CHAPTER – II

REVIEW OF LITERATURE

2.1 INTRODUCTION

In the introductory chapter the aim and scope of the present study has been discussed. This chapter deals with the review of literature, which is an important aspect of any research. It helps to trace out the past trends in any particular branch of subject. The review of literature helps to identify the areas of research. There have been a lot of studies conducted to understand the relationship between occupational stress and job satisfaction both at national and international level. In this chapter various previous studies relating to stress management and job satisfaction have been reviewed and how the present study differs from them are also discussed in detail.

2.2 EMPIRICAL STUDIES ON OCCUPATIONAL STRESS

John M. Ivancevich,(1984)\(^1\) points out that the physiological, psychological, and organizational effects of occupational stress are not only costly to individual employees and managers, but also to organization, society and family. The article examines the notion of interaction between the employee and the working environment. Stress is defined in terms of a relationship between a person and the work environment. Instead of using a global model of person-environment interaction, a more specific approach incorporating the notion of Type A-B behaviour pattern and Type A-B work environment is developed. The study examines the theory, research, and implications of a person-environment model as an explanation of occupational stress and various behavioural, psychological, and organizational consequences. The model is suggested as a formulation of a dynamic-

interactional view that emphasizes the reciprocal person-environment processes found in the workplace. It is proposed that the interaction between Type A-B behaviour patterns and Type A-B work environment is a fertile area for further theoretical and empirical research.

The purpose of Charlene Herried’s, (1985) study is to look at the associations between the measures of Type A ("Type A" personality, said to be at higher risk for developing physiological stress symptoms, notable coronary heart disease) and stress symptoms and sales performance in a real estate company, and to examine the implications for managing commission of sales people in small businesses, both in real estate and elsewhere. Type A has received considerable attention as a key personality construct with substantial consequences, both good and bad. Thus, Type A behaviour may contribute to successful individual sales performance as well as to problematic behavioural and physical expressions of stress. The real estate setting is particularly appropriate for studying the implication of Type A for individual performance and stress, because (1) individuals tend to work independently, (2) individuals control their work commitments, work hours, and work intensity, and (3) performance is directly linked to an individual’s efforts.

Charles R. Greer and Mary Anne Dorland Castro, (1986) in their study examine the functional relationship between occupational stress and perceived unit effectiveness. Purchasing agents in a Southwestern U.S. city responded to a self-report questionnaire, which solicited measures of stress and effectiveness and such information as respondents’ gender, age, number of subordinates, and position tenure and their organizations’ size and type of industry. A regression analysis of these responses which controlled the individual and organizational differences found that perceived unit effectiveness was negatively related

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3 The Relationship Between Perceived Unit Effectiveness and Occupational Stress: The Case of Purchasing Agents, The Journal of Applied Behavioral Science April 1, 1986 22: 159-175
to occupational stress and positively related to age. The researchers found no evidence of an inverted-U-shaped relationship between stress and effectiveness, and little support for the proposition that gender moderates the relationship. Nonetheless, the researchers point out that research on the relationship between occupational stress and perceived unit effectiveness should control the effects of individual characteristics.

John S. Lyons (1987)\textsuperscript{4} presented a research involving the comparison of levels of occupational stress across multiple units of a large teaching hospital. Using a scale designed to measure a four-component model of occupational stress in medical environments, the results indicated that a significant amount of the variation in this measure was accounted for by the unit on which the respondents worked. There were no significant differences across the levels of employment (e.g., house-staff, nurse clinician, registered nurse, licensed practical nurse, clerk, etc.,).

Kirk L. Froggatt and John L. Cotton, (1987)\textsuperscript{5} in their study controlled laboratory experiment investigated the effects of Type A behaviour pattern on the role of overload-induced stress and performance attributions. Although previous correlation studies have concluded that Type A individuals are more likely to feel stressed than Type B individuals, the present study did not find this. The current study reports the alternative hypothesis that differentiates the reported stress between Type A and Type B individuals. It may occur because the Type A seeks out situations that are objectively more stressful. In contrast to the stress findings, performance attributions vary between Type A and Type B individuals. Results are discussed in terms of their theoretical and practical implications.

\textsuperscript{4}Unit-specific variation in occupational stress across a general hospital, \textit{General Hospital Psychiatry} Volume 9, Issue 6, November 1987, Pages 435-438

\textsuperscript{5}The Impact of Type A Behavior Pattern on Role Overload-induced Stress and Performance Attributions, \textit{Journal of Management} March 1, 1987 13: 87-98
Sujatha Muthanna’s (1988) study looked at top level managers experiencing high occupational stress in different departments and age groups and having different levels of anxiety, peer relations and personality. The results were in turn mapped with organizational requirements as a whole and suggestions were made about the ways in which organizations could be made more effective and efficient to work in.

Lawson K. Savery, (2001) the data for his study were collected by the federal government from workplaces across Australia and released in late 1997. It seems that having influence on decisions affecting a person and type and speed of work seems to alter the perceived level of job satisfaction rather than the level of job stress. This study investigates these findings further and discusses the influence of some demographic variables on job satisfaction. The final area of the study will look at how all these variables will impact on the perceived productivity of the organization.

Manshor, et.al.(2003) in their study examined and found out that workloads, working conditions, and relationship at work were the main concern of the managers that lead to stress at the work place. The results also indicated that certain demographic variables do influence the level of stress among the managers.

Mohsin Aziz (2004) points out that the organisational stress originates in organisational demands that are experienced by the individual. Stress is built up in the concept of role

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which is conceived as the position a person occupies in a system. Study investigates the intensity of organisational role stress among Women Informational Technology Professionals in the Indian private sector. Organisational role stress scale is used on a sample of 264 to explore the level of role stress. Resource inadequacy has emerged as the most potent role stressor, followed by role overload and personal inadequacy. The research finds differences in the level of stress between married and unmarried employees on several role stressors. However, the level of education does not emerge as a significant differentiator of stressors.

Prof. Dileep Kumar. M (2004) found that there is significant difference in the level of occupational stress between nationalized and non-nationalized bank employees. Occupational stress is found higher among non-nationalized employees compared to nationalized employees. Among the different occupational stress variables Role over load, Role authority Role conflict and Lack of Senior level support contribute more to occupational stress among non-nationalized employees compared to nationalized employees. He recommended that to alleviate the negative consequences of stress more effort on the part of policy makers, practitioners, and organizational management envisaged. The researcher, thereby making a few effort suggests some effective measures, that can alleviate the stress of bank employees and leads to their better adjustment within the organization. They are for the Management to organize a Stress Management Program that focuses on different leave categories of employees at all hierarchical levels. Stress Management training programs' with specific human resource development goals in consultation with Senior Management can be organised. Finally he concluded that the productivity of the work force is the most decisive factor as far as the success of an

organization is concerned. The productivity in turn is dependant on the psychosocial wellbeing of the employees. In an age of highly dynamic and competitive world, man is exposed to all kinds of stressors that can affect him on all realms of life. The growing importance of interventional strategies is felt more at organizational level.

Upadhyay, G.R. and Havalappanavar, N.B. (2007)¹¹ in their study compared the level of stress among widows and widowers to that among families where both parents are alive. Stress among 77 single parents (58 widows and 19 widowers) was compared with that of 77 families (matched group) where both the father and the mother were alive. Results showed that single parents differed significantly regarding total stress and in all four areas of stress (care, emotional, social and financial stress). Stress was high in emotional and social areas compared to care and financial stress. Widows and widowers showed similar care stress. They differed significantly in their social, financial, emotional and total stress. Single parent families of mentally retarded children experience higher levels of stress (total and in all areas) compared to such families where both the parents are alive. Total, social, emotional and financial stresses, were higher than the care stress among widows compared to widowers.

Singh Anurag (2012)¹² Occupational stress has become a great matter of concern among the IT companies all over the world, which create lots of human resources problems like executives intension to leave the organisation, it also create loss of talent as well as money of IT companies. The present Paper studies assess level of occupational stress among the executives in Indian multinationals IT companies the paper also studies level of

occupational stress among the executives in foreign multinational IT companies.

Kohinoor Akhtar (2012)\textsuperscript{13} emphasized that the stress is mandatory according to modern school of thought but excessive targets and lack of motivational practices degenerates the engagement level of employee with in the organization which causes less job satisfaction and leads to less organizational commitment. HRM policies play a major role in handling stress and healthy environment in organization and show that stress has a inverse relationship with psychological fitness which contribute to the total productivity and employability. This study is based on trend analysis of corporate stress and its relation with the psychological fitness of employees working in Information Technology Industry in Mumbai Region.

2.3 EMPIRICAL STUDIES ON OCCUPATIONAL STRESS ON JOB SATISFACTION

Crawford Hollingworth et.al.(1988)\textsuperscript{14}, in their study, found that there is a strong association between job satisfaction and stress, with low job satisfaction being associated with high stress. This association did not reflect the confounding of job satisfaction with demographic variables, and was not modified by day of week. Possible causal relationships accounting for this correlation have been discussed in the study.

Muhammad Jamal,(1990)\textsuperscript{15} in his study examined the relationship of job stress, job stressors, and Type-A behaviour pattern with employees' job satisfaction, organizational commitment, psychosomatic health problems, and turnover motivation among full-time employees.


\textsuperscript{15} Relationship of Job Stress and Type-A Behavior to Employees' Job Satisfaction, Organizational Commitment, Psychosomatic Health Problems, and Turnover Motivation, Human Relations August 1, 1990 43: 727-738
nurses (N = 215) working in a large Canadian hospital. Both job stress and stressors (role ambiguity, overload, conflict, and resource inadequacy) were significantly related to four outcome variables. Type-A behaviour was associated with high job stress, high role ambiguity, conflict, resource inadequacy, and psychosomatic health problems. In addition, Type-A behaviour was found to be an important moderator of the stress-outcome relationship. Implications of the findings for management and for future research are highlighted.

Roland P. Chaplain (2001)\textsuperscript{16} in his study has investigated the levels of perceived stress and job satisfaction among primary head teachers. Around half reported high levels of occupational stress but some half were satisfied with their work. Sources of stress and job satisfaction were examined under four headings: managing oneself and others; managing finances; managing the curriculum; and managing change. The highest levels of satisfaction came from personal factors and organizational factors. School organization was a source of stress and of satisfaction. The lowest level of satisfaction was with the level of social support. Two subgroups reporting ‘very high’ levels of stress differed markedly in levels of job satisfaction—one ‘very satisfied’, the other ‘not satisfied’. These differences were related to gender and perceived sources of job satisfaction and stress.

Parvin Bahadoran, et al. (2002)\textsuperscript{17} their study was a descriptive-analytic correlation research. Data were collected from two groups and in one stage design. The samples included 93 midwives of delivery rooms and 75 midwives of health centre. The data gathering tool was a questionnaire. The validity of the questionnaire was proved with content and surface validity and the reliability of the questionnaire was checked with Alfa Cronbach coefficient.

\textsuperscript{16} “Stress and Job Satisfaction among Primary Head teachers - A Question of Balance?”, Homerton College, University of Cambridge, Educational Management Administration Leadership April 2001 vol. 29 no. 2 197-215.

\textsuperscript{17} Comparison of occupational stress and its relation with some personal/occupational characteristics of midwives of delivery rooms with midwives of maternal and pediatric health centers, Iranian Journal of Nursing and Midwifery research, Vol 7, No 1, 2002.
Descriptive and analytic statistical methods were used for data analysis. The results showed a significant difference in occupational stress between both the groups (delivery room midwives and health centre midwives). There was no significant relation between age, marital status, level of education with occupational stress, but there was a significant relation between the number of children, satisfaction, economic condition, personality type with occupational stress. There was a significant relation between job satisfaction, education, health services and occupational stress. But, there was not any significant relation between occupational stress with other professional factors. According to the results, change of midwives in delivery rooms with midwives in health centres every 5 years is recommended.

K. Chandraiah’s, (2003)\textsuperscript{18} study was planned to investigate the effect of Age on Occupational stress and job satisfaction among the managers of different age groups. A sample of 105 industrial managers working in different large-scale organizations was selected randomly for the study. The findings of the study reveals higher levels of job stress and less job satisfaction among managers of 25-35 years age than their counterparts in the middle age (36-45 years) and the old age groups (46-55 years). The study also found that the age found to be negatively correlated with occupational stress and positively with job satisfaction.

K. Chandraiah, et al. (2003)\textsuperscript{19}, in their study found that job becomes less satisfying under excessive stress and their expected intrinsic and extrinsic needs are not fulfilled. They further found that age plays a vital role to test the correlation between occupational stress and job satisfaction level and suggested that senior level officers have a decreased stress

\textsuperscript{18} “Occupational Stress and Job Satisfaction among Managers” Indian Journal of Occupational and Environmental Medicine, Vol.7, No.1, August 2003.

level and increased satisfaction as compared to the middle level officers.

Niels O.Pors’s\textsuperscript{20}, (2003) study based on a survey of British and Danish Library Managers explores the concept of job satisfaction and its relation to stress, job content and job conditions. In his study he explored the concept of job satisfaction and its relation to stress, job content and job conditions. The study evokes the theories of Hofstede as a tentative explanation of national differences. The study sets out to analyze job satisfaction in relation to a range of demographic variables. On the basis of a multitude of questions and statements the author forms several composite variables. They concern factors such as stress, freedom in the job, perception of management style and the actual job content. Hofstede's theories about cultural differences are at least partly confirmed through analysis. It is also evident that nationality plays a significant role in relation to factors such as stress and freedom in decision making. The study also hints that an intervening variable could be the way the nations adopt different methods to reorganise the public sector. The last point made in the study is the partial rejection of a generic theory about job satisfaction. The factors tend to be the same, but the weighing of the single factor and its significance are influenced by background factors such as nationality and size of the employing institution.

Jennifer McLean’s (2006)\textsuperscript{21}, purpose of study was to provide an initial exploration into the experiences of distance education faculty with regard to occupational stress and job satisfaction. The results of this study indicate that distance education is a rewarding career path for many higher education faculty. The challenges faced by faculty teaching exclusively at a distance are not entirely different from those of their on-campus


\textsuperscript{21} “Forgotten Faculty: Stress and Job Satisfaction Among Distance Educators”, Pennsylvania College of Technology, Online Journal of Distance Learning Administration, Volume IX, Number II, 2006.
counterparts, but the from those challenges the avenues by which they have managed are necessarily changed in the distance environment.

R Lakshminarayanan (2006)\textsuperscript{22} “in his study has concluded that every person has a working life-time/period of about 35 years, normally between 25 to 60 years of age. Given the Indian scenario of competitive market, over population and scarcity of good jobs, runs on the theory of “Survival of the Fittest” and no profession is stress-free. The degree and depth may vary from one another. Both employer and employee must understand that work should be valued and not excessive. Work should not compromise on health and family life; rather offer happiness, peace of mind, certainty, variety and flexibility. As a general rule, actions to reduce job stress should be given top priority in the process of organizational change to improve working conditions and to avert the situation of braindrain. But even the most conscientious efforts to improve working conditions are unlikely to eliminate stress completely for all workers.

Srivastava, Deepak’s, (2009)\textsuperscript{23} study has been designed to examine the degree of job satisfaction of two public sector and two private sector banks in India. The banks were selected and from each organisation 25 subjects were selected randomly. A questionnaire developed by Sinha (1990) was used for ascertaining the level of job satisfaction. Data were analysed employing one-way ANOVA. The means of four organisations were significantly different from one another. The result indicates that layoff threats, quick turnover, less welfare schemes, and less scope for vertical growth increasing job dissatisfaction. On the other hand, secure job environment, welfare policies and job stability increase the degree of job satisfaction.

\textsuperscript{22} An Overview Of Strategic Planning To Combat Occupational Stress – Need Of The Hour In The Present Indian Context”, National Institute of Virology, Indian Council of Medical Research, Pune, Maharashtra, 2006.

\textsuperscript{23} Sectorial comparison of factors influencing job satisfaction in Indian banking sector, Published on AllBusiness.com (2009)
Piyali Ghosh et al., (2010) focus on employees of private banks in India and aim to identify the factors/variables instrumental for job satisfaction and to empirically test such identified variables with the help of a survey. Several factors/variables have been clubbed as: work aspects, compensation, training, career development, supervision and work life balance. Sample comprised managerial and non-managerial staff of selected private sector banks in India; total sample size was 102. Reliability analysis was carried out using Cronbach alpha and, thereafter, factor analysis was conducted to understand factor loadings on the identified variables.

Talma Rosenthal, et al., (2012) pointed out that the occupational stress, or job strain, resulting from a lack of balance between job demands and job control, is considered one of the frequent factors in the etiology of hypertension in modern society. Stress, with its multifactorial causes, is complex and difficult to analyze at the physiological and psychosocial levels. The possible relation between job strain and blood pressure levels has been extensively studied, but the literature is replete with conflicting results regarding the relationship between the two. Further analysis of this relationship, including the many facets of job strain, may lead to operative proposals at the individual and public health levels designed to reduce the effects on health and well-being. In this study, researchers reviewed the literature on the subject, discussing the various methodologies, confounding variables, and suggested approaches for a healthier work environment.

Abdul Qayyum Chaudhry (2012) aims to find out the relationship between occupational

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24 International Journal of Indian Culture and Business Management, Volume 3, Number 5 / 2010, 560 - 576
stress and job satisfaction based on age, gender, nature of job, cadre, work experience of university teachers, and sector of university. The Pearson correlation indicates: no significant relationship found between job satisfaction and overall occupational stress; inverse relationship is found between the occupational stress and overall job satisfaction in faculty members of private universities; is no relationship between the occupational stress and overall job satisfaction in faculty members of public universities; no relationship between the occupational stress and overall job satisfaction in case of both male and female faculty members of universities; young age university teachers are more sensitive to the occupational stress and job satisfaction; and no significant relationship is found between the occupational stress and overall job satisfaction in faculty members of universities across the nature of job; visiting, contract and permanent.

Anurag Singh, et al., (2012)\textsuperscript{27} pointed out occupational stress is a key problem before organizational leadership, in this study researchers tried to explore the relationship between occupational stress and leadership behavior of organizational managers and researchers found that most of behavioral researchers are believed that reason of occupational stress may be different but there is most important reason may in its leadership behavior. The findings reflect the leadership styles exhibited by the managers in organizations. It appears that the leadership style of the managers vary depending upon various factors like the situation, need of the subordinates personal attributes etc. few studies were available highlighting the impact of leadership style of superior on the level of stress of the subordinates. Though different studies on the variables of occupational stress among executives indicate that role overload, role ambiguity, role conflict, under participation, under participation,

trust, intrinsic impoverishment significantly contribute to stress. A survey of the various studies on stress management reveals that research study on the occupational stress and job satisfaction in public sector banks in Tiruvarur district is not yet attempted. The present study “Impact of occupational stress on Job Satisfaction and subjective wellbeing of the employees in Selected Public Sector Banks in Thiruvarur District of Tamilnadu” attempts to fill the research gap. The study focuses mainly on the impact of occupational stress on job satisfaction and subjective wellbeing with special reference to public sector banks employees in Tiruvarur, Tamilnadu. The findings of this study not only throw light on level of stress and coping strategies adopted by the banks.

It may also help scholars and researchers to develop new ideas, techniques and methods for coping with stress and to improve the employees’ wellbeing. The causes and coping strategy for occupational stress adopted by the study units is discussed in the third chapter.

2.4 EMPIRICAL STUDIES ON OCCUPATIONAL STRESS AND SUBJECTIVE WELLBEING

Hl Dhar (2002) in his study has suggested that meditation is the best technique for stress-free life. Meditation is not a path of information but a path of transformation, not the path of knowing but the path of becoming. It is said five perversions (lust, anger, greed, attachment and ego) of mind create stress in the body like mental tension, migraine, high blood pressure, heart attack, diabetes, constipation, sleeplessness etc. Meditation develops virtues of chastity rather than lust, forgiveness rather than anger, detachment rather than attachment,

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generosity rather than greed, humility rather than ego. When the mind is detached from aforesaid five weaknesses, peace of mind automatically surfaces, balance of mind and state of wellbeing are experienced resulting in life free from stress. He also suggested that regular practice of integrated type of yoga not only prevent the development of various psychosomatic disorders but also improves a person’s resistance and ability to endure stressful situations more effectively.

Daisy Chauhan (2006)\textsuperscript{29} has concluded that it is a fact that stress is not similarly experienced by all people. The severity or gravity of a stressful situation depends on certain personality attributes like confidence, self-esteem, attitude, and certain qualities possessed by individuals like decision-making, sense of control, conflict resolution, possibility thinking. In that sense each individual has the capacity to choose his/her response to a particular stimulus through his/her self-awareness, independent will, creative imagination and conscious decision. Only the capability varies from person to person. The author further asserted that we need to understand that we have the ability to control and influence the environment and therefore are responsible for whatever is happening in their lives and career. Such an approach would limit the effect of other forces (external circumstances, condition or conditioning) in matters concerning oneself. If the meaning of life is the presence of difficulties, challenges, changes and conflicts then we need to learn to confront, adapt and meet the challenges by enhancing our capability and thereby realizing our potential. This is possible by adopting an integrated holistic approach to stress management. Seen in this regard stress management can be considered to be a preventive mechanism to reduce the risk of illness and thereby aim at a sense of fulfillment in one's professional and personal life by adopting a balanced approach to life.

Anjum Mahdi (2007)\textsuperscript{10}, the major result of his study was the main effect of organization has a significant effect, on the degree of stress. The interactions between the type of organizations and the type of workers as well as between the organization and intervention techniques also have a significant effect on stress. There is a significant effect of the type of organization and intervention technique on the degree of stress. Likewise the interaction effect between the organization and the intervention techniques had significant effects on the degree of stress in the after situation. There is a significant difference in the application of medication and non-medication techniques in the degree of stress between before and after situations. Subjects belonging to the three different organizations are highly significantly different in "the degree of stress in before situations as well as in the after situation. There is a significant difference between the application of medication and non-medication techniques for managing stress. Moreover there is also a significant difference in both before and after situations for the application of techniques to manage stress. Supervisors and workers belonging to Air Force are significantly different in religious and moral values. Supervisors and workers belonging to CRPF are significantly different in religious and moral values. He concluded that subjects belonging to three different organizations vary in the magnitude in the stress. And the intervention technique of medication and non-medication helped in the reduction of stress where non-medication had an edged over medication. Even in non-medication techniques yoga was more powerful than spiritualism. Among the values only religious and moral values were significantly different from the supervisors and workers of the subject belonging to Air Force and CRPF. The majority of correlation between different values showed inverse relationship.

Katherine M. Richardson, (2008) provides an empirical review of stress management interventions, employing meta-analysis procedures. A total of 36 studies were included, which represented 55 stress interventions. The average length of intervention was 7.4 weeks. The overall effect across the studies was .526, which is equivalent to a medium of large effect, indicating that, in general, stress interventions are effective, though the predominant outcome measures targeted psychological outcomes rather than performance or physiological outcomes. The results also revealed that relaxation interventions were the most frequent type of intervention. Further, there were few stress interventions focused at the organizational level. More specific results also indicated that cognitive-behavioural interventions produced larger effects than other types of interventions.

S Subramanian, (2009) attempts to explore the status of mental health and occupational stress with respect to two categories of patients: those who are suffering from cardiac problems and non cardiac health problems. Occupational Stress Questionnaire and Mental Health Questionnaire were administered to both cardiac and non cardiac patients. The cardiac group consisted of 40 patients who were being treated at the cardiology department of a reputed hospital, and non cardiac group (40 patients) consisted of outpatients of the same hospital being treated for non cardiac problems like knee pain, headache, etc. Responses to these self-reported questionnaires were subjected to statistical analysis to find out the difference between cardiac and non cardiac groups. The results revealed that cardiac patients tend to have lower levels of mental health than non cardiac patients. Similarly, cardiac patients were reported to have higher levels of stress due to role ambiguity, powerlessness, intrinsic impoverishment and unprofitability.

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John McCormick, (2009)\(^{33}\) the purpose of his research was to study teachers’ self-efficacy and occupational stress in the context of a large-scale curriculum reform in New South Wales, Australia. The study aims to follow up and replicate a study carried out approximately one year earlier. A theoretical framework, primarily based on social cognitive theory and the teachers’ attribution of responsibility for stress model and consistent with the earlier study, was used to guide the research. Data were gathered using a self-report questionnaire. Analysis was carried out using structural equation modelling, based on results of the earlier study and partial correlation analysis. A more parsimonious model of the related phenomena than had been established by the earlier study was confirmed, suggesting that the context of the educational reform was different one year later, particularly in terms of perceived social support and occupational stress specifically associated with the changes. The important result from the earlier study was replicated – understanding what was required by the reform was negatively associated with teachers’ self-efficacy for the new type of teaching and self-efficacy for using technology with the new curriculum.

Jacoba J. et.al, (2009)\(^{34}\) assessed the relationship between the occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa. A cross sectional survey design was used. The study population consisted of 818 registered nurses. The Nursing Stress Inventory, the Orientation to Life Questionnaire, the COPE, the Maslach Burnout Inventory-Human Services Survey, and the Utrecht Work Engagement Scale were administered. The results showed that the experience of depletion of emotional resources and feeling of depersonalization by registered nurses were associated with stress


\(^{34}\) Occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa, SA Journal of Industrial Psychology, Vol.35 No.1 Cape Town 2009.
due to job demands and a lack of organisational support, focus on and ventilation of emotions as a coping strategy, and a weak sense of coherence. Work engagement was predicted by a strong sense of coherence and approach coping strategies.

2.5 EMPIRICAL STUDIES ON OCCUPATIONAL STRESS INDEX

Smith A, (2000)\(^{35}\) reviews previous research on the scale of occupational stress and describes in detail the Bristol Stress and Health at work study. His study had three main aims: firstly, to determine the scale and severity of occupational stress in a random population sample; secondly, to distinguish the effects of stress at work from those of stress in general life; and finally, to determine whether objective indicators of health status and performance efficiency were related to perceived occupational stress. These aims were investigated by conducting an epidemiological survey of 17,000 randomly selected people from the Bristol electoral register, a follow-up survey 12 months later, and a detailed investigation of a cohort from the original sample. The results revealed that approximately 20% of the sample reported that they had very high or extremely high levels of stress at work. This effect was reliable over time, related to potentially stressful working conditions and associated with impaired physical and mental health. The effects of occupational stress could not be attributed to life stress or negative affectivity. The cohort study also suggested that high levels of occupational stress may influence physiology and mental performance. The prevalence rate obtained in this study suggests that 5 million workers in the UK have very high levels of occupational stress.

Manju Mehta, (2002)\(^{36}\) in her study has found out the significant stress factors (stressors)

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experienced by Indian expedition members during voyage and stay in Antarctic continent and the impact of stressors on social behaviour. In the study Different individual responses were observed during stressful situations. The most common negative behaviours were criticising each other, nagging, passing negative comments, taunting, blaming, crying, withdrawing and in few situations violent behaviour after drinking were observed. However, majority of the expedition members manifested positive behaviours e.g. co operation, helping others, providing social support, organizing group activities to channelize anxiety. It is found that 60 % of the wintering members had high enthusiasm, achievement motivation, competition and 40 % were high on leadership. Though tension level was low for almost all the expedition members, self control and maturity were also low in 65 % of the members. Sensitiveness, getting emotionally upset was low in 12 expedition members. Symptoms like insomnia, irritability, headache, migraines, anxiety and depression were reported. The post Antarctic evaluation carried out by us for the last three years has also suggested difficulties in work, communication, physiological and psychological problems. There has been instances of excessive drinking of alcohol, smoking, interpersonal conflicts, physical fights, anxiety and depression.

Alexandros-Stamatios G. et.al. (2003) investigated the occupational stress amongst 355 male and female Greek junior hospital doctors (JHDs) working in the Greater Athens area. The initial phase of the research involved in-depth interviews with a random stratified sample of sixty JHDs, both male and female, in a variety of specialties of junior hospital staff. An extended version of the occupational stress indicator (OSI) questionnaire was developed, incorporating additional items based on the results of the qualitative part of the study, and on previous research findings in the same area. The sample consisted of 193

males and 162 females JHDs, who completed the OSI. Analyses of the data demonstrated that, overall, JHDs presented significantly higher levels of sources of pressure than the normative population and other comparative occupational samples. As regards the various sub-group comparisons, bivariate analyses revealed that there were significant differences between the male and female JHDs in certain aspects of pressure (“career and achievement” and “home/work interface”). Multivariate analyses revealed that predictors of physical and mental ill health and job dissatisfaction were type A behaviour and “demands of the profession” respectively.

Kanemitsu Yoshihiro, (2005)\textsuperscript{38}, the purpose of his study was to describe the role of recent Health Psychology in an occupational stress survey. First of all, the study tried to review the importance of the individual and the moderating factors which were supposed to mediate between stressors and stress responses, by observing the historical significance in psychology. Specifically, based on the recent trend of Health Psychology, his research had proposed that such intervening variables as coping flexibilities, work control, and mentoring were valid. Finally, this study advanced a suggestion of new perspectives for research on Health Psychology, presenting some useful scales of Health Psychology.

N. Vegchel’s, (2005)\textsuperscript{39} study addresses theoretical issues involving different interaction effects between job demands and job resources, accompanied by a thorough empirical test of interaction terms in the demand-control (DC) model and the effort-reward imbalance (ERI) model in relation to employee health and wellbeing (i.e., exhaustion, psychosomatic health complaints, company-registered sickness absence). Neither the DC model nor the

\textsuperscript{38} A Health-Psychological Approach To An Occupational Stress: Consideration Of Coping Flexibility, Work Control, And Mentoring As The Mediating Variables In Psychological Stress Model, Kawasaki Medical Welfare Journal, Vol.15;No.1;Page.13-23(2005)

\textsuperscript{39} Occupational stress in (interaction): the interplay between job demands and job resources. Journal of Organizational Behavior, 26(5), 535-560.2005
ERI model gives a clear theoretical rationale or preference for a particular interaction term. Hierarchical regression analyses were conducted among 405 nursing home employees and cross-validated in a comparable sample (N = 471). Results including cross-validation showed that only a multiplicative interaction term yielded consistent results for both the DC model and the ERI model. Theoretical as well as empirical results argue for a multiplicative interaction term to test the DC model and the ERI model. Future job stress research may benefit from the idea that there should be a theoretical preference for any interaction form, either in the DC model or in the ERI model. However, more research on interactions is needed to address this topic adequately.

Michailidis M, Georgiou Y.,(2005)\textsuperscript{40} examines the occupational stress of employees in the banking sector. A sample of 60 bank employees at different organizational levels and educational backgrounds was used. Data collection utilized the Occupational Stress Indicator (OSI). Results of data analysis provided evidences that employees' educational levels affect the degree of stress they experience in various ways. Bank employees cannot afford the time to relax and "wind down" when they are faced with work variety, discrimination, favouritism, delegation and conflicting tasks. The study also shows the degree to which some employees tend to bring work-related problems home (and take family problems to work) depends on their educational background, the strength of the employees' family support, and the amount of time available for them to relax. Finally, the drinking habits (alcohol) of the employees were found to play a significant role in determining the levels of occupational stress.

N. Panchanatham, et.al.(2006)\textsuperscript{41}, in their study predicted that there is a positive correlation

\textsuperscript{40}Employee occupational stress in banking, Work. 2005;24(2):123-37.

\textsuperscript{41}“Stress Management for Problem Solving Executives with Coercive Leadership Style” Journal of the Indian
between executives’ coercive leadership behaviour and their occupational stress. The results shown in study explained the fact that there is a significant and positive relationship between these two variables. Further it is noted from the study that the coercive leaders are more stressful than their counterparts. From the result it is evident that organizations taking efforts to reduce the executive stress level can help them to make changes in the executives’ leadership pattern. It is true, that every executive is expected to follow more than one leadership style according to the situation. However, being always dominant in coercive style particularly the implementor is an obstacle to get things done.

Anne Marie Berg et.al.(2006)\(^42\) in the study pointed out that the prevalence of subjective health complaints was relatively high and was mainly associated to job pressure and lack of support. Males showed more depressive symptoms than females. All stress factors on frequency were positively associated to the burnout dimensions, depersonalization and emotional exhaustion, except work injuries. Finally they have concluded that the Executives differ in their problem solving styles and leadership styles. There is a significant and positive correlation between executives’ coercive leadership style and their level of occupational stress. Coercive leaders are more stressful than their counterparts. For better leadership pattern the executives’ stress level is to be monitored by an organizational HRD division. Formulating strategies to maintain emotional balance among the problem solvers need thorough dealings with occupational stress.

Latha KS, DHRL,et.al.(2006)\(^43\) aimed to assess the nature of stress, social support systems and coping styles among adolescents. 100 students in Pre University College (II year) of


\(^43\) “Patterns of Stress, Coping Styles and Social Supports among Adolescents”Journal of Indian Association of Child Adolescents Mental Health; 3(1): 5-10, 2006.
both genders in the age range of 16-19 years were assessed with the Adolescent Stress Scale, a semi-structured interview to elicit social support, and a self-report coping scale. The main sources of stress in both genders were getting up early in the morning, pressure to study, having to concentrate for too long during college hours, not having enough money to buy things, and long college hours. Prayer was the main coping strategy used by both the genders. Males had larger social network than females. They Concluded that the Schools/colleges should provide opportunities to work through the stresses related to college and studies by instituting specialized programmes.

An attempt was made by Geeta S. and Vijayalaxmi A.(2006) to find out the impact of emotional maturity of adolescents on their stress and self-confidence. Sample of the study consists of 105 adolescents studying in XI and XII class at Dharwad city Karnataka State, India. The findings revealed that the adolescents with high emotional maturity have significantly high stress (t=10.44; p< 0.001) and self-confidence (t=-2.92; p< 0.01) when compared to those with low emotional maturity. Adolescents with more number of siblings have shown significantly higher level of self-confidence (t = 2.96; p< 0.01) than their counter parts. It is also found that the educational level of father has significantly influenced stress of their adolescent children (F= 5.303; p< 0.01). Adolescent boys tend to have significantly higher stress than girls (t=1.72) and girls tend to have significantly high self confidence (t=1.83) World Socialist WebSite (WSWS), news and analysis study documents exploitation in Indian Call Centre (by Jake Skeers, 23rd November 2005). Work force at call centres are under constant stress because of their work load, Competitive presser and surveillance staff in this sector reported health problems such as nervousness, chronic fatigue, bodyache, insomnia, nausea and anxiety, restlessness and depression due to odd

working hours and stress.

K.K.Jain, et.al.(2007)\(^\text{45}\), in their study found the results of the study and confirmed the assumption that high age group managers as well as high age group engineers were equally satisfied with their jobs and the study revealed the same findings when low age group managers and low age group engineers were compared on their job satisfaction level.

An attempt was made by Richa Darshan (2008)\(^\text{46}\) to analyze the effects of stress in women working at call centres at Indore and problems faced by them. The attempts are also made to understand the various ways in which they try to eliminate stress from their life. The study was mainly at exploratory level and focused on issues such as age, education, motivation, commitment and decision making power and health of those at call centres. The major findings of the study include the first issue relates to balancing of family and social life for women in call centres. As they work in night shifts and also odd hours of the day, they are unable to spend sufficient leisure time with family members. As a result, the contact among the family members breaks up. The second issue is related to the stress level of women in call centres. The cause being monotony of work and dealing with abusive clients leads them to overreact to situations. The final issue identifies the poor work environment. The major problem is related to sexual harassment and offensive behaviour in work place. The researcher concluded that it is desirable to employ HR professionals with knowledge of human psychology in call centres. They should look for counsellors to refer employees problems; they actually do not retain them. Young women in call centres between 18 to 21 years should be guided on physical and mental coordination to cope with a job that

\(^{45}\) Job Satisfaction as Related to Organizational Climate and Occupational Stress: A Case Study of Indian Oil, International Review of Business, 2007.

requires hyper-alert efficiency. Because of the sexual stigma associated with job, it doesn't bring status to women in the society. Establishing an equitable and gender safe work culture and highlighting the respectability of call centres creates pleasure in the job and increases the motivation for women in call centres.

R. Bakhshi, et al., (2008)\textsuperscript{47} had undertaken the study with the objective to know socio personal characteristics of selected categories of working women and their families; to examine working conditions of selected categories of working women and to analyse the impact of occupational stress on home environment as perceived by the selected respondents. The study was conducted in Ludhiana city and a total sample of 150 respondents was selected from three categories of working women namely; doctors, university teachers and bank employees with 50 respondents in each category. Results showed the impact of stress on house care and upkeep as “pay full attention towards orderliness in home” scored maximum and “my dependency on servants has not changed” scored minimum. The impact of stress on social and leisure life revealed that “going out on holidays” scored maximum and “enjoy meeting social obligation” was least preferred. The impact of stress on miscellaneous work showed that maximum scoring statement was to “pay attention towards bill payments, cheques, deposits etc., and least scoring statement was “keeping an eye over kitchen needs is easy for me”.

J.E. Agolla’s, (2009)\textsuperscript{48} analysis is based on the empirical study on the police work stress, symptoms and coping strategies among the police services in Botswana. The data was based on a sample size of (N = 229) of police officers in Gaborone and its surrounding. A total of 10 police stations were sampled for this study. A simple convenient random sampling


technique was employed to sample the participants. Data were analysed using a simple descriptive statistics and frequency table. The findings from this study reveal that the police work stressors are getting injured while on duty and the use of force when the job demands to do so etc. The coping strategies were identified as exercising, socialising, healthy eating or diets, career planning and employee training. The research adopted survey approach using quantitative method only. Therefore, it is suggested that the study be replicated using triangulation methods to validate these findings. However, it is hoped that these findings will add to the existing body of knowledge and contribute to the understanding of the nature of police work stress.

Anthony Chukwuka Ugwu, et.al.(2009)\textsuperscript{49} was aimed to determine the impact of role extension of medical radiographers into sonography. 50 self-administered questionnaires were distributed to radiographers and to sonographers (radiographers with sonography responsibility). The questionnaires included questions seeking information on the demographic profile of the radiographer and sonographer, anatomical regions of biomechanical symptoms/stress and visual analogue scale (VAS), which rated job satisfaction and anxiety levels. 96% of the questionnaires were returned and analyzed statistically using SPSS 11.0 software with $P<0.05$ indicating level of significance. Sonographers had more prevalence of biomechanical stress symptoms than the radiographers. Job satisfaction for sonographers (58.75\%) was lower than that for radiographers (64.29\%). Anxiety level was higher among sonographers even though this was not statistically significant. Sonography responsibility on radiographers did not have any significant effect on psycho social stress. A balance in the extended role could aid efficiency in service delivery while improving the social strength of the individual.

\textsuperscript{49} Occupational stress among radiographers: the impact of sonography Responsibility Internet Journal of Medical Update, Vol. 4, No. 1, January 2009
Nor Liyana Mohd Bokti and Mansor Abu Talib (2009) in their study of a total number of 40 male officers and non-officers, from seaman and engineering and supply branch in the Lumut Naval Base participating in the study. Data were collected using a self-administered questionnaire, the Job Satisfaction Survey (Spector, 1985) and Job Related Tension Index (JRTI; Kahn et al., 1964). This preliminary study established internal consistency using Cronbach alpha values for both the instruments. Additionally, the study determined the level of occupational stress, job satisfaction and relationship between occupational stress and job satisfaction facets. The findings of the study revealed that the reliability of both the instruments were greater than 0.80. The majority of the male Navy personnel reported moderate levels of job satisfaction in the favorable nature of work facet. High occupational stress on the other hand was related to an unknown superior’s evaluation of one’s workplace performance. Correlation analyses found that occupational stress was associated with overall job satisfaction and in eight of its facets. Collectively results provide evidence that both the instruments are reliable in the Malaysian military setting context.

Dr. Parul Rishi (2008) conducted the study relating to stress auditing of forest officers and field forest staff involved in different working divisions of Madhya Pradesh Forest department with the objective of promoting a more conducive atmosphere for forest management with the association of healthy and dedicated forest personnel. The salient findings of the study was overall, both forest officers and field staff were experiencing stress of varying nature and degrees. Forest officers were experiencing more stress because of group and political pressures, work pressures, motivational problems and resource limitations. However, personal and familial stressors were not varying crucial for them.

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51 “Stress auditing of forest personnel” conducted in different working divisions of Madhya Pradesh Forest department (2008)
Field staff were experiencing more stress because of resource limitations, motivational problems, group and political pressures and personally familial stressors respectively. However, the least important stressor was work pressure and departmental pressure. He asserted that the study has implications for HRD section of forest department for providing their personnel, adequate opportunity for training in stress management and other developmental opportunities. They should also take care of different types of stressors existing at different levels of forestry sector, so that a conducive working atmosphere for forest management could be generated along with an association of healthy and dedicated forest personnel.

María del Pilar González Vigil (2010)\textsuperscript{52}, in his study has focused on the stress perception, stressful situations, and stress management strategies in studies of Swedish and Peruvian students from a teacher-training program. The research design that is applied for this purpose is comparative. The sample includes Swedish and Peruvian second year students and administrative staff from a teacher-training program. The research instruments are questionnaires and interviews. The main findings of this study indicate that in spite of the cultural differences, both the groups of students present as many similarities as differences. On the one hand, Swedish and Peruvian students manifest a particular profile in the way they perceive the concept of stress, experience specific stress effects in studies, and manage stressful academic situations. On the other hand, both the groups present some similarities considering specific stressful situations in studies; their perception of stress as negative in their academic performance, emotional state and health; their variable competence to manage stress in studies.

\textsuperscript{52} Stress Perception, Stressful Experiences and Stress Management Strategies, A Comparative Case Study of Swedish and Peruvian Teacher Students, Stockholm University, Sweden (2010)
R.P. Vempati (2010), evaluated the physiological changes of a yoga based stress management program for 26 symptomatic, male, middle managers. The Occupational Stress index (OSI) and autonomic parameters were measured. Data of subjects with OSI greater or less than the median were analyzed separately. The 't' test for paired data was used for pre-post comparisons. The whole group (n=26) showed a significant decrease in breath rate (p< .005) after the two day program, with no other changes. Subjects with OSI more than median (n = 13) showed a significant decrease in breath rate (p< .01), in the power of the low frequency component of the heart rate variability spectrum (p<.05), and in the low frequency: high frequency ratio (LF/ HF) (p<.05) and an increase in the high frequency component (p<.05) after the program, with no changes in the subjects with OSI less than the median.

Yong Wah Goh, et.al,(2010) examined Lazarus and Folkman's (1984) transactional model of stress and coping. One hundred and twenty nine Australian participants with full time employment (i.e., nurses and administration employees) were recruited. There were 49 male (age mean = 34, SD = 10.51) and 80 female (age mean = 36, SD = 10.31) participants. The analysis of three path models indicated that in addition to the original paths, which were found in Lazarus and Folkman's transactional model (primary appraisal → secondary appraisal→stress→coping), there were also direct links between the primary appraisal and stress level time one and between stress level time one to stress level time two. This study has provided additional insights into the transactional process that will extend their understanding of how individuals appraise, cope and experience occupational stress.

53 Baseline Occupational Stress Levels And Physiological Responses: A Two Day Stress Management Programme, Vivekananda Kendra Yoga Research Foundation, Bangalore, India, 2010. 
Bushara Bano (2011)\textsuperscript{55} empirically assesses the occupational stress among the employees of two important government organizations namely archaeological survey of India (ASI), Agra and District Treasury office of Agra. The analysis has been done using ORS scale. This scale comprises of ten role stressors; Inter-role distance, Role Stagnation, Role Erosion Conflict, Role Erosion, Role Overload, Role Isolation, Personal Inadequacy, Self-role distance, Role Ambiguity, Resource Inadequacy indicate key findings as well. The finding reveals that the government employees are facing moderate level of stress. The research established that Resource inadequacy is the most potent stressor. It also identifies that Role Erosion and Role Expectation Conflict has a significant impact on the stress level of employees in different government organizations.

N.Mohan and Dr.J.Ashok (2011)\textsuperscript{56} explores the influences of age and experience on stress and depression and the relationship between stress and depression among the women information technology (IT) professionals in Bangalore, Karnataka. Their study aimed at i) To find out the level of stress and depression experienced by women IT professionals ii) To understand the impact of age and experience on stress and Depression iii) to study the relationship between Stress and depression. iv) To know the factors causing of stress in software companies. The study was conducted in Bangalore, Karnataka with a sample of 250 women software professionals. The sample selection was done by convenience sampling method. The data was analyzed using descriptive one way analysis of variance and Pearson’s correlation test. Results showed that the women software professionals experienced moderate level of stress and stress dimension. This study reveals that 85


\textsuperscript{56} Stress And Depression Experienced By Women Software Professionals In Bangalore, Karnataka, Global Journal of Management and Business Research Volume 11 Issue 6 Version 1.0 May 2011
percent of the respondents experience medium level of depression and also suggested the age and experience significantly influence the overall stress and depression experienced by the employees. The study shows that there might be a strong relationship between overall stress and depression.

2.6 CONCLUSION

A survey of the various studies on stress management reveals that research study on the occupational stress and job satisfaction in public sector banks in Tiruvarur district is not yet attempted. The present study “Impact of occupational stress on Job Satisfaction and subjective wellbeing of the employees in Selected Public Sector Banks in Thiruvarur District of Tamilnadu” attempts to fill the research gap. The study focuses mainly on the impact of occupational stress on job satisfaction and subjective wellbeing with special reference to public sector banks employees in Tiruvarur, Tamilnadu. The findings of this study not only throw light on level of stress and coping strategies adopted by the banks. It may also help scholars and researchers to develop new ideas, techniques and methods for coping with stress and to improve the employees’ wellbeing. The causes and coping strategy for occupational stress adopted by the study units is discussed in the third chapter.