CHAPTER III

REVIEW OF LITERATURE

A literature review is a body of text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources and as such do not report any new or original experimental work. Its ultimate goal is to bring the reader up to date with current literature on a topic and forms the basis for another goal, such as future research that may be needed in the area. The literature of the previous studies regarding the stress management gives the reader broader outlook on the background on which the study was conducted. The analysis of various related surveys has influenced the selection of this study of the employees’ stress management in sugar mills in three districts of Tamil Nadu. The reviews given below include stress factors, impact of stress, coping strategies, social support, and other issues dealt with stress.

3.1 Stress Factors

A.P. Singh and H.C. Singh (1984) in their study entitled, “Occupational Stress, Security and Insecurity with Job Involvement of First Level Industrial Supervisors”, explored the relationship of occupational stress, security and insecurity with job involvement. The study was conducted with industrial supervisors at the Uttar Pradesh state Spinning Mills Company. The level of occupational stress in the study was assessed with the help of Occupational Stress Index and this assesses employees’ perceived stress arising from twelve dimensions of the job life. They were role overload, role ambiguity, role conflict, unreasonable group and political pressure, responsibility of the persons, powerlessness, under participation, poor peer relations at work, intrinsic impoverishment, low status, strenuous working conditions and unprofitability. The study revealed that the highly involved employees in their job indicated to be highly stressed by undesirable situations or exceeding demands of their jobs, while the less involved or uninvolved employees perceived their job situations to be less stressful. The study had also showed that level of insecurity affected significantly the job involvement and both have inverse relationship.
T.R. Rajeswari (1992)² in her article entitled, “Employee Stress: A Study with Reference to Bank Employees”, identified the potential stress situations of bank employees in the five nationalized bank branches operating in Virudhunagar. The study had examined structural rigidity, poor physical working conditions and extra organizational factors to be potential stressors inducing stress in employees. It was found that rigid structural pattern of banking industry in India with centralized formal decision-making had led to high stress perception. She pointed out that decision-making was limited to routine day to day operations at the branch level and even in these clerks played a little role and hence clerks perceived greater stress. The study suggested that at the organizational level, steps should be taken to create a supportive organizational climate and simultaneously cognitive training programmes should be given to widen the horizon of thoughts of organizational participants.

Sharda S. Nandran and Bert Klandermans (1993)³ in their paper, “Stress Experienced by Active Members of Trade Unions” determined role conflicts, role ambiguity and role overload as psychological stressors which arise when a person plays a conflicting role receives conflicting signals of what the environment expects of him. A survey was conducted with 16 labor unions of the two largest Dutch Federations [The Federation of Dutch Unions (FNV) and The Dutch National Federation of Christian Labor Unions (CNV)]. In the end of their study 3005 respondents participated, 223 were active core members and the rest were ex-core members. They analyzed how the respondents’ background characteristics fitted to their situation. The result of the study indicated that active union members experiencing a variety of role stressors as a consequence of their union activities and these stressors were associated with emotional exhaustion. The study showed that qualitative overload (finding union activities a heavy burden) and contradicting demands from a single source (inter-sender conflict from union leadership, work colleagues) were found to be most strongly associated with the feeling of uselessness and the wish to quit.

Anirudi Pandey (1995)⁴ in his study entitled, “Role Efficacy and Role Stress Relationship: Some Experience with Workers”, determined the relationship between their role efficacy and role stress among rail engine drivers of Indian
Railways. The study showed that rail engine drivers (workers) were working as motormen on Suburban local trains in Bombay and belonged to Central and Western Railways. The study has viewed that role efficacy and role stress to be negatively related since the respondents were found to be suffering from the feeling of role overload, resource inadequacy and personal inadequacy. In the study, education was found positively related with role stress and negatively with role efficacy. Advancement in experience was found to enhance probability of stress as also to have differential impact on drivers. The study had emphasized the need for conducting role efficacy and role stress for the workers if the Indian Railways want to reduce stress in the jobs of the drivers and want to increase their performance effectiveness.

P.Chand and A.S.Sethi (1997)⁵ in their study entitled “Organizational Factors in the Development of Work Stress” examined the organizational factors as predictors of job-related strain. The respondents were Junior Management Scale 1 Officers working in various banking institutions in the Himachal Pradesh. They highlighted that role conflict, strenuous working conditions and role overload were found to be the most significant predictors of job-related strain. It was felt that the direction of the relationship between strenuous working conditions lead to higher job-related strain. The study had observed that recovery of loan produced much strain among the banking personnel particularly when they were sole in-charge where they have to work with insufficient staff and lack of infrastructure. It was also found that officers had constant pressure to spend long hours at office which creates strain/stress with demands or expectations from family members to spend time at home.

Family and work responsibilities themselves may grind together and entwine, thus affecting each other and further enhancing stress. Bernard W. K. Lau, Paul M. B. Yung, Jenny W. H. Mak, and J. Mac Donald Wallace (1997)⁶ had conducted territory-wide survey, from a sample representative of 422 individuals from the general population in China. They investigated the work and family stress of Chinese adults in the community with respect to the impact on their psychological well-being. The study had viewed that psychosocial context was considered as an important source of stress. The study can be viewed as
instrumentalists in their orientation to work in that they emphasize material rewards and underplay the intrinsic qualities of work. The study showed that almost half of the respondents experienced stress and worries over money matters. The overall results showed that among the whole range of reported stress responses, the pressure from coping with daily work demands headed the list, 40% reported feelings of mental conflict in making occupational decisions, 23.4% experienced other work-related stress, such as failure to attain personal achievement in rank or salary, and difficulties in transportation which was necessary for their daily work. In comparison, 53% experienced stress in disciplining children. About 50% experienced financial difficulty and would constantly worry over this; 67.8% were apprehensive that they could not excel others in every aspect; 29.4% showed a lack of confidence in handling problems; 28.0% complained that nobody understood them. Over 30% of the respondents had frequent low feelings, or became easily angry and frustrated. In particular, in the 4-week period prior to the survey, 43.2% of them had been depressed, 35.6% got ill-tempered, and 32.2% been irascible.

Management characteristics and processes were identified as major sources of occupational stress in prison officers in previous studies. Kay Lancefield, C. J. Lennings and Don Thomson (1997) in their research entitled, “Management Style and its Effect on Prison Officers’ Stress” investigated the impact of the work environment on the level of perceived job stress from 112 prison officers in Victoria. In the study the bureaucratic and unit management models of prison administration were assessed with respect to officer job characteristics and management process to identify the impact of occupational stress on prison officers. On all measures, multivariate analysis has identified that prison officers from the bureaucratic management model (Pentridge Prison) scored higher than officers from a unit management model (Barwon Prison). The study found that State Anxiety, Trait Anxiety, Role Overload, Role Ambiguity, Role Boundary, and Physical Environment were the most salient discriminators between officers from Pentridge and Barwon. Role Boundary was caught between conflicting supervisory demands and factions Barwon prison in the implementation of unit management appeared to have successfully reduced officers' perceived levels of job stress compared to levels operating in the bureaucratic administration model at Pentridge. They
concluded that adequate initial training and ongoing support for officers could be seen as a vital component for the effective implementation of a new organizational system.

Muhammad Jamal and Shanaaz Preena (1998) in their study entitled, “Job Stress and Employee Well-Being among Airline Personnel in an Asian Developing Country” discussed the relationship between job stress and employees’ wellbeing in 150 employees working in various departments of the airline in Asia. In the study job stress was equipped in terms of perceived experiences at jobs which were chronic in nature and employee wellbeing was equipped in terms of organizational commitment, job involvement and job satisfaction. The study identified that job stress was negatively related to organizational commitment, overall job satisfaction, and satisfaction with pay, supervision, and co-workers among airline employees. The study had computed moderated multiple regressions to examine the effects of gender (male vs. female) on stress-well-being variables. It was found that moderated multiple regression did not support the role of gender as a moderator of the stress-outcome relationship. Job stress among air traffic controllers and flight attendants was related to high job dissatisfaction, distress, and psychosomatic health problems in developed countries (Jupp & Mayne, 1988; MacLennan & Peebles, 1996). The study contributed to the international job stress literature by showing similar relationship among airline employees in a developing country.

A factor related to workload is role overload, which takes place when an employee has to cope with a number of competing roles within the job. A study of Pithers and Soden (1998) had highlighted role overload as a significant stressor in teachers. They assessed levels of strain, organizational roles and stress in 32 Australian and Scottish lecturers. Strain was found to be average in both national groups and there was a high level of stress with role overload emerging as the heightened stress in this group, but there was strong evidence for work overload and excessive working hours, associated with emotional exhaustion.

Entrepreneurs are typically viewed as the subjects of job stress brought on by heavy workloads, by the assumption of risk in their business activities. Julie Aitken Harris, Robert Saltstone and Maryann Fraboni (1999) in their study entitled, “An Evaluation of the Job Stress Questionnaire with a Sample of
Entrepreneurs” used a modified version of Caplan’s Job Stress Questionnaire (JSQ) that was administered to 225 (169 male and 56 female) business owners from 12 Ontario cities. In the study, an entrepreneur was defined as one, who both owns and operates a service, retail, wholesale or manufacturing business. The sample of entrepreneurs obtained scores on the JSQ scales which suggested that they found their workload to be a greater source of on-the-job stress than problems associated with underutilization of their skills or with ambiguity about their role in the business. In the study the entrepreneurs indicated that they spent an average of 56.74 hours (SD = 12.66) directly on their business, a greater amount of time spent on work related activities than may be found in samples of employees whose workload is structured by clock-punching. Compared to scores reported previously for various occupational categories, the entrepreneurs scored significantly higher than did white-collar, blue-collar, and professional groups on the workload scale and significantly lower on scales measuring role ambiguity and under-utilization of skills. The researchers opined that these results might be due to the nature of entrepreneurial activity, which was often characterized by heavy workloads, long hours, and a self-established role in the organization. Evidence of convergent and discriminant validity at the item and subscale level has confirmed the priori dimensions of the JSQ, although the internal consistency of the scales was low to moderate.

Police are exposed to many work-related factors which have been identified in the literature as contributing to stress (Occupational Health and Safety Commission, 1992). Jeremy D. Davey, Patricia L. Obst, and Mary C. Sheehan (2001)11 in their research entitled, “Demographic and Workplace Characteristics which add to the Prediction of Stress and Job Satisfaction within the Police Workplace”, examined the influence of workplace and job characteristics on both officers’ stress and their job satisfaction. A survey was conducted with police officers recruited from two divisions of an Australian state police service (n = 749). The study had examined what workplace attributes were predictive of job stress and job satisfaction within the police workplace. In examining job stress, the study noted that region was the only demographic variable that had independent predictive power. Officers in rural stations had reported lower levels
of job stress than did their metropolitan, suburban or city-based counterparts. With regard to organizational aspects, long working hours, lack of organizational support and organizational change emerged as independent predictors of job stress. In the study over half (53%) of the sample felt they were overworked, sixty per cent of the sample felt they were constantly under pressure and the jobs were rated as dissatisfying by 12% of the sample. The study had showed that there was a positive relationship between organizational support and job satisfaction and a negative relationship between organizational support and job stress. The study concluded that difficulty in dealing with organizational change led to lower job satisfaction and higher levels of job stress. Working long hours led to increased job stress but it did not lead to lower job satisfaction whereas shift work led to lowered job satisfaction but it did not lead to job stress.

Manisha Jain, Prashant Mishra and Saroj Kothari (2002)\textsuperscript{12} made a study to understand the effect of Type A/B behavior pattern among Doctors and Engineers. The sample was drawn on the random basis from the cities of Indore, Mhow, Nagda, Bhilai, Durg, Bilaspur, Raipur, Nagpur, Renukoot, Jabalpur, Bhopal and Ratlam. They stated that Engineers experienced higher occupational role stress than doctors and Type A personalities experienced higher occupational role stress than Type B personalities. They noticed that shrinking opportunities, rising fierce competition, economic disparities and other challenges had contributed to a stressful life for doctors and engineers. It was also found that in both the personality types, profession played an important role as far as occupational role stress was concerned. They concluded that for doctors’ role of personality types was found to be significant, but in engineers the effect of personality types on occupational role stress was found to be neutral.

Prabhat Kumar Mishra and Gopa Bhardwaj (2003)\textsuperscript{13} in their article entitled, “Evaluation of Role Stress in Indian Air Traffic Controllers” attempted to identify the main role stress experienced by the Air Traffic Controllers belonged to the National Airport Division of the Airports Authority of India in Delhi, Calcutta and Mumbai to investigate the differences in role stresses according to various demographic variables. The results revealed that inter-role distance and resource inadequacy were dominant contributors of role stress whereas personal inadequacy
and role ambiguity were remote contributors of role stress. It was felt that the maximum amount of stress experienced because of the demands of their family and friends for sharing time were incompatible with the demands of their job. They concluded that at the heavy traffic situations, tension increases as it calls for more attention, accuracy and speed of decision-making.

Most studies on occupational stress concentrate on chronic conditions, whereas research on stressful situations is rather sparse. Simone Grebner, Achim Elfering, Norbert K. Semmer, Claudia Kaiser-Probst and Marie-Louise Schlapbach (2004) in their study used an even sampling approach to analyze stressful situations at work and in private life among 80 young German-speaking workers from the AEQUAS project in Switzerland. In the study content analysis showed the newcomers’ work experiences to be similar to what is typically found in older samples (e.g. social stressors, quantitative overload, problems of cooperation). It was identified that social stressors were dominant at work and in private life. In multilevel-analyses active coping predicted higher success in calming down and problem solving, particularly in controllable situations. With regard to the relationship between chronic conditions and situational variables, job control was associated with successful calming down in stressful situations and it buffered the effect of chronic job stressors on successful situational calming down, yielding a specific variant of the demands-control model. In the study number of work-related stressful events weighted by significance was moderately associated with chronic job stressors. However, it was also found while chronic job stressors predicted momentary well-being over and above the weighted number of events, events did not predict momentary well-being and its prediction of stable well-being disappeared once chronic stressors were controlled. Finally, the results had showed how chronic conditions represent background variables that not only have a stronger influence on well-being but also influence the immediate reaction to stressful encounters.

had found that Japanese full-time occupational physicians had three unique types of job stress; stress related to low understanding of occupational health services (low understanding), conflicts between occupational physicians and their coworkers such as managers and occupational health nurses (conflicts) and discrepancies between occupational physicians’ routine work and occupational health services (discrepancies). In the study they analyzed that stress was influenced by age, gender and the number of employees. The model in which low understanding contributed to self-rated health through job satisfaction and self-rated health was influenced by job satisfaction and discrepancies and the study found a potential relationship between job stress and self-rated health among Japanese full-time occupational physicians. The study had indicated that the job satisfaction of full time occupational physicians was associated with age and coping behaviors such as consultations with superiors or off-site supportive networks, communications in the company and the community and work system improvement, which included classification of roles for occupational staff and the simplification of work. The result was compatible with the previous studies, which showed that the main sources of stress of general practitioners were uncertainty and insecurity about work, isolation, poor relationship with other doctors, disillusionment with the role of the general practice and an awareness of changing demands. The results of the study finally stressed that job satisfaction of full-time occupational physicians was mainly influenced by the understanding of occupational health services in their companies because most occupational physicians have a role as employees whose jobs tend to be affected by the understanding of their superiors. The study suggested that if they had managers with a higher understanding of occupational health services, they are more likely to perform the services affirmatively and to have higher job satisfaction.

Lakshwinder Singh Kang and Raghbir Singh (2006) in their study entitled, “Stress at Work: An Assessment of Various Organizational Stressors” identified frequently reported stress symptoms and assessed the magnitude of various organizational stressors producing stress. The study was carried out in six organizations dealing with electronics equipment and services from the Punjab state Electronics Development and Production Corporation Ltd. In the study poor
interpersonal relations has been identified as the biggest source of stress among the employees of electronics industry of stress followed by poor organizational structure and climate, work inhibitors, rigid rules and inconsiderate superior, role ambiguity monotonous job, lack of resources, work overload, unmet financial needs and job security. The study had concluded that the organization’s stress management efforts should involve a process of identification of stressors which could be eliminated and training employees about how to respond to those stressors which cannot be eliminated, so that ill effects were minimal and finally rehabilitating those employees who had suffered due to stress at work.

R. Dhanalakshmi (2008)\textsuperscript{17} in her article entitled, “Factors Predicting Stress on Employees in a Public Transport Corporation”, intended to measure the level of stress of the Transport Corporation employees and study the factors that could predict stress. The study was conducted on the list of conductors and drivers from the administrative office in the two branches of Tamil Nadu State Transport Corporation in Coimbatore. It was found that the employees experienced moderate level of stress and the factors identified were health conditions, working conditions, monetary benefits, timing of work and grievance redressal. The stress was influenced by the pressure inherent in the job such as handling the public commuters and the condition of the bus. It had been felt that the management of the Corporation in order to stand the competition has gradually started making the employees accountable for each commuting trip they ply. The pressures on the employees’ made them feel insecure. The study suggested that the employees may become more passenger-friendly in order to facilitate the smooth conduct of the bus travel.

Jay P. Mulki, Jorge F. Jaramillo and William B. Locander (2008)\textsuperscript{18} in their study entitled, “Effect of Ethical Climate on Turnover Intention: Linking Attitudinal and Stress Theory” used attitudinal and stress theory to investigate the effect of ethical climate on job outcomes. The research was conducted with 208 service employees in health department in Southeastern United States. They stated that healthcare employees were operated under highly stressful conditions derived from excessive work demands, limited resources, and emotionally charged interactions with customers. The study had analyzed that the relationship between ethical climate and turnover intention was fully mediated by role stress,
interpersonal conflict, emotional exhaustion, trust in supervisor, and job satisfaction. It was found that ethical climate had reduced role stress and increased trust in supervisor. Lower stress levels had resulted in lower emotional exhaustion, higher job satisfaction and lower turnover intention. They also stated that supervisor trust had reduced interpersonal conflict and emotional exhaustion. The study suggested that organizations can promote a culture that encourages conduct and commitment to comply with ethical codes among employees.

Palas R.Sen Guptha and Ajoy Adhikar (2008)\textsuperscript{19} in their article entitled, “Role Stress among Nurses” explained about the stress associated among nurses in West Bengal. The study had given importance to two factors: ‘role demand’ and ‘role performance’. According to them, the imbalances between these two factors had produced stress for the individual in many occasions. The study had showed that the set up in government hospitals in West Bengal depicted a massive stress vested on the working nurses in their day-to-day activities. The role played by the working nurses was so sufficient in maintaining the basic physical and mental health that could never be ignored. It was found that role expectation conflict, inter-role distance and role overload were the highest contributing factors that caused stress. The study concluded that both physiological and physiological impacts of stress were found to be present to a great deal among nurses.

Shin-Goo Park, Kyoung Bok Min, Sei Jin Chang, Hwan Cheol Kim and Jin Young Min (2009)\textsuperscript{20} in their article entitled, “Job Stress and Depressive Symptoms among Korean Employees: The Effects of Culture on Work”, investigated the association between depressive symptoms and job stress and also examined which components of stress are involved in the risk for depression among males and females among Korean employees in small and medium-sized enterprises in Incheon, South Korea. Almost all subscales measuring job stress revealed contributions to the risk of developing depressive symptoms. Most of subscales of job stress contributed to an increased risk of depressive symptoms and job insecurity and occupational climate showed strong associations in both genders. It was noticed that job insecurity had reflected uncertainty and negative changes (i.e. downsizing) in their job situation and occupational climate had reflected interruptions in available opportunities, disruptions of the collective culture,
irrational and inconsistent job requirements and gender discrimination. Indeed diverse risk factors, operating across diverse countries, appeared to contribute to the relationship between job insecurity and poor health. The study also revealed different effects for males and females: for males, job demands, inadequate social support and lack of rewards were associated with depressive symptoms, whereas for females, organizational injustice was associated with depressive symptoms. Previous studies consistent with these results have indicated that job insecurity represents an important risk factor for poor health investigated whether job insecurity and a poor market for labor could predict a health decline in the Danish workforce. These results indicate that job stress may play a significant role in increasing the risk of depressive symptoms, and that further preventive efforts and research are needed to reduce job stress and address health problems caused by job stress among Korean employees.

Nadeem Malik (2011) in his research paper entitled, “A Study on Occupational Stress Experienced by Private and Public Banks Employees in Quetta City”, examined the impact of occupational stress produced upon bank employees. A sample of 200 employees from private and public banks in Quetta City showed that occupational stress was found higher among private bank employees compared to public bank employees. The study had indicated that in both sectors role overload, role authority, role conflict and lack of senior level support were found to be the major stressors among different occupational stress variables. The study also indicated that the private employees have high workload compared to public bank employees. The study concluded that the bank employees cannot afford the time to relax and “wind down” when they were faced with work variety, discrimination, favoritism, delegation and conflicting tasks.

Swaminathan P. S and Dr. Rajkumar S (2013) in their research entitled, “Stress Levels in Organizations and their Impact on Employees’ Behavior”, examined the stressors in a sample of 250 working professionals from self owned establishments, corporate, banks and educational institutions in Chennai. They identified some stressors such as degree of work freedom, manipulation, office politics and environment of trust or mistrust. Their study found that office politics was a major stress among the employees. It was understood that high stress levels
were found among the respondents having own business and the respondents over 20 years experience. With respect to the type of job, the field job entailed a lot of stress and heavy pressure due to meeting targets, frequent travel, meeting all types of clients, working in irregular hours, daily reporting and strict control by top management. The study suggested that good relationship with colleagues reduces chance of manipulation and office politics and promotes understanding.

### 3.2 Impact of Stress

Wen-Fang Chan and Catherine A. Heaney (1997)\(^{23}\) in their study entitled, “Employee Stress Levels and the Intention to participate in a Worksite Smoking Cessation Program”, exhibited the nature and extent of the relationship between stress levels and intentions to participate in a worksite smoking cessation program. A plant-wide survey was conducted among male smokers (n = 220) employed in an automobile manufacturing plant located in a medium-sized urban area in Michigan which measured job stress, non-job stress, smoking behavior and intent to participate. Previous research has indicated that workers experiencing high stress may be less likely to quit smoking than those experiencing low stress (Green and Johnson, 1990; Warburton, 1988). This study had focused on smoking cessation as a single action rather than as a process with various stages that unfold over time (Prochaska et al., 1992). The results of the study were consistent with the notion that high stress levels contribute to making people’s smoking behavior more salient to them and to motivating them to consider quitting. The study had also identified that both job and non-job stress were more strongly positively associated with intention to participate among smokers who were experiencing few symptoms rather than many symptoms.

T. Wykes, W. Stevens and B. Everitt (1997)\(^{24}\) in their article entitled, “Stress in Community Care Teams: Will it affect the Sustainability of Community Care?” investigated whether community care was sustainable by examining the levels of stress and burnout that affect community mental health staff. A sample of 61 members in six multidisciplinary community care teams based in six different centers from around Great Britain were drawn to take part. They had utilized 117 hassles in the areas of work, health, family, friends, the environment, practical
matters and chance occurrences for the study. The study focused that community care staff experienced high levels of burnout as a result of the work stressors like violence in workplace. These levels were higher than those found in any published study of health professionals within hospitals, but were similar to those found in community teams recently. There was no evidence that any particular model of community care produced less burnout, but working in an inner city did seem to produce the highest levels. The study had suggested that models of community care can only be sustained by reducing their toxicity on the staff that has to make them work and therefore, levels of stress and burnout should be included in any evaluation of the cost-effectiveness of service models.

Vivien K. G. Lim and Edith C. Yuen (1998) in their research entitled, “Doctors, Patients, and Perceived Job Image: An Empirical Study of Stress and Nurses in Singapore”, examined the relationships among three potential sources of stress, namely demands from patients/relatives, demands from doctors and perceived job image, and several work-related outcomes, such as job satisfaction, organizational commitment, intention to quit, and job induced tension. A survey was conducted with nurses from two tertiary-care hospitals in Singapore. Regression analyses in the study had suggested that stressors such as demands from patients and relatives and perceived job image are significantly associated with job satisfaction, organizational commitment, job-induced tension, and intention to quit in the expected direction. While demands from doctors were found to be significantly related to job-induced tension, job satisfaction, and organizational commitment, the relationship between demands from doctors and intention to quit was not statistically significant. Since doctors enjoyed a high social status and prestige in Singapore, their presence indirectly conferred status on the health-care profession as a whole. The study showed that perceived job image contributed significantly to the job satisfaction of the nurses. Hence, it is possible that nurses were more tolerant of the demands made by the doctors, although such demands did cause job-related tension and negatively affected their job satisfaction. The study had also revealed that if demands were perceived to originate from sources of authority, i.e. doctors, subordinates would accept the demands even though their affectivity for the job still suffered. They concluded
that nurses tend to come from the more conservative segments of a society, and it would not be surprising if nurses in the study possessed such respect for authority figures.

The possibility that stress affects plasma lipid concentrations has been the subject of recent investigation, but the findings are equivocal in non-laboratory settings. Barbara S. McCann, G. Andrew H. Benjamin, Charles W. Wilkinson, Barbara M. Retzlaff, Joan Russo and Robert H. Knopp (1999) in their research entitled, “Plasma Lipid Concentrations During Episodic Occupational Stress”, determined that psychological stress contributed to variability in plasma lipid concentrations and concomitant changes in health behaviors. They studied the effect of increased workload on plasma lipids and apolipo proteins from 173 lawyers in Washington. It was noted that plasma cholesterol, triglyceride, and apolipo protein concentrations were considered during periods of high workload (corresponding to impending tax deadlines) and during periods of usual work load. The study also measured self-reports of stress, workload, and time pressure, and cortisol, blood pressure, and heart rate to verify that impending deadlines were associated with increased stress levels. The study had found that plasma apolipo protein B and triglycerides were increased during periods of high work load, so that psychological stress (high work load) was associated with potentially atherogenie changes in plasma lipid concentrations. They concluded that the effects of longer-term stress on multiple risk factors including triglycerides and apolipo protein B could have significance for the development of coronary artery disease while the lipoprotein effect of short-term work stress was small.

The performance of emotional labor appears to have diverse consequences for workers - both negative and positive. Variation in the consequences of emotional labor may be due to the different forms of emotion management involved. Karen Pugliesi (1999) in his analysis entitled, “The Consequences of Emotional Labor: Effects on Work Stress, Job Satisfaction and Well-Being” discussed the effects of two forms of emotional labor on work stress, job satisfaction, and psychological distress - self-focused and other-focused emotion management. A survey was conducted from all employees consisting of Classified Staff, Faculty, Academic Professionals and Administrative Staff of a mid-sized public university.
in the United States. The purpose of the analysis was to reveal the “hidden workloads” of various university employees. In the study seven items were used to measure three major job characteristics like control, complexity or challenge, and demands. The study highlighted that both forms of emotional labor had uniformly negative effects on workers. Emotional labor had increased perceptions of job stress and distress decreased job satisfaction. Consistent with previous studies, job complexity and control were positively associated with job satisfaction, and negatively correlated with distress. The study also found that job demands that have negative consequences for workers in the sample were positively correlated with distress and job stress, with a negative relationship to satisfaction.

Jun Shigemi, Yoshio Mino, Tadahiro Ohtsu and Toshihide Tsuda (2000) in the research entitled, “Effects of Perceived Job Stress on Mental Health: A longitudinal Survey in a Japanese Electronics Company”, examined the causal relationship between perceived job stress and mental health by using questionnaire survey composed of a 30 item Japanese version of the General Health Questionnaire (GHQ). The population was comprised of 462 employees who were judged mentally healthy at the initiation of this study were included as subjects from a middle sized electronics company in Okayama city, Japan. Workers were all employees of the company in various departments such as production, technology and development, investigation and inspection, management and business. Of the 462 workers belonged to this company, those who were thought to be in a healthy mental state, 282 were successfully followed for 2 years. They had considered subjects who developed unhealthy mental health states and the overall proportion hazardous cases detected in the development of an unhealthy mental health state over two years was 55.7%. They had identified more specific items of perceived job stress such as ‘Too much trouble at work’ and ‘Poor relationship with superiors’ and those were indicated as causal risk factors for development of an unhealthy mental state. The study had utilized Cox’s proportional hazard model and had identified that the workers who complained of perceived job stress had a greater hazard than those without job stress. The study had also identified that the item ‘poor relationship with superior’ showed the largest adjusted hazard ratio and the item ‘too much trouble at work’ also had a significant hazardous effect on mental health with an adjusted hazard ratio. The study had suggested that smooth
line setting, use of a manual for prevention of trouble and safety at work, education and training in the work process, and social support at work are needed for the prevention of mental disorders.

Luo Lu, Shu-Fang Kao, Cary L. Cooper, and Paul E. Spector (2000) in their study entitled, “Managerial Stress, Locus of Control, and Job Strain in Taiwan and UK: A Comparative Study” investigated managerial stress in Taiwan and UK using the occupational stress indicator and the work locus of control scale. The data was collected from 353 participants in a heterogeneous sample of Taiwanese and UK managers working for various types of organizations such as Rotary Club members, Import and Export Dealers. The study indicated that there were similarities as well as differences in managerial stress in the two countries. Recognition and Managerial role were important predictors of strain for the Taiwanese managers, whereas Relationships, Organizational climate, and Personal responsibility were important predictors of strain for UK managers. The study had found that there were consistent moderating (vulnerability) effects of internal control for the Taiwanese managers and the fundamental stress-strain relationship seemed to be culturally universal. The researchers indicated that in both countries, managerial stress produced deleterious effects on work moral (job satisfaction and quitting intention), as well as personal health (mental and physical well-being) and the direct effects of work locus of control on strain were similar in both places. They suggested that it would be a good start to develop measures to assess secondary control, from a different culture’s vantage point (e.g. Chinese), and to compare results using such measures among the East and the West countries. They concluded that Taiwan and UK managers who perceived more control over their work environment exhibited higher job satisfaction, better mental and physical well-being and less quitting intention.

N. C. G. M. Donders, J. W. J. Van Der Gulden, J. W. Furer, B. Tax and E. W. Roscam Abbing (2003) in their study entitled, “Work Stress and Health Effects among University Personnel” investigated the well being at work of employees (faculty departments and services) at a Dutch university (n=2,522) in the period 1996 to 1998. The survey comprised six sections that contained the various scales such as Personal characteristics, Work content, Work relationships, Employment terms, Health and well-being. The study used linear regression analysis
to investigate the contribution of job and personal characteristics to the explanation of health effects. The study had identified that the major contributors to “tension” and “emotional exhaustion” were negative characteristics, such as work pressure. Besides the negative aspects, the major contributors to the explanation of “perceived health complaints” were sex, age and other health effects. The study also used explained variance to investigate whether health effects occurred one after another and it was found that explained variance in “job satisfaction” was much higher than in “perceived health complaints”, “Emotional exhaustion” and “tension” were in between. The study has concluded that contrary to expectations, decision latitude and social support played only minor roles.

Scott Schieman, Debra Branch Mc Brier, and Karen Van Gundy (2003)\textsuperscript{31} in their article, “Home to Work Conflict, Work Qualities, and Emotional Distress” found that home to work conflict was associated positively with anxiety and depression among a representative sample of employed men and women in Toronto, Canada. The study had analyzed that more women were engaging simultaneously in work and family roles, including full-time careers in which they were as committed as similarly situated men and give as much effort to their jobs. It was observed that in an aging population, many people were challenged to balance caregiver, parent and employee roles. The study pointed out that as more women engaged in full-time work, home and work roles often compete for both men’s and women’s time and resources, thus raising the potential for spillover-related stress. Sociological analysis of the structural organization of individuals’ lives identified the negative emotional impact of conflict between roles and jobs. That point could imply that women and men are exposed to different work conditions such that men report more noxious job environments. The study has also found that work qualities and home-to-work conflict have synergistic effects on emotional qualities and the positive relationship between work-to-home conflict and anxiety is stronger among men who hold jobs with greater routinization.

Stress in law enforcement personnel continues to be an area of great concern to investigators due to constant contact with the public, the spur of the moment decisions that often must be made, and that law enforcement has consistently been identified as one of the most stressful occupations. Angela
in their study entitled, “The Interrelationship among Stress, Anxiety, and Depression in Law Enforcement Personnel”, explored the interrelationships among stress, anxiety, and depression in a population of law enforcement personnel. A survey was conducted with police officers selected from a medium-sized city police department in Western Massachusetts. They noticed decreased job performance and job satisfaction in the workplace as the commonly observed outcomes of stress. The findings of the study specified that the individuals who experienced symptoms related to stress were likely to experience symptoms of anxiety and/or depression. Similarly, individuals who experienced anxiety were at an increased risk for the manifestation of stress and/or depression symptoms and those who experience depression are likely to experience stress and/or anxiety symptoms. The study had concluded that a relationship was found to exist between the presence of stress, anxiety and depression symptoms in law enforcement personnel and all relationships between the disorders were positive.

Zvi D. Gellis and Jong Chun Kim (2004) in their research entitled, “Predictors of Depressive Mood, Occupational Stress and Propensity to Leave in Older and Younger Mental Health Case Managers” examined age differences and relationships between occupational stressors, work environment, depressed mood and propensity to leave the job among 263 case managers (CMs) in community-based mental health agencies, in New York. The results had showed that job stressors and work climate have a significant independent impact on CMs’ job functioning. Age has been related to measures of occupational stress, organizational commitment, and job satisfaction. In the study job satisfaction differences were seen between older and younger CMs. Younger CMs reported higher overall job stress than more experienced CMs. For younger CMs, satisfaction with the supervisor, perceived job pressure and lack of organizational support were significant predictors of propensity to leave the job. Older CMs who reported lower satisfaction with financial rewards, the type of work they did and greater use of avoidance/resignation and help-seeking coping strategies, were more likely to rate themselves higher on the depressed mood scale. These findings were consistent with previous research that linked lack of support and empathy from
supervisors to job dissatisfaction. In general, the results had showed that less organizational supports and supervisor relationship stressors affect job stress, propensity to leave. The study suggested that work environment with more cohesion among workers and supervisors contributed to reduced job stress and were also linked to intent to stay on the job.

Carol B. Cunradi, Birgit A. Greiner, David R. Ragland, and June Fisher (2005)\textsuperscript{34} in their article entitled, “Alcohol, Stress-related Factors, and Short-Term Absenteeism among Urban Transit Operators” examined the interrelationship between alcohol use, stress-related factors (stressful life events, job stressors, and burnout) and short-term absenteeism among a multiethnic cohort of urban transit operators of diesel and electric buses, electric trolleys, light rail, and historic cable cars in San Francisco. The study considered that the operators who reported having at least one drink in the previous 12 months were classified as current drinkers (n=917; 63.4%); the remaining 529 operators (36.6%) as abstainers. Multivariate logistic regression analyses had showed the absenteeism among drinkers was associated with risk for alcohol dependence, heavy, alcohol related harm, increased drinking since becoming a transit operator and having any problem drinking indicator. The study found that association between absenteeism and stress-related factors varied by gender and drinking status. Final multivariate models among drinkers indicated that among males, problem drinking, stressful life events and job burnout were independently associated with elevated odds of absenteeism. Among female drinkers, only stressful life events were significantly associated with elevated odds of absenteeism. Findings of the study suggested that workplace interventions that address both individual and environmental stressors are most likely to have a positive impact on health-related outcomes, including problem drinking, thereby reducing absenteeism.

Jinhee Kim, Benoit Sorhaindo and E. Thomas Garman (2006)\textsuperscript{35} in their research entitled, “Relationship between Financial Stress and Workplace Absenteeism of Credit Counseling Clients” examined how financial stress was associated with absenteeism. Data were collected by a national non-profit credit counseling organization, from consumers about 70,000 living in all 50 states who telephoned seeking assistance in debt management. The study indicated that credit
counseling clients’ financial stress had affected their absenteeism at work. It was felt that the clients with high level of financial stress were more likely to experience higher levels of absenteeism; thus spending work hours handling personal finances, which decreased the time they were at work. Moreover, it was observed that employees with high financial stress cut down their productivity at work. The study also found that subjective measures might be better predictors of absenteeism variables than objective measures of financial stress, such as household income or debt load percentage. The study suggested that some insight must be applied into providing financial education and assistance for employees with financial strains as productivity loss might influence their pay.

Given the well-documented impact of stress on employees, it is important to understand moderating factors, especially in behavioral health treatment settings, where constant change occurs. Mark E. Johnson, Christiane Brems, Michael E. Mills, David B. Neal and Joan L. Houlihan (2006)\textsuperscript{36} in their study entitled, “Moderating Effects of Control on the Relationship Between Stress and Change” opined that it was important to understand moderating factors, especially in behavioral health treatment settings, where constant change occurs before analyzing the impact of stress. A survey was conducted with staff members at four substance abuse treatment agencies and four mental health treatment agencies in USA. They studied that the staff members revealed about perceptions of direct and indirect agency changes, stress experienced due to changes, and control and input into the changes. It was observed that as direct and indirect change increased, stress increased; as level of control and input into changes increased, stress decreased. The study further indicated that control and input served as a moderating variable between stress and direct change, but not for indirect change and different types of change were differentially affected by employee opportunities for control and input had important implications for employers. It was also noticeable from the study that very high employee turnover rates among in behavioral health fields, both among line staff and administrators, and workloads that overextend staff members; the behavioral health work environment was fraught with change, stress, and burnout. The study suggested that identifying the employees who were directly affected and involving them in decision-making may be the most cost effective approach.
Masao Ishizaki, Norito Kawakami, Ryumon Honda, Hideaki Nakagawa, Yuko Morikawa, Yuichi Yamada (2006) in their research entitled, “Psychosocial Work Characteristics and Sickness Absence in Japanese Employees” examined the association between sickness absence in Japanese employees and job demand/control and occupational class as psychosocial work characteristics. The study was conducted with 20,464 male and 3,617 female employees in nine companies/factories such as a light metal factory, three electrical manufacturing factories, two steel products factories owned by the same company, a heavy-metal products factory, an automobile plant, and a car products factory. In the study, job demands, job control and worksite support from supervisors and colleagues were analyzed by the job Content Questionnaire and likewise by the Generic Job Stress Questionnaire of the National Institute for Occupational Safety and Health. It was found that the frequency of sickness absence was the highest for the 31 to 40 year old male group and for the 51 to 60 year old female group. The frequencies were higher for females than for males with the exception of the 31 to 40 year old group. They revealed that even after adjustment for several potential confounding factors, both high level of job strain induced by low job control and low level of support at the worksite were associated with an increased number of employees taking more than 6 days of sick leave in 1 year. They identified that males with a lower level of education showed a higher rate of sickness absence, while in females the highest level of education was related to a higher rate but not statistically significantly so. Finally the study showed that both low job control and low support at the worksite were associated with a high frequency of sickness absence.

Radhey Shyam and Rajbir Singh (2006) in their paper entitled, “Burnout in Organizations: A Meta Analysis of Feasibility Studies in Indian Setup” made an attempt to analyze the result of available studies with an objective to examine the existence of burnout in various Indian Organizations. In the study they stressed that the medical professionals’ especially junior doctors were in the high category of burnout i.e. emotional exhaustion. Regarding the police personnel, the gazetted officials had experienced more emotional exhaustion than both non-gazetted and subordinate officers. Like primary school teachers, a higher percentage of secondary school teachers come out to be in the highly reduced sense of personal
accomplishment category. They also revealed that males had experienced about six times more emotional exhausting than females and with a low level of emotional exhaustion and depersonalization; there was a high level of reduced personal accomplishment. They concluded that burnout was more often the result not of stress but of unmediated stress of being stressed and having no support system.

Background Individuals who experience work stress or heavy family demands are at elevated risk of poor mental health. Maria Melchior, Lisa F. Berkman, Isabelle Niedhammer, Marie Zins and Marcel Goldberg (2007) in their research entitled, “The Mental Health Effects of Multiple Work and Family Demands: A Prospective Study of Psychiatric Sickness Absence in the French GAZEL Study” studied the association between multiple work and family demands and sickness absence due to non-psychotic psychiatric disorders in a longitudinal study conducted among employees of France’s national gas and electricity company (8,869 men, 2,671 women). In the study they had assessed three types of work stress: decision latitude (control over the content and execution of work-related tasks), psychological demands (workload and time pressures) and work-related social support received from colleagues. They had calculated Rate ratios (RRs) of sickness absence using Poisson regression models, adjusting for age, marital status, social support, stressful life events, alcohol consumption, body mass and depressive symptoms at baseline. It was noticed that participants simultaneously exposed to high levels of work and family demands had significantly higher rates of sickness absence due to non-psychotic psychiatric disorders than participants with lower levels of demands (compared to participants exposed to 0-1 work stress factors and with 1-3 dependents. They found that men and women who had simultaneously exposed to high levels of work stress and family demands were at high risk of experiencing mental health problems, particularly depression. Similarly family responsibilities, including childcare and elderly care, predominantly fall on women and men also appeared vulnerable to the combined effects of work and family stress.

The work of firefighters involves the risk of exposure to the harmful effects of toxic substances as well as the possibility of enormous emotional shock from disasters, which may result in psychiatric impairments and a lower quality of life.
Yong Shing Chen, Ming-Chao Chen, Frank Huang Chih Chou, Feng Ching Sun, Pei Chun Chen, KuanYi Tsai and Shin-Shin Chao (2007) in their study entitled, “The Relationship between Quality of Life and Post-traumatic Stress Disorder or Major Depression for Firefighters in Kaohsiung, Taiwan” examined quality of life, prevalence of post-traumatic stress disorder (PTSD) and major depression and the related risk factors for 410 firefighters in Kaohsiung, Taiwan. They determined that the firefighters with estimated PTSD or major depression scored significantly lower on quality of life measures than subclinical PTSD/major depression and mentally healthy groups. So the major predictors of poor quality of life and PTSD/major depression were mental status, psychosocial stressors, or perceived physical condition. It was understood that although major depression influenced only the mental aspect and not the physical aspect of life quality, PTSD influenced mostly the mental aspect and only partially the physical aspect of life quality. The study concluded that there was relationship among the main stressors, risk of psychiatric illness, and quality of life of their staff. Since firefighters had a higher estimated rate of PTSD and the risk factors that affect quality of life and there was the higher prevalence of psychiatric diseases the study highlighted the importance of mental health awareness among mental health professionals.

Stress is becoming a universal and a pervasive issue in the 21st century. There are only a few reports on the association between occupational stresses and arterial stiffness as a marker of early stage arthrosclerosis. Megumi Utsugi, Yasuaki Saijo, Eiji Yoshioka, Tetsuro Sato, Naoko Horikawa, Yingyan Gong, Reiko Kishi (2008) in their research, “Relationship between Two Alternatives: Occupational Stress Models and Arterial Stiffness: A Cross-Sectional Study among Japanese Workers” clarified the relationship between occupational stress models - Siegrist’s Effort Reward Imbalance and Karasek’s Demand Control Model (DCM), and arterial stiffness using Brachial Ankle Pulse Wave Velocity. The participants were local government employees (3,412 men and 854 women) aged 35 and over, who had their annual health checkups. The study had denoted that high strain indicated by high demands and low control was associated with increased arterial stiffness in women. The study also indicated that the types of job stress associated with a high risk of arterial stiffness may differ by gender. In men, although low job control was
positively significant, but no significant association was found after adjustment for all covariates. It had been reported that psychosocial stress increased blood pressure and circulating levels of neuro endocrine stress hormones and that psychosocial stress was a relative stressor of the cardiac system (e.g., it disturbs the normal vasomotor response of large coronary arteries). Since arterial stiffness is largely related to blood pressure, these mechanisms could dilute the positive association between job stress and increased arterial stiffness after adjustment for blood pressure. So the study had concluded that there was an evidence of a relationship between high occupational stress and risk of arterial stiffness in women.

Sarooj Noor (2008) in her study entitled, “Examining the Relationship between Work Life Conflict, Stress and Turnover Intentions among Marketing Executives in Pakistan” analyzed the antecedents of turnover intentions among 248 marketing executives working in different organizations across Pakistan. The study had identified that people did not want any changes in their ongoing policies, timetables, daily schedules because that lead to turnover intentions. She had noted that lack of awareness, lacking job satisfaction and commitment, lead an individual to have low job involvement and hard business plans, organization new practices and programs had usually encountered the marketing executives in to a stressful state. The individuals who had reported to experience at least some stress in their current position were more likely to hold intentions to quit than those without, with the probability of intending to quit increasing with successively higher job stress. According to her, work-life conflict and stress had a significant positive relationship with turnover intentions. She suggested that marketing executives were required to redesign their schedules frequently.

Laiba Dar, Anum Akmal, Muhammad Akram Naseem and Kashif Ud Din Khan (2011) in their article entitled, “Impact of Stress on Employees Job Performance in Business Sector of Pakistan”, identified the factors affecting the stress and also examined the relationship between the job stress and job performance of 143 employees of different multinational companies, universities and banks in Pakistan. The study revealed that job stress brings about subjective effects such as feeling undervalued and workplace victimization/bullying, unclear role/errands, work-home interface, fear of joblessness, exposure to traumatic
incidents at work and economic instability those results in poor concentration, mental block and poor decision-making skills. The study explored that the employees' job performance with demographic variables stated that male employees are highly stressed compared to their female counterparts. The stress in work environment reduced the intention of employees to perform better in jobs with the increasing level of stress and the tendency to work well also decreased.

Saeed Sagha Hazrati, Somaye Karimi, Mohadese Hasani, Mohammad Reza Dalvand and Ziba Soltani (2012) in their article entitled, “Effects of Cognitive Behavioral Stress Management Training on the Syndrome of Burnout in Employed Women Nurses: A Case Study in Hospitals of Ahvaz University of Medical Sciences”, explored the effects of cognitive behavioral stress management training on nurses’ burnout in three dimensions: emotional exhaustion, depersonalization, and personal accomplishment. The study included all women nurses employed in Golestan, Razi, and Abuzar Hospital of Ahvaz University of Medical Sciences. 30 nurses whose scores were one standard deviation above the mean were selected from among volunteers who responded to the Maslach Burnout Inventory. The study stated that the experimental group received nine sessions of cognitive behavioral stress management training. Results of the intervention sessions showed that the intervention had been effective for improving the symptoms of burnout. In the study results of the covariance analysis of the mean scores of emotional exhaustion, depersonalization and personal accomplishment showed that stress management training had been effective in reducing depersonalization and increasing personal accomplishment among members of experimental group as compared to control group.

Martin Rabe, Matthias Nubling and Salvatore Giacomuzzi (2013) in their article entitled, “Psychosocial Workload in Industrial Relations”, investigated the psychosocial strain among 113 full-time and 196 volunteer work council members in Germany and compare them to the average of all professions. The study indicated that the profession of being work council leads to higher psychosocial strain compared to the average of all professions. The study noted that higher psychosocial strain varies between full-time and volunteer work councils and work councils’ self perceived job demands differ significantly due to the profession. The
study confirmed that high psycho-social stress had increased demands for mobbing, quality of leadership, job insecurity and social support. The study suggested that preventive strategies to reduce psychosocial stress and strain for the profession of work councils should consider the specific demands conditioned to full-time and volunteer work councils.

Van Zyl, Van Eeden and Rothmann (2013) in their research entitled, “Job Insecurity and the Emotional and Behavioral Consequences Thereof”, investigated the emotional reactions and behavioral reactions to job security of employees (N= 242) working in a private hospital in Gaiiteng, South Africa. The results of the study showed that job insecurity was associated with job-related stress. The study noted that affective job insecurity was associated with detachment from the organization, while cognitive job insecurity was associated with low identification with the organization. Experiences of affective job insecurity, job-related stress, and low organizational commitment were associated with the use of avoidance coping strategies. The study concluded that employees who experienced cognitive job insecurity were less inclined to apply active coping strategies.

3.3 Coping Strategies

M. Afzalur Rahim (1997) in his article entitled, “Relationships of Stress, Locus of Control and Social Support to Psychiatric Symptoms and Propensity to Leave a Job: A Field Study with Managers” tested the moderating effects of locus of control and social support on the stress-strain relationship. These effects were tested with questionnaire data collected from a random sample of 288 managers, from Chamber of Commerce, Bowling Green, Kentucky. Results from hierarchical regression analyses have found significant inverse relationships of locus of control to stress (role overload and role insufficiency) and strain and partial support for the moderating effect of locus of control on the relationship between stress (role ambiguity and role overload) and strain but not social support. According to him locus of control was found to be more important variable than social support in explaining significant variance in stress, strain, and the stress-strain relationship. It appeared that organizations should pay more attention to selecting managers who had high internal locus of control personality and it was appropriate to transfer
managers, who were low on internal locus of control, to perform tasks which involve low stress. The study concluded that managers who are externalizers (i.e. low internal locus of control) particularly require stress management training which emphasizes an individual’s attention to exercise, relaxation, and diet and organization’s attention to role analysis and clarification and counseling for the managers.

A number of studies documented associations between work stress and elevated morbidity in professional drivers. The model of effort-reward imbalance (ERI) in this study identifies distinct situational and personal characteristics which elicit chronically stressful experience at work in terms of a mismatch between high costs and low gain. Birgit Aust, Richard Peter and Johannes Siegrist (1997) in their study entitled, “Stress Management in Bus Drivers: A Pilot Study Based on the Model of Effort-Reward Imbalance”, assessed stress management among fifty four highly stressed male inner-city bus drivers of a large public transport enterprise in a major city in Germany were recruited to participate in a twelve weeks stress management program. The pilot study had demonstrated beneficial effects on psychological outcome measures, especially so on critical coping behavior (need for control) following participation in a twelve weeks worksite stress management program. They did not find significant improvements in mood and symptoms experience. Unlike the majority of related interventions, the program combined individual and structural measures of stress reduction and its rationale was based on a theoretical model, the model of effort reward imbalance at work intervention included relaxation, coping with anger and excessive work commitment, management of conflicts with superiors and recommendations for structural changes at work. In the study, mean level of “need for control”, a critical health adverse style of coping with job demands was significantly reduced after twelve weeks.

Aslaug Mikkelsen, Per Oystein Saksvik, and Holger Ursin (1998) in their study entitled, “Job Stress and Organizational Learning Climate” determined the relationship between individual job stress and the individual perception of “learning climate” among 383 employees in the Norwegian Postal Service and in various community health care institutions. In the study mismatch between individual perceptions of learning climate and the averaged evaluation of learning climate in the rest of the working group, were found to be an important source of
stress. They had revealed that the individuals who were perceived the learning climate and who were working in a group that agreed with this position had a low job stress level because of their feeling of control over the work situation and reduced demands due to the social support from the group, producing a low job stress level. In contrast the stress level was highest when the individual perception of the learning climate was low and the group average evaluation of the organizational learning climate was high. The study concluded that there was a strong relationship between individual learning climate and job stress, and a weak, but still significant, relationship between organizational climate and stress.

At the level of the institution factors such as social support amongst colleagues and leadership style had found to be important in affecting levels of stress. Dursault M, Deaudelin C, Royer N and Loisselle J (1999) in their paper entitled, “Professional Isolation and Occupational Stress in Teachers” assessed isolation and stress in 1110 Canadian teachers and as hypothesized, found a strong positive correlation. It was found that social support had both a direct positive effect on health and a buffering effect in respect of work stress.

Linda Trenberth, Philip Dewe, and Frank Walkey (1999) in their article entitled, “Leisure and Its Role as a Strategy for Coping with Work Stress” focused the dimensions of leisure that were important to people coping with work-related stress. Data were provided by 695 principals and deputy principals from secondary schools throughout New Zealand who were experiencing major legislative and organizational change in the education sector. They pointed out that leisure was best measured in terms of active-challenge and passive-recuperative dimensions when considered in relation to coping with work-related stress. The study had confirmed that an association existed between the presence of work stressors and general (not work-specific) indicators of psychological well-being. It was also clear that work stressors might have very specific relationships with outcomes, and that the importance of leisure is also very sensitive to the type of relationship being explored. The research had reinforced the need for the construct of leisure to be better integrated into mainstream work stress research so that its role as a coping activity can be better explored and its explanatory potential exploited. The study suggested that for the present occupational group, the passive nature of leisure was more important for
coping with work stress and these results have implications for those involved in workplace health promotion where the emphasis thus far has been on physical activity and fitness.

Faroo A. Shah (2003)\textsuperscript{52} had undertaken a study to provide an adequate explanation of stress, its nature, dimensions, causes, manifestations and coping strategies. The study was conducted in three banking organizations operated in Kashmir. The study had indicated that most of the employees experience medium to high level of stress at work. It was found that role stagnation, inadequacy of role authority, role erosion and role overload were the premier constructs of stresses confronting employees. The study had also revealed that employees belonging to the Clerical cadre relatively experience more stress on most of the dimensions, when compared to the officers. The study had suggested that mechanization and computerization could reduce the strain of employees caused due to work overload and proper time scheduling, physical and mental comfort at work, periodic stress audit, data gathering on the climate of organization, satisfaction, frustration and role stresses of employees, managing tactics like exercises, meditation and dietetics should be arranged by the organization to reduce stress level of employees.

Emre Senol Durak, Mithat Durak and Tulin Gencoz (2006)\textsuperscript{53} in their study entitled, “Development of Work Stress Scale for Correctional Officers” examined the psychometric properties of Work Stress Scale for Correctional Officers (WSSCO). One hundred and nineteen correctional officers (109 males and 10 females) employed in Turkey were surveyed in the study. According to them, in contrast to 10 or 20 years ago, experienced correctional officers had reported greater stress due to cultural diversity, public research, increased civil suits, increased negative advertisement of the job in society and shift of expectations from the correctional institutions, towards being a treatment facility rather than a punitive mechanism. In the study, they pointed out that stress was positively correlated with depression, anxiety and hopelessness and negatively correlated with perceived social support. They had observed that subscales of stress like role conflict and role ambiguity, inadequacies in physical conditions of prison, and work overload were moderately and negatively correlated with perceived social
support, however threat perception and general problems subscales were not significantly correlated with perceived social support. It was felt that the adequacy of social support helped correctional officers to cope with organizational problems resulting from role definition, work overload, and physical environment of the prison more than the perception of threat and general problems.

Willem Van Rhenen, Roland W. B. Blonk, Wilmar B. Schaufeli and Frank J. H. Dijk (2006) in their research entitled, “Can Sickness Absence be Reduced by Stress Reduction Programs: On the Effectiveness of Two Approaches” aimed to evaluate the effectiveness of two brief preventive stress reduction programs (a cognitive focused program and a combined intervention of physical exercise and relaxation) on sickness absence in stressed and non-stressed employees working in various jobs in a large Dutch telecom company. The study was designed as on a priori randomized trial and the follow-up period for sickness absence was 1 year. Sickness absence data of 242 employees were analyzed with respect to spells of sickness (frequency, incidence rate), days (length, duration) and time between intervention and first subsequent absent spell. They found that for stressed employees, the physical intervention marginally decreased the frequency and incidence rate of sickness absence, although they could not find significant effects on duration or length, or on the period between the intervention and first new sickness absence spell. In contrast, there was a significant effect for stressed employees of the cognitive intervention on sickness absence by shortening the period before the first new sickness absence spell after the intervention. They had stated that assumed cost effectiveness of these interventions was considered as an important reason for implementing stress management interventions in companies.

Criminal justice scholars and psychologists have explored the causes and consequences of police stress for decades, concluding that law enforcement is a highly stressful occupation. Stress in law enforcement has been attributed to a variety of factors ranging from police culture (Dick 2000) to organizational attributes. Philip E. Carlan and Lisa S. Nored (2008) in their research, “An Examination of Officer Stress: Should Police Departments Implement Mandatory Counseling?” explored that counseling could reduce officer stress in police departments. A sample of officers from sixteen municipal police
departments (n=1,114) across the state of Alabama were taken for the study. The researchers found that the officers had possessed moderate stress, but were influenced significantly by organizational demographics (including counseling opportunities). The study had examined the interactive effects among race, gender and police stress in a large metropolitan police department and found that female officers had experienced more stress, and White male officers reported higher stress than African, American male officers. A majority of officers had believed that stress signs were not predictive of police suitability but remained reluctant to share fears and anxieties with fellow colleagues, suggesting that officers feared the stigma associated with the need for stress counseling. It was felt that officers working in supportive counseling climates had significantly less stress, a reduced need for counseling, and a greater willingness to use counseling. Officers who had engaged in counseling also reported more stress, indicating an awareness of their need for counseling. The authors concluded that police departments should consider requiring mandatory and periodic counseling for all officers, a procedural tactic that camouflages counseling need while concurrently treating the source of officer stress.

Vathsala Wickramasinghe (2010) in her article entitled “Work Related Dimensions and Job Stress: The Moderating Effect of Coping Strategies”, examined the moderating effect of coping strategies on the relationship between work related dimensions and job stress. The study was conducted with 385 white collar employees, full-time employed in various types of private sector organizations, belong to different industries and ranked at different levels within the organizations responded in Sri Lanka. In the study, factor analysis identified four broad coping strategies that individuals use, namely, individual positive coping, workplace initiatives, workplace informal support and individual destructive coping. It was found that both individual positive coping and workplace initiatives moderated the relationship between ‘relationships with others’ and job stress. The study also found that none of the coping strategies have moderated the relationship between job stress and the other three work-related dimensions.
3.4 Social Support

P. Bernin, T. Theorei and C.G. Sandberg (2001)\textsuperscript{57} in their article entitled, “Biological Correlates of Social Support and Pressure at Work in Managers” explored the patterns of correlations between psychosocial stress indices and neuro endocrinological factors in managers. Fifty-eight male managers in three Swedish companies constituted the sample. The indices have been analyzed by means of computations of age adjusted partial correlations with nine different variables analyzed in fasting blood samples. The researchers stated that serum concentrations of lipids were the variables most strongly correlated with psychosocial factors. The study focused that pressure at work influenced the managers’ endocrine status and the psychosocial support indices (good network, work support, friend support and manager support) influenced male managers in a healthy way by good social support due to the individual’s way of acting with the surroundings. The analyses of corporate culture measured as “Rules of the Game” indicated that “bureaucracy” was significantly associated with high LDL-cholesterol and low HDL-cholesterol. According to the study, good social support was in general health promoting to managers, at least with regard to serum lipids and on the other hand, bureaucracy seemed to be dangerous to the health of managers.

Social role theory provided a framework for understanding how the work-family conflict affects individual well-being and organizational effectiveness. Christo F.V. Fernandes, Satishkumar and Nandakumar Mekoth (2008)\textsuperscript{58} in their article entitled, “Social Transaction at Workplace: Impact of Social Support on Role Stress” discussed the impact of social support on role stress experienced by the executives of public and private sector banks in Goa. They pointed out that in a wide variety of professions, people at work were spending most of their time working and coordinating with others. Conflict between the demands and behaviors expected in different roles was expressed in the form of role stress that negatively influences the well-being of employees and the performance of business organizations. The study had showed that role stress was highest when social support was poor and role stress was lowest when social support was excellent, so social interactions resulted in sharing of problems, receiving support for problem-solving and alleviates the feeling of disappointment and frustration. The study also showed that stress had arisen due to lack of skills for performing was the role and could not be helped just with social support.
Butterfield, Borgen, Amundson, and Erlebach (2010) performed a qualitative study with various workers to explore how individuals cope with career transitions. They found that social support received highest number of responses from the participants. The study indicated that support from family and friends were considered as a major source in making positive transitions. The study also indicated that people who reported thriving during career transition experienced negative effects when adjusting to work environment demands, social support acts as a strong source for positive adjustment. The study suggested that the behaviors and attitudes used for positive career transition may help to coping stress.

Few researchers have explored how employees use social support to cope during organizational change. Sandra A. Lawrence and Victor J. Callan (2011) in their research entitled, “The Role of Social Support in Coping during the Anticipatory Stage of Organizational Change: A Test of an Integrative Model” proposed and tested a model to understand how perceived support influences employees’ use of support mobilization to deal with change related stress. Survey data were collected from 476 health professionals working in a large public hospital in Australia undergoing large-scale change and downsizing. In their research, moderated path analyses revealed that perceived available support plays a moderated mediation role during coping with change. Support mobilization mediated the indirect relationship between change-related stress and job satisfaction, at both low and high levels of perceived available colleague support. The research also found that perceived available non-work support moderated the relationship between support mobilization and job satisfaction, and perceived available supervisor support moderated the relationship between change related stress and support mobilization.

3.5 Management Views/Organizational Behavior

Sanjay Kumar Singh (2005) in his research entitled, “Organization Climate and Role Stress as Correlations of Journalistic Writing Attitude” stated that perception of organizational climate and role stress experienced had played important role as far as attitude towards journalistic writing of the staff reporters/correspondents were concerned. The study comprised the staff reporters and correspondents of eight national dailies published from the national capital
The study had divided the sample into five major groupings; newspaper reporters as a whole, the lower level, the higher level, the male and the female reporters. The researcher had intended to investigate the relationship of perception of internal environment of the organization and perceived role stress of the newspaper reporters/correspondents with their attitudes towards journalistic writing. The main findings of the study indicated significant positive relationships of perceptions of internal environment (organization climate) of the organization and attitudes towards journalistic writing but significant negative relationship of felt role stress with journalistic writing attitude among all the five groups of newspaper reporters.

M.P. Ganesh (2006)\textsuperscript{62} in his article entitled, “Work Motivation and Occupational Stress among Executives from Software and Manufacturing Industries: An Empirical Study” studied the effect of work motivation on occupational stress among executives from manufacturing and software industries in India. Work motivation and occupational stress questionnaires were administered to a sample of 80 male executives. He pointed out that a significant difference between the two groups in all the dimensions of occupational stress and work motivation questionnaires, except for negative stress coping in the occupational stress scale. Further the study highlighted that manufacturing executives with motivational organization had significantly higher stress symptoms than executives with moderate and high motivational organizational orientation. Software executives with moderate high motivational organizational orientation significantly higher negative stress-strain coping mechanism than executives with high organization orientation. Software executives with moderate high motivational situation were significantly stress producers than executives with low and high motivational job situation.

V.Vanitha, M.Vasanthi, J.J.Kamalakannan and T.A. Sivasubramanian (2006)\textsuperscript{63} in their article entitled, “A Study on Organizational Commitment and Stress among Information Technology Professions” examined the organizational commitment and stress among the IT professions in India. A great deal of research had identified various factors that can influence employee commitment such as leadership styles, career management and development opportunities, openness of
organizational processes, job scope, role clarity and recognition of employee contribution. According to researchers, people who were highly committed to their occupation were highly motivated to work in a chosen career role. They identified that some people were not committed to their work due to the pressure in the workplace and as a result, people developed various symptoms of stress that could affect their normal behavior and function. Finally they stated that many of the IT professionals had high level of organizational stress and due to the feeling of job insecurity, there was a lot of pressure on the employee to perform the work and this could be manifesting itself in the form of role ambiguity or role overload.

Azize Ergeneli, Arzu Ilsev and Pınar Bayhan Karapınar (2010) in their study entitled, “Work-family Conflict and Job Satisfaction Relationship: The Roles of Gender and Interpretive Habits”, examined the effects of gender and interpretive habits on the relationship between work-family conflict and job satisfaction from 286 academic personnel in Turkey. The study found that the negative effect of work-family conflict and job satisfaction is stronger for employees focusing highly on deficiency, with high necessitating, and low skill recognition, referred to as stress-predisposing interpretive habits. The study concluded that gender has an influence on the role of interpretive habits in the work-family conflict and job satisfaction relationship.

Burke (2010) in his study entitled, “Do Managerial Men Benefit from Organizational Values Supporting Work-Personal Life Balance?”, examined the relationship between the perception of men regarding their understanding of organizational values. The results of the study found that organizational values of managerial men were supportive of work-personal life and favour work - life balance in their workplace and their work experiences by working extra hours, less job stress, greater joy in work, lower intentions to quit, greater job career and life satisfaction, fewer psychosomatic symptoms and more positive emotional and physical wellbeing.

responsibilities. It was noted that work-life balance initiatives and practices affected the performance of the employees of an organization by extending these policies not only to the employees but also to their families. The study concluded that the family life and the work-life of the employees should be balanced in such a way that the concerns of employee’s personal life do not affect his/her performance, and the work life balance policies and practices suggested in the study are: flexi time, telecommuting, part-time work and job sharing.

Akanksha Bedi and Aaron C. H. Schat (2013)\textsuperscript{67} in their study entitled, “Perceptions of Organizational Politics: A Meta-Analysis of its Attitudinal, Health and Behavioral Consequences”, examined the attitudinal, psychological health, and behavioral consequences of perceptions of organizational politics. This study represented a meta-analytic review of the previous research that used 118 independent samples from published journal articles, unpublished dissertations, published book chapters, and paper presented at a conference. It was noted that perceptions of organizational politics was strongly related to organizational trust and interactional justice and also exhibited relations with other criteria, including positive relations with stress, burnout, turnover intentions and counterproductive work behavior, and negative relations with job satisfaction, citizenship behavior, and job performance. The study concluded that perceptions of organizational politics was associated with a range of attitudinal, health-related, and behavioral criteria that reflect harmful consequences of experiencing politics at work.

Promotions ordinarily involve higher wages and greater privileges; but often they also increase responsibility, accountability, and work hours. Therefore, promotions are good for workers’ wellbeing. David W. Johnston and Wang-Sheng Lee (2013)\textsuperscript{68} in their article entitled, “Extra Status and Extra Stress: Are Promotions Good for Us?”, explored pre-promotion and post-promotion effects on job attributes, physical health, mental health, and life satisfaction. The study used data from the Household, Income and Labor Dynamics in Australia (HILDA) survey. It was noted that promotions do not greatly influence workers’ wellbeing but to some extent, mental health seems affected. The research found that negative mental health effects were primarily driven by anxiety-type feelings with increase
feelings of nervousness, and the effects were severe for younger male workers without university degrees. They concluded that promotions substantially improve job security, pay perceptions, and overall job satisfaction, and also have short and longer term effects on job control, job stress, income, and hours worked.

The above literature and the availability of substantial knowledge help the researcher in understanding the role of stress in various sectors like banks, corporate, schools, universities, transports, hospitals, engineering, and IT profession. With the help of previous literature, the researcher identified many important variables related to stress symptoms, factors, impact on health, performance, behavioral changes, coping methods and social support. Since the previous studies did not focus on sugar mills, the present study provides a method for managing stress in the work life and personal life of employees in the sugar mills in three districts of Tamil Nadu to a great extent.
FOOTNOTES


40. Yong-Shing Chen, Ming-Chao Chen, Frank Huang-Chih Chou, Feng-Ching Sun, Pei-Chun Chen, Kuan-Yi Tsai and Shin-Shin Chao, “The Relationship between Quality of Life and Posttraumatic Stress Disorder or Major Depression for Firefighters in Kaohsiung, Taiwan”, Quality of Life Research, Springer Science and Business Media, 2007, pp. 1289-1297.


