CHAPTER – II REVIEW OF LITERATURE

2.1 INTRODUCTION

Review of literature paves the way for a clear understanding of the areas of research already undertaken and throws light on the potential areas which are yet to be covered. Keeping this in mind, an attempt has been made to make a brief survey of the work undertaken on the field of occupational stress.

This chapter deals with the review of literature concerned with the subject of this study. Many studies have been conducted. They highlight the occupational stress from different angles. The review of some of the important studies is presented below.

Jha (1988)\textsuperscript{11} deals in his reports that the effects of job stress on strain, the pattern of stress and strain in three different work groups, and differences in the levels of job stress and strain due to occupational level. The respondents consisted of ‘executives’ from a large steel manufacturing organization. Regression analyses indicated that job future ambiguity had a significant negative effect on job satisfaction in each group of executives. Further, role overload (in the case of production executives) and role ambiguity (in the case of data processing executives) had negative effects on job satisfaction. Role overload accounted for fatigue among the

personnel as well as among production executives. The data indicated that the patterns of stress and strain were different in the three groups of employees. The examination of differences due to occupational level indicated that the employees of middle levels had more role ambiguity than those at the higher levels. No significant differences were observed on other dimensions.

**Aldred and Carolyn**¹² (2004) observed that employers should investigate and actively manage employment-related stress. In addition, employers should apply management techniques that are more sympathetic to employee concerned about stress.

**Mohsin Aziz, (2004)**¹³ discussed in their study that organisational stress originates in organisational demands that are experienced by the individual. Stress is built up in the concept of role which is conceived as the position a person occupies in a system. This paper 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.

Riti Desai and Ray Gaur (2004)\textsuperscript{14} observed in their study that the work posture of women workers (experimental group) engaged in small-scale industries who have to maintain a constant seated position (squatting cross-legged) on the floor. Along with the worker group, an equal number of housewives belonging to the same socio-economic status were also studied as a control group. The latter group never maintained such kinds of posture for prolonged periods. To ascertain the effect of work posture, qualitative and quantitative assessment procedures were followed for both groups in the field and in laboratory studies. It was observed that there was a significant difference in body pain and discomfort among the experimental and control groups, which can be attributed to the prolonged sitting postures. The results of various other assessment procedures were considered and recommendations for suitably designed workstations were given.

Tyson, Paul D.; Pongruengphant and Rana\textsuperscript{15} (2004) examined the sources of occupational stress, coping strategies, and job satisfaction. A sample of 200 nurses was compared to 147 nurses sampled from the same hospital wards after 5 years and revealed a significant increase in nurses' workload, involvement with life and death situations, and pressure from being required to perform tasks outside their competence. Although nurses working in public hospitals generally reported more stress than private hospitals, surprisingly nurses' satisfaction with their job increased

\textsuperscript{14} Riti Desai and Ray Gaur, –Occupational Stress of Women in Small-scale Industry‖, Journal of Health Management October 2004, vol. 6, no. 2, 141-146

particularly in public hospitals, which may be attributable to age, improvements in monetary compensation, and organizational support.

Aldred, Carolyn. 16 (2005) reported that recent Appeal Court ruling lowers the standard for stress claims against Great Britain employers and allows companies to be held vicariously liable for the actions of workers' supervisors. The Court of Appeal in London ruled March 16 that an employee could sue his former employer under the Harassment Act of 1997 for alleged harassment by his manager. The ruling marks FOR the first time the Harassment Act which is a public order statute has been successfully used as a ground for an occupational stress claim.

Arthur and Andrew R. 17 (2005) found that 86 per cent of employees (n = 111) who experience stress in the workplace have sought help from their workplace counselling schemes. This study found that almost high levels of mental health problems existed (86 per cent) in employees who remained at their work and that participants had higher rates of anxiety than depression. This finding was at variance with the usual co-morbid presentation of anxiety and depression found in community based mental health services and suggests that depression may be an important differentiating factor between those who can remain at work and use counselling and those who cannot.

Béjean, Sophie; Sultan-Taäeb and Hélène\textsuperscript{18} (2005) have evaluated the costs of work-related stress in France. Three illnesses-cardiovascular diseases, depression, musculoskeletal diseases and back pain-that may result from exposure to stress were identified and the proportions of cases attributable to the risk factor were calculated from epidemiological studies. Two methodological hypotheses allowed them to provide complementary evaluations of the social cost of occupational stress and raised the ethical questions inherent in the choice of methodology. Work-related stress costs the society between €1,167 million and €1,975 million in France, or 14.4-24.2 percentage of the total spending of social security occupational illnesses and work injuries branch.

Demetri Kantarelis\textsuperscript{19} (2005) found that the theoretical concepts are proposed to capture the substance of issues associated with occupational stress. Reduction below the profit maximizing stress level may be achieved only if a firm's increase in cost for stress relief in the work place guarantees productivity and profit improvement in exchange for a reduction in employee health damages due to stress.

Leeamol Mathew (2005)\textsuperscript{20} deals in his study that examines the sources, effects, and the coping strategies of occupational stress among special educators in India. The Government policies are tailored to enhance the education of children with disabilities, but very few of these policies focus the special educators who take care

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of students with disabilities. These educators have largely been clubbed together with teachers of regular schools. Therefore, the issues of special educators have always been a neglected field in India. Of the 21 million disabled population of the country, 12 million are children with various disabilities, according to the Census of India 2001. And the level and nature of stress experienced by this population have hardly been the focus of study. Hence, an attempt is made to study the nature and levels of occupational stress experienced by teachers of special schools. The geographical area of the study was two districts, Calicut and Malappuram, of the state of Kerala, South India. 35 special educators, who had more than two years of teaching experience, were randomly selected for the study from the schools in this geographical area. The methodology adopted was both quantitative and qualitative. To collect the quantitative data, the occupational Stress Indicator, developed by Cooper, et. al., (1988) was used. The Indicator evaluates occupational stress by analysing five key factors: i) Sources of stress, ii) Individual characteristics, iii) Locus of control, iv) Coping strategies, and v) Effects of stress. To collect qualitative data an unstructured personal interview was used. The quantitative results revealed that the sources of stress spread from: i) school structure and climate, ii) home/work interface, iii) relationship with other people, iv) intrinsic job factors. The common effect of stress on special educators was found to be health related problems - both physical and mental - and job dissatisfaction. There was no organised method to redress the problem rising from occupational stress. As a result, the most commonly used coping strategy was social support, task strategies, and home/school relationship. While the qualitative data confirmed the findings of the quantitative data, it pointed out some
other issues, which the quantitative indicators did not cover. The sources of stress as repeatedly reported in the qualitative interviews were that of low salary - due to the subcontracting by the Government to NGO's, job insecurity, work overload, and high teacher-student ratio. The results point to the need of Government policies targeting specifically to the special educators if there has to be tangible improvements in the quality of life of the children with disabilities.

Michailidis, Maria; Georgiou and Yiota\textsuperscript{21} (2005) have emphasized the importance of assessment and management of work related stress. The recognition of the harmful physical and psychological effects of stress on both individuals and organizations was studied by them. A sample of 60 bank employees at different organizational levels and educational backgrounds was used. Data collection utilized the Occupational Stress Indicator (OSI). It implied that educational levels affect the degree of stress they experience in various ways. Finally, the drinking habits (alcohol) of the employees were found to play a significant role in determining the levels of occupational stress.

Ogińska-Bulik and Nina\textsuperscript{22} (2005) explored the relationship between emotional intelligence and perceived stress in the workplace and health-related consequences in human service workers. They selected 330 respondents as sample size. Three methods were used in the study: The Emotional Intelligence Questionnaire INTE with Polish modification, the Subjective Work Evaluation


Questionnaire developed in Poland, and the General Health Questionnaire (GHQ-28) with Polish modification. The results confirmed an essential, but not very strong, role of emotional intelligence in perceiving occupational stress.

Ryan, P., Hill, R., Anczewska, M.k Hardy, P.k Kurek, A.k Nielson, K. and Turner, C. 23 (2005) have attempted to address the issue of work-related stress through whole team training programmes, on a background of largely ineffective stress reduction training programmes offered to individuals within the workplace. The findings have significant implications to the conceptual, methodological and everyday organizational practice levels of tackling this central issue to the health of the workplace.

Salmond, Susan; Ropis and Patricia E., 24 (2005) analysed the job related stress among medical-surgical and home care nurses in the U.S. High stress leads to negative work environments that deprive nurses of their spirit and passion about their job. Key factors contributing to workplace stress includes team conflict, unclear role expectations, heavy workload, and lack of autonomy.

Stetz, Thomas A., Stetz, Melba C., Bliese and Paul D. 25 (2005) showed that three out of four regression equations had significant three-way interactions.

Organizational constraints×supervisor support×self-efficacy had statistically


\[ 24 \quad \text{Salmond, Susan; Ropis, Patricia E. – Job Stress and General Well-Being: A Comparative Study of Medical-Surgical and Home Care Nurses‖, MEDSURG Nursing, Oct 2005, Vol. 14 Issue 5, p301-309, 9p.} \]

\[ 25 \quad \text{Stetz, Thomas A.; Stetz, Melba C.; Bliese, Paul D. – The importance of self-efficacy in the moderating effects of social support on stressor-strain relationships‖, Work & Stress, Jan-Mar 2006, Vol. 20 Issue 1, p49-59, 11p.} \]
significant interactions in the prediction of job satisfaction and psychological well-being. Organizational constraints×co-worker support×self-efficacy had a significant interaction in the predicted of psychological well-being. These results indicate that interventions aimed at reducing strains by increasing social support should consider an individual's self-efficacy.

Vakola, Maria, Nikolaou and Loannis\(^\text{26}\) (2005) suggested that occupational stress and organizational change are now widely accepted as two major issues in organizational life. The study explored the linkage between employees' attitudes towards organizational change and two of the most significant constraints in organizational behaviour; occupational stress and organizational commitment. The results were in the expected direction showing negative correlations between occupational stressors and attitudes to change, indicating that highly stressed individuals demonstrate decreased commitment and increased reluctance to accept organizational change interventions.

Wiesner, Margit, Windle, Michael, Freeman and Amy\(^\text{27}\) (2005) considered main and moderated relationships between 5 job stressors. Alcohol consumption, drug use, and depression were examined using data from a community sample of 583 young adults (mean age = 23.68 years). Analyses revealed a few direct associations between high job boredom, low skill variety, and low autonomy and depression


\(^{27}\) Wiesner, Margit; Windle, Michael; Freeman, Amy, –Work Stress, Substance Use, and Depression Among Young AdultWorkers: An Examination of Main and Moderator Effect Models‖, Journal of Occupational Health Psychology, Apr2005, Vol. 10 Issue 2, p83-96, 14p.
measures and heavy alcohol use. There were no direct relationships between job stress and binge drinking, alcohol consumption, drug use, or heavy drug use.

**Yates and Iva** ²⁸ (2005) in their study have found from the families and work institute that 40 percentage of the workers reported their job was very or extremely stressful. Another 25 percentage view their jobs as the number one stress factor in their lives. They also have identified several job conditions which can lead to occupational stress.

**Adams, Richard E., Boscarino, Joseph A., Figley and Charles R.** ²⁹ (2006) discussed in their study (a) assessed the psychometric properties of a CF scale, and (b) examined the scale's predictive validity in a multivariate model. Factor analyses indicated that the CF scale measured multiple dimensions. In the light of increasing the ability of professional caregivers to meet the emotional needs of their clients within a stressful environment without experiencing CF.

**Adriaenssens, Liesbeth; De Prins, Peggy; VloeberghS, Daniël** ³⁰ (2006) investigated (1) the well-being (job stress and job dissatisfaction) of academic staff at the University of Antwerp, (2) the specific factors of the work environment that have an impact on employee well-being, and (3) the interaction between HR practices and

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employee well-being. Finally they also have given suggestions of improvement for the work environment.

Botha, Christo; Pienaar and Jaco\textsuperscript{31} (2006) conducted a study to determine the dimensions of occupational stress of employees of the Department of Correctional Services in a management area of the Freestate Province of South Africa. The results indicated that an external locus of control and negative affect contributed to the experience of occupational stress.

Coetzer, W.J. and Rothmann, S.\textsuperscript{32} (2006) in their study identified occupational stressors for employees in an insurance company and assessed the relationship between occupational stress, ill health and organisational commitment. The results showed that job insecurity as well as pay and benefits were the highest stressors in the insurance industry.

H., Azlihanis A. L., Naing; D. Aziah B. and N., Rusli\textsuperscript{33}(2006) conducted a study to identify the prevalence and factors associated with job strain among teachers working in secondary school in Kota Bharu, Kelantan. A sample size of 580 teachers was taken. And the result was significant. The result reveals that there was linear relationship between job strain and duration of current employment, duration of working hours job insecurity and social support.


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Jackson, Leon; Rothmann and Sebastiaan\textsuperscript{34}(2006) discussed to determine the differences between occupational stress and strain of educators in different biographical groups, and to assess the relationship between occupational stress, organizational commitment and ill-health. A sample of 1170 was selected and Organizational Stress Screening Tool (ASSET) and a biographical questionnaire were administered. They found differences between the occupational stress, organizational commitment and ill-health of educators in different types of schools, age, and qualification groups.

Keeva and Steven\textsuperscript{35} (2006) in their article deal with the high rates of mental depression among lawyers in the U.S. Studies which highlighted the depression problem among lawyers are cited. It discusses the suicide of Judge Mack Kidd of Austin, Texas. It explored the role of occupational stress among lawyers.

Kushnir, Talma; Melamed and Samuel\textsuperscript{36} (2006) in their study focused on the –Domestic Stress and Well-Being of Employed Women‖. Respondents were 133 mothers employed in secretarial and managerial jobs. It was suggested that in families (as in teams), shared decision control may be a more potent coping resource than personal control.

\textsuperscript{34} Jackson, Leon; Rothmann, Sebastiaan. –Occupational stress, organisational commitment, and ill-health of educators in the North West Province‖, South African Journal of Education, Feb 2006, Vol. 26, Issue 1, p75-95, 21p, 8.
\textsuperscript{35} Keeva, Steven. –Depression Takes a Toll‖, ABA Journal, Jan 2006, Vol. 92 Issue 1, p37-38, 2p
\textsuperscript{36} Kushnir, Talma; Melamed, Samuel. –Domestic Stress and Well-Being of Employed Women: Interplay Between Demands and Decision Control at Home‖, Sex Roles, May 2006, Vol. 54 Issue 9/10, p687-694, 8p.
Noblet, Andrew; LaMontagne and Anthony D.\textsuperscript{37} (2006) have conducted a study on -The role of workplace health promotion in addressing job stress-. The enormous human and economic costs associated with occupational stress suggested that initiatives designed to prevent and or reduce employee stress should be high on the agenda of Workplace Health Promotion (WHP) program. The aim of the second part of this study was a detailed description of what the comprehensive approach to stress prevention/reduction looks like in practice and to examine the means by which WHP can help develop initiatives that address both the sources and the symptoms of job stress.

Richards, David, Bee, Penny, Barkham, Michael, Gilbody, Simon, Cahill, Jane and Glanville, Julie\textsuperscript{38} (2006) in their study reviewed the prevalence of low staff morale, stress, burnout, job satisfaction and psychological well-being amongst staff working in in-patient psychiatric wards. Out of the results of 34 mental health studies identified, 13 were specific to acute in-patient settings, and 21 were specific to other non-specified ward-based samples.

W. de Vente, J.H. Kamphuis and P.M.G. Emmelkamp\textsuperscript{39} (2006) investigated the level and the type of alexithymia associated with occupational stress. Group differences in alexithymia were analyzed using ANOVAs. The type of

\textsuperscript{37} Noblet, Andrew; LaMontagne, Anthony D. -The role of workplace health promotion in addressing job stress-, Health Promotion International, Dec2006, Vol. 21 Issue 4, p346-353, 8p.

\textsuperscript{38} Richards, David; Bee, Penny; Barkham, Michael; Gilbody, Simon; Cahill, Jane; Glanville, Julie. -The prevalence of nursing staff stress on adult acute psychiatric in-patient wards-, Social Psychiatry & Psychiatric Epidemiology, Jan2006, Vol. 41(1), p.34-43.

alexithymia was investigated by (a) determining absolute and relative stability, (b) exploring state dependence by adjusting alexithymia for burnout and distress complaints and (c) associating recovery of complaints with change in alexithymia. It was found out from their results that Alexithymia was significantly elevated among the patients.

**Wated, Guillermo and Sanchez, Juan I.**40 (2006) conducted research on “The Role of Accent as a Work Stressor on Attitudinal and Health-Related Work Outcomes” Data were collected from 114 Hispanic employees who spoke English with an accent supported this prediction. The moderating roles of group identity, self-efficacy, and perceived control in the process were examined. None of the proposed coping mechanism buffered the impact of perceived discrimination based on accent on employee outcomes.

**Rakesh Kumar Agrawal and Shailendra Singh Chahar (2007)**41 in their study have explored the extent and types of role stresses present among the engineering and management students in India. The findings reveal that students experience role overload, role stagnation and self-role distance. Male students experience higher levels of role stagnation than female students. However, no significant differences could be observed on any of the role stressors between first year students and their seniors, or between management and engineering students.

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Upson, John W.; Ketchen Jr., David J.; Ireland and R. Duane\textsuperscript{42} (2007) focused on potentially dangerous role of stress among supply chain members, and how this stress can be addressed, after identifying supply chain activities that create employee stress. The researchers concluded that by using the suggested initiatives, both employees' quality of life and the organization's performance can improve.

Buddeberg-Fischer, B, Klaghofer, R, Stamm, M, Siegrist, J and Buddeberg,\textsuperscript{43}(2008) in their study investigated the perceived job stress, its association with the amount of working hours, and its impact on young physicians' self-reported health and their satisfaction with life during residency. Stress at work in young physicians, especially when experienced over a longer period in postgraduate training, has to be a matter of concern because of its negative impact on health and life satisfaction and the risk of developing symptoms of burnout in the long run.

Christopoulos, M. and Hicks, R.E.\textsuperscript{44}(2008) carried out a study and examined that role perfectionism play on occupational stress and depression in the context of an Australian university student population. As expected maladaptive perfectionism significantly correlated with occupational stress and depression; however,
unexpectedly adaptive perfectionism did not correlate significantly with occupational stress and depression.

**Gbolahan and Gbadamosi**\(^{45}\) (2008) have conducted a study which explored the relationship among Perceived stress, Perception of sources of stress, Satisfaction, Core self-evaluation, Perceived health and Well being. Survey data were collected from 355 employees in Botswana. Results indicated that significant links between Perceived stress, Satisfaction, Core self-evaluation and Well being. Overall, much of these findings were consistent with what had been reported in the literature.

**Kopp, Maria S; Stauder, Adrienne; Purebl, Gyorgy; Janszky, Imre; Skrabski and Arpad**\(^{46}\) (2008) conducted a study to analyse the association between work-related factors and self-reported mental and physical health after controlling the negative affect and hostility as the personality traits. This study indicated that independent of negative affect and hostility, a cluster of stressful work-related psychosocial conditions accounts for a substantial part of variation in self-reported mental and physical health of the economically active population in Hungary.

**Nagesh, P. Murthy, M. and Narasimha S.**\(^{47}\) (2008) in their study identified the six factors that contribute to workplace stress. They were demands of the job, control over work, support from colleagues and management, working relationships,

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clarity of role, and organizational change. This paper also suggested measures in the form of training to enable organizations and individuals to manage stress at workplaces in general and IT call centres in particular.

**Rashmi Shahu and S.V. Gole**\(^{48}\) (2008) discussed in their article that the occupational stress is commonly acknowledged to be a critical issue for managers of private manufacturing companies. This study attempts to fill part of this void in literature by examining the relationship between job stress, job satisfaction and performance among 100 managers of private manufacturing firms. The findings of the study suggest that higher stress levels are related to lower performance whereas higher job satisfaction indicates higher performance.

**Richardson, K. M., & Rothsetin, H.R.**\(^{49}\) (2008) in their article provided an empirical review of stress management interventions, employing meta-analysis procedures. 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.

**A.S.Ramesh and C.Madhavi**\(^{50}\) (2009) discussed in their article that during the last 25 years, agricultural sector has gone through a lot of changes and it is also found to be one of the potential areas for stress. Greater use of automation

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technology, excessive use of organic production, low price for agricultural products and new complicated legislations has made the life of farmers more stressful. In this study an attempt was made to find out the potential factors which cause stress and make the life of farming community more miserable. Results have clearly indicated that the occupation farming leads to stress due to financial, weather, work overload, social interaction and farm hassles. It was inferred that all the selected dimensions produce either high or medium level of stress to farming people. It was also found that stress due to financial factors was found to be slightly higher than other stresses.

Chang-qin Lu, Oi-ling Siu, Wing-tung Au and Sandy S. W. Leung\(^{51}\) (2009) in their article were of the view that managers in private enterprises experienced higher levels of occupational stressors and psychological strains than those in state-owned enterprises. Moreover, “Organizational structure and climate” was also found to be a major stressor when predicting both psychological and physical strain in both economic sectors.

Katherine Pollak. Eisen. George J. Allen. Mary Bollash and Linda S. Pescatello\(^ {52}\) (2009) suggested that work stress contributes significantly to corporate health costs. Traditionally, these interventions have been delivered in small, instructor-led groups. Outcomes from a stress-management intervention provided via an instructor led versus a computer-presented format were compared through a

\^51 Chang-qin Lu; Oi-ling Siu; Wing-tung Au; Sandy S. W. Leung, “Manager’s occupational stress in state-owned and private enterprises in the People’s Republic of China”, The International Journal of Human Resource Management, Vol. 20(8), August 2009, pages 1670 - 1682

randomized, controlled design. Attrition was significantly higher in the computer-presentation format.

**Pal, S., and Saksvik, P.** (2009) conducted a study on job stress among 27 Norwegian doctors and 328 nurses and 111 Indian doctors and 136 nurses. The result was that work-family conflict was not predictive of job stress in Norwegian doctors, but work-family conflict, high job demands, and low flexibility in working hours did predict job stress in Norwegian nurses. For the Indian sample, job stress was predicted by high family-work conflict and low social support in nurses and low job control in doctors. Hence, there seem to be some overlap and some differences in cultures when considering the role of demands, control, support, and flexibility in predicting strain.

**Latha and Panchanatham (2010)** discussed in their study that the Business Process Outsourcing (BPO) sector is one of the fastest growing sectors in the global scenario. The sector was showing a remarkable growth in the Indian context also. It was perform a number of activities relating to customer interaction and service. Some of them were involved in pure back office work and some others are directly dealing with the customers. Call center is a voice based part of BPO organization. The BPO sector was developing the young generation not only by providing employment opportunities but also by building confidence in them. Indian BPO companies were paying great attention to inducting and training the employees. But most of the

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employees were youngsters and they face a lot of problems. They work on continuous
night shifts, which affect their biological balance. Apart from this, excessive
workloads, unreachable targets and pressurizing customers create stress among the
employees. This ultimately results in physical, psychological and behavioural
deviations among them, which not only affects the employees and the organization,
but, also the whole country. This paper aims to identify the problems in the sector and
the nature of the stress created by such problems. First hand information regarding the
problems, the sources of stress and the experience on stress situations was collected
from a project leader who has five years of experience. A questionnaire was
circulated to measure the stress level of employees. It also identifies the various
stressors prevailing among the employees. The impact of job satisfaction, feedback,
working conditions, work family balance and workload in creating stress among the
employees are analyzed. Some strategies for coping with stress were also suggested.

Rakesh Kumar Agrawal and Anushka Majupuria (2010)\textsuperscript{55} presented in
their study that occupational stress can affect different occupational groups in
different ways. Accountants have special socio-psychological and financial concerns
that are typical in nature. This study also has examined the role stressors affecting
chartered accountants (CAs) in India. The data collected from a sample of CAs from
the National Capital Region of India using the ORS scale reveals presence of
moderate levels of role stress amongst the CAs. While role overload has emerged as
the most potent stressor for CAs, they experience only low levels of role erosion and

\textsuperscript{55} Rakesh Kumar Agrawal, Anushka Majupuria, –An examination of role stress in chartered
accountants in India, International Journal of Indian Culture and Business Management 2010
- Vol. 3, No.5 pp. 577 – 591.
role ambiguity. Female CAs has higher levels of role stagnation while male CAs report greater role ambiguity. In addition, the role expectation conflict was higher in CAs working as employees than those running their own professional practice.

Shirotriya, A.K. and Basumatary B. (2010)\(^{56}\) in their study were of the view that occupational stress and low level of frustration are the two main root causes of suicides and shoot outs which are very pervasive in paramilitary and other security forces. The purpose of this study was to compare occupational stress and frustration tolerance among BSF, CISF and PAC with some selected rank and age categories. Data were collected through 150 male subordinate officers and other personnel of different rank categories from selected three forces. Samples were selected through random sampling by the Occupational Stress Index (OSI) by A.P. Srivatsava and A.P. Singh and Frustration Tolerance (FRTO) Inventory by S.N.Rai. Data were evaluated by applying ANOVA for comparing both parameters among selected three forces with level of significance was set at 0.05. The result of the study indicated that PAC endure highest level of occupational stress and BSF and CISF exhibit moderate level of occupational stress and each category of paramilitary forces has similar level of frustration tolerance. This may be due to the similar level of working atmosphere and transitions lifestyle. The occupational stress among selected forces was of significantly higher level and should be a matter of concern for ensuring efficient work output from them.

Urmila Rani Srivastava (2010) in her study deals with two main objectives. The first is to examine the extent of stress, negative mental health outcomes and variations in mood states experienced by shift workers (N = 100) and a control group of day workers (N = 100) employed in Feeder Balancing Dairy, Ramnagar Varanasi and Kanpur, Dugdth Utpadak Sahakari Sangh (brand name Parag, Ltd. for both organisations). Secondly, to find out the relative contribution of stress variables and mood states in the prediction of mental health outcomes separately for both shift workers and a control group of day workers. Their overall findings concur with other studies and provide evidence that shift workers significantly experienced higher levels of job and life stress, higher indices of negative mental health outcomes (as measured by GHQ – 28) and variations in mood states as compared to day workers. The results of the present study established some significant relationships between stress and negative mental health outcomes among both shift and day group of workers. However, the magnitude of correlation coefficients was slightly higher in the day worker group. For both groups of workers significant positive correlations were found between all the dimensions of negative mental health and mood states of tense arousal, anger, energetic arousal and general arousal. The findings of step-wise multiple regression analysis indicated that the amount of life stress and role conflicts were the two major predictors of negative mental health outcomes among shift workers. The results of a similar analysis carried out on day workers indicated that in the prediction of mental health of day workers, job related stressors (role ambiguity, role conflict and role overload) played a

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significant role. The findings further indicated that shift workers' mood states such as anger, tense arousal and elevated tone were also significant predictors of mental health outcomes. In day group of workers, anger coupled with low level of energetic arousal influenced their mental health. It is interesting to note, however, that in both groups of workers anger was the strongest predictor of all indices of negative mental health outcomes. Thus, the present study adds additional support to the notion that night shift work is a potent source of stress. Shift work is opposed to the human circadian system and this conflict creates multiple physiological, psychological and psycho-social problems for shift workers.

Balakrishnan Somasundaram Subbiah, Ganesh Meenakshisundaram and Soundarapandian Krishnaswamy (2011\textsuperscript{58}) presented in their study that concern over occupational stress and its relationship to executive well-being has produced voluminous amount of research over the last few decades. According to them, stress in organization has finally been recognized as something to be actually dealt with. They were of the view that, the adverse effects that stress can have on an individual range from mental health problems such as anxiety, depression, tension etc. to physiological ailments such as coronary heart disease, ulcers and even cancer. The present study was undertaken by them to probe coping patterns of occupational stress among executives in an automobile organization with special reference to M/s. Lucas-TVS Limited, Padi, Chennai, Tamil Nadu. The study examined the sources of stress and the relationship between stress and outcomes. In addition, the role of certain

individual, interpersonal and organizational measures in the relationship between stress and outcomes was studied. The data for the study were collected through a structured questionnaire. The questionnaire elicited information regarding the individual demographics, their stress experience and the consequences of stress. ANOVA, Inter correlation, chi-square, t-test and Principal Components Factor Analysis method were used to study the experience of stress based on individual, interpersonal and organizational measures.

**Dhamodharan and Arumugasamy (2011)** in their study have made an attempt to explore the influencing effect of occupational stress on the executives leadership style. The occupational stress index developed by Shrivastava and Singh (1981) and Managerial Styles developed by McBer & Co. (1980) were administered on a sample of 388 Executives of Neyveli Lignite Corporation Ltd., Neyveli. The inferential statistical techniques, Chi-Square Test and Pearson's Product Moment Correlation Coefficient were applied for determining the effect of occupational stress as an influence of leadership styles. The correlation analysis suggests that presence of the occupational stressors influences positively the coercive and authoritative leadership styles and influences negatively the affiliative, democratic, pace-setting and coaching styles. The Chi-Square Test also confirms the presence of association between stressors and leadership styles.

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Jyoti Sharma and Arti Devi (2011)\textsuperscript{60} discussed in their study that stress has been on rise in this era of high-technology speed, global competition and consumerism. Taking its toll on the physical and psychological health of the employees, it is affecting the productivity and functioning of an organization. They have demonstrated the direct and indirect costs of stress. Due to its cost, the critical importance of a stress-free work-life for an organization for creating and sustaining competitive advantage cannot be underestimated and it comes with the realization that employees are susceptible to high levels of stress.

Kumar and Pragadeeswaran (2011)\textsuperscript{61} discussed in their paper the ways to explore the experiences of executives in coping with occupations related stress using spiritual quotient. The perceived status of occupational stress and spiritual quotient were evaluated based on the responses from employees in executive cadres in NLC. From the frequency distribution and chi-square analysis, it was found that occupational stress had less influenced the executives. From one-way ANOVA comparing the spiritual quotient among the executives with low, moderate and high level occupational stress it was evident that the executives with low stress level tend to have high spiritual quotient level. Moreover, spiritual quotient tends to decline significantly when there was an increase in the level of stress among executives. The results of the correlation analysis strongly supported the negative relationship

\textsuperscript{60} Jyoti Sharma and Arti Devi, -Role Stress Among Employees: An Empirical Study Of Commercial Banks\textsuperscript{61}, Gurukul Business Review (GBR), Vol. 7, 2011, pp. 53-61.

between spiritual quotient and occupational stress among executives at their workplace.

**Siddiqi Saima (2011)** discussed in his study has made an attempt to find out the occupational stress among managers and engineers working in small and medium enterprises of Aligarh district in U.P. The sample consisted of 75 managers and 75 engineers. Mean and SD were calculated and t-test was employed to find out the level of difference between the managers and engineers. The result shows that the significant difference between the managers and engineers was found on 6 out of 12 dimensions of occupational stress. These were role ambiguity, role conflict, unreasonable group and political pressure, under participation, intrinsic impoverishment and un profitability. On rest of the factors, both groups are found having insignificant difference.

**Tanuka Roy Sinha, Debmallya Chatterjee and Paivi Iskanius (2011)** stated in their article that one of the problems encountered by the employees in the place of work today is the increased level of work stress. In such scenario, the nursing profession is increasingly characterised by occupational stress leading to psychological and physical problems. Studies using fuzzy evaluation with special reference to government hospital nurses particularly in Indian context are very rare. Consequently, the paper tries to minimise the uncertainty in human judgement using triangular fuzzy numbers (TFNs). Findings show that among the major factors, lack

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of reward/recognition/ apprehension and fatigue induce maximum stress among nurses.

**Vijit Chaturvedi (2011)** in his study has found that women employees were more stressed than male counterparts in private and government academic institutes. Age was found to have significant impact on stress level whereas income group did not varied with respect to level of stress.

**Rabindra Kayastha, Krishnamurthy and Adhikary (2012)** have compared the occupational stress among the government, public, and private school teachers in Nepal. 268 teachers with at least one year experience in anyone of three different types of schools in Nepal were selected for this study. The sample was selected randomly, each from government, public, and private schools. The data was collected by research assistants through direct contact with the respondents. Findings reveal that there was no significant difference in occupational stress among Higher Secondary Level School Teachers of Nepal in three different types of schools.

**Singh Anurag (2011)** discussed in his study that occupational stress has become a great matter of concern among the IT companies all over the world, which create lots of human resource problems like the executives' intention to leave the

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organization. It also creates loss of talent as well as money for IT companies. The present Paper studies assess the level of occupational stress among the executives in Indian multinational IT companies. The paper also studies the level of occupational stress among the executives in foreign multinational IT companies.

CONCLUSION

The above studies concentrated on various aspects of stress management followed by both Government and Private organisations including, telecom, hospital, school, bank, sugar mill, safety and health, colleges, universities, insurance, professionals like lawyer, doctor, home makers, IT, off shore operations, manufacturing, hotel, training and development sector, transport and others. Few of the above studies deal with physical and mental performance of employees and their stress management. The studies rarely highlighted the occupational stress and health of the employees. There was no comprehensive study to realise the job satisfaction and job stress among the employees of paper industry especially the factory employees whose jobs are stressful and risky. These issues have not been addressed by the earlier studies in paper industry. Having this fact in mind, the researcher has made an attempt to address the above social issues in the paper industry of Tamilnadu.