderate levels of stress.

10. **Low Status**: In this component, it is found that in a age group 20-25 majority of the IT employees (52.9%) have moderate levels of stress, 45.1% of them experienced low levels of stress, and remaining 2.0% of them have high levels of stress. In the age group of 26-40 majority of the IT employees (54.3%) have moderate levels of stress and 42.5% employees facing Low level of stress and remaining 3.2% of them have high levels of stress. In the age group of 41-55 majority of the IT employees (58.8%) have moderate levels of stress and 37.3% employees facing Low level of stress and remaining 3.9% of them have high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =1.516; P=.0.824), further confirming that majority of the IT employees in all the age group experiencing moderate levels of stress.
11. **Strenuous Working Conditions**: In this component, it is found that in a age group 20-25 majority of the IT employees (51.0%) have moderate levels of stress, 26.8% of them experienced high levels of stress, and remaining 22.2% of them have Low levels of stress. In the age group of 26-40 majority of the IT employees (59.7%) have moderate levels of stress and 21.3% employees facing

Low level of stress and remaining 19.0% of them have high levels of stress. In the age group of 41-55 majority of the IT employees (58.8%) have moderate levels of stress and 27.5% employees facing Low level of stress and remaining 13.7% of them have high levels of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =6.105; P=0.191), further confirming that majority of the IT employees in all the age group experiencing moderate levels of stress.

12. **Unprofitability**: In this component, it is found that in a age group 20-25 majority of the IT employees (54.2%) have moderate levels of stress, 35.9% of them experienced high levels of stress, and remaining 9.8% of them have Low levels of stress. In the age group of 26-40 majority of the IT employees (59.7%) have moderate levels of stress and 29.0% employees facing High level of stress and remaining 11.3% of them have Low levels of stress. In the age group of 41-55 majority of the IT employees (49.0%) have moderate levels of stress and 33.3% employees facing High level of stress and remaining 17.6% facing Low level of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =4.522; P=.0.340), further confirming that majority of the IT employees in all the age group experiencing moderate levels of stress.
13. **In Total** it is found that in a age group 20-25 majority of the IT employees (66.0%) have moderate levels of stress, 32.2% of them experienced low levels of stress, and remaining 2.0% of them have high levels of stress. In the age group of 26-40 majority of the IT employees (64.7%) have moderate levels of stress and 32.6% employees facing Low level of stress and remaining 2.7% of them have high levels of stress. In the age group of 41-55 majority of the IT

employees (60.8%) have moderate levels of stress and 39.2% employees facing Low level of stress. When chi-square test was applied to various frequencies of levels of role overload, a significant X^2 value was observed (X^2 =2.277; P=.0.685), further confirming that majority of the IT employees in all the age group experiencing moderate levels of stress.

H3: Male and female IT employees differ significantly in their occupational stress

Table – 5.8: Showing distribution of the sample by gender

Gender	No. of Respondents
Male	260
Female	165
Total	**425**

Source: Field Survey

Table – 5.9: Mean and SD of stress of IT Employees in Gender

Components of Occupational Stress	Gender	N	Mean	S.D	't' value	P value
Role overload	Male	260	17.14	3.92	0.828	0.408
	Female	165	17.47	3.96		
Role Ambiguity	Male	260	10.18	2.96	0.206	0.837
	Female	165	10.24	2.81		
Role conflict	Male	260	13.21	2.91	0.862	0.389
	Female	165	13.47	3.25		
Unreasonable Group and Political Pressure	Male	260	10.97	2.74	0.732	0.465
	Female	165	11.18	2.86		
Responsibility for persons	Male	260	9.07	2.30	0.002	0.999
	Female	165	9.07	2.40		
Under-participation	Male	260	11.22	2.91	1.938	0.053
	Female	165	10.66	2.83		
Powerlessness	Male	260	7.98	2.73	1.108	0.268
	Female	165	7.68	2.52		
Poor peer relations	Male	260	10.97	2.49	1.093	0.275
	Female	165	10.71	2.32		
Intrinsic impoverishment	Male	260	10.99	2.71	2.655	0.008
	Female	165	10.27	2.71		
Low status	Male	260	7.45	2.40	0.845	0.399
	Female	165	7.26	2.13		
Strenuous working conditions	Male	260	10.97	2.48	0.021	0.983
	Female	165	10.96	2.94		
Unprofitability	Male	259	6.55	1.67	2.205	0.028
	Female	165	6.94	1.90		
Total occupational stress	Male	260	126.68	17.36	0.437	0.663
	Female	165	125.92	18.03		

Df = 423

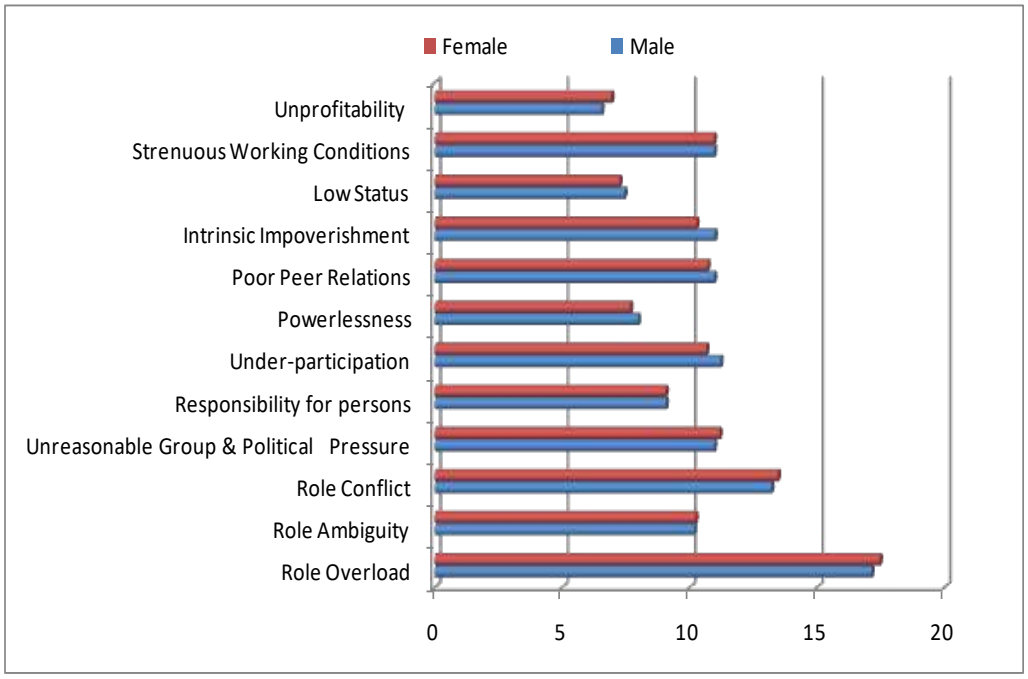


Figure – 5.3: Stress of IT Employees in Gender

1. **Role Overload:** The mean Role overload of male and female is 17.14% and 17.47%, SD is 3.91% and 3.96% respectively with 't' value 0.828 and P value 0.408 revealed non-significant influence over Role Overload in IT companies. The mean value clearly showed that female employees have more stress compare to male employees.
2. **Role Ambiguity:** Independent samples 't' test revealed a non-significant difference between mean Role ambiguity scores of male and female IT employees. 't' value of 0.206 was found to be non-significant at 0.837 level. The mean values clearly revealed that female IT employees (mean-10.24) had more stress compared to male IT employees (mean-10.18).
3. **Role Conflict:** Independent samples 't' test revealed a non-significant difference between mean Role conflict scores of male and female IT employees. 't' value of 0.862 was found to be non-significant at 0.389 level. The mean values clearly revealed that female IT employees (mean-13.47) had more stress compared to male IT employees (mean-13.21).

4. **Unreasonable Group and Political Pressure:** Independent samples 't' test revealed a non-significant difference between mean Unreasonable Group and Political Pressure scores of male and female IT employees. 't' value of 0.732 was found to be non-significant at 0.465 level. The mean values clearly revealed that female IT employees (mean-11.18) had more stress compared to male IT employees (mean-10.97).
5. **Responsibility for Persons:** Independent samples 't' test revealed a non-significant difference between mean Responsibility for Persons scores of male and female IT employees. 't' value of 0.002 was found to be non-significant at 0.999 level. The mean values clearly revealed that male IT employees (mean-9.07) had equal stress compared to female IT employees (mean-9.07).
6. **Under-participation:** Independent samples 't' test revealed a non-significant difference between mean Under-participation scores of male and female IT employees. 't' value of 1.938 was found to be non-significant at 0.053 level. The mean values clearly revealed that male IT employees (mean-11.22) had more stress compared to female IT employees (mean-10.66).
7. **Powerlessness:** Independent samples 't' test revealed a non-significant difference between mean Powerlessness scores of male and female IT employees. 't' value of 1.108 was found to be non-significant at .268 level. The mean values clearly revealed that male IT employees (mean-7.98) had more stress compared to female IT employees (mean-7.68).
8. **Poor peer relations:** Independent samples 't' test revealed a non-significant difference between mean Poor peer relations scores of male and female IT employees. 't' value of 1.093 was found to be non-significant at 0.275 level.

The mean values clearly revealed that male IT employees (mean-10.97) had more stress compared to female IT employees (mean-10.71).

9. **Intrinsic impoverishment:** Independent samples 't' test revealed a significant difference between mean Intrinsic impoverishment scores of male and female IT employees. 't' value of 2.655 was found to be significant at 0.008 level. The mean values clearly revealed that male IT employees (mean 10.99) had more stress compared to female IT employees (mean 10.27).
10. **Low status:** Independent samples 't' test revealed a non-significant difference between mean Low status scores of male and female IT employees. 't' value of .845 was found to be non-significant at .399 level. The mean values clearly revealed that male IT employees (mean-7.45) had more stress compared to female IT employees (mean-7.26).
11. **Strenuous working conditions:** Independent samples 't' test revealed a non-significant difference between mean Strenuous working conditions scores of male and female IT employees. 't' value of .021 was found to be non-significant at .983 level. The mean values clearly revealed that male IT employees (mean-10.97) had more stress compared to female IT employees (mean-10.96).
12. **Unprofitability:** Independent samples 't' test revealed a non-significant difference between mean Unprofitability scores of male and female IT employee 't' value of 2.205 was found to be non-significant at .028 level. The mean values clearly revealed that female IT employees (mean-6.94) had more stress compared to male IT employees (mean-6.55).
13. Totally on an average of all occupational stress components 't' test revealed a non-significant difference between mean total scores of male and female IT

employees 't' value of .437 found to be non-significant at .663 level. The mean value clearly revealed that male IT employee (126.68) had more stress compared to female IT employee (125.92).

H4: Married, unmarried and widower IT employees differ significantly in their occupational stress.

Table – 5.10: Distribution of Marital Status of Respondents

Name of the Gender	Numbers of Respondents
Married	200
Unmarried	215
Widow	10
Total	**425**

Source: Field Survey

Table – 5.11: One way ANOVA of Marital Status

Components of Occupational Stress	Marital Status	N	Mean	Std. Deviation	F value	P value
Role overload	Married	200	16.97	3.827	1.087	.338
	Unmarried	215	17.53	4.033		
	Widow	10	17.60	3.921		
	Total	425	17.27	3.936		
Role Ambiguity	Married	200	10.06	2.973	.946	.389
	Unmarried	215	10.29	2.800		
	Widow	10	11.20	3.458		
	Total	425	10.20	2.898		
Role Conflict	Married	200	13.11	3.076	.904	.389
	Unmarried	215	13.49	3.014		
	Widow	10	13.70	3.057		
	Total	425	13.31	3.043		
Unreasonable Group and Political Pressure	Married	200	11.04	2.701	.278	.758
	Unmarried	215	11.03	2.894		
	Widow	10	11.70	1.829		
	Total	425	11.05	2.781		
Responsibility for persons	Married	200	9.01	2.300	1.055	.349
	Unmarried	215	9.09	2.395		
	Widow	10	10.10	1.663		
	Total	425	9.07	2.338		
Under-participation	Married	200	11.08	3.002	.138	.871
	Unmarried	215	10.94	2.774		
	Widow	10	10.80	3.120		
	Total	425	11.00	2.885		
Powerlessness	Married	200	7.90	2.762	.089	.915
	Unmarried	215	7.82	2.550		
	Widow	10	8.10	2.644		
	Total	425	7.86	2.648		

Poor peer relations	Married	200	10.88	2.560	.005	.995
	Unmarried	215	10.87	2.288		
	Widow	10	10.80	2.898		
	Total	425	10.87	2.428		
Intrinsic impoverishment	Married	200	10.89	2.631	.860	.424
	Unmarried	215	10.54	2.828		
	Widow	10	10.80	2.440		
	Total	425	10.71	2.728		
Low status	Married	200	7.34	2.206	.147	.863
	Unmarried	215	7.40	2.389		
	Widow	10	7.70	2.214		
	Total	425	7.38	2.296		
Strenuous working conditions	Married	200	10.89	2.472	.221	.802
	Unmarried	215	11.05	2.832		
	Widow	10	10.80	2.860		
	Total	425	10.97	2.664		
Unprofitability	Married	199	6.53	1.731	1.955	.143
	Unmarried	215	6.87	1.804		
	Widow	10	6.60	1.647		
	Total	424	6.70	1.771		
Totals	**Married**	**200**	**125.6300**	**17.92623**	**.482**	**.618**
	Unmarried	**215**	**126.9209**	**17.36034**		
	Widow	**10**	**129.9000**	**17.20110**		
	Total	**425**	**126.3835**	**17.60457**		

Figure – 5.4: Stress of IT Employees in Marital Status

Hypothesis stated as 'Married, unmarried and widower IT employees differ significantly in their occupational stress' is rejected.

1. **Role overload:** The mean Role overload scores of the employees who are Married, Unmarried and Widow were 16.97%, 17.53% and 17.63% respectively. One way ANOVA with F value of 1.087 and significance of .338 revealed non-significant difference among employees with different marital status. Hence Widow Employees facing more stress (17.60) compare to Unmarried employees (17.53) and married respondents (17.53) in occupational stress component Role overload.
2. **Role Ambiguity:** The mean Role Ambiguity scores of the employees who are Married, Unmarried and Widow were 10.06, 10.29 and 11.20 respectively. One way ANOVA with F value of .946 and significance of .389 revealed non-significant differences among employees with different marital status. Hence widow employees facing more stress (11.20) compare to Unmarried employees (10.29) and Married employees (10.06) in occupational stress component Role Ambiguity.
3. **Role Conflict:** The mean Role Conflict scores of the employees who are Married, Unmarried and Widow were 13.11, 13.49 and 13.70 respectively. One way ANOVA with F value of .904 and significance of .389 revealed non-significant difference among employees with different marital status of respondents. Hence Widow employees facing more stress (13.70) compare to Unmarried employees (13.49) and Married employees (13.11) in occupational stress component Role conflict.

4. **Unreasonable Group and Political Pressure:** The mean Unreasonable Group and Political Pressure scores of the employees who are Married, Unmarried and Widow were 11.04, 11.03 and 11.70 respectively. One way ANOVA with F value of .278 and significance of .758 revealed non-significant difference among employees with different marital status of respondents. Hence Widow Employees facing more stress (11.70) compare to Married employees (11.04) and Unmarried employees (11.03) in occupational stress component Unreasonable Group and Political Pressure.
5. **Responsibility of Persons:** The mean Responsibility of Persons scores of the employees who are Married, Unmarried and Widow were 9.01, 9.09 and 10.10 respectively. One way ANOVA with F value of 1.055 and significance of .349 revealed non-significant difference among employees with different marital status of respondents. Widow employees facing more stress (10.10) compare to Unmarried employees (9.09) and Married employees (9.01) in occupational stress component Responsibility of Persons.
6. **Under-participation:** The mean low Under-participation of the employees who are Married, Unmarried and Widow were 11.08, 10.94 and 10.80 respectively. One way ANOVA with F value of .138 and significance of .871 revealed non-significant difference among employees with different marital status. Hence Married employees facing more stress (11.08) compare to Unmarried employees (10.94) and Widow Employees (10.80) in occupational stress component Under-Participation.
7. **Powerlessness:** The mean Powerlessness scores of the employees who are Married, Unmarried and Widow were 7.90, 7.82 and 8.10 respectively. One way ANOVA with F value of .089 and significance of .915 revealed non-

significant difference among employees with different marital status of respondents. Hence Widow employees facing more stress (8.10) compare to Married employees (7.90) and Unmarried employees (7.82) in occupational stress component Powerlessness.

8. **Poor Peer Relation:** The mean Poor peer relation scores of the employees who are Married, Unmarried and Widow were 10.88, 10.87 and 10.80 respectively. One way ANOVA with F value of .005 and significance of .995 revealed non-significant difference among employees with different marital status of respondents. Hence Married employees facing more stress (10.88) compare to Unmarried employees (10.87) and Widow Employees (10.87) in occupational stress component Poor Peer Relation.
9. **Intrinsic impoverishment:** The mean Intrinsic Impoverishment scores of the employees who are Married, Unmarried and Widow were 10.89, 10.54 and 10.80 respectively. One way ANOVA with F value of .860 and significance of .424 revealed non-significant difference among employees with different marital status among respondents. Hence married employees facing more stress (10.89) compare to Widow employees (10.80) and Unmarried employees (10.54) in occupational stress component Intrinsic Impoverishment.
10. **Low Status:** The mean low status scores of the employees who are Married, Unmarried and Widow were 7.34, 7.40 and 7.70 respectively. One way ANOVA with F value of .147 and significance of .863 revealed non-significant difference among employees with different marital status of respondents. Hence Widow employees facing more stress (7.70) compare to Unmarried employees (7.40) and Married employees (7.34) occupational stress component Low status.

11. **Strenuous working conditions:** The mean strenuous working conditions scores of the employees who are Married, Unmarried and Widow were 10.89, 11.05 and 10.80 respectively. One way ANOVA with F value of .221 and significance of .802 revealed non-significant difference among employees with different marital status of respondents. Hence Unmarried employees (11.05) facing more stress compare to Married employees (10.89) and Widow employees (10.80) in occupational stress component Strenuous working conditions.
12. **Unprofitability:** The mean Unprofitability scores of the employees who are Married, Unmarried and Widow were 6.53, 6.87 and 6.60 respectively. One way ANOVA with F value of 1.955 and significance of .143 revealed non-significant difference among employees with different marital status of respondents. Hence Unmarried employees facing more stress (6.87) compare to widow employees (6.60) and married employees (6.53) in occupational stress component Unprofitability.

In total widow employees (129.90) are facing more stress compare to Unmarried employees (126.92) and married employees (125.63) in IT companies.

H5: Demographic variables (Educational background, managerial levels, companies, nature of work) of IT employees significantly influence their occupational stress

Table – 5.12: Stress in Education Level

Education Background	No. of Respondents
Diploma	20
Graduates	369
Post graduates	36
Total	**425**

Source: Field Survey

Table – 5.13: One way ANOVA of Educational Background

Components of Occupational Stress	Educational Background	N	Mean	Std. Deviation	F value	P value
Role Overload	Diploma	20	18.40	4.593	.921	.399
	Graduate	369	17.19	3.956		
	PG	36	17.42	3.290		
	Total	425	17.27	3.936		
Role Ambiguity	Diploma	20	10.85	3.660	1.574	.208
	Graduate	369	10.10	2.854		
	PG	36	10.83	2.833		
	Total	425	10.20	2.898		
Role Conflict	Diploma	20	13.50	2.743	.364	.695
	Graduate	369	13.27	3.080		
	PG	36	13.69	2.867		
	Total	425	13.31	3.043		
Unreasonable Group and Political Pressure	Diploma	20	11.65	2.834	.513	.599
	Graduate	369	11.03	2.813		
	PG	36	10.92	2.430		
	Total	425	11.05	2.781		
Responsibility for Persons	Diploma	20	9.30	1.625	.267	.766
	Graduate	369	9.04	2.406		
	PG	36	9.28	1.951		
	Total	425	9.07	2.338		
Under-Participation	Diploma	20	11.50	2.482	.329	.720
	Graduate	369	10.97	2.910		
	PG	36	11.06	2.888		
	Total	425	11.00	2.885		
Powerlessness	Diploma	20	8.05	1.395	2.326	.099
	Graduate	369	7.77	2.711		
	PG	36	8.75	2.395		
	Total	425	7.86	2.648		
Poor Peer Relations	Diploma	20	10.50	1.821	2.141	.119
	Graduate	369	10.82	2.428		
	PG	36	11.64	2.631		
	Total	425	10.87	2.428		
Intrinsic Impoverishment	Diploma	20	10.15	3.048	.709	.493
	Graduate	369	10.71	2.686		
	PG	36	11.06	2.995		
	Total	425	10.71	2.728		
Low Status	Diploma	20	6.85	2.159	.870	.420
	Graduate	369	7.38	2.300		
	PG	36	7.69	2.340		
	Total	425	7.38	2.296		
Strenuous Working Conditions	Diploma	20	11.25	2.403	.266	.767
	Graduate	369	10.98	2.700		
	PG	36	10.72	2.468		
	Total	425	10.97	2.664		
Unprofitability	Diploma	20	7.20	1.852	1.464	.232
	Graduate	368	6.71	1.793		
	PG	36	6.36	1.437		
	Total	424	6.70	1.771		
Total	**Diploma**	**20**	**129.2000**	**15.98881**	**.910**	**.403**
	Graduate	**369**	**125.9350**	**18.01543**		
	PG	**36**	**129.4167**	**13.67871**		
	Total	**425**	**126.3835**	**17.60457**		

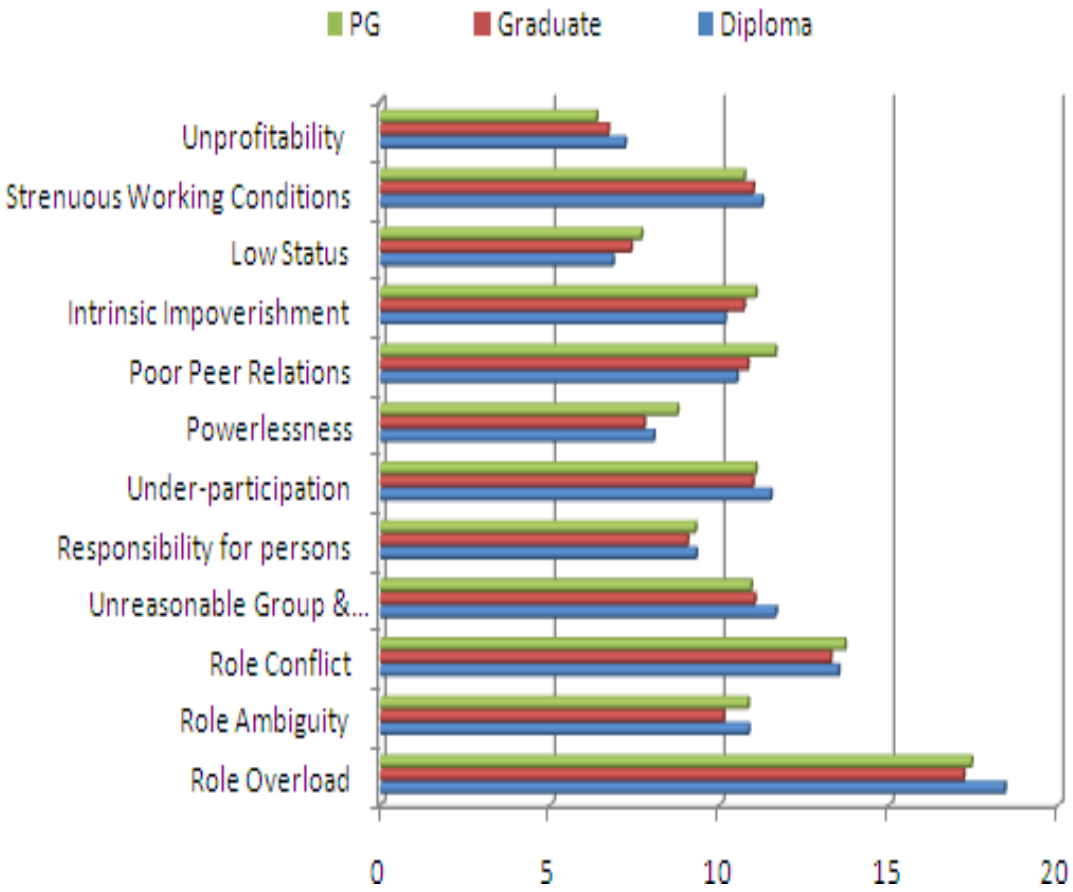


Figure – 5.5: Stress of IT Employees in Educational Background

1. **Role Overload:** The mean Role Overload scores of the employees who are Diploma holder, Graduates and Post graduates were 18.40, 17.19 and 17.42 respectively. One way ANOVA with F value of .921 and significance of .399 revealed non-significant difference among employees with different graduates of respondents. Hence Diploma holders facing more stress (18.40) compare to post graduates employees (17.42) and Graduate employees (17.19) in occupational stress component Role Overload.
2. **Role Ambiguity:** The mean Role Ambiguity scores of the employees who are Diploma holder, Graduates and Post graduates were 10.85, 10.10 and 10.83 respectively. One way ANOVA with F value of 1.574 and significance of .208 revealed non-significant difference among employees with different education

level of respondents. Hence Diploma holder (10.85) facing more stress compare to Post graduates (10.83) and Graduates (10.10) in occupational stress component Role Ambiguity.

3. **Role Conflict:** The mean Role Conflict scores of the employees who are Diploma holder, Graduates and Post graduates were 13.50, 13.27 and 13.69 respectively. One way ANOVA with F value of .364 and significance of .695 revealed non-significant difference among employees with different education level of respondents. Hence Post graduates (13.69) facing more stress compare to Diploma holders (13.50) and Graduates (13.27) in occupational stress component Role Conflict.
4. **Unreasonable Group and Political Pressure:** The mean Unreasonable Group and Political Pressure scores of the employees who are Diploma holder, Graduates and Post graduates were 11.65, 11.03 and 10.92 respectively. One way ANOVA with F value of .513 and significance of .599 revealed non-significant difference among employees with different education level of respondents. Hence Diploma holders (11.65) facing more stress compare to Graduates (11.03) and Post graduates (10.92) in occupational stress component Unreasonable Group and Political Pressure.
5. **Responsibility for Person:** The mean Responsibility for Person scores of the employees who are Diploma holder, Graduates and Post graduates were 9.30, 9.04 and 9.28 respectively. One way ANOVA with F value of .267 and significance of .766 revealed non-significant difference among employees with different education level of respondents. Hence Diploma holders facing more stress (9.30) compare to Post graduates employees (9.28) and Graduates employees (9.04) in occupational stress component Responsibility.

6. **Under Participation:** The mean Under Participation scores of the employees who are Diploma holder, Graduates and Post graduates were 11.50, 10.97 and 11.06 respectively. One way ANOVA with F value of .329 and significance of .720 revealed non-significant difference among employees with different education level of respondents. Hence Diploma holder employees facing more stress (11.50) compare to Post graduates (10.97) and graduates (10.97) in occupational stress component Under Participation.
7. **Powerlessness:** The mean Powerlessness scores of the employees who are Diploma holder, Graduates and Post graduates were 8.05, 7.77 and 8.75 respectively. One way ANOVA with F value of 2.326 and significance of .099 revealed non-significant difference among employees with different education level of respondents. Hence Post graduates facing more stress (8.75) compare to diploma holders (8.05) and Graduates (7.77) in occupational stress component Powerlessness.
8. **Poor Peer Relation:** The mean Poor Peer Relation scores of the employees who are Diploma holder, Graduates and Post graduates were 10.50, 10.82 and 11.64 respectively. One way ANOVA with F value of 2.141 and significance of .119 revealed non-significant difference among employees with different education level of respondents. Hence Post graduates facing more stress (11.64) compare to Graduates (10.82) and Diploma holders (10.50) in occupational stress component Poor Peer Relation.
9. **Intrinsic Impoverishment:** The mean Intrinsic Impoverishment scores of the employees who are Diploma holder, Graduates and Post graduates were 10.15, 10.71 and 11.06 respectively. One way ANOVA with F value of .709 and significance of .493 revealed non-significant difference among employees

with different education level of respondents. Hence Post graduates face more stress (11.06) compare to graduates (10.71) and Diploma holders (10.51) in occupational stress component Intrinsic Impoverishment.

10. **Low Status:** The mean Low Status scores of the employees who are Diploma holder, Graduates and Post graduates were 6.85, 7.38 and 7.69 respectively. One way ANOVA with F value of .870 and significance of .420 revealed non-significant difference among employees with different education level of respondents. Hence post graduates face more stress (7.69) compare to graduates (7.38) and Diploma holder employees (6.85) in occupational stress component Low status.
11. **Strenuous Working Condition:** The mean Strenuous Working Condition scores of the employees who are Diploma holder, Graduates and Post graduates were 11.25, 10.98 and 10.72 respectively. One way ANOVA with F value of .266 and significance of .767 revealed non-significant difference among employees with different education level of respondents. Hence study reveals that diploma holder employees face more stress (11.25) compared to graduates (10.98) and post graduate (10.72) employees in Strenuous Working Condition.
12. **Unprofitability:** The mean Unprofitability scores of the employees who are Diploma holder, Graduates and Post graduates were 7.20, 6.71 and 6.36 respectively. One way ANOVA with F value of 1.464 and significance of .232 revealed non-significant difference among employees with different education level of respondents. Hence study reveals that Diploma holder employees face more stress (7.20) compare to graduates (6.71) and post graduates (6.36) in Occupational stress component unprofitability

Third Objective: To analyze the influence of managerial hierarchical levels of occupational stress of IT employees.

H5: Demographic variables (managerial levels, companies, nature of work) of IT employees significantly influence their occupational stress

Table – 5.14: Showing distribution of the sample managerial positions

Managerial level	No. of Respondents
Top level	50
Middle level	330
Low level	45
Total	**425**

Source: Field Survey

Table – 5.15: One Way ANOVA of Managerial Level

Components of Occupational Stress	Level	N	Mean	Std. Deviation	Std. Error	F value	P value
Role Overload	Top	50	16.52	3.850	.545	1.367	.256
	Middle	330	17.31	3.900	.215		
	Low	45	17.82	4.250	.633		
	Total	425	17.27	3.936	.191		
Role Ambiguity	Top	50	9.80	2.595	.367	1.243	.290
	Middle	330	10.19	2.907	.160		
	Low	45	10.73	3.122	.465		
	Total	425	10.20	2.898	.141		
Role Conflict	Top	50	12.92	3.181	.450	.474	.623
	Middle	330	13.37	2.979	.164		
	Low	45	13.33	3.384	.505		
	Total	425	13.31	3.043	.148		
Unreasonable Group and Political Pressure	Top	50	10.16	3.033	.429	2.952	.050
	Middle	330	11.18	2.710	.149		
	Low	45	11.11	2.886	.430		
	Total	425	11.05	2.781	.135		
Responsibility for Persons	Top	50	9.08	2.648	.375	.197	.821
	Middle	330	9.10	2.314	.127		
	Low	45	8.87	2.180	.325		
	Total	425	9.07	2.338	.113		
Under-Participation	Top	50	10.74	3.331	.471	.239	.787
	Middle	330	11.04	2.845	.157		
	Low	45	10.98	2.692	.401		
	Total	425	11.00	2.885	.140		

Powerlessness	Top	50	7.86	3.064	.433	.880	.415
	Middle	330	7.80	2.567	.141		
	Low	45	8.36	2.756	.411		
	Total	425	7.86	2.648	.128		
Poor Peer Relations	Top	50	10.64	3.015	.426	.773	.462
	Middle	330	10.95	2.383	.131		
	Low	45	10.56	2.006	.299		
	Total	425	10.87	2.428	.118		
Intrinsic Impoverishment	Top	50	10.62	3.023	.428	.612	.543
	Middle	330	10.78	2.679	.147		
	Low	45	10.31	2.770	.413		
	Total	425	10.71	2.728	.132		
Low Status	Top	50	7.40	2.657	.376	.025	.975
	Middle	330	7.37	2.290	.126		
	Low	45	7.44	1.937	.289		
	Total	425	7.38	2.296	.111		
Strenuous Working Conditions	Top	50	10.34	2.715	.384	1.599	.203
	Middle	330	11.04	2.636	.145		
	Low	45	11.13	2.777	.414		
	Total	425	10.97	2.664	.129		
Unprofitability	Top	50	6.26	2.058	.291	2.088	.125
	Middle	329	6.74	1.687	.093		
	Low	45	6.96	1.977	.295		
	Total	424	6.70	1.771	.086		
Total	**Top**	**50**	**122.3400**	**19.28371**	**2.72713**	**1.536**	**.216**
	Middle	**330**	**126.8303**	**17.45062**	**.96063**		
	Low	**45**	**127.6000**	**16.54663**	**2.46663**		
	Total	**425**	**126.3835**	**17.60457**	**.85395**		

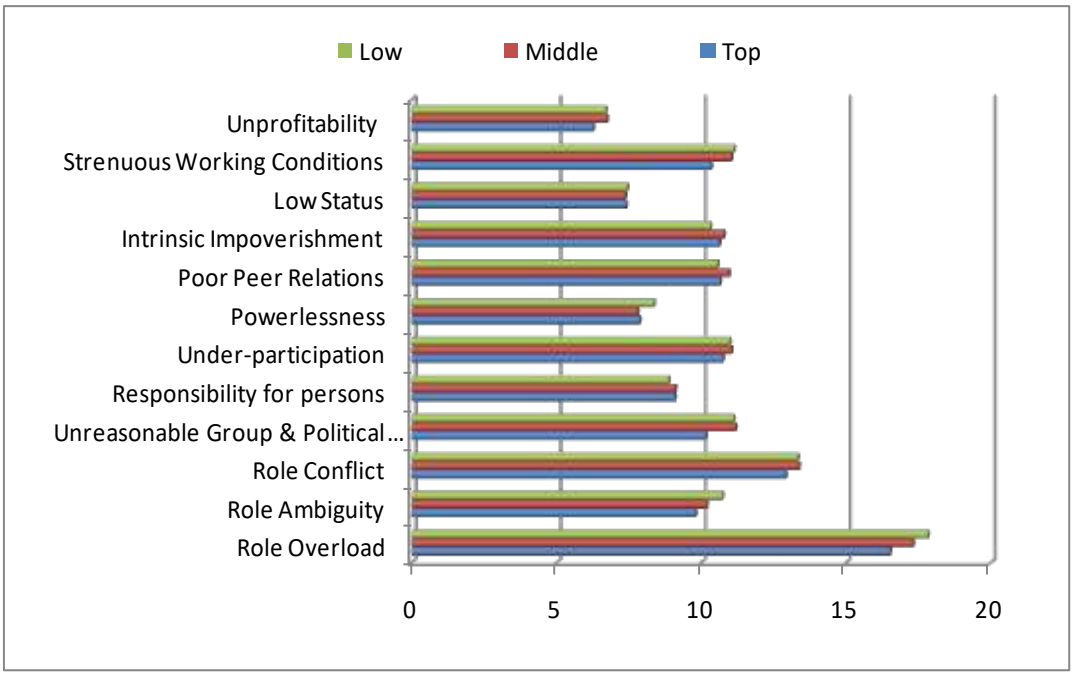


Figure – 5.6: Stress of IT Employees in Managerial Level

1. **Role Overload:** The mean Role Overload scores of the employees who are Top level, middle level and Low level employees were 16.52, 17.31 and 17.81 respectively. One way ANOVA with F value of .1.367 and significance of .256 revealed non-significant difference among employees with different managerial level of respondents. Hence study reveals that Bottom level employees face more stress (17.81) compared to Middle level employees (17.31) and Top level employees (16.52) employees in Role Overload.
2. **Role Ambiguity:** T he mean Role Ambiguity scores of the employees who are Top level, middle level and Low level were 9.80, 10.19 and 10.73 respectively. One way ANOVA with F value of 1.243 and significance of .290 revealed non-significant difference among employees with different education level of respondents. Hence study reveals that Low level employees face more stress (10.73) compared to middle level employees (10.19) and Top level employees (9.80) employees in Role Ambiguity.
3. **Role Conflict:** The mean Role Conflict scores of the employees who are Top level, middle level and Low level were 12.92, 13.37 and 13.33 respectively. One way ANOVA with F value of .474 and significance of .623 revealed non-significant difference among employees with different Managerial level of respondents. Hence study reveals that Middle level employees face more stress (13.37) compared to Low Level employees (13.33) and Top level employees (12.92) employees in Role Conflict.
4. **Unreasonable Group and Political Pressure:** The mean Unreasonable Group and Political Pressure scores of the employees who are Top level, middle level and Low level were 10.16, 11.18 and 11.11 respectively. One way ANOVA with F value of 2.952 and significance of 0.050 revealed non-

significant difference among employees with different managerial level of respondents. Hence study reveals that Middle level employees' face more stress (11.18) compared to Low level employees (11.11) and Low level of employees (10.16) employees in Unreasonable Group and Political Pressure.

5. **Responsibility for Person:** The mean Responsibility for Persons scores of the employees who are Top level, middle level and Low level were 9.08, 9.10 and 8.87 respectively. One way ANOVA with F value of 0.197 and significance of 0.821 revealed non-significant differences among employees with different Managerial level of respondents. Hence, study reveals that Middle level employees are face more stress (9.10) compared to Top level employees (9.08) and Low level employees (8.87) in Responsibility for Persons.
6. **Under participation:** The mean Under participation scores of the employees who are Top level, Middle level and Low level were 10.74, 11.04 and 10.98 respectively. One way ANOVA with F value of 0.239 and significance of 0.787 revealed non-significant difference among employees with different Managerial level of respondents. Hence, study reveals that middle level employees (11.04) face more stress compare to low level (10.98) and top level (10.74) employees in under participation.
7. **Powerlessness:** The mean powerlessness scores of the employees who are Top level, Middle level and Low level were 7.86, 7.80 and 8.36 respectively and one way ANOVA with F value of 0.880 and significance of 0.415 revealed non-significant difference among employees with different managerial level of respondents. Hence, study reveals that Low level employees face more stress (8.36) compare to Top level employees (7.86) and Middle level (7.80) employees in powerlessness.

8. **Poor Peer Relation**: The mean Poor Peer Relation scores of the employees who are Top level, Middle level and Low level were 10.64, 10.95 and 10.56 respectively. One way ANOVA with F value of .773 and significance of .462 revealed non-significant difference among employees with different Managerial level of respondents. Hence, study reveals that Middle level employees face more stress (10.95) compare to Top level employees (10.64) and Low level employees (10.72) in Poor Peer Relation.
9. **Intrinsic Impoverishment:** The mean Intrinsic Impoverishment scores of the employees who are Top level, Middle level and Low level were 10.62, 10.78 and10.31 respectively. One way ANOVA with F value of .612 and significance of .543 revealed non-significant difference among employees with different education level of respondents. Hence, study reveals that Middle level employees face more stress (10.78) compare to Top level employees (10.62) and Low level employees (10.31) in Intrinsic Impoverishment.
10. **Low Status:** The mean Low Status scores of the employees who are Top level, Middle level and Low level were 7.40, 7.37 and 7.44 respectively. One way ANOVA with F value of .025 and significance of .975 revealed non-significant difference among employees with different Managerial level of respondents. Hence, study reveals that Low level employees face more stress (7.44) compare to Top level employees (7.40) and Middle level employees (7.37) in Low Status.
11. **Strenuous Working Condition:** The mean Strenuous Working Condition scores of the employees who are Top level, Middle level and Low level were 10.34, 11.04 and 11.13 respectively. One way ANOVA with F value of 1.599 and significance of .203 revealed non-significant difference among employees

with different Managerial level of respondents. Hence, study reveals that Low level employees (11.13) face more stress compare to Top level employees (10.34) and Middle level employees (11.04) in Strenuous Working Condition.

12. **Unprofitability:** The mean Unprofitability scores of the employees who are Top level, Middle level and Low level were 6.26, 6.74 and 6.96 respectively. One way ANOVA with F value of 2.088 and significance of 0.125 revealed non-significant difference among employees with different Managerial level of respondents. Hence, study reveals that Low level employees face more stress (6.96) compare to Middle level employees (6.74) and Top level employees (6.26) in Unprofitability.

In Total Low level employees (127.60) facing more stress compare to Middle level employees (126.83) and Top level employees (122.34).

Fourth Objective: To assess whether IT employees working in different companies and different nature of work differ in their occupational stress.

Table – 5.16: Respondents from Chosen Companies

Name of the Company	No. of Respondents
IBM	59
WIPRO	123
INFOSYS	83
CISCO	77
NOUS	83
Total	**425**

Source: Field Survey

Table – 5.17: One Way ANOVA of Chosen Companies

Components of Occupational Stress	Companies	N	Mean	Std. Deviation	F value	P value
Role Overload	IBM	59	17.80	3.809	.645	.631
	WIPRO	123	17.46	4.147		
	INFOSYS	83	17.00	4.048		
	CISCO	77	17.29	3.452		
	NOUS	83	16.87	4.039		
	Total	425	17.27	3.936		
Role Ambiguity	IBM	59	10.81	3.170	1.052	.380
	WIPRO	123	10.15	2.975		
	INFOSYS	83	10.20	2.780		
	CISCO	77	10.22	2.945		
	NOUS	83	9.81	2.634		
	Total	425	10.20	2.898		
Role Conflict	IBM	59	13.56	2.775	.876	.478
	WIPRO	123	13.59	3.040		
	INFOSYS	83	13.07	2.946		
	CISCO	77	12.88	3.141		
	NOUS	83	13.36	3.237		
	Total	425	13.31	3.043		
Unreasonable Group and Political Pressure	IBM	59	11.29	2.282	.296	.881
	WIPRO	123	10.97	3.172		
	INFOSYS	83	11.17	2.626		
	CISCO	77	10.83	2.587		
	NOUS	83	11.10	2.848		
	Total	425	11.05	2.781		
Responsibility for Persons	IBM	59	9.00	1.875	1.208	.307
	WIPRO	123	9.40	2.275		
	INFOSYS	83	8.86	2.692		
	CISCO	77	9.18	2.229		
	NOUS	83	8.76	2.427		
	Total	425	9.07	2.338		
Under-Participation	IBM	59	11.47	2.562	.843	.498
	WIPRO	123	10.83	2.874		
	INFOSYS	83	11.19	3.420		
	CISCO	77	10.68	2.760		
	NOUS	83	11.02	2.650		
	Total	425	11.00	2.885		
Powerlessness	IBM	59	8.08	2.168	.779	.539
	WIPRO	123	7.85	2.649		
	INFOSYS	83	7.67	2.931		
	CISCO	77	8.22	2.553		
	NOUS	83	7.59	2.759		
	Total	425	7.86	2.648		
Poor Peer Relations	IBM	59	11.20	2.099	.602	.661
	WIPRO	123	10.77	2.670		
	INFOSYS	83	10.66	2.281		
	CISCO	77	10.81	2.373		
	NOUS	83	11.05	2.484		
	Total	425	10.87	2.428		

Intrinsic Impoverishment	IBM	59	11.20	3.242		
	WIPRO	123	10.37	2.838		
	INFOSYS	83	10.81	2.462		
	CISCO	77	10.65	2.708		
	NOUS	83	10.83	2.413		
	Total	425	10.71	2.728		
Low Status	IBM	59	7.27	2.677	.267	.899
	WIPRO	123	7.54	2.348		
	INFOSYS	83	7.37	2.304		
	CISCO	77	7.22	2.037		
	NOUS	83	7.37	2.185		
	Total	425	7.38	2.296		
Strenuous Working Conditions	IBM	59	10.98	2.556	.622	.647
	WIPRO	123	11.25	2.635		
	INFOSYS	83	10.87	2.797		
	CISCO	77	10.68	2.658		
	NOUS	83	10.90	2.676		
	Total	425	10.97	2.664		
Unprofitability	IBM	59	6.81	1.861	.176	.950
	WIPRO	123	6.75	1.867		
	INFOSYS	83	6.72	1.803		
	CISCO	76	6.63	1.565		
	NOUS	83	6.60	1.739		
	Total	424	6.70	1.771		
Total	**IBM**	**59**	**129.4915**	**15.56452**	**.699**	**.593**
	WIPRO	**123**	**126.9187**	**17.38927**		
	INFOSYS	**83**	**125.6024**	**19.13173**		
	CISCO	**77**	**125.1948**	**17.35393**		
	NOUS	**83**	**125.2651**	**18.04269**		
	Total	**425**	**126.3835**	**17.60457**		

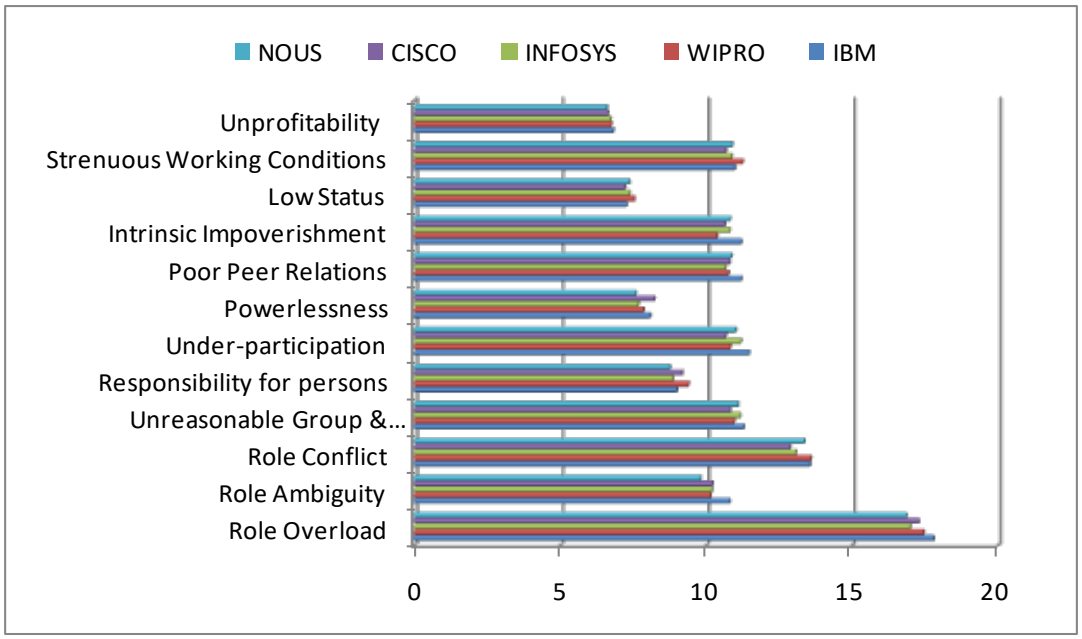


Figure – 5.7: Stress of IT Employees in Chosen Companies

1. **Role Overload:** The mean Role Overload scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS INFOSYSTEMS were 17.80%, 17.46%, 17.00%, 17.29% and 16.87% respectively. One way ANOVA with F value of 0.645 and significance of 0.631 revealed non-significant difference among employees from chosen companies respondents. Hence study reveals that IBM (17.80%) and WIPRO (17.46%) company employees face more stress compare to CISCO (17.29%), INFOSYS (17.00%) and NOUS Info-systems' employees (16.87%) in Role Overload.
2. **Role Ambiguity:** The mean Role Ambiguity scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS INFOSYSTEMS were 10.81%, 10.15%, 10.20%, 10.22% and 9.81% respectively. One way ANOVA with F value of 1.052 and significance of 0.380 revealed non-significant difference among employees from chosen companies respondents. Hence study reveals that IBM (10.81%) and CISCO (10.22%) company employees face more stress compare to INFOSYS (10.20%), WIPRO (10.15%) and NOUS Info-systems' employees (9.81%) in Role Ambiguity.
3. **Role Conflict:** The mean Role Conflict scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS INFOSYSTEMS were 13.56%, 13.59%, 13.07%, 12.88% and 13.36% respectively. One way ANOVA with F value of 0.876 and significance of 0.478 revealed non-significant difference among employees from chosen companies respondents. Hence study reveals that WIPRO (13.59%) and IBM (13.56%) company employees face more stress compare to NOUS Info-systems (13.36%), INFOSYS (13.07%) and employees of CISCO (12.88%) in Role Conflict.

4. **Unreasonable Group and Political Pressure:** The mean Unreasonable Group and Political Pressure scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS INFOSYSTEMS were 11.29%, 10.97%, 11.17%, 10.83% and 11.10% respectively. One way ANOVA with F value of 0.296 and significance of 0.881 revealed non-significant difference among employees from chosen companies respondents. Hence study reveals that IBM (11.29%) and INFOSYS (11.17%) company employees face more stress compare to NOUS Info-systems (11.10%), WIPRO (10.97%) and CISCO employees (10.83%) in Unreasonable Group and Political Pressure.
5. **Responsibility for Persons:** The mean Responsibility for Persons scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS Infosystems were 9.00%, 9.40%, 8.86%, 9.18% and 8.76% respectively. One way ANOVA with F value of 1.208 and significance of 0.307 revealed non-significant difference among employees from chosen companies respondents. Hence study reveals that WIPRO (9.40%) and CISCO (9.18%) company employees face more stress compare to IBM (9.00%), INFOSYS (8.86%) and NOUS Info-systems' employees (8.76%) in Responsibility for Persons.
6. **Under Participation:** The mean Under Participation scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS INFOSYSTEMS were 11.47%, 10.83%, 11.19%, 10.68% and 11.02% respectively. One way ANOVA with F value of 0.843 and significance of 0.498 revealed non-significant difference among employees from chosen companies respondents. Hence, study reveals that IBM (11.47%) and INFOSYS (11.19%)

company employees face more stress compare to NOUS Info-systems (11.02%), WIPRO (10.83%) and CISCO employees (10.68%) in Under Participation.

7. **Powerlessness:** The mean Powerlessness scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS Infosystems were 8.08%, 7.85%, 7.67%, 8.2% and 7.59% respectively. One way ANOVA with F value of 0.779 and significance of 0.539 revealed non-significant difference among employees from chosen companies respondents. Hence, study reveals that CISCO (8.22%) and IBM (8.08%) company employees face more stress compare to WIPRO (7.85%), INFOSYS (7.67%) and NOUS Info-systems' employees (7.59%) in Powerlessness.
8. **Poor Peer Relation:** The mean Poor Peer Relation scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS INFOSYSTEMS were 11.20%, 10.77%, 10.66%, 10.81% and 11.05% respectively. One way ANOVA with F value of 0.602 and significance of 0.661 revealed non-significant difference among employees from chosen companies respondents. Hence study reveals that IBM (11.20%) and NOUS Info-systems (11.05%) company employees face more stress compare to CISCO (10.81%), WIPRO (10.77%) and INFOSYS employees (10.66%) in Poor Peer Relation.
9. **Intrinsic Impoverishment:** The mean Intrinsic Impoverishment scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS INFOSYSTEMS were 11.20%, 10.37%, 10.81%, 10.65% and 10.83% respectively. One way ANOVA with F value of 0.645 and significance of 0.631 revealed non-significant difference among employees from chosen companies respondents. Hence, study reveals that employees of IBM (11.20%)

and employees of NOUS Info-systems (10.83%) company employees face more stress compare to employees of INFOSYS (10.81%) employees of CISCO (10.65%) employees of WIPRO (10.37%) in Intrinsic Impoverishment.

10. **Low Status:** The mean Low Status scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS Infosystems were 7.27%, 7.54%, 7.37%, 7.22% and 7.37% respectively. One way ANOVA with F value of 0.267 and significance of 0.899 revealed non-significant difference among employees from chosen companies respondents. Hence, study reveals that employees of WIPRO (7.54%), employees of IBM (7.37%) and employees of NOUS Info-systems (7.37%) company employees face more stress compare to employees of IBM (7.27%), CISCO (7.22%) employees in Low Status.
11. **Strenuous Working Conditions:** The mean Strenuous Working Conditions scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS Infosystems were 10.98%, 11.25%, 10.87%, 10.68% and 10.90% respectively. One way ANOVA with F value of 0.622 and significance of 0.647 revealed non-significant difference among employees from chosen companies respondents. Hence, study reveals that employees of WIPRO (11.25%) and employees of IBM (10.98%) company employees face more stress compare to employees of NOUS Info-systems (10.90) and employees of CISCO (10.68%) in Strenuous Working Conditions**.**
12. **Unprofitability:** The mean Unprofitability scores of the employees who are working in chosen companies IBM, WIPRO, INFOSYS, CISCO and NOUS Infosystems were 6.81%, 6.75%, 6.72%, 6.63% and 6.60% respectively. One way ANOVA with F value of 0.176 and significance of 0.950 revealed

non-significant difference among employees from chosen companies respondents. Hence, study reveals that employees of IBM (6.81%) and employees of WIPRO (6.75) face more stress compare to employees of INFOSYS (6.72%), employees of CISCO (6.63%) and employees of NOUS Info-systems in Unprofitability.

In Total employees of IBM (129.49%) and employees of WIPRO (126.91%) are facing more stress compare to employees of INFOSYS (125.60%), employees of CISCO (125.19%) and employees of NOUS Info-systems (125.26%).

Fifth Objective: To analyze the influence of nature of family environment on occupational stress of IT employees:

H6: IT employees with different family environment differ significantly in their occupational stress.

Table – 5.18: Categorization of Family Environment

Family Environment	No. of respondents
Good	337
Average	60
Low	28
Total	**425**

Source: Field Survey

Table – 5.19: One way ANOVA of Family Environment

Components of Occupational Stress	Family Environment	N	Mean	Std. Deviation	F value	P value
Role Overload	Good	337	17.09	4.012	1.657	.192
	Average	60	18.00	3.631		
	Low	28	17.82	3.497		
	Total	425	17.27	3.936		
Role Ambiguity	Good	337	10.13	2.913	.776	.461
	Average	60	10.30	2.702		
	Low	28	10.82	3.139		
	Total	425	10.20	2.898		
Role Conflict	Good	337	13.26	3.062	.768	.465
	Average	60	13.30	2.751		
	Low	28	14.00	3.421		
	Total	425	13.31	3.043		

Unreasonable Group and Political Pressure	Good	337	11.04	2.803	.082	.921
	Average	60	11.00	2.597		
	Low	28	11.25	2.977		
	Total	425	11.05	2.781		
Responsibility for Persons	Good	337	8.94	2.346	3.003	.050
	Average	60	9.43	2.086		
	Low	28	9.89	2.572		
	Total	425	9.07	2.338		
Under-Participation	Good	337	11.00	2.910	.102	.903
	Average	60	10.92	2.757		
	Low	28	11.21	2.948		
	Total	425	11.00	2.885		
Powerlessness	Good	337	7.74	2.700	2.177	.115
	Average	60	8.52	2.259		
	Low	28	7.89	2.671		
	Total	425	7.86	2.648		
Poor Peer Relations	Good	337	10.89	2.366	2.793	.062
	Average	60	10.38	2.337		
	Low	28	11.68	3.128		
	Total	425	10.87	2.428		
Intrinsic Impoverishment	Good	337	10.68	2.674	.185	.831
	Average	60	10.75	3.101		
	Low	28	11.00	2.596		
	Total	425	10.71	2.728		
Low Status	Good	337	7.31	2.301	.925	.397
	Average	60	7.73	2.503		
	Low	28	7.50	1.689		
	Total	425	7.38	2.296		
Strenuous Working Conditions	Good	337	10.99	2.699	1.141	.320
	Average	60	10.60	2.830		
	Low	28	11.50	1.644		
	Total	425	10.97	2.664		
Unprofitability	Good	336	6.67	1.755	.296	.744
	Average	60	6.85	1.812		
	Low	28	6.79	1.912		
	Total	424	6.70	1.771		
Total	**Good**	**337**	**125.7211**	**18.07374**	**1.550**	**.214**
	Average	**60**	**127.7833**	**14.86902**		
	Low	**28**	**131.3571**	**16.82858**		
	Total	**425**	**126.3835**	**17.60457**		

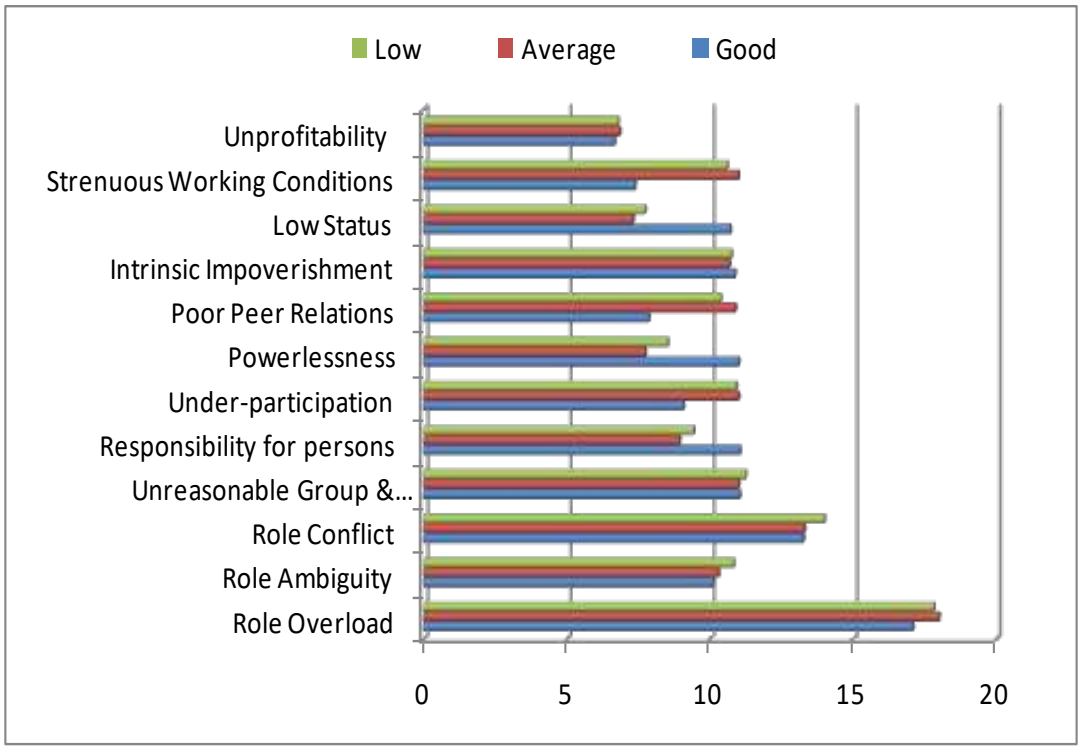


Figure – 5.8: Stress of IT Employees in Family Environment

IT employees with different family environment differ significantly in their occupational stress is partially accepted.

1. **Role Overload:** The mean Role Overload scores of the respondent family environment are good, average and low were 17.09%, 18.00% and 17.82% respectively. One way ANOVA with F value of 1.657 and significance of 0.192 revealed non-significant difference among family environment of respondents. Hence study reveals that Average family environment (18.00%) face more stress compare to family environment which low (17.82) and Good family environment (17.09%) in Role Overload.
2. **Role Ambiguity:** The mean Role Ambiguity scores of the respondent's family environment are good, average and low were 10.13%, 10.30% and 10.82% respectively. One way ANOVA with F value of 0.776 and significance of 0.461 revealed non-significant difference among family environment of

respondents. Hence study reveals that respondents who said their family environment low (10.82%) face more stress compare to family environment which is Average family environment (10.30%) and Good family environment (10.13%) in Role Ambiguity.

3. **Unreasonable Group and Political Pressure:** The mean Unreasonable Group and Political Pressure scores of the respondent's family environment are good, Average and low were 11.04%, 11.00% and 11.25% respectively. One way ANOVA with F value of 0.082 and significance of 0.921 revealed non-significant difference among family environment of respondents. Hence study reveals that who said their family environment low (11.25%) face more stress compare to family environment which is Good family environment (11.04%) and family environment which is Average (11.00%) in Unreasonable Group and Political Pressure.
4. **Responsibility for Persons:** The mean Responsibility for Persons scores of the respondent's family environment are Good, Average and low were 8.94%, 9.43% and 9.89% respectively. One way ANOVA with F value of 3.003 and significance of 0.050 revealed significant difference among family environment of respondents. Hence study reveals that who said their family environment low (9.89%) face more stress compare to family environment which is Average family environment (9.43%) and family environment which is Good (8.94%) in Responsibility for Persons.
5. **Under-Participation:** The mean Under-Participation scores of the respondent's family environment are Good, Average and Low were 11.00%, 10.92% and 11.21% respectively. One way ANOVA with F value of 0.102 and significance of 0.903 revealed significant difference among family

environment of respondents. Hence study reveals that who said their family environment low (11.21%) face more stress compare to family environment which is Good (11.00%) and Average (10.92%) in Under-Participation.

6. **Powerlessness:** The mean Powerlessness scores of the respondent's family environment are Good, Average and Low were 7.74%, 8.52% and 7.89% respectively. One way ANOVA with F value of 2.177 and significance of 0.115 revealed significant difference among family environment of respondents. Hence study reveals that who said their family environment is Average (8.52%) face more stress compare to family environment which is low (7.74%) and Good family environment (7.74%) in Powerlessness.
7. **Poor Peer Relations:** The mean Poor Peer Relations scores of the respondent's family environment are Good, Average and low were 10.89%, 10.38 and 11.68 respectively. One way ANOVA with F value of 2.177 and significance of 0.115 revealed significant difference among family environment of respondents. Hence study reveals that who said their family environment low (11.68%) face more stress compare to Good family environment (10.89%) and Average (10.38%) in Poor Peer Relations.
8. **Intrinsic Impoverishment:** The mean Intrinsic Impoverishment scores of the respondent's family environment are Good, Average and low were 10.68%, 10.75% and 11.00% respectively. One way ANOVA with F value of 0.185 and significance of 0.831 revealed significant difference among family environment of respondents. Hence study reveals that who said their family environment low (11.00%) face more stress compare to Good family environment (10.68%) and Average (10.75%) in Intrinsic Impoverishment.

9. **Low Status:** The mean Low Status scores of the respondent's family environment are Good, Average and low were 7.31 %, 7.73% and 7.50% respectively. One way ANOVA with F value of 0.925 and significance of 0.397 revealed significant difference among family environment of respondents. Hence study reveals that family environment which is Average (7.73%) face more stress compare to, who said their family environment low (7.50%) and Good family environment (7.31 %) in Low Status
10. **Strenuous Working Condition:** The mean Strenuous Working Condition scores of the respondent family environment are good, Average and low were 10.99%, 10.60% and 11.50% respectively. One way ANOVA with F value of 1.657 and significance of 0.192 revealed non-significant difference among family environment of respondents. Hence study reveals that who said their family environment low (11.00%) face more stress compare to Good family environment (10.68%) and Average (10.75%) in Strenuous Working Condition.
11. **Unprofitability:** The mean Unprofitability scores of the respondent's family environment are Good, Average and low were 6,67% 6.85% and 6.79% respectively. One way ANOVA with F value of 0.296 and significance of 0.744 revealed significant difference among family environment of respondents. Hence study reveals that family environment which is Average (6.85%) face more stress compare to, who said their family environment low (6.79%) and Good family environment (6.67 %) in Unprofitability.

In total employees who responded that they low about their family environment (131.35%) face more stress compare to Average family environment (127.78%) and Good family environment (125.72%).

Sixth Objective: To study the major predictors of Occupational stress by its components:

H7: Components of Occupational stress are significantly related to each other and only few components of occupational stress best predict the total Occupational Stress of IT Employees

Researcher has studied all the 12 components of occupational stress index by using statistical technique step wise multiple regressions. It revealed that most of the components of occupational stress were significantly interrelated to each other.

Table – 5.20: Correlation between occupational stress components

		OS1	OS2	OS3	OS4	OS5	OS6	OS7	OS8	OS9	OS10	OS11	OS12
OS2	Cor	.417**											
	Sig	.000	.										
OS3	Cor	.373**	.380**										
	Sig	.000	.000	.									
OS4	Cor	.571**	.384**	.366**									
	Sig	.000	.000	.000	.								
OS5	Cor	.324**	.104*	.115*	.250**								
	Sig	.000	.033	.018	.000	.							
OS6	Cor	.189**	.296**	.357**	.303**	-.229**							
	Sig	.000	.000	.000	.000	.000	.						
OS7	Cor	.084	.206**	.222**	.060	.080	.296**						
	Sig	.085	.000	.000	.215	.099	.000	.					
OS8	Cor	.048	.187**	.361**	-.027	-.172**	.305**	.296**					
	Sig	.325	.000	.000	.584	.000	.000	.000	.				
OS9	Cor	.163**	.259**	.309**	.310**	-.071	.393**	.201**	.285**				
	Sig	.001	.000	.000	.000	.146	.000	.000	.000	.			
OS10	Cor	.167**	.293**	.256**	.221**	-.036	.204**	.286**	.144**	.260**			
	Sig	.001	.000	.000	.000	.455	.000	.000	.003	.000	.		
OS11	Cor	.430**	.297**	.319**	.526**	.184**	.260**	.174**	.092	.203**	.400**		
	Sig	.000	.000	.000	.000	.000	.000	.000	.059	.000	.000	.	
OS12	Cor	.377**	-.040	.148**	.351**	.345**	-.098*	.044	-.164**	-.019	-.044	.226**	
	Sig	.000	.410	.002	.000	.000	.043	.371	.001	.694	.367	.000	.
Total	Cor	.690**	.623**	.678**	.692**	.279**	.537**	.450**	.370**	.524**	.484**	.647**	.298**
	Sig	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

1. Role overload was found to significantly and positively related to Role ambiguity (OS2) (r=.417; P=.000), Role conflict (OS3) (r= .373 P=.000), Unreasonable group and political pressure (OS4) (r=.571; P=.000), Responsibility for persons (OS5) (r=.324; P=.000), Under participation (OS6) (r=.189; P=000), Powerlessness (OS7) (r=.084; P=.085) Poor peer relations (OS8) (r=.048; P=.325), Intrinsic impoverishment (OS9) (r=.163; P=.001), Low status (OS10) (r=.167; P=.001), Strenuous working conditions (OS11) (r=.430; P=.000), Unprofitability (OS12) (r=.377; P=.000) and total occupational stress (r=.690; P=.000), indicating that as the scores in role overload increased, scores in these components also increased linearly and significantly. Further, it was observed that role overload was independent in Powerlessness (OS7) and Poor peer relations (OS8).
2. Role Ambiguity was found to significantly and positively related to Role conflict (OS3) (r=.380; P=.000), Unreasonable group and political pressure (OS4) (r=.384; P=.000), Responsibility for persons (OS5) (r=.104; P=.000), Under participation (OS6) (r=.296; P=000), Powerlessness (OS7) (r=.206; P=.000) Poor peer relations (OS8) (r=.187; P=.000), Intrinsic impoverishment (OS9) (r=.259; P=.000), Low status (OS10) (r=. 293; P=.000), Strenuous working conditions (OS11) (r=.297; P=.000), Unprofitability (OS12) (r=-.040; P=.410) and total occupational stress (r=.623; P=.000), indicating that as the scores in Role Ambiguity increased, scores in these components also increased linearly and significantly. Further, it was observed that role ambiguity was independent and negatively at Unprofitability (OS12).

3. Role Conflict was found to significantly and positively related to Unreasonable group and political pressure (OS4) (r=.366; P=.000), Responsibility for persons (OS5) (r=.115; P=.018), Under participation (OS6) (r=.357; P=000), Powerlessness (OS7) (r=.222; P=.000) Poor peer relations (OS8) (r=.361; P=.000), Intrinsic impoverishment (OS9) (r=.309; P=.000), Low status (OS10) (r=.256; P=.000), Strenuous working conditions (OS11) (r=.319; P=.000), Unprofitability (OS12) (r=.148; P=002) and total occupational stress (r=.678; P=.000), indicating that as the scores in Role Conflict increased, scores in these components also increased linearly and significantly.
4. Unreasonable Group and Political Pressure was found to significantly and positively related to Responsibility for persons (OS5) (r=.250; P=.000), Under participation (OS6) (r=.303; P=.000), Powerlessness (OS7) (r=.060; P=.215), Poor peer relations (OS8) (r=-.027; P=.584), Intrinsic impoverishment (OS9) (r=.310; P=.000), Low status (OS10) (r=.221; P=.000), Strenuous working conditions (OS11) (r=.526; P= .000), Unprofitability (OS12) (r=.351; P=.000) and total occupational stress (r=.692; P=.000), indicating that as the scores in Unreasonable Group and Political Pressure increased, scores in these components also increased linearly and significantly. Further, it was observed that Unreasonable Group and Political Pressure was independent Powerlessness (OS7) and negatively at Poor peer relations (OS8).
5. Responsibility for persons was found to significantly and positively related to Under participation (OS6) (r=-.229; P=.000), Powerlessness (OS7) (r=.080; P=.099) Poor peer relations (OS8) (r=-.172; P=.000), Intrinsic impoverishment (OS9) (r=-.071; P=.146), Low status (OS10) (r=-.036; P=.455), Strenuous

working conditions (OS11) (r=.184; P=000), Unprofitability (OS12) (r=.345; P=000) and total occupational stress (r=.279; P=.000), indicating that as the scores Responsibility for persons, scores in these components also increased linearly and significantly. Further, it was observed that Responsibility for persons was independent at Powerlessness (OS7) and negatively at Under participation (OS6), Powerlessness (OS7) and Low status (OS10).

6. Under-participation was found to significantly and positively related to Under participation (OS6) (r=-.229; P=000), Powerlessness (OS7) (r=.0805; P=.099), Poor peer relations (OS8) (r=-.172; P=.000), Intrinsic impoverishment (OS9) (r=-.071; P=.146), Low status (OS10) (r=-.36; P=.455), Strenuous working conditions (OS11) (r=.184; P=000), Unprofitability (OS12) (r=.345 ; P=.000) and total occupational stress (r=.279; P=.000), indicating that as the scores in Under-participation is increased, scores in these components also increased linearly and significantly. Further, it was observed that Under-participation was independent and negative at Under participation (OS6), Poor peer relations (OS8), Intrinsic impoverishment (OS9), and Low status OS10.
7. Powerlessness was found to significantly and positively related to Powerlessness (OS7) (r=.296; P=.000), Poor peer relations (OS8) (r=.305; P=.000), Intrinsic impoverishment (OS9) (r=.393; P=.000), Low status (OS10) (r=.204; P=.000), Strenuous working conditions (OS11) (r=.260; P=000), Unprofitability (OS12) (r=-.098; P=.043) and total occupational stress (r=.537; P=.000), indicating that as the scores in Powerlessness increased, scores in these components also increased linearly and significantly. Further, it was observed that role overload was negative at Unprofitability (OS12).

8. Poor peer relations was found to significantly and positively related to Poor peer relations (OS8) (r=.296; P=.000), Intrinsic impoverishment (OS9) (r=.201; P=.000), Low Status (OS10) (r=.286; P=.000), Strenuous working conditions (OS11) (r=.174; P=000), Unprofitability (OS12) (r=.044; P=.371) and total occupational stress (r=.450; P=.000), indicating that as the scores in Poor peer relations increased, scores in these components also increased linearly and significantly. Further, it was observed that role overload was independent at Unprofitability (OS12).
9. Intrinsic impoverishment was found to significantly and positively related to Intrinsic impoverishment (OS9) (r=.285; P=.000), Low status (OS10) (r=.144; P=.003), Strenuous working conditions (OS11) (r=.092; P=.059), Unprofitability (OS12) (r=-.164; P=001) and total occupational stress (r=.370; P=.000), indicating that as the scores in Intrinsic impoverishment increased, scores in these components also increased linearly and significantly. Further, it was observed that intrinsic impoverishment was independent at Strenuous working conditions (OS11) and negative at Unprofitability (OS12).
10. Low status was found to significantly and positively related to Low status (OS10) (r=.260; P=.000), Strenuous working conditions (OS11) (r=.203; P=.000), Unprofitability (OS12) (r=-.019; P=.694) and total occupational stress (r=.524; P=.000), indicating that as the scores in Low status increased, scores in these components also increased linearly and significantly. Further, it was observed that Low status was negative at Unprofitability (OS12).
11. Strenuous working conditions was found to significantly and positively related to Strenuous working conditions (OS11) (r=.400; P=.000), Unprofitability (OS12) (r=-.044; P=.367) and total occupational stress (r=.484; P=.000),

indicating that as the scores in Strenuous working conditions increased, scores in these components also increased linearly and significantly. Further, it was observed that strenuous working conditions were negative at Unprofitability (OS12).

12. Unprofitability was found to significantly and positively related to Unprofitability (OS12) (r=.226; P=.000) and total occupational stress (r=.647; P=.000), indicating that as the scores in Unprofitability increased, scores in these components also increased linearly and significantly.

Table – 5.21: Regression analysis

Model	Variables Entered	Contribution	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	Unreasonable Group and Political Pressure	47.9%	.693(a)	.480	.479	12.71743
2	Role Conflict	19.7%	.829(b)	.688	.686	9.86616
3	Powerlessness	10.2%	.889(c)	.790	.788	8.10666
4	Role overload	6.9%	.927(d)	.859	.857	6.65804
5	Intrinsic impoverishment	4.2%	.949(e)	.900	.899	5.61099
6	Strenuous working conditions	3.3%	.966(f)	.933	.932	4.60885
7	Role Ambiguity	2.2%	.977(g)	.954	.954	3.79149
8	Poor peer relations	1.0%	.982(h)	.964	.964	3.36218
9	Low status	1.0%	.986(i)	.971	.971	3.00876
10	Responsibility for persons	0.8%	.990(j)	.979	.979	2.56479
11	Under-participation	1.4%	.997(k)	.993	.993	1.48033
12	Unprofitability	0.7%	1.000(l)	1.000	1.000	.00000

a Dependent Variable: Totals; Criteria prob F enter<=.050, prob F remove>=.100...

However, the second part of the hypothesis 'Only few components of occupational stress best predict the total occupational stress of IT employees' is accepted as stepwise multiple regression revealed that Unreasonable Group and Political Pressure, Role conflict, Powerlessness, Role overload and intrinsic impoverishment contributed more than 95% of the variance to the total stress. Rest of

the components contributed less than 5% of variance for the total stress scores. Since, only 5 out 12 components best predicted the total stress hypothesis stated as only few components of occupational stress best predict the total occupational stress of IT employees is accepted.

When all the 12 components of occupational stress were regressed on total occupational stress scores of the IT employees, using stepwise multiple regressions, following results were obtained. The first and foremost variable to enter into the equation was Unreasonable group and political pressure (OS4) with contribution of 47.9%, followed by Role conflict (OS3) (contribution 19.7%), Powerlessness (OS7) (contribution 10.2%), Role overload (OS1) (contribution 6.9%), Intrinsic impoverishment (OS9) (contribution 4.2%), Strenuous working conditions (OS11) (contribution 3.3%), Role ambiguity (OS2) (contribution 2.2%), Poor peer relations (OS8) and Low status (OS10) (contribution 1.0%), Responsibility for persons (OS5) (contribution 0.8%), Under participation (OS6) (contribution 1.4%), and the last variable to enter into the equation was Unprofitability (OS12) (contribution 0.7%). Hence, Hypotheis-7 stated as Components of Occupational stress are significantly related to each other is partially accepted.

Chapter - VI

SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

6.1 FINDINGS

6.2 SUGGESTIONS

6.3 CONCLUSION

6.4 AREA FOR FURTHER RESEARCH

CHAPTER – VI
SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

6.1 FINDINGS:

Every study is complete only if it has certain outcomes in the form of findings and certain recommendations for betterment of areas that have been found during the course of the study from the primary and secondary data collection and on the basis of analysis, researcher extracted major findings given below.

- In the present study, the selected sample had moderate levels of stress in most of the components of the occupational stress including the total stress scores.
- It was found that age, marital status, educational qualifications, type of company did not influence the occupational stress of the selected IT employees for the study.
- Gender, managerial levels, nature of work, and family environment of IT employees had limited influence on their occupational stress.
- Most of the components of occupational stress were significantly interrelated to each other.
- Stepwise multiple regressions revealed that components like Unreasonable Group and Political Pressure, Role conflict, Powerlessness, Role overload and Intrinsic impoverishment contributed more than 95% of the variance to the total stress.
- There are different types of stress are found so understanding the stress and coping up with that is the best strategy. Everyone has given a unique response to stress, single method will not work for everyone's problem so one has to experiment with different techniques and strategies.

- Hypothesis 1 stated as ’IT employees experience moderate levels of occupational stress’ is accepted as most of the components of occupational stress, selected IT employees experienced moderate levels of stress. It was found that 64.7% of the employees experienced moderate levels of stress on the whole, 64.9% in role conflict, 36.0% in role ambiguity, 49.9% in role conflict, 64.5% in Unreasonable Group and Political Pressure, 64.9% in Responsibility for persons, 40.9% in under participation, 50.1% in Powerlessness, 71.3% in Poor peer relations, 48% in Intrinsic impoverishment, 54.4% in Low status, 56.5% in Strenuous working conditions, and 56.5% in Unprofitability. In total the sample selected had moderate levels of stress in most of the components and hence H1 stated as ’IT employees experience moderate levels of occupational stress’ is accepted.
- Hypothesis 2 stated as ‘IT employees with different age groups differ significantly in their occupational stress’ is Partially Accepted, as Chi Square revealed non-significant differences between respondents in all the age groups for all the components of occupational stress and total stress scores, except in “Unreasonable Group and Political Pressure”, where a significant association is Observed; where the IT employees of age group between 26-40 exhibited highest (70.6%) in medium levels of unreasonable groups and political pressure. In other words, respondents belonging to different age groups had similar levels of occupational stress both in individual components and in total scores.
- Hypothesis 3 stated as ‘Male and female IT employees differ significantly in their occupational stress’ is partially accepted as Independent samples ‘t’ test revealed significant differences between male and female respondents in at least 3 of the components like under participation, intrinsic impoverishment, and in Unprofitability. In these components of occupational stress the male

respondents had higher stress in like under participation, intrinsic impoverishment and female respondents had higher stress scores in Unprofitability. In rest of the components of occupational stress and in total stress, male and female respondents had similar levels of stress. Hence, Hypothesis 3 stated as 'Male and female IT employees differ significantly in their occupational stress' is partially accepted.

- Hypothesis 4 stated as 'Married, unmarried and widow/er IT employees differ significantly in their occupational stress' is rejected. The test statistics used to test this hypotheses is One way ANOVA and one way ANOVA revealed non-significant differences between married, unmarried and widow/er IT employees, as none of the F values found to be statistically significant. In other words marital status of the IT employees did not influence their stress scores either in individual components or in total scores. Hence, Hypothesis 4 stated as Married, unmarried and widow/er IT employees differ significantly in their occupational stress' is rejected.
- Hypothesis 5 stated as IT employees with different family environment differ significantly in their occupational stress is partially accepted as at least in one of the component responsibility for persons' where the family environment level was conducive, the occupational stress was decreased linearly and significantly as revealed by one way ANOVA. In rest of the components and total stress scores, one way ANOVA revealed non-significant differences between IT respondents with different extent of family environment. Hence, Hypothesis 6 stated as IT employees with different family environment differ significantly in their occupational stress is partially accepted.

- Hypothesis 6 stated as Demographic variables (Educational background, managerial levels, companies, nature of work) of IT employees significantly influence their occupational stress is partially accepted as test statistics revealed few significant differences and few non-significant differences between respondents with different levels of Educational background, managerial levels, companies, and nature of work for various components of occupational stress and total stress scores. In other words demographic variables had limited influence over occupational stress of IT employees.
- Hypothesis 7 stated as "components of Occupational stress are significantly related to each other' is partially accepted, as in few cases research do not find significant and mutual relationship between two component. For example, role overload was independent of powerlessness and poor peer relations as revealed by Pearson's product moment correlation. In the case of role ambiguity, it was not related to Unprofitability as so on. Hence, Hypothesis 7 stated as Components of Occupational stress are significantly related to each other is partially accepted.

6.2 SUGGESTIONS:

Based on the analyses made in the foregone chapter and in the light of the findings of this study, the researcher offers the following suggestions are made in the study for effective management of stress in IT industry.

- **Coping strategies to be effectively adopted and implemented to minimize the stress level.**

In the study it is found that majority (64.7%) of the employees experience moderate level stress. The contribution of various components of stress is 64.9% in role conflict, 36.0% in role ambiguity, 49.9% in role conflict, 64.5% in Unreasonable

Group and Political Pressure, 64.9% in Responsibility for persons, 40.9% in under participation, 50.1% in Powerlessness, 71.3% in Poor peer relations, 48% in Intrinsic impoverishment, 54.4% in Low status, 56.5% in Strenuous working conditions, and 56.5% in Unprofitability. According to Selye, 1974 moderate test is not a good sign for employee and organizational productivity. Gradually it declines the employee productivity and leads to some health problems. The hypothesis tested on the level of employee stress also indicates that significant number of employees is moderately stressed at the level of 0.01significance. Hence, in this study it is advised that, IT firms may effectively adopt and implement de-stressing programs on all the components of the employee stress.

- **Manage Stress according the managerial level of the employee.**

According to the study, stress level of the employees varies with the age level. Compared to the lower age group, middle aged employees experience high level of stress (Selye, 1974). The hypothesis stated on IT employees with different age groups differ significantly (0.05 Sig) in their occupational stress and it is partially accepted, Where as Chi-Square statistics reveals non-significant differences between different age groups in all the components of occupational stress and total stress scores, except in "Unreasonable Group and Political Pressure", where a significant association is Observed; But, the IT employees of age group between 26-40 exhibited highest (70.6%) in medium levels of unreasonable groups and political pressure. In other words, respondents belonging to different age groups had similar levels of occupational stress both in individual components and in total scores. But, level of stress varies from hierarchical levels. Therefore, in the study it is suggested that different training programmes to be conducted including excursion tours and trips across the different levels of the managerial hierarchy.

- **Attention on Gender wise Stress Management Strategies**:

The findings of the study reveal that the stress level among male and female respondents is significantly differ. Evident to that hypothesis on that variable stated as 'Male and female IT employees differ significantly in their occupational stress' is partially accepted as independent samples 't' test revealed significant differences between male and female respondents in at least 3 of the components like under participation (level of significance - 0.053), intrinsic impoverishment (level of significance - 0.008), and in Unprofitability (level of significance - 0.028). In these components of occupational stress it is found that male respondents had higher stress in under participation, intrinsic impoverishment and female respondents had higher stress scores in Unprofitability components of the stress. Hence, the research suggest that for male employees flexi timing to be given for completing the targets and promotions and rewards should given for each term. For female employees' emotions to be taken care and baby care centres and crèches to maintained for their children and good facilities to be provided, by doing this female employees can work without stress and achieve the targets easily.

- **Discrimination should not be entertained between employees**

Proper leave facility should be given female employees in their pregnancy and in the time of delivery, she is very much capable of doing work after delivery the same designation and same salary should be provided after her comeback from long leave.

Fourth hypothesis stated as 'Married, unmarried and widow/er IT employees differ significantly in their occupational stress' is rejected. The test statistics used to test this hypotheses is One way ANOVA and one way ANOVA revealed non-significant differences between married, unmarried and widow/er IT employees, as none of the F values found to be statistically significant. In other words marital status

of the IT employees did not influence their stress scores either in individual components or in total scores. Hence, Hypothesis-4 stated as Married, unmarried and widow/er IT employees differ significantly in their occupational stress' is rejected.

- **Adequate counseling on the family issues such as health and education of the dependents.**

Analysis of the data reveals that, a considerable amount of employee stress in the chosen organisation is also caused by the family issues such as low income, health, education etc. To improve the family environment of the employees, organization should organise counselling and other events. Games and competitive exams for employees' children and accordingly reward them with good scholarships and valuable cash prizes and company should honour the meritorious children of the employees so that children will show more and more interest towards academic and parents can work calmly and peacefully. Organization should give free treatment for health problems of all family members.

Hypothesis stated on IT employees with different family environment differ significantly in their occupational stress is partially accepted as at least in one of the component responsibility for person (level of significance – 0.005) where it is found that as the family environment level was conducive, the occupational stress was decreased linearly and significantly as revealed by one way ANOVA. In rest of the components and total stress scores, one way ANOVA revealed non-significant differences between IT respondents with different extent of family environment. Hence, Hypothesis is partially accepted.

- **Skill updating, Job Enlargement and Enrichment:**

Organization should encourage higher study of the employees they should arrange Faculty development programmes (FDPs) and Faculty Improvement

Programme (FIPs) organization should give paid leaves for higher education and proper study materials should be provided. Apart from this, time to time promotions to be given so that financially they should not be suffered.

Hypothesis stated on Demographic variables (Educational background, managerial levels, companies, nature of work) of IT employees significantly influence their occupational stress is partially accepted at (0.5 Sig) as test statistics revealed few significant differences and few non-significant differences between respondents with different levels of educational background, managerial levels, companies and nature of work for various components of occupational stress and total stress scores.

- **Organization should prepare employee for giving good performance.**

Employees should be kept happy in every manner so that he can give good result in work and work with full of enthusiasm and happiness. Companies should send then foreign countries for the period of one or two years. So that they should feel some change and proud on himself for associating with particular organization.

- The pressure of workload can be reduced by ***delegating responsibility*** and selectively worrying about on the most important stress producing situations, and establishing goals and setting priorities to accomplish important objectives.
- ***Time management***: Managers should make a list of activities to be performed and prioritize them in their order of importance. They should utilize their precious time to concentrate on the few prioritized tasks.
- The third important factor is ***person environment fit***. The managers need to adapt or cope with the environment which is not suitable for them. If this is not feasible it is better to quit.

- The ***political climate*** is also an important factor to be taken into consideration. If the organizations atmosphere, conveys a perception that, "it's not what you know, but whom you know," then the organization will be a very stressful place to work. If the problem seems to be significant enough, based on turnover, absenteeism and other important factors, thought should be given to hire a management consultant to evaluate the climate and make recommendations for change.
- It is also important that people always maintain a ***sense of humour***, especially regarding themselves. A sense of humour about ourselves is acknowledge of the fact that they are imperfect human beings.
- One cannot rely on the individual coping strategies alone to mitigate stress. Managers need to understand the employees' workload and provide ***social support*** whenever necessary. Managers should provide acknowledgement and appreciation to those performing their jobs well.
- It is necessary to equip the employees with necessary skills to face any challenges that may come. Schabracq and Cooper (2000) suggest that investment in ***professional development*** (vocational and professional skills) can mitigate stress. Training and skill development can provide the IT personnel with additional skills. Professional development may also take place through hands-on experience of the job, where the learning process coincides within the activity of carrying out the job. It is likely that the longer IT personnel employed the more job-related skills they acquire.
- A ***process of stress management*** can be adopted to keep their employees fit and ready to face any challenge that may arise due to the changing nature of technology. Firstly to have a scientifically developed induction system;

To conduct regular educational sessions on stress and lifestyle management; To implement innovative stress-relieving programs; To provide access to counsellors; To keep track of employees' health with preventive checks at regular interval, risk stratification of employees' health; risk management programs and review of health status at regular intervals.

- Among the new approaches are bio-feedback and meditation. Some traditional approaches are physical exercise and spiritual practices. ***Biofeedback*** is a method where brain gives off electrical signals that can be measured by a recording machine, now called the electroencephalograph or EEG. It takes less time away from the job; it's cheaper and its effectiveness can be objectively measured. ***Transcendental Meditation*** is the ability to control bodily reactions mentally. Jogging and walking as a form of ***physical exercise*** has been quite a popular approach fallowed. Important element in human life is faith. It puts everything into ***spiritual*** focus.
- Organizations are just as worried about stress as are individuals. Organizations need to reduce or eliminate stress by ***improving communication***, through better participation by employees, and by redesigning jobs to be more fulfilling.
- From the individual's point of view, the best way to manage stress is to ***learn to relax***, take interest in something outside the job, like for example, listening to music, playing an instrument, going for picnics with loved ones or taking long walks. The best way, undoubtedly is meditation and practice of yoga. Doing exercise and aerobics early in the morning will also help to cope with stress. Worshipping at a temple, chanting prayers and slokhas, or just sitting around at the place of worship enjoying the serenity of the place, participating in community prayers and social gatherings help in keeping the mind fresh and balanced.

- Every employee should express their feelings and take control of their environment, time management is the best policy to avoid stress, reframing problems and looking differently towards problem is also one method of avoiding stress. Forgiving will increase respect in others mind if one can't change the situation then try to learn how to accept them.

6.3 CONCLUSION:

Everything is good and goal oriented IT employees constantly worried about work deadlines, actual work demand will not lead stress, employees found temporary methods of reducing stress like smoking, drinking, under eating, physical violence etc. From these methods solution will not come out rather health will go upset and one will fell ill. As researcher studied there are different types of stress are found so understanding the stress and coping up with that is the best strategy. Everyone has given a unique response to stress, single method will not work for everyone's problem so one has to experiment with different techniques and strategies. Every employee should express their feelings and take control of their environment, time management is the best policy to avoid stress, reframing problems and looking differently towards problem is also one method of avoiding stress. Forgiving will increase respect in others mind if one can't change the situation then try to learn how to accept them.

Recession has set in all over the world, especially hitting the IT sector severely, because most of the IT companies had their clients abroad. The great depression which has resulted in the consequences like the closure of Lehman Brothers, and Merrill Lynch, have still increased the amount of uncertainty on the employees of IT sector. Companies are going for downsizing, which is another great cause for worry and stress. Most of the leading IT Companies are giving pink slips to experienced employees who had served them for more than ten years. Lack of job

security, is one of the factors to be given serious concern, as it acts on the stress of the employees. It is true that companies do offer a variety of solutions like yoga classes, exercise, meditation, flexi time, and telecommuting. But they cannot be substitutes for professional mental health counseling and care, especially when stress-related problems have already set in. Such counseling needs to be necessarily third party, precisely because many employees may find it delicate to reveal their personal problems to in-house people. Researcher do feel that a proactive decision by major players in the IT industry regarding the provision of professional mental health care for employees will definitely have a salutary effect on the general acceptability of mental health care in the country as a whole.

The issue of access to professional mental health care for IT employees (and of other industrial sectors as well) is not merely the employees' or the companies' issue. Indeed this is one area in which the state ought to step in, as part of its responsibility to maintain the viability of the IT industry in the long run.

The skills, behaviours and attitudes mentioned here are just a few of the many available to people to combat stress. One person’s nourishment may well be another’s poison. What is important is for each individual to have some program for dealing with stress. The results of having no methods at all may be disastrous.

India is the destiny for software industry, as it has cost comparative advantages over other countries in terms of Human Resources. Therefore, Indian employees are the most sought after destination for software industries. In the wake of globalization, “survival of the fittest” was the mantra adopted to achieve progress on all fronts including exports. The export of non-traditional goods which includes software has been increased stupendously over a period of 15 years. As the economic, politico-legal, socio-cultural environment was conducive, the Indian soil could attract

Small-Medium Enterprise (SMEs), large scale IT companies, MNCs, TNC's and the global companies. This was to design software as the demand for such products is on the higher side in the North American countries, as much as 68% of Indian IT exports. The complexity of the job and the working environment in IT sector could exert pressure on the employees to execute the projects, well within the time. The employees also have developed the urge to complete the project, well within the time, so as to take up the other projects for the sake of more compensation. In the process of carrying out the work assigned; obviously stress is unavoidable. Stress up to the optimum level promotes productivity; over and above the optimum level stress becomes distress. The study conducted by the universities and research institute reveals that more than 70% of the employees in IT companies are under excessive stress. Most of the employees in IT and ITeS are youngsters; in spite of that they do not enjoy satisfactory life both at the work place and their residences. The stress over and above optimum level, leads to disorders such as hypertension, diabetes, neurological, cardiac, and psychological. The internal factors and the external factors are considered to be stressors, which demand immediate attention both by the organization as well as an individual. Fair and transparent policies with regard to acquisition, development, utilization of human resource will help maintaining positive stress. Similarly, the social relationship will also contribute to the positive stress. "Distress increases the disorders and decreases the productivity" for the employees and the organization respectively.

In an endeavour to usher stress management, coping strategies are adopted by individual and organisations. Large scale IT companies are very serious in implementing the coping strategies, whereas, small and medium size IT companies have callous attitudes towards such activities. Stress management must not remain

hollow promise. I.T. companies which have lost the path, due to uncontrolled stress shall stay in main stream of economic activities by adopting proper stress management practices. This is possible only, when employees of the organization measures to combat distress. Eustress paves the way for prosperity whereas; the distress will be a catastrophe. I.T. companies shall realize the repercussions of the distress especially, in long term and employ coping strategies to diminish the distress. The Government of India, the State Governments, Technical Institutions - Universities, Institutions of Health Science and Institutions of Management Studies, shall join together, to prepare a roadmap for the stress management in IT industry; in particular, so that the employees will have an opportunity to work to achieve the set targets. The targets set on this basis of Simple, Measurable, Achievable, Reachable and Timely (SMART) will help to eliminate distress.

Information technology employees have to keep pace with the change in the job culture which affects the mental health of the employees. This is particularly relevant because jobs in information technology is the most coveted one in modern India, and the most brilliant section of the youth are going for it. While each job has its own stress, IT jobs are somewhat different from our traditional and typical concept of secured employment. IT jobs are mostly contractual with less job security but high pay, and entail strong competitiveness, along with globalized lifestyle. There are a few evidences that IT jobs are offering an elevated standard of life, but taking tolls on the mental health and relationship aspects of the professionals. Stress during work may hit health hard. Stress at workplace may increase rates of heart disease, flu, virus, metabolic syndrome and high blood pressure (Times of India, 24th Nov., 2006).

Coping strategies have been suggested. But it is to be realized that stress is felt based on individuals' perception and appraisal of stressors. Therefore, no single

remedy may be prescribed for all the employees. Moreover, stress management measures are continuous phenomenon as stressors vary with the time.

6.4 AREA FOR FURTHER RESEARCH:

The role of positive stress in accelerating productivity, evaluation of effectiveness of coping strategies for stress management in IT industry and Politico-Legal environment for effective stress management in I.T. Industry can be carried out for further research.

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ANNEXURE

QUESTIONNAIRE

Dear Sir/Madam,

……

……

I am pursuing my research on the topic **"Job Stress Among IT Employees - A Study on Select IT Companies in Karnataka".** In the Institute of Management Studies and Research, Kuvempu University, Shivmoga. As part of this study, I have prepared a questionnaire touching broadly upon issues like performance, experience, opinions and suggestions relating to stress.

I request you to help me in this study by sparing some of your valuable time to respond to the questions which are in the questionnaire.

I assure you that the data obtained from your response will be used strictly for this research and will maintain confidentiality about the personal details of the respondents.

Thank for your valuable time and response.

Yours truly,

(Smt. Padmavati)

DEMOGRAPHIC DATA

Name	
Address	
Age	
Gender	
Religion	
Marital Status	
Income	
Educational Level	
Managerial Position	
E-mail	
Sector	
Company you work with	
Nature of work	
Family environment	
Phone	
Fax	

KINDLY ANSWER ALL THE QUESTION

Sl. No.	Items	SD	D	UD	A	SA
1	I have to do a lot of work in this job					
2	The available information relating to my job-role and outcomes are vague and					
3	My different officers often give contradictory instructions regarding my works.					
4	Sometimes it becomes complied problem for me to make adjustment between political/group pressures and formal rules and instructions.					
5	The responsibility for the efficiency and productivity of many employees in thrust upon me.					
6	Most of my suggestions are heeded and implemented here					
7	My decisions and instructions concerning distribution of assignments among employees					
8	I have to work with persons whom I like					
9	My assignments are monotonous nature					
10	Higher authorities do care for my self respect					
11	I get less salary in comparison to the quantum of my labour/work					
12	I do my work under tense circumstances					
13	Owing to excessive work load I have to manage with insufficient number of employees and resources.					
14	The objectives of my work-role are quite clear and adequately planned.					
15	Officials do not interfere with jurisdiction and working methods					
16	I have to do some work unwillingly owing to certain group/political pressures					
17	I am responsible for the future of a number of employees					
18	My Co-operation is frequently sought in solving the administrative or industrial problems at higher levels.					
19	My suggestions regarding the training programmers of the employees are due significance.					
20	Some of my colleagues and subordinates try to defame and malign me as unsuccessful					
21	I get ample opportunity to utilize my abilities and experience independently					
22	This job has enhanced my social status					
23	I am seldom rewarded for my hard labour and efficient performance					
24	Some of my assignments are quite risky and complicated.					
25	I have to dispose off my work hurriedly owing to excessive work load.					

26	I am unable to perform my duties smoothly owing to uncertainly and ambiguity of the scope of my jurisdiction and authorities.					
27	I am not provided with clear instructions and sufficient facilities regarding the new assignments trusted to me.					
28	In order to maintain group conformity sometimes I have to do / produce more than the usual.					
29	I bear the great responsibility for the progress and prosperity of this organization					
30	My opinions are sought in framing important policies of the organization / department					
31	Our interest are duly considered in making appointment for important posts					
32	My colleagues do co-operate with me voluntary in solving administrative and industrial problems.					
33	I get ample opportunity to develop my aptitude and proficiency properly					
34	My higher authorities do not give due significance to my post and work.					
35	I often feel that this job has made my life cumbersome.					
36	Being too busy with official work I am not able to devote sufficient time to my domestic and personal problems.					
37	It is not clear that what type of work and behaviour my higher authorities and colleague except from me.					
38	Employees attach due importance to the official instructions and formal working procedures.					
39	I am compelled to violate the forma and administrative procedures and policies owing to group/political pressures.					
40	My opinion is sought to in changing or modifying the working system, instrument conditions.					
41	There exists sufficient mutual co-operation and team spirit among employees of this organization / department.					
42	My suggestions and co-operation are not sought in solving even those problems for which I am quite competent.					
43	Working conditions are satisfactory here from the point of view of our welfare and convenience.					
44	I have to do such work as ought to be done by others.					
45	It becomes difficult to implement all of a sudden the new dealing procedures and policies in place of already in practice.					
46	I am unable to carry out my assignment to my satisfaction on account of excessive load of work and lack of time.					